

June 17, 2005

Mr. Jim Santaguida
Senior Analyst / Team Leader, Station Sustainment, Investment Planning
Hydro One Networks Inc.
483 Bay Street, 15th Floor – North Tower
Toronto, ON.,
M5G 2P5

Dear Mr. Santaguida:

***2005 Breaker Replacement Program
Notification of Approval of Connection Proposal***

CAA ID Number: 2005-EX220

Thank you for the data that you provided for the breakers that are to be installed in place of existing units at various transformer stations. The existing breakers are considered to be at the end of their useful life and the breaker replacement work is scheduled for completion before the end of 2005.

Since the ratings of the replacement units are the same or higher than the original breakers, we have concluded that this work will have no adverse impact on the IESO-controlled grid. The data for the replacement breakers are attached.

The IESO is therefore pleased to grant **conditional approval** for the replacement of the 115 kV and 34.5 kV circuit breakers listed in the attached assessment report.

Final approval will be granted upon successful completion of the IESO Facility Registration process. During facility registration you will be expected to demonstrate that you have fulfilled the requirements and the equipment you have installed is materially unchanged from the proposal assessed by the IESO. Contact facility.registration@ieso.ca if you have not received a Facility Registration Summary package within the next 10 days.

For further information, please contact the undersigned.

Yours truly

Mike Falvo
Manager - Transmission Assessments & Performance
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cc: IESO Records

All information submitted in this process will be used by the IESO solely in support of its obligations under the *Electricity Act, 1998*, the *Ontario Energy Board Act, 1998*, the *Market Rules* and associated policies, standards and procedures and in accordance with its licence. All information submitted will be assigned the appropriate confidentiality level upon receipt.

ASSESSMENT SUMMARY

HYDRO ONE NETWORKS Inc.

2005 Breaker Replacement Program (CAA ID Number: 2005-EX220)

1.0 GENERAL DESCRIPTION

During 2005 Hydro One proposes to replace a number of breakers that have reached the end of their useful life. Section 2.0 contains a table showing the locations and identifiers of the breakers that are being replaced, as well as the ratings of the new units.

2.0 PROPOSED FACILITIES

The details for the new breakers are as follows:

| LOCATION | IDENTIFIER | TYPE OF BREAKER (proposed) | RATED VOLTAGE (proposed) | CONTINUOUS CURRENT (existing) | CONTINUOUS CURRENT (proposed) | INTERRUPTING CAPABILITY (existing) | INTERRUPTING CAPABILITY (proposed) |
|-------------------|------------|----------------------------|--------------------------|-------------------------------|-------------------------------|------------------------------------|------------------------------------|
| ST.ANDREW | T3Z | OIL | 34.5 kV | 3000 A | 3000 A | 1000 MVA | 1000 MVA or 16.7 kA |
| MERIVALE TS | AL12 | SF6 | 115 kV | 1200 A | 1200 A | 5000 MVA | 50 kA |
| MERIVALE TS | AL5 | SF6 | 115 kV | 1200 A | 1200 A | 5000 MVA | 50 kA |
| MERIVALE TS | AL4 | SF6 | 115 kV | 1200 A | 1200 A | 5000 MVA | 50 kA |
| PORT ARTHUR TS #1 | A6P | OIL | 115 kV | 1200 A | 1200 A | 7500 MVA | 10000 MVA or 50 kA |
| PORT ARTHUR TS #1 | P3B | OIL | 115 kV | 1200 A | 1200 A | 3500 MVA | 5000 MVA or 25 kA |
| PORT ARTHUR TS #1 | P7B | OIL | 115 kV | 1200 A | 1200 A | 3500 MVA | 5000 MVA or 25 kA |
| RUNNYMEDE TS | YSC4 | SF6 | 34.5 kV | 1200 A | 1200 A | 22 kA | 46 kA |
| RUNNYMEDE TS | BSC3 | SF6 | 34.5 kV | 1200 A | 1200 A | 22 kA | 46 kA |
| THORNTON TS | T4Y | SF6 | 46 kV | 2500 A | 2500 A | 17 kA | 23 kA |

3.0 ASSESSMENT

The assessment indicates that the ratings of the new breakers are either higher or at least the same as the existing breakers and that the interrupting capability of the new breakers is adequate for the short circuit levels experienced in the current system.

The Transmission System Code (Appendix 2) recommends that all 115 kV breakers have an interrupting capability of 50 kA. The new 115 kV breakers P3B and P7B at Port Arthur TS #1 are rated below the performance standard set in the TSC. Since the 2002 Short Circuit Survey prepared by Hydro One indicates that the current maximum short circuit levels at Port Arthur TS are below 15 kA and the system in that area has not suffered major modifications in the last years, it can be concluded that the interrupting capability of the new breakers is adequate. If in the future the short circuit levels at Port Arthur TS are to exceed the interrupting capability of the new breakers, Hydro One will be required to replace the necessary breakers with adequately rated units.

The installed breakers will operate and remain in their original configuration and location.

The Market Rules (Chapter 4 section 7.4) require that each transmitter shall provide the IESO on a continual basis with on-line monitored quantities as specified in Appendix 4.16. For this proposed project, the IESO will continue to require the status and operating quantities associated with the breakers. Hydro One will be

required to meet the IESO's on-line monitoring requirements and meet Transmission System Code requirements with respect to protection systems.

These replacements represent like-for-like exchanges or improvements of existing equipment and will have no adverse impact on the IESO-controlled grid.

4.0 NOTIFICATION OF APPROVAL

It is therefore recommended that a Notification of Approval of the Connection Proposal be issued.