

Oshawa PUC Networks MS9 44 kV / 13.8 kV Municipal Indoor Station Construction Project

CLIENT

Oshawa PUC Networks

LOCATION

Oshawa, Ontario

Project Description

Due to an increase in customer peak demand, the Oshawa PUC MS9 indoor substation is located within an urban neighborhood. The station is a 2-storey building complete with switchgear room, cable room / pull pit, system control room, storage room, and office space. The building was designed and built to resemble the general architectural characteristics consistent with the neighborhood/area with which it is located.

B&M Scope of Work

Black & McDonald (B&M) supplied all labour, materials, supplies, equipment, services, and incidentals necessary to design, construct and commission the project:

- Major electrical equipment including
 - Two 44 kV / 13.8 kV power transformers
 - Six 13.8 kV 600 A distribution feeders
 - Metalclad GIS switchgear
 - Nine 15 kV breakers
- Auxiliary 125 V DC control power system for the protection and control and monitoring of equipment (relays, circuit breakers, supervisory control and data acquisition [SCADA], etc.)
- Low-voltage station service according to the load requirements for the equipment at the substation
- SCADA and communication requirements for normal, emergency and restoration operation.
- Uninterruptible power supply for SCADA and programmable logic controller
- Security features (security cameras, accessibility, locks, etc.)
- Emergency back-up generator