

Newmarket and Footscray Electrical Power Resilience Project

Client: Metro Trains Melbourne
Location: Melbourne, Victoria
Duration: May 2016 - March 2017

DESCRIPTION

The Newmarket and Footscray Electrical Power Resilience (EPR) Project was initiated by Metro Trains Melbourne on behalf of Public Transport Victoria to improve the reliability of its traction power system. As part of the project Electrix was engaged as design and construct contractor to install a new 22kV feeder connection between the North Melbourne and Newmarket substations and to complete works required to facilitate a secondary 22kV connection at Footscray Substation.

SCOPE

In North Melbourne, the brief required construction of an overhead 22kV, 3 phase powerline of approximately 600 meters from North Melbourne Substation to the Arden Street Bridge in Kensington and the running of a 22kV cable and fibre optic cable from the Arden Street Bridge to Newmarket substation using existing conduits. In Footscray the scope included the construction of an underground cable route from Footscray substation to the existing Jemena conduits on the western side of the rail corridor.

The project required extensive stakeholder engagement, consultation, co-ordination and approval at each stage of the work. This necessitated a design change to complete portion of the overhead section as an undercrossing of the Moonee Ponds Creek to maintain clearances around CityLink structures.

VALUE TO CLIENT

The project required Electrix to meet many challenges including:

- Design of the overhead line for construction in a very tight rail corridor with many nearby assets.
- Coordination of work to minimize the need for rail disruptions.
- Extensive liaison with various government and semi-government agencies and other utilities for route coordination and approval.

