

South Pine to Hays Inlet powerline duplication

Who is ENERGEX?

ENERGEX delivers electricity to your home or business.

We are a Queensland Government Owned Corporation that maintains extensive electricity distribution networks spanning more than 25,000 square kilometres throughout South East Queensland. Operating in one of the fastest growing regions of Australia, ENERGEX has commenced a major investment phase to improve and expand our electricity network to meet these demands and community expectations.

What is the South Pine to Hays Inlet network upgrade?

ENERGEX proposes to duplicate the existing 110kV high voltage transmission line from the substation on South Pine Road, Brendale to the Hays Inlet Substation on McKillop Street, Rothwell.

As well as upgrading the network, ENERGEX is planning to construct a new 110kV zone substation on Goodrich Road, Griffin and a new connection into the Mango Hill Substation to increase its capacity. At the Hays Inlet Substation ENERGEX will install circuit breakers, capacitor banks and replace the transformer.

Will the new 110kV powerline make my electricity supply more reliable?

Yes. The additional powerline will greatly improve the reliability and quality of the electricity supply to the area.

We expect residents in the Moreton Bay Regional Council area will experience improved reliability as a result of our extensive program of work over the next five years.

Why is ENERGEX planning this work?

The existing Hays Inlet Substation is nearing capacity. The additional line and upgrade work is required to ensure that ENERGEX is able to continue to deliver a safe and reliable electricity supply to this fast growing region in future.

The Moreton Bay Regional Council, encompassing the former Pine Rivers, Redcliffe and Caboolture local councils, is experiencing rapid growth in residential and commercial development. As a consequence, demand for electricity in the area is expected to increase by approximately five percent a year.

What is the preferred route and why was it chosen?

The preferred route follows an existing powerline corridor. From South Pine Road at Brendale to Linkfield Road just west of South Pine River at Bald Hills, the additional powerline will share a corridor with two ENERGEX powerlines. From Linkfield Road north to the Hays Inlet Substation the additional powerline will follow the existing ENERGEX line.

This preferred route was chosen after extensive investigations and the analysis of potential impacts such as environmental and social concerns, visual amenity and economic constraints.



The preferred route and co-location with existing towers was found to be the most effective corridor option and importantly, had the least overall environmental, community and economic impact.

When will work start?

Work on the additional powerline is expected to start in early 2009.

What will the construction timeframe be?

Depending on the weather, construction of towers and installation of lines is expected to take approximately 12 months. Residents will be kept informed of the proposed timing of

works via letters, fact sheets and public displays. ENERGEX will work closely with property owners who are impacted by the upgrade work to minimise any disruption during the construction period.

What is an easement?

For our purposes, an easement is a legal right for ENERGEX to use land to construct and maintain powerlines. Landowners retain ownership of the land within the easement, but are restricted as to how that land can be used. ENERGEX is responsible for electrical safety in the easement and will maintain access and vegetation to ensure the reliability of the powerline.

No new easements will be required for the South Pine to Hayes Inlet powerline duplication. Existing easements in this corridor, acquired in the 1970s and widened in the late 1990s ahead of expected future growth in demand, are wide enough to accommodate the proposed duplication of the South Pine to Hays Inlet powerline. A small parcel of land will be needed for the new substation at Griffin.

What restrictions apply to land use in the easement?

Safety is the primary reason ENERGEX places restrictions on certain activities in easements. We aim to be flexible in the co-use of easements but ask landowners to seek ENERGEX's approval before undertaking any activity in the easement such as building a shed, adding fill or planting vegetation. ENERGEX needs to have easy access to the easement in case of an emergency.

Why will the powerline be above ground?

The new powerline will run above ground because this option will ensure that vegetation clearance, excavation and construction time is kept to a minimum. This also ensures that inspection, maintenance and repairs to the line are cost effective. Typically, it costs around five to seven times more to build a 110kV line underground. Underground lines

have a shorter operating life expectancy than above ground lines. Underground lines require complete clearance of vegetation in the easement and do not result in reduced magnetic fields.

What will it look like?

The powerline will be carried on steel towers similar in silhouette to the existing towers and aligned with them but some will be marginally taller.

ENERGEX uses these to carry its 110kV double circuit sub-transmission lines as they are both a very safe means for distributing high voltage electricity and they minimise the need for vegetation clearance and excavation.

While all steel towers are similar, each is custom designed for the area where it is being constructed, taking into consideration issues such as visual impact, engineering factors, topography, location specific issues and cost.

ENERGEX ensures its visual impact is minimised; for example by using special finishes on towers and planting appropriate screening trees in easements.

What about Electric and Magnetic Fields?

Electric and Magnetic Fields (EMFs) are the invisible forces produced by the voltage and current associated with the flow of electricity. EMFs are produced wherever electricity or electrical equipment is in use.

In and around your home EMFs are produced by anything with an electric current flowing through it, such as powerlines running from the street to your home, your home wiring system and electrical appliances.

We are aware of concerns regarding the perceived health effects from exposure to EMFs and as an Energy Networks Association member we have adopted an approach of prudent avoidance. This policy has been in place since 1991.

This policy ensures that we operate our electrical power systems prudently

within Australian health guidelines, minimise exposure where economically practicable and closely monitor, and, where appropriate, sponsor high quality scientific research. Safety for the community and our staff is our number one priority. When designing the electricity network system ENERGEX locates powerlines away from residential areas where feasible or reasonable to do so.

For more information about EMFs visit ENERGEX's website at www.energex.com.au and the links to www.arpansa.gov.au and www.ena.asn.au.

How can I find out more?

ENERGEX is committed to informing and engaging the community. Your feedback is important to us and will help in communicating with you throughout this project. Consultation will be carried out with potentially impacted landowners, communities and other key stakeholders in the project area.

Project updates will be provided at key times. If you would like to receive these project updates you can register your name and address with us so that we can keep you informed.

We have developed a special information page on our website at www.energex.com.au/network where you will find additional information about the project.

Contact us

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