

A wide-angle photograph of a large-scale electrical construction site. In the foreground, there are stacks of black pipes and some greenery. The middle ground shows several tall, silver metal transmission towers under construction, with cranes positioned around them. In the background, there are more completed structures and a clear sky.

Hydro One Leamington Transfer Station

CLIENT

Hydro One

LOCATION

Leamington, Ontario

PROJECT DESCRIPTION

Hydro One is Ontario's largest electricity transmission and distribution service provider. The company distributes electricity across Ontario to nearly 1.4 million predominantly rural customers, or approximately 26 percent of the total number of customers in Ontario. Its service territory covers approximately 90 percent of the province including northern Ontario. Hydro One generates and distributes electricity to 22 communities in the most northern parts of the province.

Black & McDonald (B&M) was the general contractor during this project. The station was built as the total load in the area exceeded the loading capacity of the existing stations and transmission lines. Hydro One needed an experienced partner to deliver on this key power infrastructure upgrade and manage the expanded scope to ensure the people in the region maintained access to reliable power.

B&M SCOPE OF WORK

Now completed, the station is comprised of two 75/100/125 MVA, 215.5 -28 kV transformers, eight feeders, one capacitor bank, and switching, protection and metering equipment.

Hydro One Leamington Transfer Station

The project scope included:

- Site preparation including clearing, grading, drainage, access roads and fences.
- Foundation works including yard equipment and bus support structure foundation, PCT building foundation and any other temporary foundation or support that might be required during construction period.
- Installation of the two transformers (HONI will procure and supply the power transformers)
- Procurement and installation of:
 - All electrical equipment and accessories
 - Substation grounding grid and above grade ground connections
 - Materials including cable raceway systems, trenches, conduits, cable raceways, duct banks, and lighting complete with accessories
 - PCT building complete with P&C panels, building electrical and mechanical equipment, and all materials and cables from a HONI approved PCT building vendor
 - Metering equipment, material and cables
 - Telecommunication equipment, material and cables
 - Equipment and bus support structural steel and platforms for major electrical equipment and PCT building
- Site acceptance testing and checks, and documentation including test report, O & M manual, etc.

BENEFITS TO CLIENT OR PROBLEM(S) SOLVED

Hydro One relied on the knowledgeable expertise of Black & McDonald's electricians, linemen and labourers to ensure the job was completed promptly, on budget and to the high standards the power company demands for its infrastructure and everyday delivery.