

edison

Nga Awa Purua

Geothermal Power Station

INDUSTRY SECTOR:	Generation - Geothermal
EDISON SERVICE:	Project Management
CLIENT:	Mighty River Power



Project Overview:

Mighty River Power's new Nga Awa Purua geothermal power station is its second geothermal development. The \$430M geothermal power station has a capacity of 140MW and connects into Transpower's existing 220kV transmission grid.

Nga Awa Purua houses the largest single shaft geothermal turbine in the world and provides enough electricity to power 140,000 homes (equivalent to Taupo, Rotorua, Hamilton and Tauranga combined).

The power station has 9km of pipeline, 6 production wells at a depth between 2000 and 2500 metres, 4 injection wells up to 3000 metres depth and 48,000 tonnes of fluid extracted per day.

Edison Delivery:

Edison was engaged by Mighty River Power to provide technical support during the tendering, design and installation of the 220/11kV substation that connects the new geothermal power station to the national grid (Transpower).

The substation comprises one 220/11kV transformer, associated switchgear and protection including synchronisation into the grid.

The substation also provides an alternative point of connection to the national grid for Rotokawa's OEC21 generator. This includes complex protection systems and over 1km of underground cable.

The connection allows Mighty River Power to connect the Rotokawa OEC21 generator directly into the national grid rather than into the local power supply authority's network.

Client Feedback:

"The experience and expertise that Edison brought to the project was of great value and aided in the completion of the site works ahead of schedule."

Alan Ofsoski, Mighty River Power