

OEB Staff Supplementary Interrogatories on the Updated Evidence

2019 Cost of Service Rate Application

Niagara-on-the-Lake Hydro Inc. (NOTL Hydro)

EB-2018-0056

January 22, 2019

Supp-Staff-1

Ref: Exhibit 2 Rate Base – Underground Voltage Conversion- Additional Evidence, Pages 3 and 4; Appendix 1H 2018 CGC Customer Engagement Report (Original evidence)

NOTL Hydro explained the reasons that triggered the underground voltage conversion by-law in 1989 as follows:

Installing the higher poles for the 27.6 kV lines would extensively damage this tree canopy and disturb the character of the area. This would not be acceptable to the Town residents. Recognizing this, in 1989 NOTL Hydro Electric Commission passed a by-law requiring that the voltage conversion in these area be by way of underground installations.

The attached by-law 5.7.1 in the additional evidence is named as a “Policy”.

The final report of customer engagement by CGC (Appendix 1H to Exhibit 1 of the original application), which summarized the customer engagement results from the 2018 open houses, states that

Customers commented that overall, underground lines should be a matter of efficiency, not cosmetics. They are a very expensive proposition and Niagara On The Lake Hydro has to be cautious in rolling them out. When it comes a cost vs. benefit analysis, the benefit appears too small and is not a priority.

- a) Please clarify whether the “by-law” 5.7.1” is a policy of the company? If so, would a company policy be reviewed periodically to ensure the appropriateness of the policy?
- b) Please explain if and how NOTL Hydro has reviewed the policy in 2018 based on the customers’ comment in the CGC’s final customer engagement report.
 - If so, please explain how the customers’ comment was incorporated into NOTL Hydro’s decision for the underground conversion program/project.
 - If not, please explain why not.

Supp-Staff-2

Ref: Exhibit 2 Rate Base – Underground Voltage Conversion- Additional Evidence, Pages 7, 8, and 9; Exhibit 2 Rate Base (Original evidence), Page 46

Page 7 of the additional evidence provides a map of past and future underground voltage conversion in NOTL Olde Town.

Page 8 of the additional evidence stated that “NOTL Hydro estimates it has completed 2/3s of the underground conversion project and that it will be completed by 2034.”

Page 9 of the additional evidence (Table 2.4) provides the underground conversion expenditure and underground conversion spend % of Total capital. The table includes \$340k underground conversion spend in 2019.

Staff notes that page 46 of Exhibit 2 as filed in the original evidence (Table 2.34 capital projects table) provides the underground project expenditure as part of the system renewal expenditure from 2014 to 2028. Part of the table is reproduced below:

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Overhead	671,928	453,329	572,989	513,654	662,000	637,000	560,000	510,000	510,000	560,000	560,000	560,000	560,000	530,000	530,000
Underground	332,974	186,316	452,077	256,601	186,955	335,000	425,000	425,000	425,000	450,000	450,000	450,000	460,000	469,000	476,000
Underground - Additional virgil						125,000	175,000								
System Renewal Total	1,004,902	639,645	1,025,066	770,255	848,955	1,097,000	1,160,000	935,000	935,000	1,010,000	1,010,000	1,010,000	1,020,000	999,000	1,006,000
underground % of System Renewal total (staff calculation)	33%	29%	44%	33%	22%	42%	52%	45%	45%	45%	45%	45%	45%	47%	47%
underground Average % of Total System Renewal	41%														

The underground % of system renewal total for each year from 2014 to 2028 and the average % are calculated by staff.

- Please confirm that all area shown in Map 2.2 with the future underground conversion is considered as tourist area.
- Please provide the data, if available, using the same format in the table above for the forecasted overhead, underground and total system renewal expenditures for

the years of 2029 to 2034 when the underground conversion project will be completed.

- c) Please confirm the staff calculation for the underground % of system renewal total for each year from 2014 to 2018 and the average % calculated in the table above.
- d) Please confirm that the underground expenditure in 2019 that is subject to the OEB's determination is \$460k (\$335k plus \$125k Virgil project) instead of \$340k that was included in Table 2.4 of the additional evidence.
- e) Please confirm that NOTL Hydro did not file any additional evidence on the underground Virgil project of \$125k.

