Energy Probe Research Foundation

Compendium Panel 7

EB-2017-0049

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2. The overall revenue requirement for the current year (2019) is determined using the revenue cap approach to increase the prior year's overall revenue requirement (i.e. $1,499,881,927 \times 1.0341 = \$1,550,978,775^1$);

3. Using a similar approach as in the Board's CAM, column 2 determines the revenue at current rates by applying the prior year's rates (2018) to the current year's (2019) charge determinants and adding the current year's miscellaneous revenue for each rate class; and

4. The multiplier required to collected the current year's (2019) approved overall revenue requirement is established (i.e. $1,550,978,775 / $1,498,127,222 = 1.0353) and applied uniformly to column 2 to determine the current year's (2019) revenue requirement by rate class as shown in column 3.

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[1] Differences due to rounding.

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Table 2: Revenue Requirement by Rate Class in 2019

Rate Class	(column 1) 2018 Revenue Requirement	(column 2) Revenue - with 2018 rates and 2019 charge determinants	(column 3 = Column 2 x1.0353) 2019 Revenue Requirement
UR	$ 96,173,150	$ 97,161,331	$ 100,589,029
R1	$ 323,539,529	$ 325,416,230	$ 336,896,399
R2	$ 529,368,662	$ 529,259,234	$ 547,930,661
Seasonal	$ 113,925,781	$ 113,422,685	$ 117,424,058
GSe	$ 160,456,449	$ 158,183,985	$ 163,764,465
GSd	$ 143,462,225	$ 142,147,553	$ 147,162,293
UGe	$ 22,725,406	$ 22,599,303	$ 23,396,571
UGd	$ 29,812,914	$ 29,506,059	$ 30,546,986
St Lgt	$ 12,501,834	$ 12,565,824	$ 13,009,127
Sen Lgt	$ 6,447,526	$ 6,480,263	$ 6,708,877
USL	$ 3,158,213	$ 3,178,994	$ 3,291,143
DGen	$ 4,064,693	$ 4,390,671	$ 4,545,567
ST	$ 54,245,544	$ 53,815,088	$ 55,713,599
TOTAL	$ 1,499,881,927	$ 1,498,127,222	$ 1,550,978,775
2019 Revenue Requirement	$ 1,550,978,775		
Multiplier to bring column 2 total to 2019 Revenue Requirement	1.0353		

Calculations are set out in Exhibit H1-01-02.

The same approach described for 2019 is used to determine the 2020 and 2022 revenue requirement by rate class, as shown in Tables 3 and 4, respectively.

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Table 3: Revenue Requirement by Rate Class in 2020

Rate Class	(column 1) 2019 Revenue Requirement	(column 2) Revenue - with 2019 rates and 2020 charge determinants	(column 3 = Column 2 x 1.0302) 2020 Revenue Requirement
UR	$ 100,589,029	$ 101,708,590	$ 104,784,012
R1	$ 336,841,113	$ 339,578,217	$ 349,846,241
R2	$ 547,930,661	$ 549,292,876	$ 565,902,163
Seasonal	$ 117,033,037	$ 116,883,839	$ 120,418,124
GSe	$ 163,764,465	$ 162,464,025	$ 167,376,544
GSd	$ 147,162,293	$ 146,978,730	$ 151,423,011
UGe	$ 23,396,571	$ 23,401,549	$ 24,109,155
UGd	$ 30,546,986	$ 30,461,236	$ 31,382,311
St Lgt	$ 13,009,127	$ 13,088,879	$ 13,484,655
Sen Lgt	$ 6,708,877	$ 6,705,916	$ 6,908,687
USL	$ 3,244,351	$ 3,267,616	$ 3,366,421
DGen	$ 5,038,666	$ 5,406,470	$ 5,569,949
ST	$ 55,713,599	$ 55,651,033	$ 57,333,785
TOTAL	$ 1,550,978,775	$ 1,554,888,977	$ 1,601,905,058
2020 Revenue Requirement	$ 1,601,905,058		
Multiplier to bring column 2 total to 2020 Revenue Requirement	1.0302		

Calculations are set out in Exhibit H1-01-02.

