

NPK and OKN Transformers Commissioned

INDUSTRY SECTOR:	Transmission
EDISON SERVICE:	Commissioning Engineer
CLIENT:	Transpower



NPK 110/33kV Transformer T1



OKN Substation 110/33kV Transformer T2

Project Overview:

The existing 70 year old single phase transformers at Ohakune (OKN) and National Park (NPK) substations were scheduled for replacement with new three-phase units in 2014 / 2015. The Mt Ruapehu ski fields are supplied by these substations and therefore it was important the project was completed in time for the 2015 winter season.

Both transformers were to be upgraded simultaneously and both substations are single bank stations. Therefore significant challenges faced the project team who had to ensure that effective planning and sequencing of the construction works was in place to minimize any supply disruptions.

The Transpower mobile substation was deployed at each site sequentially in order to maintain the local supplies in the Ohakune and National Park areas. This occurred while the substations underwent major modifications coinciding with critical periods of construction.

Edison Delivery:

Edison was engaged to provide engineering support through the various stages of the projects, from civil site works through to commissioning of the mobile substation and eventual commissioning of the new replacement transformers.

During the mobile substation's first deployment to National Park equipment issues resulted in a delay to the works which in turn affected both substation programs. Careful planning by the project team and liaison across all parties reduced the expected five week delay to four weeks from the original livening date.

Following successful commissioning of the new National Park Transformer T1 the mobile substation was redeployed to Ohakune substation. Ohakune Transformer T2 was subsequently livened and commissioned 16 days after National Park T1 commissioning.

Client Feedback:

"Edison's Project Manager was a very experienced and resourceful individual who bought great value to the project team. His contributions during the multiple commissioning periods were crucial for the success of the projects. Edison's back office also provided valuable support to both their Project Manager and the Transpower team throughout, making Edison a competent and necessary specialist service provider to Transpower."

Hao Zheng, Transpower NZ Ltd