



# Lower South Island Stakeholder Group Forum

Invercargill

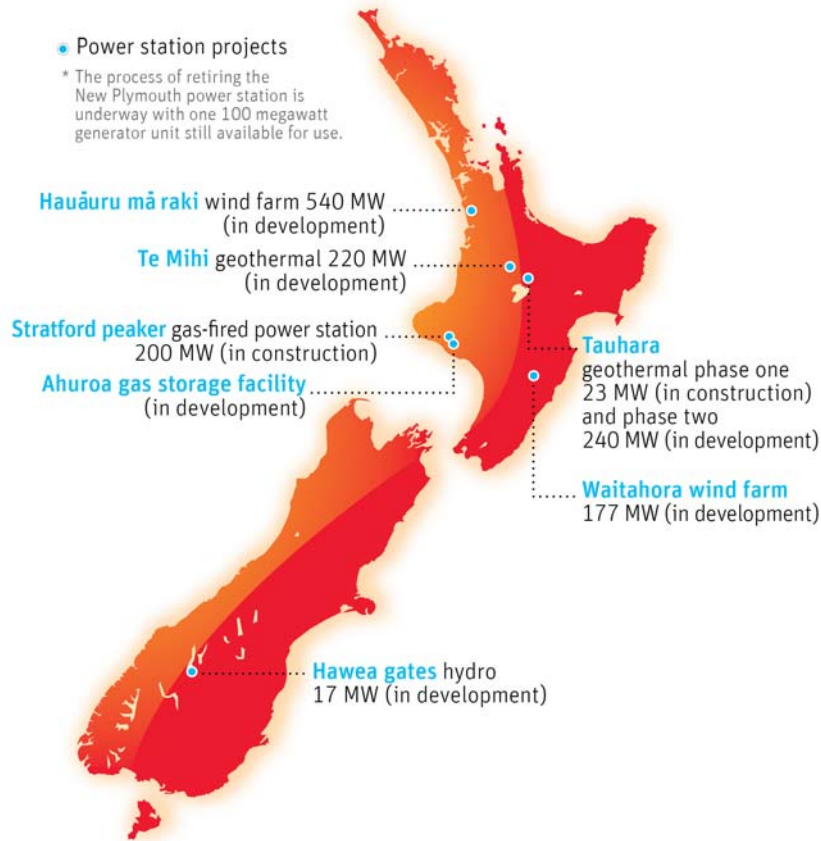
Friday 10 October 2008

# Contact Energy – a snapshot



- New Zealand's leading listed company
- Generates 28% of NZ's electricity
- Has 27 per cent of the retail electricity market
- Has 36 per cent of natural gas market
- Has 50 per cent of LPG market
- 650,000 retail customers
- Leading geothermal generator
- 2,000 MW of installed generation capacity
- 84,000 New Zealand retail shareholders
- 1,000 staff across the country.

# Our projects - \$3 billion investment programme



- Investing \$3 billion in new generation projects across the country over the next five years
- Projects totaling 1,400 megawatts of new generation
- These are a good proportion of the country's best generation options in geothermal (500 MW), wind (720 MW), hydro (17 MW) and gas (200 MW)
- Vital to a higher renewables future

# Therefore.... a big investment in transmission is needed

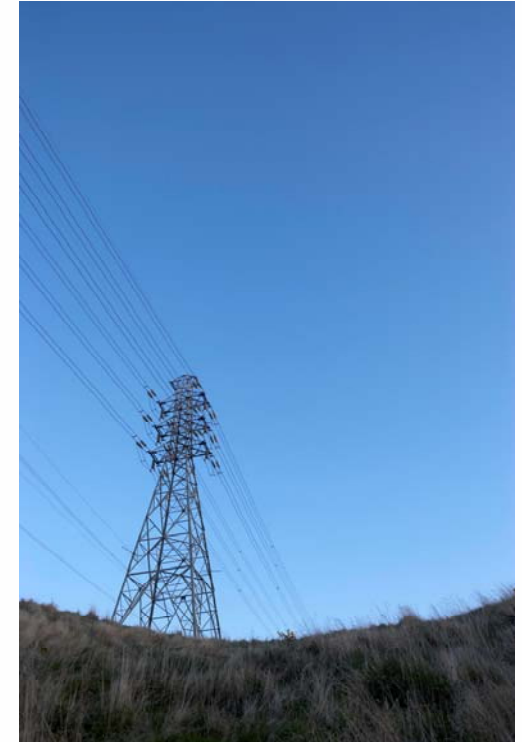
The transmission grid has not kept pace with growing electricity demand, investment in new generation and changing power flows.