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Table 4: Revenue Requirement by Rate Class in 2022

Rate Class	(column 1) 2021 Revenue Requirement	(column 2) Revenue - with 2021 rates and 2022 charge determinants	(column 3 = Column 2 x1.0251) 2022 Revenue Requirement
UR	$ 108,238,528	$ 109,425,851	$ 112,170,282
R1	$ 359,049,986	$ 361,743,149	$ 370,815,768
R2	$ 582,274,223	$ 584,520,242	$ 599,180,172
Seasonal	$ 122,466,014	$ 122,494,970	$ 125,567,178
GSe	$ 169,986,426	$ 168,875,386	$ 173,110,828
GSd	$ 154,863,399	$ 154,646,826	$ 158,525,411
UGe	$ 24,669,213	$ 24,699,132	$ 25,318,593
UGd	$ 32,065,543	$ 32,003,409	$ 32,806,064
St Lgt	$ 14,954,290	$ 15,023,656	$ 15,400,453
Sen Lgt	$ 6,365,748	$ 6,363,383	$ 6,522,979
USL	$ 3,592,415	$ 3,613,137	$ 3,703,756
DGen	$ 6,064,096	$ 6,371,535	$ 6,531,335
ST	$ 58,784,202	$ 58,902,270	$ 60,379,555
AUR	$ 5,935,878	$ 5,994,595	$ 6,144,942
AUGe	$ 1,289,020	$ 1,301,343	$ 1,333,981
AUGd	$ 2,115,180	$ 2,119,510	$ 2,172,668
AR	$ 19,100,617	$ 19,227,028	$ 19,709,247
AGSe	$ 4,230,946	$ 4,208,335	$ 4,313,881
AGSd	$ 4,387,252	$ 4,398,788	$ 4,509,111
TOTAL	$ 1,680,432,976	$ 1,685,932,546	$ 1,728,216,204
2022 Revenue Requirement	$ 1,728,216,204		
Multiplier to bring column 2 total to 2022 Revenue Requirement	1.0251		

Calculations are set out in Exhibit H1-01-02.

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1   **2.2   REVENUE-TO-COST RATIO**

2

3   Hydro One proposes to adjust class revenue recovery as necessary to move the revenue-

4   to-cost ("R/C") ratios for all rate classes towards the Board-approved ranges, specified in

5   EB-2010-0219 – Review of Electricity Distribution Cost Allocation Policy, Report of the

6   Board, issued on March 31, 2011 and EB-2012-0383 – OEB Letter – New Cost

7   Allocation Policy for Street Lighting Rate Class, issued on June 12, 2015.

8

9   The classes with R/C ratios outside the Board-approved ranges will have their R/C ratio

10   change phased-in over multiple years, if necessary, to achieve the end state target while

11   limiting total bill impacts to customers. Where necessary, adjustments are applied to

12   move the R/C ratios towards the Board-approved range, consistent with the approach

13   previously approved by the Board. To increase the R/C ratio of a rate class that is outside

14   the Board-approved range requires an increase in revenue requirement for this rate class.

15   That increase in revenue will be made up by decreasing the revenue collected from those

16   classes with the highest R/C ratios above 1, as required. This decrease in revenue results

17   in a decrease to the R/C ratio of these classes. For any given year, the increase in the

18   revenue to be collected from rate classes whose R/C ratio was increased is exactly offset

19   by an equal decrease in revenue to be collected from those rate classes whose R/C ratio

20   was decreased.

