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Niagara
on-the-Lake
HYDRO

3

4

Rate Application

5

Supplementary

6

Questions

7

RESPONSES TO FOLLOWUP

8

OEB

9

10 2019 Cost of Service Rate Application

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

12 EB-2018-0056

13

1 **Table of Contents**

2 **Table of Contents 2**

3 1-Staff-8 3

4 2-Staff-25 5

5 2-Staff-27 & 2-VECC-8 6

6 4-Staff-42 & 4-VECC-29 8

7 MODEL 10

8 7-Staff-8 11

9 9-Staff-67 13

9 9-Staff-71 14

10

11

12

13

14

1-Staff-8

Ref: NOTL Hydro's Response to 1-Staff-8

NOTL Hydro provided a weblink to the Bank of Canada's website for the inflation calculator to support the inflation factor used. The screen of the webpage is copied below:

transportation, and recreation. An increase in this cost is called **inflation**.

The calculator's results are based on the most recent month for which the CPI data are available. This will normally be about two months prior to the current month.

How to Use the Calculator

Enter any dollar amount, and the years you wish to compare, then click the **Calculate** button.

YEARS MUST BE IN THE RANGE 1914 - 2018. COMMAS AND SPACES CAN BE USED IN THE DOLLAR AMOUNT.

A "basket" of goods and services

...that cost: \$ 100.00 in 1914

...would cost: \$ Answer in 2018

Clear Calculate

Per cent change: Answer

Number of Years: Answer

Average Annual Rate of Inflation (%) / Decline in the Value of Money: Answer

CPI for first year: Answer

CPI for second year: Answer

2002 CPI = 100.0

a) Please illustrate how the inflation factors used by NOTL Hydro are derived using the inflation calculator.

RESPONSE:

The inflation calculation is derived using the estimated average life of the assets. In this example 20 years is used.

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Inflation Calculator

About the Calculator

The Inflation Calculator uses monthly [consumer price index](#) (CPI) data from 1914 to the present to show changes in the cost of a fixed "basket" of consumer purchases. These include food, shelter, furniture, clothing, transportation, and recreation. An increase in this cost is called **inflation**.

The calculator's results are based on the most recent month for which the CPI data are available. This will normally be about two months prior to the current month.

How to Use the Calculator

Enter any dollar amount, and the years you wish to compare, then click the **Calculate** button.

YEARS MUST BE IN THE RANGE 1914 - 2018. COMMAS AND SPACES CAN BE USED IN THE DOLLAR AMOUNT.

A "basket" of goods and services

...that cost:	\$	100.00	in	1997
...would cost:	\$	144.48	in	2017
Clear Calculate				
Per cent change:	44.48			
Number of Years:	20			
Average Annual Rate of Inflation (%) / Decline in the Value of Money:	1.86			
CPI for first year:	(Oct 1997) 90.6			
CPI for second year:	(Oct 2017) 130.9			

2002 CPI = 100.0

Data Source: [Statistics Canada](#), CONSUMER PRICE INDEXES FOR CANADA, MONTHLY (V41690973 series.)



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2 To determine the inflation go back 20 years from the year being analyzed to get the rate
3 of inflation for that 20 years. In this case, for 2017 the starting point is 1997 and the
4 inflation rate is 144.48%.

5

2-Staff-25

Ref: NOTL Hydro's Response to 2-Staff-25

In explaining the unit cost for the pole replacement, NOTL Hydro stated that "For 2020 to 2023, a generic estimate of around \$5,000 per pole was used; adjusted for inflation and rounded to even numbers."

Staff notes that the unit cost of pole replacement in 2021 and 2022 is \$5,714 and in 2023 is \$5,556.

a) Please explain why the unit cost in 2023 is lower than the unit costs in 2021 and 2022 if the unit cost is derived by a generic estimation adjusted by inflation and rounded to even numbers.

RESPONSE:

The unit cost is lower due to the rounding. 45 poles at \$5,000 per pole is \$225,000 so the total cost was rounded up to \$250,000 account for inflation. The fact that this lead to an average cost in 2023 lower than 2022 was not realized at the time.

2-Staff-27 & 2-VECC-8

Ref: NOTL Hydro's Responses to 2-Staff-27 and 2-VECC-8

In explaining the prioritization of the investments, NOTL Hydro explained that projects for the budget year are funded based on criticality factors until the budget blanket is full. And the one-time large projects are budgeted separately. NOTL explained, in its response to 2-VECC-8, that the 2015 underground investment was lower than the average because resources were diverted to the new transformer at NOTL station in 2015.

