



CAMBRIDGE AND NORTH DUMFRIES HYDRO INC.

1500 Bishop Street, P.O. Box 1060, Cambridge, ON N1R 5X6

September 17, 2010

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

Dear Ms. Walli:

Re: Current Practice use to Gather and Utilize System Reliability Performance Information. EB-2010-0249

In accordance with the letter from the OEB dated August 23, 2010, re: Initiative to Develop Electricity Distribution System Reliability Standard attached please find Cambridge and North Dumfries Hydro Inc.'s response to the questions outlined in Attachment A of the letter.

Three copies of this letter along with the attachment have been forwarded to your attention via courier.

If you require any additional information or clarification, please contact me at (519) 621-8405, ext. 2355.

Yours truly,

CAMBRIDGE & NORTH DUMFRIES HYDRO INC.

John W. Grotheer, CMA
President & CEO

Attachment A

Questions to Discuss For Electricity Distributors

Current Practices

In addition to SAIDI, SAIFI and CAIDI, what, if any, other system reliability measures do you use?

Response:

In addition to the above system reliability measures, CND Hydro tracks the number of autorecloses and number of lockouts for each distribution feeder on a monthly basis and a total for the year.

Provide a detailed description of your methodology utilized to record SAIDI and SAIFI. Please include information such as:

The degree of use of automated event tracking from SCADA systems, as well as reliance on manual observations.

Whether planned outages are tracked separately.

The level of detail captured throughout a stepped restoration process to record the total customer duration impact.

Response:

CND Hydro tracks the number of customers affected and the duration for each planned and unplanned outage. This task is done by our System Control Centre (SCC). The number of customers affected comes from the system connectivity model in our Geographic Information System (GIS). The duration of the outage is calculated using the start and end times from our SCADA system where it is an event that is registered on our SCADA system (ie. a breaker operation, a switch operation, remote fault indication, etc.). For other events, the start time is the time of the initial call from the customer for unplanned outages or the time that our crews start the interruption for planned outages. The end time for these events is the time of restoration of power by our crews.

Planned outages are tracked separately so that we can keep statistics on the number of Customer-Hours and the number of Customer Interruptions for both planned and unplanned outages.

The outage report is detailed. For a stepped restoration process, we record the exact number of customers restored and reflect that in the calculation of Customer-Hours lost. For instance, two hundred customers could be affected by an outage initially but after switching we may be able to reduce that number to twenty. Therefore, 180 customers may be out of power for one hour and 20 customers may be out of power for three hours. We would record it with that granularity.

Do you use system reliability performance results in planning, investment and maintenance expenditures, as well as establishing operation and maintenance procedures? Please explain.

Response:

Yes, we utilize reliability information in both our annual operating and capital budget preparation as well as in our ten year Distribution Plant Asset Management Plan. It helps us to target areas in our distribution system that needs improvement to maintain reliability to our customers. The reliability information also creates new procedures (ie. wildlife protection to reduce outages caused by animal contacts, power washing to reduce outages caused by tracking due to contamination, etc.).

Do you identify and track the impacts of extraordinary events?

Response:

Yes, we make note of extraordinary events such as the blackout of August, 2003 so that we can see our statistics with and without that extraordinary event.

What other actions do you take to manage system reliability performance?

Response:

(a) For every unplanned outage, a detailed outage report is prepared by our SCC outlining information including the following:

Outage Location, Outage Date, Weather Conditions, Equipment Involved, Voltage Level, Cause Code (ie. Unknown/Other, Scheduled, Loss of Supply, Tree Contacts, Lightning, Defective Equipment, Adverse Weather, Adverse Environment, Human Element, Foreign Interference), Distribution Feeder Number, Listing of Previous Outages, Times and Event Details of the Outage, Interruption Start/Stop Times, Number of Customers Affected between each Set of Times, Customer-Hours Lost for each Set of Times, Duration in Minutes for each Set of Times, Total Customer-Hours Lost and Actions Required.

This outage report is widely circulated internally so that management and staff are aware of outages, understand the impact of outages and can use the information to figure out how to better respond in the future and/or incorporate additional maintenance or capital investment to reduce the likelihood of future outages in the area.

(b) A monthly report is prepared by the SCC including the following:

- Total Number of Planned Outages and Total Number of Customer-Hours Lost due to Planned Outages*
- Total Number of Unplanned Outages and Total Number of Customer-Hours Lost due to Unplanned Outages*
- Notable System Abnormalities*
- Planned and Unplanned Outage Customer-Hours Lost, System Interruptions and Customer Interruptions month by month for past five years and current year*
- Twelve Month Rolling Customer-Hours Lost, System Interruptions and Customer Interruptions*
- Customer-Hours Lost by Cause, System Interruptions by Cause and Customer Interruptions by Cause month by month for current year*
- Twelve month rolling index of CAIDI, SAIDI and SAIFI*
- Total Number of Customers*
- Number of Autorecloses and Number of Lockouts for each Distribution Feeder on a monthly basis and a total for the year*

The December report becomes an annual report.

(c) Discussion/review of major outages at senior management meetings and Operations meetings.

(d) Periodic comparisons of our SAIDI, SAIFI and CAIDI performance to other similar LDC's.