

# Wainuiomata Zone Sub Transformer Replacement

**INDUSTRY SECTOR:** Distribution - Stations  
**EDISON SERVICE:** Project Delivery  
**CLIENT:** Wellington Electricity



## Project Overview:

Wainuiomata Zone substation consists of two 20MVA transformer's TSF 'A' and 'B'. Through routine maintenance inspections it was found that TSF 'A' had high levels of dissolved gases.

Wainuiomata Zone substation has N-1 security of supply with two 33kV radial transformer feeders from Gracefield GXP. The removal of TSF 'A' for refurbishment would put Wainuiomata at N security. Any subsequent outage would leave the entire Wainuiomata area (population ~17,000) without power for the duration of a persistent fault on the 33kV or loss of the remaining transformer 'B'.

Wellington Electricity's Petone Zone substation consisted of two lightly loaded 33/11kV 20MVA transformers. A future project to create an 11kV switching station accelerated the decision to decommission transformer 'B' and relocate it to Wainuiomata.

## Edison Delivery:

Edison was engaged by Wellington Electricity to manage and deliver all stages of the project from the design and consenting processes to installation of the replacement transformer from Petone and removal of the failing transformer for assessment.

This work included identifying suitable design options such as temporary vs permanent installation, transformer location, overhead line vs underground cable, and the lifting plan.

Edison engaged with the neighbouring property owner and was given consent to access the site for heavy plant.

By providing a complete technical service and solution package Edison Consulting Group was able to help resolve this issue for Wellington Electricity.

## Client Feedback:

***"Edison managed this project with a professional attitude and we were kept up to date in every aspect of the work. The end result was the project was completed on budget and in a timely manner."***

***Peter Robinson, Project Manager  
Wellington Electricity***