



**Update from Orion NZ Ltd
on their Recovery from the
Canterbury Earthquakes**

National Lifelines Forum

6 November 2013

Earthquake Recovery Overview

- “ **Network recovery progressing well**
- “ **Stage 1 of three stages to build resilience into the eastern suburbs now complete**
 - . Remaining stages due for completion December 2014 – required for removal of temporary overhead lines
- “ **New purpose-built Control Centre and offices fully operational**
- “ **Overall network recovery completion date 2019**

Network Element	Impact of Earthquake	Progress to Date
66kV network	50% of cables damaged (30km out of 60km)	Two temporary overhead lines constructed – three stage process to replace these; Stage 1 complete
Zone and building substations	4 of Orion’s 314 substations severely damaged 268 privately owned substations have damage	All zone and building substations assessed; 17% of repairs completed
11kV underground network	410 cables out of 6,622 damaged; 1000+ faults	100% of known faults repaired Now rechecking and assessing cables for hidden damage (4% completed)
Local substations (kiosks)	Some of the 3,392 local substations have moved on foundations	All assessments complete; 11% of repairs complete
400V overhead network	Some damage to 3,059km of network (incl. poles sunk or leaning)	Make safe repairs completed All assessments completed; 60% of repairs are complete

Commercial Connection Challenges.....

Did you know?

- Power supply needs **site-specific design**, just as your building does.
- You will need to set aside a **footprint of between 1m² and 12m²** to house the electrical equipment needed to power your site.
- Electrical equipment on your site will need **24 hours a day / seven days a week access** for safety reasons.
- **Basements are no longer a suitable location** for electrical equipment because of flood risk and access issues – a key lesson learned from the earthquakes.

We are here to help. Please contact us on **03 363 9898**, email **info@oriongroup.co.nz** or click on the "Get connected" link at **oriongroup.co.nz** to find out more about our electricity network connection process.

Then Came the 2013 Storms

- “ **Early September storm was Orion’s third biggest event**
 - . Only slightly less impact on the network than the September 2010 earthquake, and greater than 1992 snowstorms

- “ **What next**

Significant events: past 21 years

Note: Earthquake
February 22 2011
629 million minutes

