



130 Queens Quay East, Suite 902
Toronto, Ontario M5A 0P6
T 416.926.1907 F 416.926.1601
www.pollutionprobe.org

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

May 2, 2022

**Re: EB-2021-0110 - Hydro One Network Inc. Custom IR Application (2023-2027) - Application Update
Pollution Probe Interrogatories to Applicant**

Dear Ms. Marconi:

In accordance with Procedural Order No. 5 dated April 14, 2022, please find attached Pollution Probe's interrogatories for the above proceeding.

Respectfully submitted on behalf of Pollution Probe.

Michael Brophy, P.Eng., M.Eng., MBA
Michael Brophy Consulting Inc.
Consultant to Pollution Probe
Phone: 647-330-1217
Email: Michael.brophy@rogers.com

cc: Richard Carlson, Pollution Probe (via email)
John DeVenz (via email)
All Parties (via email)

ONTARIO ENERGY BOARD

Hydro One Network Inc. Custom IR Application (2023-2027)

POLLUTION PROBE INTERROGATORIES OF APPLICATION UPDATE

May 2, 2022

Submitted by: Michael Brophy
Michael Brophy Consulting Inc.
Michael.brophy@rogers.com
Phone: 647-330-1217
28 Macnaughton Road
Toronto, Ontario M4G 3H4

Consultant for Pollution Probe

O-PP-1

Ref: Exhibit O, Tab 1, Schedule 1, page 1 of 10

Preamble:

“This Exhibit presents an update to Hydro One’s evidence to reflect a customer-centric approach.....to deliver on our commitments to customers without impacting the proposed transmission and distribution rates during the 2023 to 2027 period in a material way.”

The above statement implies an analysis was undertaken that determined the impact on rates was material as a result of higher inflation assumptions and lower demand forecast.

- a) Did Hydro One undertake an analysis to determine the impact on transmission and distribution rates as a result of the higher revenue requirements due to higher inflation assumptions and reduced load forecast - assuming no deferral of revenue requirements into the next rate period?
- b) If the answer to a) is yes, please provide the results of the analysis for each year from 2023 through 2027.
- c) If the answer to a) is no, please explain why an analysis of the impact on rates in the existing rate period was not undertaken and presented prior to recommending the deferral alternative.
- d) If not provided in the response to b), please provide an analysis of the impact of the higher inflation assumptions and reduced load forecast on transmission and distribution rates for 2023 through 2027 period. Please provide final results identical to the three tables on page 10 and 11 of Exhibit A-3-1, Attachment 1, Joint Rate Application Business Plan - May 7, 2021.

Please assume no deferral of revenue requirements into the next rate period. Please provide the variance from originally filed evidence and the variance from the previous rate period.

- e) Please explain what materiality criteria Hydro One used to assess its updated request for incremental funding and resulting rate impacts.

O-PP-2

Ref: Exhibit O, Tab 1, Schedule 1, page 5 of 10

Preamble:

“Overall, the above-described updates to Hydro One’s load forecasts result in an average 1.2% reduction over the test period in the case of the transmission load forecast and an average 1.9% reduction over the test period in the case of the distribution load forecast.”

Lower throughput would suggest there could be opportunities to reduce OM&A and capital spending plans.

- a) Did Hydro One assess if there are potential opportunities in transmission and/or distribution to reduce OM&A and/or capital spending plans as a result of the lower load forecasts? If yes, please provide this analysis.
- b) If the answer is no, please explain why not.

O-PP-3

Ref: Exhibit O, Tab 1, Schedule 2, page 6 of 42
Exhibit O, Tab 1, Schedule 2, Attachment 1, page 7 of 10

Preamble:

“Rising fuel costs have led to a 30% to 35% increase in the 2022 forecast for Hydro One’s internal fleet.”

“Higher oil prices influence Canadian inflation in a variety of ways. The direct effect on CPI is mostly limited to gasoline prices that are adding about 1.2 percentage points to Canada’s present 5.1% y/y inflation rate (chart 18).”

An increase in the long-term price forecast for fossil fuels will have a material impact on the business case for purchasing electric vehicles as an alternative to conventional and hybrid fossil fueled vehicles. Investing in electric vehicles can help mitigate the impact on rates of higher and volatile fossil fuel prices.

- a) Please provide Scotiabank’s revised long-term price forecast for gasoline and diesel fuel. If not available, please provide their revised forecast for oil prices that can be used as a proxy to forecast gasoline and diesel prices.
- b) Please provide financial analyses for purchasing electric vehicles as an alternative to conventional and hybrid fossil fueled vehicles. Please use Scotiabank’s revised price forecast for gasoline and diesel fuel in the analysis.

As in a) if an updated price forecasts for gasoline and diesel are not available, please use oil price forecasts as a proxy. Please complete the following tables 1-6 for representative light, medium and heavy-duty vehicles.