21

22   R/C Ratio from 2017 to 2018

23   Table 5 shows how the R/C ratio and revenue requirement by class are adjusted by the

24   2018 rate design process. In 2018, most of the 2018 R/C ratios as determined by the

25   2018 CAM are already within the Board-approved range and require no further

26   adjustment. The exception is the Distribution Generation (DGen) class, which has a 2018

27   CAM R/C ratio of 0.57. Hydro One proposes to increase the DGen class R/C ratio to

28   0.63 in 2018, which is the maximum the R/C ratio can be increased while still limiting

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1   the total bill impact for a typical DGen customer to no more than 10%. This is the same

2   approach proposed, and approved by the Board, in Hydro One's 2016 and 2017 Draft

3   Rate Orders (EB-2015-0079 and EB-2016-0081). The increase in revenue collected from

4   the DGen class is offset by decreasing the revenue collected from USL and Seasonal

5   classes, which have the highest R/C ratios above 1.

6

7   **Table 5: Revenue-to-Cost Ratios and Class Revenue Recovery – 2017 to 2018**

8

Rate Class	2017		2018				Board Range
	R/C	Revenue Requirement ($ M)	R/C		Revenue Requirement ($ M)		R/C (%)
			CAM	After Rate Design	CAM	After Rate Design	
UR	1.10	87.6	1.05	1.05	96.2	96.2	85 - 115
R1	1.10	310.9	1.07	1.07	323.5	323.5	85 - 115
R2	0.95	519.4	0.95	0.95	529.4	529.4	85 - 115
Seasonal	1.04	113.4	1.09	1.09	114.1	113.9	85 - 115
GSe	0.99	160.6	1.01	1.01	160.5	160.5	80 - 120
UGe	0.95	21.8	1.02	1.02	22.7	22.7	80 - 120
GSd	0.95	145.5	0.97	0.97	143.5	143.5	80 - 120
UGd	0.95	30.3	0.95	0.95	29.8	29.8	80 - 120
St Lgt	0.95	12.1	0.93	0.93	12.5	12.5	80 - 120
Sen Lgt	0.95	7.3	1.03	1.03	6.4	6.4	80 - 120
USL	1.10	3.2	1.15	1.09	3.4	3.2	80 - 120
DGen	0.61	4.6	0.57	0.63	3.7	4.1	80 - 120*
ST	0.95	51.0	0.98	0.98	54.2	54.2	85 - 115
TOTAL		1,467.6			1,499.9	1,499.9	

9
10   *Assume same as for GS, as previously approved in EB-2013-0416*

11

12   R/C Ratio from 2018 to 2020

13   Table 6 and Table 7 show how the R/C ratio and revenue requirement by class are

14   adjusted by the 2019 and 2020 rate design process. Hydro One proposes to continue

15   increasing the DGen class R/C ratio from 0.63 in 2018 to 0.76 in 2019, which limits the

16   total bill impact for a typical DGen customer to no more than 10% per year. The increase

17   in revenue from the DGen class is made up by decreasing the revenue collected from the

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1 USL, Seasonal and R1 classes, which had the highest R/C ratios above 1. By 2020, the

2 DGen rate class R/C ratio will be within the Board-approved range and no further

3 adjustments will be required to any of the R/C ratios.

4

5 **Table 6: Revenue-to-Cost Ratios and Class Revenue Recovery – 2018 to 2019**

Rate Class	2018		2019			
	R/C	Revenue Requirement ($ M)	R/C		Revenue Requirement ($ M)	
			Before Rate Design	After Rate Design	Before Rate Design	After Rate Design
UR	1.05	96.2	1.06	1.06	100.6	100.6
R1	1.07	323.5	1.08	1.08	336.9	336.8
R2	0.95	529.4	0.95	0.95	547.9	547.9
Seasonal	1.09	113.9	1.08	1.08	117.4	117.0
GSe	1.01	160.5	1.00	1.00	163.8	163.8
UGe	1.02	22.7	1.02	1.02	23.4	23.4
GSd	0.97	143.5	0.96	0.96	147.2	147.2
UGd	0.95	29.8	0.94	0.94	30.5	30.5
St Lgt	0.93	12.5	0.94	0.94	13.0	13.0
Sen Lgt	1.03	6.4	1.04	1.04	6.7	6.7
USL	1.09	3.2	1.10	1.08	3.3	3.2
DGen	0.63	4.1	0.68	0.76	4.5	5.0
ST	0.98	54.2	0.97	0.97	55.7	55.7
TOTAL		1,499.9			1,551.0	1,551.0

