

HAYWARDS Substation Community Newsletter

Keeping the energy flowing



Welcome to the first issue of the Haywards Substation Community Newsletter. This will be a regular newsletter designed to keep neighbours of Haywards Substation informed as the HVDC inter-island link Pole 3 project progresses.

What's been happening?

Late last year residents and landowners adjacent to the Haywards Substation were introduced to the Pole 3 project via a letter and fact sheet. In May this year a series of meetings were held at the substation to provide neighbouring residents with an opportunity to learn more about the project, as well as the nature of changes that are necessary at the substation.

At the meetings, we outlined:

- the role and importance of the HVDC system in New Zealand's electricity system
- the nature of the work that needs to be done
- the areas at the substation available for development
- the type of equipment which may be built in these areas
- the process and timeline for the project
- our intention to submit an outline plan to Hutt City Council in July

We also made commitments:

- to keep neighbouring residents informed about the project
- to discuss with neighbours any concerns they have about the project
- to meet again with residents and landowners later in the year (around October) once the site contractor for Haywards had been selected and the site layout finalised.

An outline plan for Haywards Substation was submitted to the Hutt City Council in mid-July for feedback and approval, with the understanding that details of the final outline plan will not be confirmed until the contractor for the design, supply and installation of equipment has been appointed.

We expect to appoint this contractor in September. Once the appointment is made, we will have a much clearer understanding of the final site layout and of the effects on neighbouring properties. We will contact residents directly at this time to discuss the outline plan and its effects.

What's coming up?

September

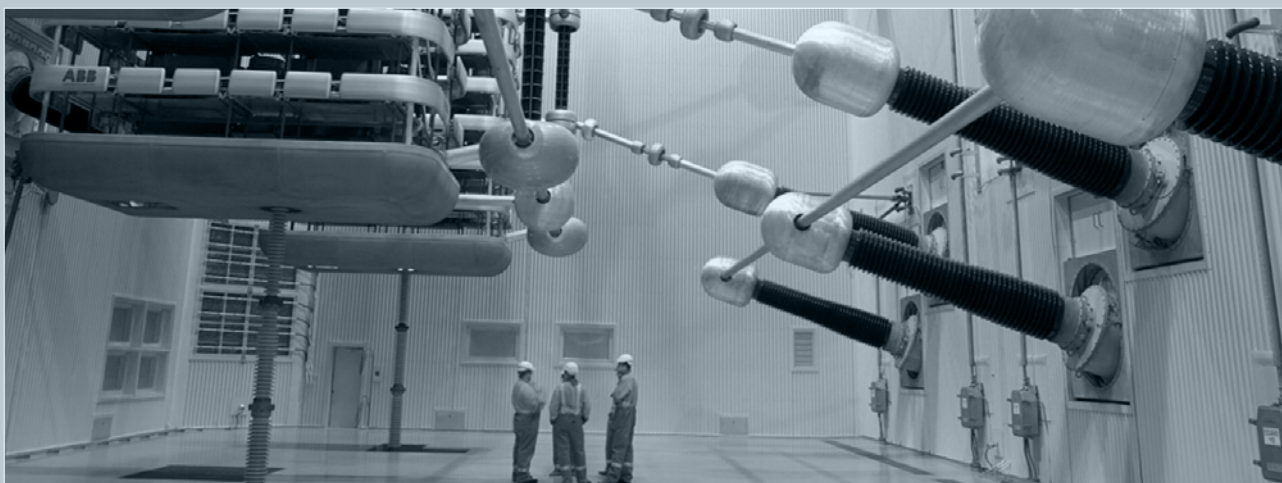
- Contract awarded for the design, supply and installation of the Pole 3 equipment, which will decide the final site layout and physical works
- Work commences on a revised outline plan
- Tenders requested from contractors for preparatory site works including seismic strengthening works

October – November

- Final outline plan shared with neighbours and interested parties
- Visual effects of the revised design on individual properties assessed and modelled (where requested)
- The proposed mitigation works reviewed and amended in light of the final outline plan
- Final outline plan submitted to Hutt City Council
- Issue two of the Haywards Substation Community Newsletter distributed

December – January

- Traffic management measures put in place on SH 58
- Site works commence.



The HVDC (High Voltage Direct Current) inter-island link is the transmission link between Benmore substation in the South Island and Haywards substation just north of Wellington. It enables the transportation of power between the North and South Islands.

The link consists of two separate circuits, with major converter systems at each end. These converter systems are called Pole 1 and Pole 2. They convert electricity from alternating current (AC), which runs through most transmission lines in New Zealand including the lines that run into Haywards and Benmore substations, to direct current (DC), which is more effective for transporting power over long distances and is used over the HVDC link.

The HVDC link also includes three undersea cables across the Cook Strait, two of which are connected to Pole 2 and one connected to Pole 1. These cables are in good condition.

Transpower will be replacing the 44-year-old Pole 1 equipment at Haywards substation in the North Island and Benmore substation in the South Island with new state-of-the-art thyristor valve units. The new units will be called Pole 3, and once built, the old Pole 1 will be fully decommissioned and removed (half of Pole 1 has already been decommissioned).

The HVDC Pole 3 project, worth up to \$672 million, will be completed in two stages resulting in an increase in the capacity of the overall HVDC link to 1000 MW from 2012 and to 1200 MW from 2014.

Pole 3 timeline

KEY ACTIVITIES	2009			2010				2011				2012	
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Pole 3 Stage 1													
Consenting		June		Dec									
Pole 3 contract awarded			Sept										
Civil/building/construction works at Haywards				Jan						July			
Major equipment delivery and installation									May				March
Pole 3 commissioned													April
Pole 1 Decommissioning													
Pole 1 switched off												Sept	
Pole 1 mercury arc valve removal												Sept	April
Pole 1 building demolition commences													April

For more information on the HVDC inter-island link Pole 3 project, please call 0800 33 88 66 or visit www.gridnewzealand.co.nz

