

Whitsundays Network Upgrade FAQs



Whitsundays Network Upgrade Project Frequently Asked Questions

Why is the project needed?

As the Whitsundays region grows, so does the demand for electricity in the area as homes and businesses install an increasing number of electrical appliances, like air conditioning.

Boosting network capacity and security is about powering lifestyles and the local economy.

To cater for the projected growth in electricity demand, we need to create additional capacity and flexibility in the network to ensure a reliable power supply now and into the future.

To bolster the electricity supply for the area, this project will refurbish and expand the Cannonvale substation.

We will also duplicate key sections of the 66,000-volt underground cable network between the Cannonvale substation and Shute Harbour, providing greater network resilience.

What will the substation look like?

The existing Cannonvale substation control building will remain, and an additional modular building will be built on the site towards the TAFE. The new substation building is designed to minimise any impact on the visual amenity of the area.

Outdoor communications equipment, electrical plant and switchgear will be established in the substation yard to support the substation expansion.

View the artist's impressions for an idea of what the substation will look like on the website.

Will the substation be fenced?

All our substations are fully enclosed by fencing as a security measure to both protect the community and to reduce the risk of damage to electrical infrastructure.

This fencing will be a combination of chain mesh fencing for security purposes, and timber palings to provide screening of the substation from the street and help improve the visual amenity.

What will the substation surroundings look like?

Trees will be removed from the site to pave the way for construction and reduce the risk of unplanned outages caused by network damage. In particular, some of the large eucalyptus trees, will be removed, as they are prone to snapping in high winds and bringing down powerlines.

To help offset the removal of vegetation from the site and to improve the visual amenity of the substation, we will be establishing some powerline-friendly screening shrubs in clear areas.

The species of shrubs will be carefully selected for their growing habit or characteristics. We will use native shrubs that provide screening of the infrastructure, habitat for small birds and lizards, and are low growing to stay well outside our clearance zones for powerlines.

We will use a local nursery to assist with the selection of powerline-friendly species and to supply the shrubs.

Will the substation create a lot of noise?

Low levels of background noise are usual with normal substation operation. The faint hum is expected to be indistinguishable from surrounding sounds, however this will be considered as part of the design.

As part of the environmental impact assessment for a substation site, a noise assessment is carried out in accordance with the [Environmental Protection Act 1994](#), [Environmental Protection Policy \(Noise\)](#), and noise mitigation measures are put in place where necessary. A noise assessment for the Cannonvale substation has been completed and noise control measures have been incorporated into the design.

Where is the new powerline going to be built?

We need to duplicate sections of the underground 66,000-volt – or 66kV – network between Cannonvale substation and Shute Harbour substation. Where possible, we plan to run the new cable adjacent to the existing line.

Since the current line was built, development in the area has progressed so we are looking at the line route options available to us. We'll be able to provide more information after our detailed design is completed.



When will the substation and powerlines be built?

We started the detailed design in late 2021 and construction to expand the Cannonvale substation is scheduled to commence in the 3rd quarter of 2022.

Duplication of sections of the 66,000-volt (66kV) powerline between Cannonvale, Jubilee Pocket, Mt Rooper and Shute Harbour substations will commence in the 4th quarter of 2022.

The project is expected to be completed by the end of 2024.

We'll continue to provide the community with information about the project and will advise residents of the expected construction dates of each phase as it progresses.

What are the likely impacts of the project?

Construction of new substations and powerlines can be disruptive to the community, particularly in built-up areas. Some of the impacts that may be associated with this type of work include:

- Excavation – both open trenching excavation and hydrovac excavation will be used during construction of the substation and the powerline.
- Noise, dust and vibration - audible noise, possible dust and localised vibration from construction activities and heavy machinery.
- Construction traffic - Increased vehicles moving around the substation during construction and in the community when we are building the powerline.
- Access and disruptions to traffic – from time to time during construction, we may introduce traffic control, speed limitations and detours to keep our crews and the public safe. This may result in short traffic delays and limited access to some areas during key construction periods.
- Vegetation clearing and trimming.
- Hours of work – most of our work will be conducted from 6am to 6pm, Monday to Saturday. However, from time to time, there may be a need to conduct after hours or night works in some locations to limit the impact on businesses, traffic, or the general community. Where night works are required, we will advise the community through direct communications and signage prior to the works commencing.

The project team will keep the community and key stakeholders updated on our activities and any potential impacts of our work via this webpage.

Are there any health risks?

When substations and powerlines are discussed, many people ask about electric and magnetic fields (EMF). EMFs are generated by any object with electric current flowing through it, including powerlines and all household electrical appliances, such as televisions, washing machines, microwaves, hair dryers and computers.

The level of EMF from powerlines depends on the amount of current flowing along the lines. Fields decrease in strength the further you move away from the source. Putting powerlines underground doesn't reduce the levels of EMF as the earth doesn't create a shield.

Fortunately, EMF can be reduced by the configuration of substation infrastructure and powerlines. The project team will design the powerlines with this in mind. Our standards for EMF emissions continue to be better than those required by Australian and International health authorities.

Along the proposed line route and at the substation boundary, EMF levels are expected to be well within the limits required by the International Commission on Non-Ionising Radiation Protection (ICNIRP) and similar to those encountered in daily life. Tests will confirm this during a survey of the proposed line route and substation site before the project is completed.

More detailed information on EMF and links to the ICNIRP website and other relevant organisations can be found on our [Electric and magnetic fields webpage](#).

Get in touch with us

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