6

7

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Table 7: Revenue-to-Cost Ratios and Class Revenue Recovery – 2019 to 2020

Rate Class	2019		2020			
	R/C	Revenue Requirement ($ M)	R/C		Revenue Requirement ($ M)	
			Before Rate Design	After Rate Design	Before Rate Design	After Rate Design
UR	1.06	100.6	1.07	1.07	104.8	104.8
R1	1.08	336.8	1.09	1.09	349.8	349.8
R2	0.95	547.9	0.95	0.95	565.9	565.9
Seasonal	1.08	117.0	1.08	1.08	120.4	120.4
GSe	1.00	163.8	0.99	0.99	167.4	167.4
UGe	1.02	23.4	1.01	1.01	24.1	24.1
GSd	0.96	147.2	0.96	0.96	151.4	151.4
UGd	0.94	30.5	0.94	0.94	31.4	31.4
St Lgt	0.94	13.0	0.94	0.94	13.5	13.5
Sen Lgt	1.04	6.7	1.03	1.03	6.9	6.9
USL	1.08	3.2	1.09	1.09	3.4	3.4
DGen	0.76	5.0	0.81	0.81	5.6	5.6
ST	0.97	55.7	0.97	0.97	57.3	57.3
TOTAL		1,551.0			1,601.9	1,601.9

R/C Ratio from 2020 to 2021

The 2021 R/C ratios as determined by the 2021 CAM are the starting point for the 2021 rate design. As shown in Table 8 most of the rate classes are already within the Board-approved range and require no further adjustment. The five rate classes whose R/C ratios require adjustment are the AUGe, AUGd, AR, AGSe and AGSd classes, which are all new rate classes created as a result of incorporating the Acquired Utilities.

Hydro One proposes to phase-in an increase to the R/C ratios for these classes to within the Board-approved range while limiting the total bill impact. The principle adopted for determining how much to increase the R/C ratio for these rate classes is based on the following considerations:

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i) Acquired customers' base distribution rates have been frozen since 2014, while base distribution rates of existing Hydro One customers have increased about 22% over the period from 2015 to 2021;

ii) The total bill impacts for acquired customers should be similar to what other Hydro One customers in a similar rate class will experience in 2021; and

iii) The bill impact due to phasing in R/C ratios to within the Board-approved range should not exceed either i) or ii), whichever is higher.

Following the above principle, Hydro One proposes to adjust the 2021 R/C ratios as follows:

- AUGe from 0.59 to 0.68, resulting in a distribution bill impact of 22% and a total bill impact of 3.3% for an average customer;

- AUGd from 0.43 to 0.61, resulting in a total bill impact of 0.4% for an average customer, which is similar to the total bill impact for an average customer in the UGd class;

- AR from 0.78 to 0.85, which raises the R/C ratio to within the Board-approved range while resulting in a total bill impact of 4.8% for an average former Haldimand County Hydro customer and a total bill impact of 5.6% for an average former Norfolk Power customer;

- AGSe from 0.74 to 0.78, resulting in a distribution bill impact of 22% and a total bill impact of 3.9% for an average former Haldimand County Hydro customer. An average former Norfolk Power customer will see a total bill impact of 0.2%; and

- AGSd from 0.53 to 0.67, resulting in total bill impacts of 0.8% and 0.6% for an average former Haldimand County Hydro customer and an average former Norfolk Power customer, respectively. These increases are similar to the total bill impact for an average customer in the GSd class.

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1   The increase in revenue from these classes is offset by decreasing the revenue collected

2   from the UR, R1, Seasonal and USL classes, which had the highest R/C ratios above 1.

