

November 2, 2010

BY COURIER (2 COPIES) AND EMAIL

Ms. Kirsten Walli
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Ontario Energy Board
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Dear Ms. Walli:

**Re: Pollution Probe – Written Submissions
EB-2010-0002 – Hydro One – 2011/12 Transmission Rates**

Pursuant to the Board's correspondence dated October 25, 2010, please find enclosed Pollution Probe's written submissions for this matter.

Yours truly,



Basil Alexander

BA/ba

Encl.

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

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 2011 and 2012 (the “Hydro
One 2011-12 Transmission Rates Application”).

POLLUTION PROBE

WRITTEN SUBMISSIONS

November 2, 2010

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Introduction

Pollution Probe's submissions are limited to two issues:

1. Strong support of Hydro One's upgrades to eliminate Toronto's current short circuit constraints; and
2. Elimination of the subsidy currently present in the export transmission system tariff.

Each issue is discussed in turn below.

Elimination of the Toronto Short Circuit Constraints

Issue 4.1: Are the amounts proposed for rate base in 2011 and 2012 appropriate?

Pollution Probe strongly supports Hydro One's proposal to eliminate the current Toronto short circuit constraints involving the Leaside, Hearn, and Manby Transformer Stations. While all of these upgrades should be paid by all of Ontario's electricity consumers given the benefits to the province, these upgrades need to proceed on schedule regardless of whether all of Ontario's electricity consumers pay for these upgrades or if a small amount needs to be paid by Toronto Hydro on behalf of all of Toronto's electricity consumers given the nature of the upgrade.

The City of Toronto is currently exposed to two serious electricity security of supply challenges. First, any loss of the Leaside electricity supply path would lead to a 300 MW power shortage in downtown and central Toronto. Second, in the event of a provincial or North American blackout, Toronto's hospitals will not be able to operate at full capacity.¹ Pollution Probe submits that both of issues need to be addressed.

There are two potential solutions to keep Toronto's lights on if the Leaside supply path is lost:

1. Build a third transmission line to serve downtown and central Toronto at an estimated cost of \$600 million.
2. Install 300 MW of small-scale combined heat and power ("CHP") plants in downtown and central Toronto.²

However, while the first option of building a third line to provide power to the Hearn Transformer Station would ensure that Toronto's lights stay on if the Leaside supply path is lost, it would not enable Toronto's hospitals to continue to operate at full capacity in the event of a provincial or North American blackout. The better option is to instead install numerous, small-scale, high-efficiency CHP plants in Toronto's hospitals, buildings and factories since it would address both of Toronto's security of supply challenges.

¹ Exhibit K2.2, *Pollution Probe Cross-Examination Reference Book for Panel 1*, Tab 1, pg. 1; Transcript, Vol. 2, Sept. 21, 2010, pgs. 18-19.

² Exhibit K2.2, *Pollution Probe Cross-Examination Reference Book for Panel 1*, Tab 1, pg. 2; Transcript, Vol. 2, Sept. 21, 2010, pgs. 19-20.

The CHP option is also attractive for additional reasons. For example, the development of distributed CHP plants would be less expensive on a cost basis than building new nuclear reactors or refurbishing the Darlington reactors to provide electricity supply for a third transmission line. The electricity supplied by these CHP plants would also not suffer the additional transmission losses that a third line would experience, particularly during periods of peak demand, because they would be located close to load.³ Finally, these options would provide additional flexibility and options in the event of a loss of the Manby electricity supply path.⁴

Unfortunately, as a result of the current short circuit constraints at Hydro One's Leaside, Manby, and Hearn Transformer Stations, less than 80 MW of CHP can be installed in downtown and central Toronto.⁵ As a result, Hydro One is seeking approval from the Board to invest \$152.7 million to eliminate these short circuit constraints as part of this application.⁶

Pollution Probe accordingly and strongly supports Hydro One's proposal to eliminate these short circuit constraints because:

1. Facilitating the installation of CHP in downtown and central Toronto is the lowest cost option to increase Toronto's security of supply; and
2. Facilitating the installation of CHP in Toronto, and hence reducing Ontario's need for new or refurbished nuclear generation, will reduce Ontario's costs of meeting its base-load electricity needs.

Pollution Probe notes that Hydro One has also received letters of support for its proposal from thirteen organizations. These organizations include: the City of Toronto, Redpath Sugar, Sunnybrook Health Sciences Centre, Toronto Community Housing and the University Health Network (which includes the Princess Margaret Hospital, the Toronto General Hospital, and the Toronto Western Hospital).⁷ This support thus comes from a variety of perspectives, such as government, manufacturers/processors, and hospital/research facilities.

As a result, Pollution Probe submits that Hydro One's proposal is in the best interests of all of Ontario's (as well as Toronto's) electricity consumers. The cost of Hydro One's short circuit upgrades should thus be paid for by all of Ontario's electricity consumers. Given the broad positive benefits and impacts of such CHP generation, CHP generators should not bear the costs of these upgrades since such a policy would discourage the development of CHP in downtown and central Toronto. However, if the Board determines that a small amount needs to be paid by only Toronto's electricity consumers then these costs should be recovered from Toronto Hydro.

