

## Dismantling of the Pakuranga to Penrose 'A' Transmission line

### What is happening with the Pakuranga to Penrose 'A' Transmission line?

Transpower is undertaking a project to install new underground high-voltage cabling between Pakuranga and Albany substations to help reinforce our network across Auckland and into North Auckland. As part of that project, we are removing the lower capacity 110 kV transmission line between Pakuranga and Penrose substations – known as the Pakuranga–Penrose 'A' line.

### Which line is the Pakuranga–Penrose A line?

This is the northern-most of the four lines crossing the Tamaki estuary [this map shows Pakuranga to Penrose 'A' Transmission line, the other three lines and the new underground cable route](#).

### How long has the line been there?

The line was constructed around the 1940's and is part of the original line from Arapuni to Penrose.

### Why can't you remove or underground all the other transmission lines across Auckland?

All the other overhead transmission lines are needed to provide Auckland and Northland consumers with power. Our investments are closely regulated and we are not in a position to underground all our transmission lines given the great cost to do so - \$10 to \$15 million a kilometre for each line. What we can do, as we have for this project, is to look at opportunities to remove older lower capacity lines whenever we put higher capacity lines in.

### When will the dismantling of this line begin?

The progressive dismantling of the Pakuranga to Penrose A transmission line will be done in two stages:

1. In the transmission corridor (Penrose substation to Tamaki River) – work will start in November 2011 and is expected to be completed by February 2012
2. Tamaki River to Pakuranga substation – the removal will be completed in 2013.

See this [map for more detail on the line route](#).

The Tamaki River to Pakuranga substation section of line will be connected to an adjacent line at Tamaki River. At all times the line should be considered as being live. This approach is to ensure a secure supply of power to the Pakuranga region while the cabling work is underway.

**Which section of the line will come down first?**

Dismantling of the line will begin in our transmission corridor between Penrose and Tamaki River.

**When will the rest of the line come down?**

The removal of the section between Tamaki River and Pakuranga substation will now be deferred and removal will now be complete in 2013. This is to provide backup while other grid upgrade projects to reinforce power supply into Auckland are underway.

**These times for dismantling are different from those previously advised?**

There have been some delays in this project due to the Rugby World Cup, and the need to coordinate with the transmission upgrades projects underway to reinforce the security of supply into the upper North Island.

**How can you remove some section of the line and still retain a supply of electricity?**

We will connect the Pakuranga to Penrose 'A' line at Tamaki River to our Otahuhu to Penrose A line.

**How will the line be dismantled?**

The wires will be removed first and then the towers will be dismantled and removed.

The approach will likely involve tension retaining equipment, temporary netting and a reel winder to collect the decommissioned lines and lower them to the ground.

The steel towers will be removed either by crane, or manually piece by piece where crane access is not possible. In some places a helicopter may be used to carry parts of the tower/s away. Once the towers have been dismantled, any remaining foundations will be removed and the site reinstated.

**Is the work dangerous?**

The work is being carried out by professionals and under strict safety controls. As with any works, people must stay out of our worksites and follow the direction of our crews for their safety.

**What about where lines cross the road?**

Where the lines cross roads we may need to temporarily stop traffic for about 10 minutes at a time while the lines come down, but this would only happen over about a day on any given road. The affected roads for this first section of work are:

- Gavin |Street
- Leon Leicester Avenue
- Reliable Way
- Ferndale Road



- Panorama Road
- Barrack Road
- Jarman Road
- Mt Wellington Highway (this will be done overnight to avoid traffic delays)
- Ireland Rd
- Peterson Road
- Convamore lane
- Waipuna East Road

**Will the power supply be affected?**

The power supply may be affected by work but only briefly. We will be working with the local lines company Vector and we may need to shutdown the power supply for a short time. We anticipate that this will only happen in the area where the lines cross Mt Wellington Highway and this work is being carried out between 11pm and 2am.

If you experience a power outage please call the local network company Vector on 0508 832 867.

**As a landowner/occupier of a property underneath this line will I be informed before work begins?**

Yes. We will be contacting you well before the works and providing details of how the work will be undertaken around your property. If there are any issues with respect to how and when we access your property we will work with you to come to an agreement before starting work.

