

Hydro One – 230 kV Underground Circuits from Riverside TS to Strachan TS

CLIENT

Hydro One

LOCATION

Toronto, Ontario

PROJECT DESCRIPTION

The purpose of this project was to replace Hydro One's existing 12 x 115 kV underground low pressure liquid filled cables (H2JK ca1 & ca2 and K6J ca1 & ca2) that were installed in 1957, which are now at or nearing end of life from Riverside Junction to Strachan TS.

B&M SCOPE OF WORK

The work required was engineering, procurement and construction of two new 230 kV circuits to be installed in a concrete duct bank in place of one of the existing direct buried cable circuits. The installation was a combination of open cut and directional drilling and/or tunneling within the existing right of way boundaries, installation of 14 chambers, and installation of 36 km of 4,000 kcm 230 kV cable. Removal of existing 115 kV cable and oil accessories was also required.

The scope included:

- Design, supply and installation of 230kV XPLE cable – 5.6 km underground
- Design, supply and installation of directional drilling (and/or tunneling) and open cut along the existing cable route – approximately 5.6 km
- Laying approximately 6 x 5.6 km of 230 kV XPLE single core XLPE cables
- Cable splicing and termination materials
- Installation of all splicing and cable terminations in Riverside Junction and Strachan TS
- Dress cables and final termination
- Cable testing AC High Pot, PD testing and DTS modelling.
- Cable pulling / transportation
- Back filling
- Handling, storage, transport, testing and disposal of all excavated materials
- Handling, storage, transport, testing and disposal of all oil in the decommissioned cables