

## Orion earthquake response 9.00am, Monday 9 January 2012

Power was cut to parts of eastern Christchurch for just over an hour this morning, after the high voltage electricity supply into the Dallington substation failed. The Dallington substation is one of Orion's major substations, supplying power to up to 12,000 customers in the surrounding suburbs; however up to 7,000 customers were affected at the time.

When the power went out this morning, our teams immediately worked their way along the length of the new high voltage lines into Dallington, checking for any damage. These temporary lines were built as an emergency measure after the February earthquake, when all of the large 66,000 volt underground cables supplying power from the national grid to Dallington were damaged beyond repair.

No damage to the new overhead lines was found, and we believe the most likely cause of the outage was that a small animal, bird, or other object came in contact with the lines, causing the power supply to "trip out".

This outage illustrates the pluses and minuses of overhead lines versus underground cables. Modern overhead lines built to the latest seismic standards generally withstand earthquakes better and can be repaired much faster than underground cables. However, overhead lines can be affected by wildlife and vegetation, while underground cables are protected from those impacts.

We are working as quickly as we can to develop permanent replacements for the temporary overhead lines, however we expect it will take three to five years to completely restore resilience to the network.

## ENDS

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