What will the project involve?
We are constructing a new zone substation in Gracemere (on the corner of Platen, John, James and Lawrie Streets), and a new 66,000 volt (66 kV) powerline, as well as other network upgrades.

When complete, the new powerline will connect the new substation to the existing Egans Hill and, ultimately, Malchi substations. The powerline route runs down Lawrie Street, along Gavial Gracemere Road and into Sullivan Road.

Why is the project needed?
We are investing in the local electricity network to meet the increasing demand for electricity in the Gracemere region and to provide residents with a secure and reliable electricity supply.

Demand for electricity has grown with the local population and new housing estate developments, as well as with the level of commercial and industrial activity in the Gracemere industrial area.

As well as increasing the network’s capacity for the 10,000 homes and businesses in the Gracemere region, and future growth, this investment will provide new options for restoring the power following interruptions caused by unplanned outages.

Did you consider other options?
Substation:
We undertook a thorough assessment of a number of potential locations for the substation site in the Gracemere area.

We investigated available land within the township precinct based on the criteria of proximity to the electricity load, site access, network access and minimal social and environmental impacts.

The new substation for Gracemere needs to be located within the township to supply electricity to the growing number of residential estates currently being developed and planned for, as well as supplying the industrial area on the western approach to the town along the Capricorn Highway.

Frequently Asked Questions

The location selected will also cater for increased demand from future commercial development within the Gracemere CBD.

With the support of the Rockhampton Regional Council, we believe the selected substation site offers the lowest overall environment, social and economic impact to the Gracemere community.

Powerline location:
We have investigated a number of powerline route options taking social, environmental, design and cost factors into consideration before the proposed powerline corridor was selected.

What planning approvals were required?
The substation does not require planning approval under the current planning scheme.

While the approval was not required, we chose to take a collaborative approach, working with Rockhampton Regional Council and the community to identify a suitable location for the substation. We have also taken guidance from Local and State planning instruments to ensure the project takes into consideration all potential impacts. The substation site was purchased as a private sale.

What was considered before the line route was proposed?
The main considerations in selecting the powerline route included:

- Minimising the potential impact on homes and businesses, recreation areas, scenic and tourism areas, conservation and heritage areas, or areas zoned for future development.
- Avoiding, where possible, extremely rough or steep terrain including water bodies
- Minimising the impact on small land parcels and cultivated land
- Minimising clearing of native vegetation, and its potential habitat values, and any impact on endangered or vulnerable ecosystems, or threatened flora and fauna species.
What will the substation look like?

The substation will have a modern appearance and be designed to minimise any impact on the visual amenity of the area. Artist’s impressions will provide the community with an idea of what the substation will look like on site.

Will the substation be fenced?

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

This fencing is a combination of chain mesh fencing for security purposes, and/or timber fencing to provide screening of the substation from the street and help improve the visual amenity. Gates and doors will be locked at all times. The design of the substation fence and material choice will be determined during the design phase and form part of the community consultation process.

Will the substation create a lot of noise?

Low levels of background noise are associated with normal substation operation. The faint hum is expected to be indistinguishable from surrounding sounds.

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. The noise study is scheduled to be completed towards the end of 2017.

When will the substation and powerlines be built?

The new Gracemere substation and the powerlines connecting the new substation to the existing Egans Hill substation are expected to be constructed between 2018 and 2020.

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

Why aren’t powerlines near residential communities placed underground?

The cost to underground powerlines is significantly more than constructing them above ground. Electricity infrastructure projects are a necessity, and the solutions proposed must be considered cost effective. We aim to balance the costs, which are ultimately paid for by our customers, with any potential impacts of infrastructure construction on the community.

We are required to meet obligations under the National Electricity Law, which promotes the efficient investment in and operation and use of electricity services for the long-term interests of electricity consumers.

Are there any health risks?

When substations and powerlines are discussed, many people ask about electric and magnetic fields (EMF). EMF are generated by any object with electric current flowing through it, including powerlines and all electrical appliances used in homes 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 also decrease in strength the further you move away from the source. Putting powerlines underground does not reduce EMF levels as the earth does not create a shield.

Fortunately, EMF can be reduced by configuring substation infrastructure and powerlines in a particular design. The project team will design the transmission lines 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 Ergon’s website at: https://www.ergon.com.au/network/network-management/network-infrastructure/emf

Will you engage the Community?

Our community engagement activities aim to provide a greater understanding of the project, the various stakeholder considerations, and the challenges and opportunities in meeting these various requirements.

They also provide the community with the opportunity to express their views and concerns. We carefully consider all feedback received. There is a genuine opportunity to influence a range of project decisions and assist us in improving the outcome for the community (recognising that we must meet construction standards, financial constraints and our legislative requirements). We will provide updates and engage as the project progresses.

For more information or to provide feedback to the project team please email community@ergon.com.au or call 1300 653 055.