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March 31, 2010

Ms. Kirsten Walli
Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
P.O. Box 2319
Toronto, ON.
M4P 1E4

Dear Ms Walli:

EB-2002-0424 – Customer Delivery Point Performance Standards (CDPPS)

On January 17, 2008 the Board issued a Decision that directed Hydro One to revise its CDPPS document, and to report to the Board by:

March 31, 2009 and
March 31, 2010

- i) on the development of and progress made in relation to power quality issues in the preceding calendar year; and
- ii) on the development and progress made in relation to the development of generator performance standards in the preceding calendar year.

On April 2, 2008, the Board approved the revised CDPPS document that was filed as directed above. On March 31, 2009, Hydro One filed the first set of reports.

Please find attached the second and final set of reports to be filed. This concludes Hydro One's filing requirements in relation to power quality and generator supply point performance, as directed by the Board.

Sincerely,

ORIGINAL SIGNED BY SUSAN FRANK

Susan Frank

Attach. (2)

Hydro One Networks Report

Summary of Activities in 2009 Relating to Power Quality Issues

In 2009, Hydro One continued to work with customers on resolving Power Quality (“PQ”) issues on our transmission system through direct consultation, installation of monitors and broader educational seminars. Hydro One has also continued to work with industry partners to work towards the development of PQ standards for the industry.

Hydro One’s Process for Responding to PQ Issues

Hydro One’s process for dealing with PQ issues is described at our company website on the [Power Quality](#) page. Customers can report PQ issues on the website or through their Account Executive at Hydro One. In either case, PQ issues are tracked and are not “closed” until they have been resolved in a satisfactory manner to the customer. Hydro One works with large industrial customers (e.g. auto sector, pulp and paper), generators and LDCs on PQ issues on a case-by-case and as required basis. Hydro One includes questions on PQ issues in its annual Customer Satisfaction Survey and has received favourable remarks from customers.

Installation of PQ Monitors and Data Analysis

As of December, 2009, 50 permanent power quality monitors were in service and integrated into the PQ monitoring system. The need for additional permanent monitor installations is determined based on a case-by-case analysis. Hydro One also installs PQ monitors on a temporary basis, as required, to identify and address customer-specific PQ issues.

As previously reported, work was initiated in 2008 to upgrade the PQ data retrieval and analysis system from a prototype trial to a full production system. This work was completed in 2009. This upgrade enables Hydro One to gather information from additional monitors, as the prototype was not designed to handle as many monitors (on a regular basis) as have been installed. This significantly improves the information available to assess and analyze PQ parameters, and also helps in resolving PQ issues.

Educational Seminars

In 2009, Hydro One also arranged a PQ educational seminar for large customers and Hydro One staff. In addition to our own staff, the training was attended by 16 representatives from large customers. Based on the favourable response from customers, additional seminars will be held as required in future.

Work with Industry Partners

Hydro One continues its ongoing efforts to work with external entities and associations towards the development of standards for PQ issues. Hydro One works actively with other transmitters, industry associations and standards-setting bodies, such as the IEEE, CSA, and IEC (International Electrotechnical Commission) to develop PQ guidelines for manufacturers, customers and utilities, and continues to participate, along with other North American and international utilities, in funding projects to understand and address PQ matters through the CEATI Power Quality Interest Group, and other such organizations.

Hydro One Networks Report

Summary of Activities in 2009 to Develop a

Process to Track Reliability Performance of Generator Supply Points

In 2009, Hydro One continued its work in developing a process to track generator supply point reliability performance. This work included improvements in tracking performance at the supply points and development of a historical database, and participation in transmission industry studies and activities. Hydro One expects to undertake activities in the future such as correlating data with generators to improve the quality of data being recorded for events at generator supply points. This will prove beneficial for the possible development of standards in future.

Improvements in Hydro One’s Process to Track Reliability Performance

In 2009, Hydro One continued to develop its internal processes to systematically track and record transmission network events that affect transmission-connected generators. Some of these process developments included:

- 1) Leveraging the existing process of reviewing and updating load delivery points to also systematically review and update transmission-connected generator supply points. This process provides an inventory of generator supply points for which events are tracked and recorded. As of December 31, 2009, Hydro One has identified a total of 84 generators that are directly connected to the transmission grid (i.e. not embedded). Table 1 (below) categorizes these generators by size (MVA).

Table 1 - Generators Connected to the Hydro One Transmission Grid - Grouped by Size

MVA Category	Total
0-100	37
100-150	13
150-500	18
500-2000	10
2000+	6
Total	84

- 2) Tracking of transmission outage events impacting on transmission-connected generators. This process commenced in January, 2007, and has continued through to 2009. A summary of the number of sustained events, categorized by generator size (MVA), is included in Table 2 below.

Table 2 - Events Affecting Generators Connected to the Hydro One Transmission Grid

MVA Category	2007 Sum of Sustained Events	2008 Sum of Sustained Events	2009 Sum of Sustained Events
0-100	69	57	84
100-150	4	9	11
150-500	6	4	2
500-2000	3	2	2
2000+	0	5	5
Total	82	77	104

- 3) Reporting details pertaining to events affecting transmission-connected generators, including event occurrences, duration and the affected power output. These events are reported through the same channels as existing delivery point load interruption data.

Involvement in Transmission Industry Studies & Activities

Hydro One continues to explore industry information sources such as the CEA and NERC GADS (Generating Availability Data System), which collect event data relating to the reliability of generating systems that includes the collection of events beyond those under generator plant management control.

Hydro One continues to leverage synergies between the work to measure generator supply point performance and the work to monitor load customer delivery point performance, taking into account the different characteristics of generator and load customers on the system. In addition, Hydro One monitors external studies on an ongoing basis and assesses options identified by other transmitters to enhance the reliability of supply points for generators. Hydro One regards the safe, secure and reliable connection of generators to be extremely important.