

September 16, 2016

VIA Email, Courier and RESS

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Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
27th Floor, 2300 Yonge Street
Toronto, ON M4P 1E4

Dear Ms. Walli,

**Re: Hydro One Networks Inc.
2017 and 2018 Transmission Cost of Service Application
Board File Number EB-2016-0160**

This letter is in response to correspondence to the Independent Electricity System Operator (“IESO”) dated September 8, 2016, from Kent Elson of Klippensteins Barristers and Solicitors with respect to Hydro One’s Cost of Service application (EB-2016-0160). On behalf of Environmental Defense, Mr. Elson requested that the IESO expand on responses from Hydro One for certain interrogatories regarding historical energy demands and transmission losses. Mr. Elson also requested that the IESO answer, or provide relevant information to Hydro One to answer, questions about the sources of Hydro One’s transmission losses and benchmarking studies with other transmission service providers, among other things.

As noted in a letter issued to Kent Elson on September 15, 2016 from Gordon M. Nettleton of McCarthy Tétrault LLP on behalf of Hydro One, data related to the operations of Ontario’s transmission system can be found in various public reports on the IESO’s website.

The IESO, as Ontario’s system operator, calculates and publishes estimated transmission system losses (MW) associated with total market demand (Ontario demand plus exports). Measurements are taken at points of generation and points of distribution across the entire system. Therefore, the data inherently includes losses from parts of the system that are not under Hydro One’s jurisdiction. The IESO does not calculate transmitter-specific transmission losses nor has the IESO conducted any studies of transmission companies in Canada or the US. Estimates of recent total system transmission losses are published in 5-minute intervals at <http://reports.ieso.ca/public/RealtimeConstTotals/>. Historical data is available upon requests to customer.relations@ieso.ca.

With respect to Ontario and market demand peak values, the total energy consumed from the transmission system within Ontario (“Ontario demand”) and both inside and outside of Ontario (“total market demand”) back to market opening in 2002 can be found in hourly intervals in the

Hourly Ontario and Market Demands 2002-2015 on the IESO's website at <http://www.ieso.ca/Pages/Power-Data/Data-Directory.aspx>.

Information on transfer capability limits for each major interface between Ontario and other jurisdictions can be found in the Ontario Transmission System reports available at the following link http://www.ieso.ca/Documents/marketReports/OntTxSystem_2016jun.pdf.

The amount of power that can be transferred at Ontario's interjurisdictional interfaces at any given time is affected by many dynamic factors in and outside Ontario. In accordance with NERC practices and standards, the value used by the IESO to calculate and report on transmission transfer limits incorporates complex considerations such as generation, customer demand and limits imposed on the transmission system due to thermal, voltage, and stability conditions during a particular time period.

We hope that this information will be useful.

Yours truly,



Nancy Marconi
Manager, Regulatory Proceedings

cc: Mr. Kent Elson, Klippensteins Barristers & Solicitors (email)
EB-2016-0160 Intervenors (email)
Harold Thiessen, Case Manager, Ontario Energy Board (email)