3

4   **Table 8: Revenue-to-Cost Ratios and Class Revenue Recovery – 2020 to 2021**

| Rate Class | 2020 | | 2021 | | | | Board Range |
| | R/C | Revenue Requirement (S M) | R/C | | Revenue Requirement (S M) | | R/C (%) |
			CAM	After Rate Design	CAM	After Rate Design	
UR	1.07	104.8	1.10	1.10	108.6	108.2	85 - 115
R1	1.09	349.8	1.10	1.10	361.1	359.0	85 - 115
R2	0.95	565.9	0.97	0.97	582.3	582.3	85 - 115
Seasonal	1.08	120.4	1.11	1.10	123.4	122.5	85 - 115
GSe	0.99	167.4	1.00	1.00	170.0	170.0	80 - 120
UGe	1.01	24.1	1.01	1.01	24.7	24.7	80 - 120
GSd	0.96	151.4	0.93	0.93	154.9	154.9	80 - 120
UGd	0.94	31.4	0.91	0.91	32.1	32.1	80 - 120
St Lgt	0.94	13.5	0.95	0.95	15.0	15.0	80 - 120
Sen Lgt	1.03	6.9	0.96	0.96	6.4	6.4	80 - 120
USL	1.09	3.4	1.11	1.10	3.6	3.6	80 - 120
DGen	0.81	5.6	0.82	0.82	6.1	6.1	80 - 120*
ST	0.97	57.3	0.89	0.89	58.8	58.8	85 - 115
AUR	N/A	N/A	0.86	0.86	5.9	5.9	85 - 115
AUGe	N/A	N/A	0.59	0.68	1.1	1.3	80 - 120
AUGd	N/A	N/A	0.43	0.61	1.5	2.1	80 - 120
AR	N/A	N/A	0.78	0.85	17.6	19.1	85 - 115
AGSe	N/A	N/A	0.74	0.78	4.0	4.2	80 - 120
AGSd	N/A	N/A	0.53	0.67	3.5	4.4	80 - 120
TOTAL		1,601.91			1,680.4	1,680.4	

5

6

7   <u>R/C Ratio from 2021 to 2022</u>

8   Table 9 shows how the R/C ratio and revenue requirement by class are adjusted by the

9   2022 rate design process. Hydro One proposes to increase the AUGe, AUGd, AGSe and

10   AGSd class R/C ratios to the Board-approved value of 0.80, which can be achieved while

11   still limiting the total bill impact to well below 10%. The increase in revenue from these

12   classes is offset by decreasing the revenue from the R1, UR and USL classes, which had

13   the highest R/C ratios above 1.

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1

Table 9: Revenue-to-Cost Ratios and Class Revenue Recovery – 2021 to 2022

| Rate Class | 2021 | | 2022 | | | |
| | R/C | Revenue Requirement ($ M) | R/C | | Revenue Requirement ($ M) | |
			Before Rate Design	After Rate Design	Before Rate Design	After Rate Design
UR	1.10	108.2	1.11	1.10	112.2	111.4
R1	1.10	359.0	1.10	1.10	370.8	369.6
R2	0.97	582.3	0.97	0.97	599.2	599.2
Seasonal	1.10	122.5	1.09	1.09	125.6	125.6
GSe	1.00	170.0	0.99	0.99	173.1	173.1
UGe	1.01	24.7	1.01	1.01	25.3	25.3
GSd	0.93	154.9	0.92	0.92	158.5	158.5
UGd	0.91	32.1	0.90	0.90	32.8	32.8
St Lgt	0.95	15.0	0.95	0.95	15.4	15.4
Sen Lgt	0.96	6.4	0.95	0.95	6.5	6.5
USL	1.10	3.6	1.10	1.10	3.7	3.7
DGen	0.82	6.1	0.86	0.86	6.5	6.5
ST	0.89	58.8	0.89	0.89	60.4	60.4
AUR	0.86	5.9	0.87	0.87	6.1	6.1
AUGe	0.68	1.3	0.69	0.80	1.3	1.6
AUGd	0.61	2.1	0.61	0.80	2.2	2.9
AR	0.85	19.1	0.85	0.85	19.7	19.7
AGSe	0.78	4.2	0.77	0.80	4.3	4.5
AGSd	0.67	4.4	0.66	0.80	4.5	5.4
TOTAL		1,680.4			1,728.2	1,728.2

2

3

4   R/C ratio adjustment calculation details are provided in Exhibit H1, Tab 1, Schedule 2,

5   which is also provided in Excel format.

