

Te Apiti Wind Farm 110kV Transmission Line

Project: Te Apiti Windfarm 110kV Transmission Line

Client: Meridian Energy Limited

Location: Palmerston North NZ

Contract Value: NZ \$1.4m

Duration: TBC

DESCRIPTION

Electrix developed a relationship with the Meridian Energy Te Apiti team shortly after the design concept was finalised by the Beca Carter Hollings and Ferner Ltd. (BECA) consulting engineers, project design team.

The project involved the installation of a transmission line 4.5km long running from the Te Apiti substation on Saddle Road to the Woodville substation. This line would provide the wind farm connection to the national electricity grid.

SCOPE

The project was the first contract for electrical services awarded to Electrix and included the 110kV substation and 48km of 22kV underground cabling. Cabling ran from each of the fifty-five turbines (windmill generators) back to the substation.

The line was built using 21 mono-tubular steel poles specially imported from France. Each pole has a set of anchor bolts set into a concrete foundation.

Poles were either assembled on the ground or erected in-situ by a truck mounted crane. The conductor pull rope was first flown directly onto the structures using a helicopter prior to tension stringing of the 'wolf' conductors and OPGW.

VALUE TO CLIENT

Electrix had an LTI-free project and for its safety and a proactive approach was awarded the inaugural "Meridian Energy Project Te Apiti Contractors Performance Award" in February 2004.

Meridian Energy's Construction Project Manager referred to Electrix in a comment about the project. "We also have a very good local contractor in Electrix, who have the right mix of knowledge and expertise".

