



September 22, 2004

Mr Tom Kydd  
Acting Manager-Stations T&D: Sustainment Programs  
Hydro One Networks Inc.  
483 Bay Street, 15<sup>th</sup> Floor: North Tower  
Toronto M5G 2P5  
Ontario

Dear Mr Kydd:

***2004 Breaker Replacement Program  
Notification of Approval of Connection Proposal  
CAA ID Number: 2003-EX170***

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. The breaker replacement work is scheduled for completion before the end of 2004.

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 IMO-controlled grid. The data for the replacement breakers are attached.

The IMO is therefore pleased to grant **conditional approval** for the replacement of the 230 kV, 115 kV and 34.5 kV circuit breakers listed in the attached assessment report.

**Final approval** will be granted upon successful completion of the IMO Facility Registration process.

Please contact [facility.registration@theIMO.com](mailto:facility.registration@theIMO.com) if you have not received a Facility Registration Summary package within the next 10 days.

For further information, please contact the undersigned.

Yours truly,

Bob Gibbons

Manager – Long Term Forecasts & Assessments

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cc: IMO BIRM

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All information submitted in this process will be used by the IMO 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.

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## ASSESSMENT SUMMARY

### HYDRO ONE NETWORKS Inc.

#### 2004 Breaker Replacement Program

##### 1.0 GENERAL DESCRIPTION

During 2004 Hydro One proposes to replace a number of circuit breakers that have reached the end of 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.

Although this information was provided by Hydro One in a single Connection Assessment application some of the breakers listed in the table were assessment and issued conditional approvals on an individual basis. Other were assessed and approved for in service without a formal notification of approval, under the assumption that they will be formally covered under this approval. These particular situations are also identified in the table.

##### 2.0 PROPOSED FACILITIES

The details for the new breakers are as follows:

Location	Identifier	Type of New Breaker	Rated Voltage	Continuous Current	Interrupting Capability	Comments
Merivale TS	D1L10	SF6	145 kV	2000 A	50 kA	Rated higher than existing
Merivale TS	D1L4	SF6	145 kV	2000 A	50 kA	Rated higher than existing
Sarnia Scott	HL27	SF6	250 kV	3000 A	63 kA	Approved
Sarnia Scott	L7L22	SF6	250 kV	3000 A	63 kA	Rated higher than existing
Pinard TS	PL22	SF6	250 kV*	3000 A	50 kA	Approved under 2004-EX197
Pinard TS	PL20	SF6	250 kV*	3000 A	50 kA	
Manby TS	T14F	Oil	34.5 kV	3000 A	1000 MVA Asym	Same rating as exiting
St. Andrew TS	T4Q	Oil	34.5 kV	3000 A	1000 MVA Asym	Same rating as exiting
Runnymede TS	BY	Oil	34.5 kV	2000 A	1000 MVA Asym	Same rating as exiting

\* Breakers are suitable for 260 kV operation.

##### 3.0 ASSESSMENT

With the exception of the breakers at Pinard TS that have been assessed under CAA ID 2004-EX197, all other breakers will have an interrupting capability which meets the standards set by the Transmission System Code.

The assessment indicates that the ratings of the new breakers are either higher or at least the same as the exiting breakers. Hence, these replacements represent like-for-like exchanges and will have no adverse impact on the IMO-controlled grid.

#### ***4.0 NOTIFICATION OF APPROVAL***

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