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November 13, 2009

BY COURIER (2 COPIES) AND EMAIL

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
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Toronto, Ontario M4P 1E4
Fax: (416) 440-7656
Email: boardsec@oeb.gov.on.ca

Dear Ms. Walli:

Re: Pollution Probe – Interrogatories for Toronto Hydro
EB-2009-0139 – Toronto Hydro – 2010 Rates

Pursuant to *Procedural Order No. 1* and the Board's *Issue List Decision and Procedural Order No. 2*, please find enclosed Pollution Probe's interrogatories to Toronto Hydro for this proceeding.

Yours truly,

Basil Alexander

BA/ba

Encl.

cc: Applicant and Intervenors per Appendix "A" to *Procedural Order No. 1* by email

EB-2009-0139

Pollution Probe Interrogatories for Toronto Hydro

November 13, 2009

Issue 1.1: Has Toronto Hydro responded appropriately to all relevant Board directions from previous proceedings?

1. Reference: Exhibit Q1, Tab 4, Schedules 1-1, 1-2, & 1-3

   Please provide copies of all contracts between Navigant Consulting, Inc. and Toronto Hydro and/or the Ontario Power Authority related to the preparation and production of reports and materials about distributed generation in Toronto.

2. Reference: Exhibit Q1, Tab 4, Schedules 1-1, 1-2, & 1-3

   In this proceeding, Toronto Hydro filed copies of three sets of materials by Navigant Consulting, Inc. regarding distributed generation in Toronto. Did Navigant Consulting, Inc. prepare any other related reports or materials for Toronto Hydro and/or the Ontario Power Authority (e.g. an Analyst's Report, other additional or more detailed reports/materials, etc.)? If yes, please provide copies of these materials.

3. Reference: Exhibit Q1, Tab 4, Schedule 1-3

   Page 116 of Schedule 1-3 includes a graph showing the evaluated costs of various distributed generation technologies. However, according to pages 108 and 110, the costs for the various CHP technologies appear to be calculated based on the assumption that they would not be properly sized to match their minimum thermal loads. Please re-calculate these costs and reproduce the graph on page 116 assuming that the CHP technologies are instead properly sized to meet their minimum thermal loads. Please provide all of the key input assumptions for your revised cost calculations for each of the CHP technologies.

4.

   (a) Please provide City of Toronto street maps that clearly show the boundaries for each area in Toronto where there are Toronto Hydro distribution system constraints that limit the amount of natural gas-fired combined heat and power (CHP) generation capacity that can be attached to Toronto Hydro's distribution system.

(b) For each constrained area, please state the maximum quantity (MW) of natural gas-fired CHP that can currently be added to the Toronto Hydro distribution system in that area.

(c) For each constrained area, please describe in detail Toronto Hydro's proposed actions and budgets to reduce these constraints in that area.

(d) For each constrained area, please state the maximum quantity of natural gas-fired CHP that will be able to be added to the Toronto Hydro distribution system in that area by:

(i) December 31, 2010;
(ii) December 31, 2011;
(iii) December 31, 2012;
(iv) December 31, 2013;
(v) December 31, 2014; and
(vi) December 31, 2015.

5. Please provide detailed estimates and breakdowns of all of the additional costs required to connect the following proposed CHP facilities to Toronto Hydro's distribution system:

(a) total of 5.7 MW of CHP at Sunnybrook Hospital;
(b) total of 20 MW of CHP located on the site of the Toronto General Hospital's parking garage on Elizabeth Street;
(c) total of 6 MW of CHP at the north-east corner of Victoria and Queen Streets; and
(d) total of 6 MW of CHP at 246 & 252 Sackville Street.

If some of these costs would be covered by planned infrastructure/capital improvements, please note that as appropriate as well as when these improvements are expected to be implemented.

6. Is it Toronto Hydro's position that new CHP facilities should reimburse Toronto Hydro for 100% of the costs of connecting such facilities to the Toronto Hydro distribution grid? If not, please clearly describe Toronto Hydro's position on this issue and its supporting rationale.

7. Reference: EB-2009-0077, *Notice of Amendment To A Code: Amendments To The Distribution System* dated October 21, 2009

On October 21, 2009, the Board amended its *Distribution System Code* with respect to how the costs of connecting a new renewable generating facility to an electric LDC's system would be shared between the generating facility and the LDC. Specifically, according to page 2 of the *Notice of Amendment*:

- cost responsibility for "expansions" would be assigned as follows:

- where the expansion is in a Board-approved plan or is otherwise approved or mandated by the Board, the distributor would be responsible for all costs of the expansion; and

- in all other cases, the distributor would be responsible for the costs of the expansion up to a "renewable energy expansion cost cap" ($90,000 per MW of capacity on the connecting generator), and the generator would be responsible for all costs above that amount; and

- the distributor would bear all of the costs of "renewable enabling improvements".

Would Toronto Hydro be opposed to a directive from the Board to apply the same or similar cost-sharing principles to new natural gas-fired CHP facilities in its service territory? If so, please fully explain why.

8. According to page 49 of the Board's EB-2008-0272 *Decision With Reasons* dated May 28, 2009 regarding Hydro One's 2009-10 transmission rate application:

> Pollution Probe submitted that the Board should order Hydro One to complete a detailed preliminary plan and budget within the next 6 months, to eliminate Toronto's short-circuit constraints to allow more distributed generation. In Pollution Probe's view, this project is necessary in order to allow expansion of distributed generation, and to avoid the need for a "Third Line".
>
> Hydro One replied that it is in the process of producing a plan and priorities for dealing with the short circuit issues in Toronto and will have it completed by the end of 2009. Hydro One submitted that this is the earliest by which this work can be achieved.

Has Toronto Hydro requested Hydro One to remove the short circuit constraints at the Leaside, Hearn, and/or Manby Transformer Stations as soon as possible? If so, please provide copies of all of the correspondence between Toronto Hydro and Hydro One on this issue. If not, please explain why not.

9. Reference: Exhibit Q1, Tab 4, Schedule 1-1, pages 2 & 4

According to page 2:

> Central and Downtown Toronto faces a number of potential electricity system reliability challenges in the 2015 – 2017 timeframe including the need for additional area supply capacity, infrastructure renewal, and

supply diversity to mitigate against low probability but high impact events.

One option to increase Toronto's security of supply would be to build a new third transmission line to serve downtown and central Toronto. On the other hand, as Navigant Consulting, Inc. notes at page 4, installing 300 MW of widespread distributed generation in central and downtown Toronto "could defer the need for a major transmission upgrade and other upgrades that would otherwise be necessary to meet peak demand."

(a) Please describe and quantify the financial value of the transmission and distribution upgrade savings from installing up to 300 MW of distributed generation in downtown and central Toronto to avoid the need for the proposed Third Line.

(b) Please describe Toronto Hydro's strategies and plans to avoid the need for the proposed Third Line.