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December 6, 2016

VIA RESS AND COURIER

Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto, Ontario M4P 1E4

Dear Ms. Walli:

RE: EB-2016-0160 Hydro One Networks Inc. ("Hydro One") Transmission Rates Application – Responses to Undertakings J5.4 and J6.3

Hydro One's responses to Undertakings J5.4 and J6.3 are enclosed.

Yours truly,

McCarthy Tétrault LLP
Per:

For: Gordon M. Nettleton

GMN

UNDERTAKING – J5.4

Undertaking

TO ADVISE WHAT DISCOUNT RATE WAS USED RE: THE NPV CALCULATION IN UNDERTAKING TCJ2.3.

Response

The original analysis was completed using a discount rate of 5.78%. This is consistent with Hydro One's weighted average cost of capital at the time the application was submitted. It is noted that the approved return on equity has decreased since that time, from 9.19% to 8.78%, which would result in a slightly lower discount rate today.

The analysis is based on the assumption that two coating events will be required. One is in the year 2017 and the other in 2052. For the 230kV towers, both tower coating events are priced at $37,000 in 2016 dollars and are then inflated by 2% annually. This results in a forecasted tower coating expense of approximately $75,000 in 2052. Furthermore, a terminal value at the end of the study period was used to account for the remaining life of the asset.

The two coating events and the terminal value impact Hydro One CCA pools for income tax purposes, resulting in a tax shield benefiting rate payers. The 2017 tower coating capital expenditure comes to a net expense of approximately $30,000 after considering the tax shield. The 2052 tower coating capital expenditure comes to a net expense of approximately $8000 after discounting and considering the tax shield. The terminal value had no material impact on the analysis. The present value of the two coating events and the terminal value added together is $38,000 as referenced in the "230kV Tower" section of Table 2 of Exhibit TCJ2.3.

The same approach was used for the comparable rebuild scenarios. In the case of a single 230kV tower, the $450,000 capital expenditure in 2016 dollars was also inflated by 2% resulting in a projected expense of approximately $830,000 in 2047. Furthermore, a terminal value at the end of the study period was also included to reflect the remaining life of the asset. Both the cost of rebuilding the tower and the terminal value were discounted using the 5.78% discount rate, which, including tax shield considerations, resulted in a present value expense of $103,000, as provided in Table 2 of Exhibit TCJ2.3.

Witness: Chong Kiat Ng

The same approach was used in analyzing the 230kV multiple tower scenario as well as both 115kV tower scenarios, with the appropriate costs for each.

Discount Rate of 8%

As requested as part of the undertaking, Hydro One has rerun the analysis using a discount rate of 8%, with all other considerations remaining the same. The results are provided below with comparable figures from the original analysis using a discount rate of 5.78%.

Single Tower Replacement Discount Rate of 5.78%		**Single Tower Replacement Discount Rate of 8.00%**	
115 kV Tower		**115 kV Tower**	
PV for Coating Cost ($K)	30	PV for Coating Cost ($K)	27
PV for Replacement ($K)	92	PV for Replacement ($K)	52
Unit Capital Cost Saving ($K)	62	Unit Capital Cost Saving ($K)	25
230 kV Tower		**230 kV Tower**	
PV for Coating Cost ($K)	38	PV for Coating ($K)	33
PV for Replacement ($K)	103	PV for Replacement ($K)	58
Unit Capital Cost Saving ($K)	65	Unit Capital Cost Saving ($K)	25

Hydro One does not believe that an 8% discount rate is appropriate, especially as this would require a significant increase in the cost of debt and equity to justify. However, it is noted that in either scenario the cost of tower coating is lower than the cost of replacing towers and is the beneficial option to rate payers.

UNDERTAKING – J6.3

Undertaking

TO PROVIDE A BREAKDOWN ON PROJECTS THAT ARE IN EXECUTION IN 2017 AND '18, HOW MANY OF THEM HAVE GONE THROUGH DETAILED ESTIMATE, AND HOW MANY OF THEM HAVE GONE THROUGH BUDGETARY ESTIMATE, AND HOW MANY OF THEM ARE PLANNER ESTIMATE.

Response

The following table depicts a more detailed breakdown of the status of transmission capital projects, in gross dollars as of May 2016, shown in Exhibit B1, Tab 4, Schedule 1, Figure 2, page 14 of 23.

Status	**2017 ($M)**	**2018 ($M)**
In Scoping	136	405
Budgetary Estimating	244	293
Detailed Estimating	85	69
In Execution	710	459
Total	1,174	1,226

Witness: Mike Penstone/Kevin Mancherjee