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1   application. The fixed-to-variable split for these classes will remain unchanged over the

2   2021 to 2022 period to provide stability in customer rates and revenue mix.

3

4   The AGSe and AGSd classes consist of customers formerly served by Norfolk Power and

5   Haldimand County Hydro. Hydro One proposes to use a blended fixed-to-variable split,

6   which is a revenue weighted average of the two ratios approved by the Board in Norfolk

7   Power and Haldimand Hydro's last Cost-of-Service distribution rate applications. The

8   fixed-to-variable split for AGSe and AGSd will remain unchanged over the 2021 to 2022

9   period to provide stability in customer rates and revenue mix.

10

11   Table 10 below summarizes the current and proposed fixed and volumetric revenue split.

12

13   **Table 10: Current and Proposed Fixed and Volumetric Revenue Split – 2017 to 2022**

Rate Class	2017		2018		2019		2020		2021		2022	
	Fixed	Volumetric	Fixed	Volumetric	Fixed	Volumetric	Fixed	Volumetric	Fixed	Volumetric	Fixed	Volumetric
UR	77%	23%	83%	17%	90%	10%	100%	0%	100%	0%	100%	0%
R1	61%	39%	65%	35%	71%	29%	76%	24%	83%	17%	91%	9%
R2	64%	36%	68%	32%	73%	27%	78%	22%	84%	16%	91%	9%
Seasonal	61%	39%	66%	34%	71%	29%	77%	23%	84%	16%	91%	9%
GSe	20%	80%	20%	80%	20%	80%	20%	80%	20%	80%	20%	80%
UGe	24%	76%	24%	76%	24%	76%	24%	76%	24%	76%	24%	76%
GSd	5%	95%	5%	95%	5%	95%	5%	95%	5%	95%	5%	95%
UGd	7%	93%	7%	93%	7%	93%	7%	93%	7%	93%	7%	93%
St Lgt	2%	98%	2%	98%	2%	98%	2%	98%	2%	98%	2%	98%
Sen Lgt	27%	73%	27%	73%	27%	73%	27%	73%	27%	73%	27%	73%
USL	77%	23%	77%	23%	77%	23%	77%	23%	77%	23%	77%	23%
DGen	66%	34%	70%	30%	62%	38%	61%	39%	61%	39%	60%	40%
ST	19%	81%	19%	81%	19%	81%	19%	81%	19%	81%	19%	81%
AUR	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100%	0%	100%	0%
AUGe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	39%	61%	39%	61%
AUGd	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	23%	77%	23%	77%
AR	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100%	0%	100%	0%
AGSe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	52%	48%	52%	48%
AGSd	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21%	79%	21%	79%

14

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1   **3. CALCULATION OF SUB-TRANSMISSION (ST) RATES**

2

3   **3.1   INTRODUCTION**

4

5   The charges for the use of Common ST lines, High Voltage Distribution Stations
6   ("HVDS"), Low Voltage Distribution Stations ("LVDS") and Specific ST Line, were
7   derived using the results of the 2018 and 2021 CAMs, and reflect the changes in revenue
8   requirement and load forecast in those years. The methodology used in this application
9   for the allocation of costs to the ST rate class, as well as for the design of ST rates has not
10   changed from the methodology that was used in Hydro One's 2015-2017 Distribution
11   Rate Application (EB-2013-0416). Hydro One has had approved ST rates applicable to
12   its embedded distributors since 2008. As such, embedded distributors have had the
13   opportunity to review the cost allocation and rate design of the rates applicable to them as
14   part of the regulatory approval process for Hydro One's previous rate applications.

