

Marsden Interconnector Temporary Installation

Project: Marsden Interconnector Temporary Installation
Client: Transpower New Zealand Ltd
Location: Marsden Substation, Northland, New Zealand
Contract Value: \$1.1 million

Marsden has two identical interconnecting transformers. Burnt contacts on the on-load tap selector switches were discovered.

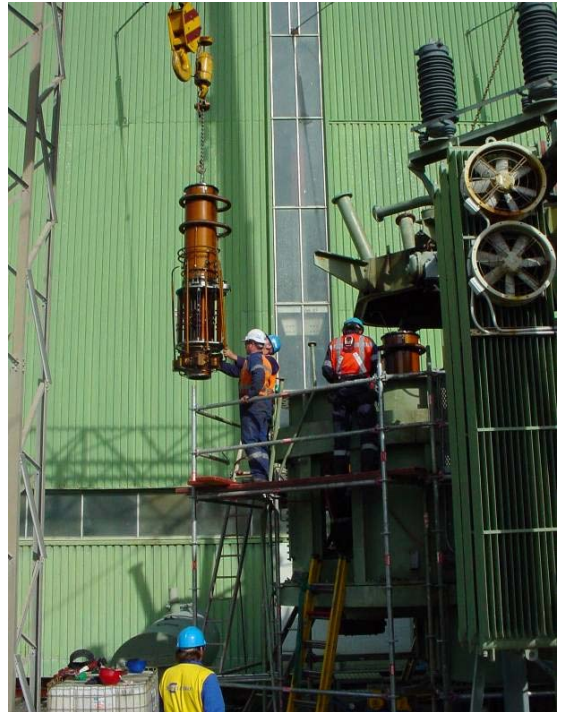
Electrix were requested by Transpower to undertake the repair. This involved three separate divisions within the Electrix structure - Maungatapere Projects, Auckland Transformer division and Transmission lines. As these Interconnectors are critical to Northland work began immediately to achieve the tight deadlines.

Significant environmental protection & contingency planning went into this project due to the sensitive location. The work involved temporarily relocating three transformer units from Otahuhu. The three transformer units were placed below the 220kV tie lines at Marsden on supports in a purpose built temporary bund. Connections were made to the existing bays of the T1 and T2 transformers. The 220kV connections were made directly to the 220kV tie lines above the transformer. The 110kV terminations were achieved with a temporary 110kV tie line.

After repairs were completed on the T2 unit the T1 unit was inspected and found to have a similar fault. While the temporary T3 units remained in position, a short notice major repair on T1 (similar to T2) was undertaken.

This type of repair is normally undertaken in a fully equipped workshop crane room, large enough to handle the transformer unit under controlled conditions.

The co-operation between the Electrix divisions resulted in the project being completed within the time restraints and incident free.



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