Table 1			
Representative Light Duty Vehicle			
(After Tax Cost)			
Year	Electric vehicle	Conventional fossil fueled	Plug-in hybrid fossil fueled
1			
2			
.			
15			

Table 2		
Representative Light Duty Vehicle		
Description	Electric vs conventional fossil fueled vehicle	Electric vs plug-in hybrid fossil fueled vehicle
Incremental cost		
Simple Payback (years)		
NPV discounted @ WACC*		
IRR		

Table 3 Representative Medium Duty Vehicle (After Tax Cost)			
Year	Electric vehicle	Conventional fossil fueled	Plug-in hybrid fossil fueled
1			
2			
.			
15			

Table 4 Representative Medium Duty Vehicle		
Description	Electric vs conventional fossil fueled vehicle	Electric vs plug-in hybrid fossil fueled vehicle
Incremental cost		
Simple Payback (years)		
NPV discounted @ WACC*		
IRR		

Table 5			
Representative Heavy-Duty Vehicle			
(After Tax Cost)			
Year	Electric vehicle	Conventional fossil fueled	Plug-in hybrid fossil fueled
1			
2			
.			
15			

Table 6		
Representative Heavy-Duty Vehicle		
Description	Electric vs conventional fossil fueled vehicle	Electric vs plug-in hybrid fossil fueled vehicle
Incremental cost		
Simple Payback (years)		
NPV discounted @ WACC*		
IRR		

*Net Present Value discounted at the weighted average cost of capital

O-PP-4

Ref: Exhibit O, Tab 1, Schedule 2, page 8 of 42
Exhibit O, Tab 1, Schedule 2, page 11 of 42
Exhibit O, Tab 1, Schedule 2, page 17 of 42

Preamble:

“The plan was then re-escalated using the revised inflation rates listed above for each of 2021, 2022, and 2023 for capital and OM&A, and by 2.0% for years 2024 through 2027 for capital.”

“If the forecast inflation rates for 2022 and 2023 at the time of DRO are higher than the forecasts used in this evidence update (i.e. 4.5% for 2022 and 3.3% for 2023), then the following process is proposed:

- The revenue requirement will be updated to reflect the new inflation rate, but will not exceed a prescribed inflation cap (the “Inflation Forecast Cap”).”
 - a) Please provide a sensitivity analysis of the impact on transmission and distribution rates, assuming an average 3% inflation rate for the years 2024 through 2027. Please provide final results identical to the three tables on page 10 and 11 of Exhibit A-3-1, Attachment 1, Joint Rate Application Business Plan - May 7, 2021.

Please assume no deferral of revenue requirements into the next rate period. Please provide the variance from originally filed evidence and the variance from the previous rate period.

- b) If the OEB does not agree to Hydro One’s proposal to defer revenue requirements into the next rate period, what other action does Hydro One propose to mitigate the impact on rates?
- c) Hydro One has indicated that cost reductions or deferrals could be undertaken in system renewal and system service budget categories. Please outline the estimated total reductions or deferrals in capital spending (in millions of dollars) that could be implemented for each year of the 2023-2027 period. Please indicate which amounts are reductions and which are deferrals.

O-PP-5

Ref: Exhibit O, Tab 1, Schedule 2, page 11 of 42

Preamble:

“If the plan is not adjusted for updated inflation assumptions, a range of investments that are not deemed “mandatory” (e.g., driven by regulatory or compliance obligations) would be impacted by deferrals and reductions. The potential impact areas include System Renewal investments that are required to mitigate asset-related risks (e.g., to address a subset of deteriorated system assets based on verified condition, risk-based prioritization, and prudent planning to manage the overall proportion of poor-condition assets) as well as System Service investments that aim to improve service for some of the customers that experience reliability issues. The examples below further highlight the likely areas of impact:”

- a) Please provide the approximate percentage of transmission and distribution system renewal investments that are deemed “mandatory” (e.g., driven by regulatory or compliance obligations).
- b) Please provide the approximate percentage of transmission and distribution system service investments that are deemed “mandatory” (e.g., driven by regulatory or compliance obligations).
- c) Please clarify if general plant is also a category that could be impacted by potential reductions and deferrals.
- d) Please provide the approximate percentage of general plant investments that are deemed “mandatory” (e.g., driven by regulatory or compliance obligations).
- e) Hydro One has indicated that cost reductions or deferrals could be undertaken in system renewal and system service budget categories. Please outline the estimated total reductions or deferrals in capital spending (in millions of dollars) that could be implemented for each year of the 2023-2027 period. Please indicate which amounts are reductions and which are deferrals.

O-PP-6

Ref: Exhibit O, Tab 1, Schedule 2, page 17 of 42

Preamble:

“If the cumulative inflation for 2022 and 2023 exceeds 10%, Hydro One will aim to manage its work program to the capped amount through investment reprioritization and redirection and will adjust the outcomes outlined in TSP Section 2.5 and DSP Section 3.5 accordingly.”

Hydro One has outlined a plan to manage its work program through investment reprioritize and redirection if inflation exceeds its proposed 10% inflation cap.

- a) Please explain why Hydro One would not implement a similar plan to reduce rate impacts during the 2023 - 2027 period as a result of higher inflation assumptions and reduced loaded forecast - assuming that no incremental revenue requirements are deferred into the next rate period?