Supp-Staff-3

Ref: Exhibit 2 Rate Base – Underground Voltage Conversion- Additional Evidence, Page 9; DSP filed in the original evidence, Page 62

NOTL Hydro explained one benefit of the underground conversion project “Tree trimming costs are lower. It is estimated that when the Olde Town is fully converted the tree trimming savings will be around \$20,000 for each three year cycle.”

Page 62 of the DSP as filed in the original evidence states that

Recently, a three-year agreement was signed with a qualified contractor to provide tree trimming services for a total contract price of \$130,000.

Another benefit provided by NOTL Hydro in its additional evidence is “Better reliability”. NOTL Hydro provided four outages impacting one customer in 2018 in Olde Town to support the benefit and stated that: “we were able to provide some reassurance that most of these would no longer occur when his service was converted to underground.”

- a) Please confirm that the tree trimming cost after 2034, which is the estimated completion year of underground project, would be \$110k for three-year cycle and the annual saving would be \$6.7k.
- b) Please provide the detailed explanation of the outages in 2018, including the cause of the outages, and who provide the reassurance that it would no longer occur when the service was converted to underground.

Supp-Staff-4

Ref: Exhibit 2 Rate Base – Underground Voltage Conversion- Additional Evidence, Page 10

In analyzing the costs, NOTL Hydro explained that “there is an additional cost to install an underground service compared to overhead but that differential is difficult to quantify.”

It further explained that the main cost drivers for the higher installation costs of overhead in urban area as compared to the rural area are the higher planning and design costs in urban area and the cost of rigorous review process including public hearings for any construction in Olde Town. Niagara-on-the-Lake Hydro stated that “the cost of this process is likely to be significant due to the additional tree trimming, and potential tree removals, that would be required with the higher 27.6 kV lines”.

- a) Please explain whether the cost of installing an overhead line would still be lower than the cost of installing the underground, even with the additional costs mentioned above.
- b) Given NOTL Hydro has started the underground conversion project in 1987, please provide the history (maintenance frequency and cost incurred for repair and maintenance) with respect to the maintenance of the underground facilities in Olde Town.
- c) Please explain whether NOTL Hydro has analyzed the cost of maintenance between the overhead and underground. If so, please provide. If not, why not.
- d) Please provide the method (i.e. Direct buried, Duct bank or Concrete encased duct bank) used by NOTL Hydro for its underground conversion project and the rationales for choosing the method(s)

Supp-Staff-5

Ref: Exhibit 5 Cost of Long-term debt Additional Evidence, Page 2

NOTL Hydro explained that the town advised NOTL Hydro of its intention of calling the two callable town loans and resetting the interest rates of 3.5% by providing an excerpt of the email from the town. In the email, the town staff indicated a discussion to be held in January.

Staff notes from the original evidence that one town loan has a 90-day notice period for recalling the loan and the other town loan has a 45-day notice period for recalling the loan.

- a) Please provide a pdf copy of the email from the town.
- b) Please provide an update regarding any discussion with the town.
- c) Please provide the expected effective dates for the two town loans with reset interest rates.

Supp-Staff-6

Ref: Exhibit 5 Cost of Long-term debt Additional Evidence, Page 3

NOTL Hydro stated that “The proposed rate is equivalent to what financial institutions were offering at that time for 10 year debt. Again, as this debt is unsecured and has no financial covenants it is really much cheaper.”

- a) Please provide the support for the statement that “the proposed rate is equivalent to what financial institutions were offering at that time for 10 year debt.”

Supp-Staff-7

Ref: Exhibit 9 Group 2 and LRAM Rate Riders Additional Evidence, Page 3; DVA Continuity Schedule filed on Jan 10, 2019, Tab 7 Rate Rider Calculations

Staff notes that the Group 2 rate riders for all rate classes in the DVA continuity schedule filed with the settlement proposal are still based on one-year disposition period instead of two-year period.

- a) Please confirm if the staff observation above is correct. If so, please update the Group 2 rate riders in the DVA continuity schedule using a two-year disposition period.