September 30, 2010

Ms. Kirstin Walli
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

**Re: Initiative to Develop Electricity Distribution Reliability Standards EB-2010-0249**

Dear Ms. Walli:

Chatham-Kent Hydro Inc. and Middlesex Power Distribution Corporation welcome the opportunity to comment on Ontario Energy Board Staff discussion paper on Transmission Project Development Planning.

Please find attached the joint submission from Chatham-Kent Hydro Inc. and Middlesex Power Distribution Corporation ("CKH/MPDC").

If you have any further questions, please do not hesitate to call David Ferguson at (519) 352-6300 x 558 or email davidferguson@ckenergy.com.

Yours truly,

Cheryl Decaire
Co-ordinator of Regulatory and Rates
(519) 352-6300 ext 405
Email: cheryldecaire@ckenergy.com

cc: Dave Kenney, President of Chatham-Kent Hydro Inc.
Chris Cowell, Chief Financial and Regulatory Officer
David Ferguson, Director of Regulatory Affairs & Risk Management

# Initiative to Develop Electricity Distribution Reliability Standards

EB-2010-0249

Comments from:
Chatham-Kent Hydro Inc. and
Middlesex Power Distribution Corp.

Chatham-Kent Hydro and Middlesex Power Distribution Corporation ("CKH / MPDC") are pleased to provide information related to the development of electricity distribution reliability standards, as follows:

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

In addition to these measures, CKH / MPDC also utilize:

- Momentary Average Interruption Frequency Index ("MAIFI"), and
- Customer Average Interruption Frequency Index ("CAIFI")

Note that the tracking of CAIFI started subsequent to the installation of the CKH / MPDC Outage Management System ("OMS") in August 2010.

**(2) Provide a detailed description of your methodology utilized to record SAIDI and SAIFI.**

CKH / MPDC track SAIDI and SAIFI using the recently installed OMS. The OMS is comprised of software that assembles and organizes outage notifications received from customers, in order to assist in the pinpointing and determination of the cause of the outage.

The CKH / MPDC Control Room Dispatcher manually records the time of the outage, as determined by the time of the first customer notification, or the time stamp of the SCADA exception report. The time of restoration is also manually recorded, as determined by the time of the last customer re-connection. Using Geographic Information System ("GIS") tools, the number of customers affected is automatically tallied for each incident.

This methodology is used for both planned and unplanned outages. In the case of unplanned outages, the information may be recorded after-the-fact.

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

Yes, CKH / MPDC utilize outage statistics and feeder performance to determine and prioritize the list of proposed projects. This has the highest impact on feeder refurbishment and/or asset replacement prioritization, such as:

- Cable/transformer replacement;
- Installation of automated switching and fault locating equipment;
- Vault and transformer maintenance programs;
- Pole replacement projects, and;
- Feeder extensions, feeder interconnections

An annual summary is completed for each feeder, containing information about the related assets, condition of the feeder and its performance over the past year. Based on this summary, projects are proposed and/or approved.

**4. Do you identify and track the impacts of extraordinary events?**

Extraordinary events are noted and are included in the normal calculations (SAIDI, SAIFI, CAIDI, MAIFI and CAIFI), unless specifically advised by the Board to exclude an event (such as the 2003 Blackout).

The CKH / MPDC OMS has the ability to normalize for weather events using the methodology outlined in the Institute of Electrical and Electronic Engineers ("IEEE") P1366, however, this functionality is currently not being used.

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

CKH / MPDC have specific annual maintenance programs targeted to improve system reliability, including:

- Infrared scanning;
- Insulator replacement;
- Pole replacement;
- Vault maintenance;
- Transformer maintenance, and;
- Tree trimming

In addition, the recent OMS investment allows CKH/MPDC to leverage data residing in our GIS to ultimately help manage outages and more accurately calculate performance statistics.

CKH / MPDC have also included projects in our 5 year business plan to increase the level of system automation and modernize protection and control on our feeders. These projects include the installation of more SCADA and additional fault indicators.

CKH /MPDC completed the installation of residential Smart Meters in 2008 and plans are being formulated to integrate the outage reporting capability of the Smart Meters into the OMS. The integration of Smart Meters and the OMS will allow us to pinpoint the location of the fault and determine, with a high degree of accuracy, the impact of the fault on our customers. This integration will also help determine the effectiveness of any restoration steps taken to restore power.

CKH / MPDC plans to synthesize data from the OMS, Smart Meters and SCADA into summary reports. This will drive more efficient use of system reliability information by field staff and on-call personnel.