Amanda Klein

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September 5, 2012

via RESS e-filing – signed original to follow by courier

Ms. Kirsten Walli **Board Secretary Ontario Energy Board** PO Box 2319 2300 Yonge Street, 27th floor Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: **Toronto Hydro-Electric System Limited ("THESL")** Interrogatories to Hydro One Networks Inc. ("HONI") HONI 2013-2014 Transmission Rates Application **OEB File No. EB-2012-0031**

THESL writes in respect of the above-noted matter. Pursuant to Procedural Order No. 1, issued July 12, 2012, please find attached the interrogatories of THESL to HONI regarding its 2013-2014 Transmission Rates Application.

Yours truly,

[original signed by]

Amanda Klein Director, Regulatory Affairs Toronto Hydro-Electric System Limited regulatoryaffairs@torontohydro.com

AK:RB/acc

cc: Intervenors of Record for EB-2012-0031

Ontario Energy Board

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Schedule B;

AND IN THE MATTER OF a review of an Application filed by Hydro One Networks Inc. for an Order or Orders approving a transmission revenue requirement and rates and other charges for the transmission of electricity for 2013 and 2014.

INTERROGATORIES OF TORONTO HYDRO-ELECTRIC SYSTEM LIMITED ("THESL")

September 5, 2012

EB-2012-0031 Toronto Hydro-Electric System Limited Interrogatories to Hydro One Networks Inc. Filed: 2012 Sep 5 page 2 of 4

ISSUE 5

Are the proposed spending levels for Sustaining, Development and Operations OM&A in 2013 and 2014 appropriate, including consideration of factors such as system reliability and asset condition?

5 - THESL - 1

Ref: Exhibit C1/Tab 2/Sch 2/ p41 lines 12, 13; p42 lines 2, 3; p 40 Fig 14, 15

- a) Please explain why Hydro One considers its strategy of maintaining 25% of its underground transmission cable population in fair/poor condition over the next 10 years to be an appropriate long term strategy.
- b) Please compare the forced outage frequency of underground transmission cables with the CEA benchmark for forced outage frequency of underground transmission cables. Please plot it onto the data of Figure 14. If the CEA benchmark is not available, please compare to another comparable benchmark for forced outage frequency of underground transmission cables. Please state the relative performance of Hydro One to the benchmark.
- c) Please compare the forced outage duration of underground transmission cables with the CEA benchmark for forced outage duration of underground transmission cables. Please plot it onto the data of Figure 15. If the CEA benchmark is not available, please compare to another comparable benchmark for forced outage duration of underground transmission cables. Please state the relative performance of Hydro One to the benchmark.

ISSUE 11

Are the amounts proposed for rate base in 2013 and 2014 appropriate?

11 – THESL – 2

Ref: Exhibit D1-3-3/Appendix A/Table 4/Item #D17

a) Please explain why the customer capital contribution for Bremner TS constitutes 100% of the gross total cost. What assumptions underpin this conclusion?

11 - THESL - 3

Ref: Exhibit D2/Tab 2/Sch 3/ p74

 a) Please explain the impact of the Bremner TS line connection on the current transfer capability between John TS and Esplanade TS. In Hydro One's response, please indicate how 115kV transfer capability will be maintained.

11 – THESL – 4

Ref: Exhibit D2/Tab 2/Sch 3/ p74

a) Please provide a detailed cost breakdown of the \$60M gross cost for building the Bremner TS line connection.

11 – THESL – 5

Ref: Exhibit D2/Tab 2/Sch 3/ p74

 a) Has Hydro One considered any alternate designs for the Bremner TS line connection project? If so, please identify any alternative designs that have been considered, and the status of those alternatives.

ISSUE 12

Are the proposed 2013 and 2014 Sustaining and Development and Operations capital expenditures appropriate, including consideration of factors such as system reliability and asset condition?

12 - THESL - 6

Ref: Exhibit D1/Tab 3/Sch 2/ Table 1, Table 2, Table 3

 a) Please indicate the amount of the historic, bridge and test year amounts for Sustaining, Development, Operations, and Shared Services Capital that were spent and will be spent within the municipal boundaries of Toronto in each of Tables 1, 2 and 3.

12 – THESL – 7

Ref: Exhibit C1/Tab 2/Sch 2/ p34 lines 16-18; p41 Fig 16

- a) Please state what percentage of Hydro One's overall underground transmission cable population is in Toronto, Ottawa and Hamilton, respectively.
- b) Please plot the cable health by category (as shown in Figure 16) for each of the cable populations in Toronto, Ottawa and Hamilton.
- c) Please describe the planned cable replacement rate and cable investment strategy for each of Toronto, Ottawa and Hamilton.

12 - THESL - 8

Ref: Exhibit C1/Tab 2/Sch 2/ p40 Fig 14, Fig 15; p34 lines 16-17; p70 Fig 30, Fig 31

a) Please prepare a chart comparing the forced outage frequency of underground transmission cables for the period 2002 to 2011 (from Figure 14) with the forced outage frequency of line conductors for the period 2002 to 2011 (from Figure 30).

- b) Please prepare a chart comparing the forced outage duration of underground transmission cables for the period 2002 to 2011 (from Figure 15) with the forced outage duration of line conductors for the period 2002 to 2011 (from Figure 31).
- c) Please explain what Hydro One believes to be the appropriate relative performance of underground cables to line conductors in order to achieve "a high degree of reliability" for underground cables as stated in line 17 of p34?
- d) What level of cable replacement would be required so that the forced outage frequency and forced outage duration of underground cables would be three and (separately) ten times better than that of line conductors?

12 - THESL - 9

Ref: Exhibit C1/Tab 2/Sch 2/ p41 lines 1-4

- a) Please plot, for HONI's entire underground transmission cable population, the number of defects and cable leaks that were addressed in planned outages from 2002 to 2011.
- b) Please state if defects and cable leaks that did not lead to forced outages are considered as main factors in driving cable replacement. Please explain the reason why or why not.

12 - THESL - 10

Ref: Exhibit C1/Tab 2/Sch 2/ p41 lines 13-15

- a) Please state the relative weight of circuit criticality, maintenance costs, forced outage frequency and environmental risks in making cable replacement decisions.
- b) Please explain if the type of customer load (i.e., Residential, commercial, industrial), or the presence of public service customers (i.e., Hospitals) is used in determining circuit criticality?
- c) Does Hydro One, in its current process, consider factors such as extent of high voltage and or distribution voltage back-up facilities, amount of load at risk, or length of time customers will remain in a single contingency state when making cable replacement decisions? If Hydro One does consider such factors, please explain how it does.