



## **CONNECTION ASSESSMENT & APPROVAL PROCESS**

### **ASSESSMENT SUMMARY**

**APPLICANT:** *Cambridge & North Dumfries Hydro*

**PROJECT:** *Install New 230 kV Metering and Associated Facilities at Galt TS*

**CAA ID No. 2002-EX021**

*Long Term Forecasts & Assessments Department*

**DATE:** *May 16, 2002*

## **ASSESSMENT SUMMARY**

### **CAMBRIDGE & NORTH DUMFRIES HYDRO: INSTALL NEW 230 KV METERING AND ASSOCIATED FACILITIES AT GALT TS**

#### **1.0 BACKGROUND**

Cambridge and North Dumfries Hydro Inc. (CND) plans to upgrade the metering at the Hydro One owned Galt TS in Cambridge. Galt TS is a Bermondsey style 230kV-27.6kV station supplied from a tap to the Middleport TS x Detweiler TS 230 kV circuits M20D and M21D.

Currently, metering at Galt TS is at 27.6 kV and is owned by Hydro One. CND advised that the metering seal will soon expire. Under the Market Rules, the metering responsibility will fall to CND. They have been working with Hydro One Network Services and Hydro One Network Management to determine the best method of installing the required metering.

#### **2.0 PROPOSAL**

CND plans to upgrade the metering at Galt TS by installing new metering equipment at 230 kV. This will require the following major items:

- Installation of three (one per phase) 230kV CVT's and 230kV CT's on each of the M20D and M21D taps to Galt TS. Due to space limitations, the CT's and CVT's will be installed upstream from the existing 230 kV transformer disconnect switches.
- Installation of three (one per phase) surge arresters on each of the M20D and M21D taps, on the line side of the CVTs
- Installation of structures, grounding system, connections, communication facilities etc. associated with the above facilities
- Installation of mid span openers on both the 230kV M20D and M21D taps to Galt TS. The openers are required to provide isolation for working on the 230 kV metering equipment (since this equipment will be upstream from the transformer disconnect switches).

The work is scheduled to be completed in the last quarter of 2002.

### **3.0 IMPACT ASSESSMENT**

The installation of the mid span openers will ensure that the proposed equipment can be isolated from the main M20D and M21D supply circuits to allow work on the metering equipment without an outage on the main circuits. Only the supply to the affected power transformer at Galt TS would be interrupted for work on the instrument transformers. However, interruption of one transformer at a DESN station for maintenance work is considered normal practice since DESN stations are normally designed to supply the entire station load with one transformer out of service for maintenance or during forced outages. Thus, the proposed work will not have any significant adverse impact on the IMO-controlled grid.

### **4.0 REQUIREMENTS FOR CONNECTION**

Based on the above, it is concluded that the proposed modified connection will not have any significant adverse system impacts. The project may, therefore, proceed subject to meeting all applicable market rules and regulatory requirements

### **5.0 NOTIFICATION OF APPROVAL OF THE CONNECTION PROPOSAL**

Based on the results of this Assessment, it is recommended that the Applicant should receive a “Notification of Approval of the Connection Proposal” for this project. The Applicant is required to obtain the necessary approvals as may be required by the OEB and other regulatory authorities, including requirements of the facility and metering registration process.