A modern and robust transmission system is vital to ensuring electricity makes its way to market and to ensuring a secure supply of electricity.

Particularly important to connecting renewables which tend to be distant from load.

Currently the transmission system is constrained in a number of places, leading to wholesale price irregularities within regions  
The removal of pole one of the HVDC link late last year is a case in point.

Contact supports Transpower's current investment programme which is seeking to address historic under-investment

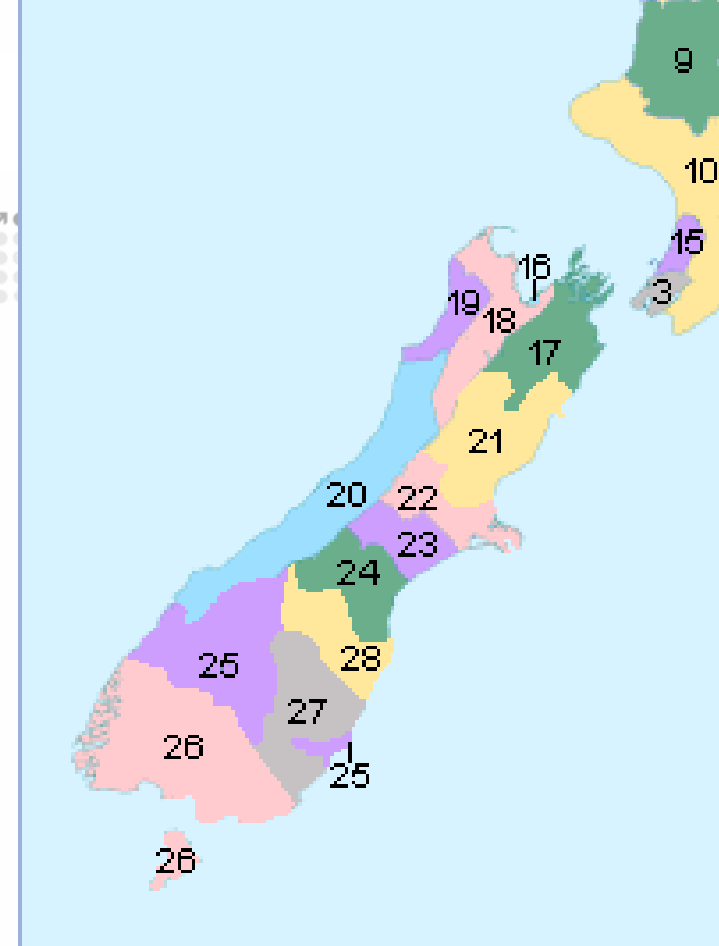




## Lower South Island - Retail

Retail base (excluding Tiwai):

- Total Customers (ICP's) = 166,000
- Contacts ICP's = 108,000 (65%)
- 2,400 GWh pa Total
- 1,500 GWh pa (60%) Contact (20% incl Tiwai),
- Retail over PowerNet (Invercargill & Southland), OtagoNet, and Aurora (Dunedin and Central) distribution networks



# Lower South Island - Generation

- Clutha Hydro Generation:
  - Clyde 432MW – 4x 108MW units onto 220kV system.
  - Roxburgh 320MW - 8x 40MW units. G6,G7 & G8 on 110kV bus.  
(Rox G2 out at present being refurbished).
- Lake Hawea storage but essentially “run of river” from Lake Wanaka
- Hawea Gates – small scale hydro (17MW) for Board Approval in November
- Future Clutha Schemes 2020+
- 110kV system constrains ROX 110 generation to <90MW
- ROX T10 Interconnection Transformer single biggest issue for Contact to remove generation constraint

# Lake Storage (as at 8 Oct)