³ Exhibit K2.2, *Pollution Probe Cross-Examination Reference Book for Panel 1*, Tab 1, pg. 3.

⁴ Transcript, Vol. 2, Sept. 21, 2010, pg. 21, ls. 4-9.

⁵ Exhibit K2.2, *Pollution Probe Cross-Examination Reference Book for Panel 1*, Tab 1, pg. 4; Transcript, Vol. 2, Sept. 21, 2010, pgs. 21-22.

⁶ Exhibit A, Tab 11, Schedule 4, pg. 30; included as part of Exhibit K2.2, *Pollution Probe Cross-Examination Reference Book for Panel 1* at Tab 2, pg. 8. Transcript, Vol. 2, Sept. 21, 2010, pgs. 22-23.

⁷ Exhibit D1, Tab 3, Schedule 3, Appendix C, Page 1; included as part of Exhibit K2.2, *Pollution Probe Cross-Examination Reference Book for Panel 1* at Tab 3, pg. 12; Transcript, Vol. 2, Sept. 21, 2010, pgs. 25-26.

Elimination of the Subsidy Currently Present in the Export Transmission System Tariff

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

Pollution Probe submits that the current transmission subsidy for electricity exports and imports should be eliminated. As a result, the export/import transmission system tariff should be raised to reflect the true costs of such transmission (i.e. \$5 per MWh).

Hydro One's current transmission rate for electricity exports and imports is \$1 per MWh while its transmission rate for its domestic customers is \$5 per MWh.⁸ In other words, the transmission rate for electricity export/imports is 80% lower than the transmission rate for domestic customers. The practical impact is that Ontario's residential, commercial, institutional and industrial customers are subsidizing the export of electricity from Ontario electricity generators (such as OPG and Bruce Power) to the United States. Such customers are similarly subsidizing the import of coal-fired electricity generation, particularly from the Ohio Valley.

Charles River Associates International ("CRA") prepared a report for Ontario's Independent Electricity System Operator ("IESO") that examined the potential elimination of this subsidy. In particular, the elimination of this electricity export/import subsidy would:

- a) Reduce Ontario's electricity exports by 35% in 2010 and 46% in 2015;
- b) Reduce Ontario's electricity imports by 33% in 2010 and 35% in 2015; and
- c) Reduce electricity bills for Ontario consumers by \$207 million in 2010 and \$176 million in 2015.⁹

However, instead of achieving these significant positive impacts, the IESO has submitted that the subsidized export tariff should be maintained to eliminate the need for OPG and Bruce Power to dispatch down/off its nuclear units during periods of surplus base-load generation.¹⁰

Pollution Probe submits that the IESO's submission to maintain the existing subsidy should not be followed (i.e. the current subsidy should be instead eliminated) because.

1. According to the Board's long established principles regarding rate design, electricity transmission tariffs should be based on the *actual cost* of providing the transmission service. In other words, subsidies should not be in place that would increase the revenue/profits or reduce the costs/losses of nuclear power companies at the expense of Ontario's electricity consumers; and
2. Eliminating the status quo subsidy for electricity exports will not require OPG or Bruce Power to dispatch down/off their nuclear units. Instead, if they want to avoid reducing their nuclear generation during periods of surplus base-load

⁸ Exhibit H1, Tab 5, Schedule 2, Attachment 1, pgs. 3 & 6-7 (see generally pgs. 3-8).

⁹ Exhibit H1, Tab 5, Schedule 2, Attachment 1, pg. 16, Table 3.

¹⁰ *Submissions of the Independent Electricity System Operator* dated October 15, 2010, pg. 4.

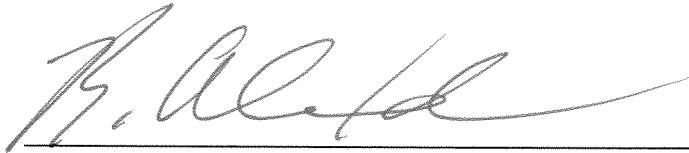
generation, they should simply lower their electricity spot market bid prices. In other words, they should instead follow standard market principles so that their overall sales in domestic and export markets are not reduced instead of relying on subsidies from Ontario's electricity consumers.

Pollution Probe thus submits that the current transmission subsidy for electricity exports and imports should be eliminated. As result, the export/import transmission system tariff should be increased to \$5 per MWh to reflect the actual cost of transmission.

Costs

Pollution Probe requests that it be awarded 100% of its reasonable costs of participating in this proceeding. Pollution Probe is a registered charity with no pecuniary interest in the outcome of Hydro One's application.

ALL OF WHICH IS RESPECTFULLY SUBMITTED



Basil Alexander, Counsel for Pollution Probe

November 2, 2010

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