- a) Please explain how NOTL Hydro manages the competing demand of the existing resources such as labor and funds between the one-time large projects and the ongoing investment needs.
- b) Given the new transformer proposed in 2019, please explain the reasonableness of the system renewal forecast of \$1,097k that is similar to the prior years' annual expenditure for system renewable.
- c) Please also explain the likelihood of no forecasted WIP in 2019 given the large one-time project for the new transformer and the forecasted regular ongoing capital expenditures.

RESPONSE:

a) In planning the allocation of resources for a year, NOTL Hydro will assess the labour requirements of the planned projects. Given the limited workforce and the demands for new services, ongoing investments and regular service work, it is quite common for one-time large projects to be staffed using third party resources. For instance, the Lakeshore Rd. project work in 2018 was largely done by a third party. Funding is less of an issue as due to its low debt:equity ratio NOTL Hydro has access to the needed funds.

b) NOTL Hydro considers that it is very important to maintain a steady investment in system renewal. Short changing the investment in one year can lead to short changing the investment for several years and suddenly the system is in need of substantial investment all at once and is suffering from performance issues. Maintaining the level of investment, even with a large transformer project, is critical. For 2019, the system renewal work will be performed with the same mix of internal and third party resources as in adjacent years. The transformer work will largely be performed by a third party.

c) Copied below is our response to 2-Staff-13 from the first round of interrogatories:

b) NOTL Hydro does not foresee any significant changes from 2018 capital spend as

1 submitted. NOTL Hydro has reviewed each project and believes that all Internal
2 projects will be completed by year end, all underground work for 2018 was complete
3 as of September. To the best of our knowledge there will not be any significant
4 customer projects outstanding at year end.
5

6 The only amounts that will appear in CWIP at the end of 2018 will relate to down
7 payments and some engineering costs incurred for the 83 MVA transformer to be
8 installed in 2019 as well as some initial engineering work for the battery project also
9 scheduled to be completed in 2019. Both these projects are still expected to be
10 completed and capitalized in 2019 in line with our submission.
11

12 c) NOTL Hydro has reviewed our capital forecast for 2018 and with the exception of the
13 battery project and costs related to the new transformed referenced in part b above,
14 it is expected that all internal capital jobs to be complete by year-end. The plan is
15 that all 2019 internal jobs will also be completed by year-end 2019. In terms of
16 customer projects, to the best of our knowledge there will not be any significant
17 projects outstanding at year-end. Customer jobs do not impact rate base as they
18 are included on the Asset Continuity as both assets and contributions which net to
19 zero.
20
21
22

4-Staff-42 & 4-VECC-29

Ref: NOTL Hydro's Responses to 4-Staff-42 and 4-VECC-29

NOTL Hydro explained the variance of operation costs for 2018 vs. 2017:

IFRS requires that senior management only capitalize hours directly to projects to which their hours are directly attributable. For 2018, NOTL Hydro reviewed the tasks undertaken by and time spent by the President and VP Operations. This resulted in fewer hours of these two management staff being capitalized and more being expensed as part of OM&A.

The impact of this change is NOTL Hydro capitalized 1,136 less hours in 2018 as compared to 2017 and the quantum of the impact is \$95,449.

In response to 4-VECC-29, NOTL Hydro provided the allocation amount and % of the employee costs to the OM&A and capital from 2014 to 2019. The capitalization % has decreased from 43.9% in 2014 Board approved to 27.8% in 2019.

- a) Has the nature of the work by the President and VP operations change in 2018 as compared to 2017? If so, please provide the details. If not, please confirm that the variance in 2018 is 100% due to the application of accounting policy.
- b) Given NOTL Hydro adopted the IFRS in 2015 and changed its capitalization policy on January 1, 2013, please explain the reasons for changes of the work practice in 2018.
- c) Given NOTL Hydro's 2014 Cost of Service application was based on the changed capitalization policy which aligns with the IFRS, please explain why the capitalization % has decreased significantly from 2014 OEB approved to 2019 forecasted?

RESPONSE:

- a) In general, the nature of the work by the President and VP Operations has not changed from 2018 as compared to 2017. However, it should be noted that both were heavily involved in the preparation of the Cost of Service application in 2018 and this was not required in 2017. It is also noted that the VP Operations position changed in mid-2017 when the previous VP Operations left to work for Ontario Power Generation. We can confirm that the variance in 2018 is due to the application of accounting policy.
- b) NOTL Hydro probably should have changed its accounting before 2018.
- c) The capitalization % in 4-VECC-29 is based on the entire NOTL Hydro workforce. The capitalization % therefore would have declined due to:

- The above mentioned change in the capitalization of the President and VP Operations. Without this the capitalization % would have been 32.5%.
- Increased O&M service work. The number of linemen has remained at 4 while the number of customers has increased and the general system has grown. This requires more O&M.
- Increased inside staff. The increase in headcount over 2016-2017 added inside staff who generally do not perform capital work. These were an additional customer service representative and the senior journeyman lineman who performs a variety of non-capital work.

1 **MODEL**

- 2 Please refer to the accompanying Cost Allocation Model Excel File for further details.

7-Staff-8

Ref: NOTL Hydro's Response to 7-Staff-8

The DSP stated that "NOTL Hydro recovered as a capital contribution, all new infrastructure costs at the transformer station, feeder upgrades, smart switch, metering and all other connection costs to meet the requested obligation totaling to an estimated \$800,000." In response to 7-Staff-58, part c), NOTL states that the feeder supplying the large user "also supplies 6 other small capacity customers", and "NOTL Hydro had a feeder available to service the Large Use customer by shifting the supply to all other customers (with the exception of 6)."

NOTL has also revised the model such that the feeder is directly allocated to the large user class despite this feeder not being dedicated to the service of the large user class. NOTL has also continued to allocated costs related to primary distribution assets (in addition to those directly allocated) based on the large user class' forecasted billing demand of 60,000 kW, corresponding to an average monthly billing demand of 5,000 kW. This is indicated as 6,410 kW in the peak month, and 14,359 as the sum of the four months with the highest billing demands.

- a) Please clarify if the large user paid for shifting supply of other customers in order to make the existing feeder suitable for the large user's needs.
- b) Please clarify if the large user paid for the construction of new dedicated feeder to attach to the shared feeder as described above.
- c) Please explain what other upgrades were paid for by the large user in their capital contribution.
- d) If the large user does indeed receive primary service from an asset which is used to serve other customers, please remove the direct allocation of cost associated with this asset.
- e) Please explain how, the sum of the four highest use months can be 14,359 kW when the total of all 12 months is 60,000 kW implying an average of 5,000 kW per month.
- f) Please provide a revised model reflecting the responses addressing the concerns of part d) and e).

RESPONSE:

- a) Yes
- b) Yes
- c) To clarify, a feeder consists of the primary wire which serves the customers along the feeder and the breaker and connected equipment which connects the primary wire to the transmission station. The Large Use customer and a large number of other customers were previously served by the F4 feeder line.

A new breaker and connected equipment were needed at the station to serve the

1 load of the Large Use customer. The number of feeders from the NOTL MTS
2 therefore increased from three to four. However, NOTL Hydro was able to
3 connect this breaker to the same primary line that served the Large Use
4 customer and a few other residential customers. This became the F3 feeder (we
5 previously had the F1, F2 and F4 feeders). This prevented the need to build a
6 new feeder lines of poles and wires. The existing F4 feeder still serves the large
7 number of remaining customers but has a changed route that no longer includes
8 the short bit of line to the Large Use customer. The Large Use customer paid for
9 this work as well as their own connection.

10 d) See f) below.
11

12 e) The load forecast is based on an average monthly demand of 5,000 kW per
13 month. The 4 NCP value based on the demand projections provided by the
14 customer should be 25,640 kW. The peak demand for January – April and
15 August – December is projected to be 6,410 kW, therefore the 4 NCP amount
16 should be 25,640.
17

18 f) NOTL Hydro has included a version of the Cost Allocation Model with the direct
19 allocation removed and an updated 4 NCP value for the Large User. This model
20 does replace the model submitted with our interrogatory responses on 2018-11-
21 20 but is included to show the impact of the concerns arising parts d and e of the
22 above question.
23
24

9-Staff-67

Ref: NOTL Hydro's Response to 9-Staff-67

NOTL Hydro explained that the billing error pertains to one customer for its billing period from August 2015 to March 2018. All the bills have been cancelled and subsequently rebilled in 2018. NOTL Hydro stated that the variance will be captured through NOTL Hydro's annual 1598 reconciliation and stated that this error did not require a reallocation of GA costs between RPP and non-RPP customers.

- a) Please specify what period is the \$101,912 billing adjustment that was recorded in account 1589 pertaining to?
- b) Please explain if the customer is RPP or non-RPP customer?
- c) Please explain why the variance would be captured in annual 1598 reconciliation?

RESPONSE

- a) The billing adjustment of \$101,912 pertains to 2017
- b) The customer is non-RPP
- c) In previous years, the customer was overcharged which created led to an increase in GA collected and a credit to account 1589 which was subsequently refunded to all non-RPP customers through a rate rider. The correction to be booked in 2018 will reduced GA collected which will debit account 1589 and be recovered from customers through a rate rider. The total amount of the correction will be reflected in account 1589.

9-Staff-71

Ref: NOTL Hydro's Response to 9-Staff-71

NOTL Hydro explained that the process of the GA allocation is to remove the RPP GA from the total GA and the remaining is the Non-RPP GA. So the \$47,862, which is 100% of the IESO Invoice adjustment, is left in account 1589.

a) Please fill out the table below for 2017. Please use the RPP monthly trued-up consumptions that were settled with the IESO.

	Loads pertainin g to Class B (CT148)	IESO Actual GA Rate on websit e	Expected GA Charges Class B CT148 \$ (Calculate d)	CT 148 \$ per IESO Invoic e	Differenc e	RPP Consumptio n (actual)	Estimate d RPP Proportio n	Adjustment s pertaining to RPP	Adjustment s pertaining to non-RPP Class B
	kWh	\$/kWh	\$	\$	\$	kWh	%	\$	\$
	A	B	C=A x B	D	E=D- C	F	G=F/A	H=E x G	I=E-H
JAN									
Feb									
Mar									
Apr									
May									
Jun									
Jul									
Aug									
Sep									
Oct									
Nov									
Dec									
Total									

RESPONSE

a) Please see table below

Month	Loads Pertaining to Class B (CT148)	IESO Actual GA Rate on Website	Expected GA Charges Class B (CT148 \$ (Calculated))	CT148 \$ per IESO Invoice	Difference	RPP Consumption (actual)	Estimated RPP Proportion	Adjustments Pertaining to RPP	Adjustments pertaining to non RPP Class B
	kWh	\$ / kWh							
	A	B	C = A x B	D	E = D - C	F	G = F / A	H = E x G	I = E - H
January	17,353,822	\$0.08227	\$1,427,698.94	\$1,427,571.31	(\$127.63)	9,930,604	57.2%	(\$73.03)	(\$54.59)
February	15,122,537	\$0.08639	\$1,306,435.97	\$1,306,452.96	\$16.99	8,530,256	56.4%	\$9.58	\$7.41
March	16,272,915	\$0.07135	\$1,161,072.49	\$1,161,044.04	(\$28.45)	9,285,840	57.1%	(\$16.23)	(\$12.21)
April	14,565,630	\$0.10778	\$1,569,883.60	\$1,566,462.24	(\$3,421.36)	8,124,384	55.8%	(\$1,908.36)	(\$1,513.00)
May	15,288,925	\$0.12307	\$1,881,608.00	\$1,879,115.85	(\$2,492.15)	8,481,452	55.5%	(\$1,382.51)	(\$1,109.64)
June	17,089,222	\$0.11848	\$2,024,731.02	\$1,841,137.45	(\$183,593.57)	9,750,727	57.1%	(\$104,754.38)	(\$78,839.19)
July	19,589,545	\$0.11280	\$2,209,700.68	\$2,362,236.02	\$152,535.34	11,779,416	60.1%	\$91,721.23	\$60,814.11
August	19,438,443	\$0.10109	\$1,965,032.20	\$1,961,854.65	(\$3,177.55)	11,333,851	58.3%	(\$1,852.72)	(\$1,324.84)
September	17,093,503	\$0.08864	\$1,515,168.11	\$1,508,874.99	(\$6,293.12)	9,722,094	56.9%	(\$3,579.27)	(\$2,713.85)
October	15,279,401	\$0.12563	\$1,919,551.15	\$1,913,639.89	(\$5,911.26)	8,344,517	54.6%	(\$3,228.31)	(\$2,682.95)
November	15,362,482	\$0.09704	\$1,490,775.25	\$1,495,320.31	\$4,545.06	8,692,776	56.6%	\$2,571.80	\$1,973.26
December	17,803,615	\$0.09207	\$1,639,178.83	\$1,639,264.74	\$85.91	10,591,013	59.5%	\$51.10	\$34.80
	200,260,040		\$20,110,836.24	\$20,062,974.45	(\$47,861.79)	114,566,930	57.2%	(22,441.09)	(25,420.70)

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