15

16   The HVDS and Common ST line charges are billed to customers supplied from multiple
17   feeders connected to the same Transmission Station ("TS") or HVDS based on their
18   aggregated billing demand. The aggregation of billing demand is consistent with the
19   billing of Retail Transmission Service Rates ("RTSR") for ST customers and was most
20   recently reviewed and approved in Hydro One's 2015 to 2017 distribution rate
21   application (EB-2013-0416).

22

23   As previously reviewed and approved by the Board in Hydro One's most recent
24   distribution rate application, customers with load displacement generation above 1 MW,
25   or 2 MW for renewable generation, installed after October 1998, are billed ST volumetric
26   charges on a gross load basis.

Witness: Henry Andre

2018 Revenue Reconciliation

Rate Class	Customers/ Connections	Number of Customers/ Connections (Average)	Test Year Consumption		Draft Rates			Revenues at Draft Rates	Class Specific Revenue Requirement	Transformer Allowance Credit	Total	Difference
			kWh	kW	Monthly Service Charge	Volumetric						
						kWh	kW					
Residential – Urban [UR]	Customers	225,944	2,047,262,889	-	$ 27.71	$ 0.0078		$ 91,099,611	$ 91,059,278		$ 91,059,278	-$ 40,334
Residential – Medium Density [R1]	Customers	446,102	4,924,068,303	-	$ 37.79	$ 0.0218		$ 309,642,803	$ 309,776,676		$ 309,776,676	$ 133,873
Residential – Low Density [R2]	Customers	328,410	4,539,367,306	-	$ 88.61	$ 0.0359		$ 512,168,583	$ 512,389,870		$ 512,389,870	$ 221,287
Seasonal Residential	Customers	149,485	631,921,216	-	$ 40.52	$ 0.0601		$ 110,663,881	$ 110,674,030		$ 110,674,030	$ 10,150
General Service Energy Billed (less than 50 kW) [GSe]	Customers	88,484	2,104,034,980	-	$ 29.56	$ 0.0589		$ 155,314,669	$ 155,312,539		$ 155,312,539	-$ 2,130
General Service Demand Billed (50 kW and above) [GSd]	Customers	5,406	2,341,979,038	8,025,918	$ 102.52		$ 16.6975	$ 140,663,013	$ 140,663,018		$ 140,663,018	$ 6
Urban General Service Energy Billed (less than 50 kW) [UGe]	Customers	18,074	598,366,765	-	$ 23.88	$ 0.0278		$ 21,813,845	$ 21,840,758		$ 21,840,758	$ 26,913
Urban General Service Demand Billed (50 kW and above) [UGd]	Customers	1,744	1,057,526,028	2,832,322	$ 100.72		$ 9.5589	$ 29,182,041	$ 29,182,030		$ 29,182,030	-$ 11
Street Lighting	Customers	5,323	121,367,848	-	$ 4.07	$ 0.0976		$ 12,105,488	$ 12,100,924		$ 12,100,924	-$ 4,565
Sentinel Lighting	Customers	23,987	20,385,578	-	$ 3.15	$ 0.1199		$ 3,350,934	$ 3,351,836		$ 3,351,836	$ 903
Unmetered Scattered Load [USL]	Customers	5,597	24,437,190	-	$ 34.76	$ 0.0284		$ 3,028,745	$ 3,029,299		$ 3,029,299	$ 554
Distributed Generation [DGen]	Customers	1,152	18,368,070	184,739	$ 196.16		$ 6.3673	$ 3,889,142	$ 3,889,144		$ 3,889,144	$ 2
Sub-Transmission [ST]	Customers	808	15,528,383,151	29,977,946	$ 1,022.07		$ 1.4367	$ 52,982,332	$ 52,982,040		$ 52,982,040	-$ 292
Total								$ 1,445,905,087	$ 1,446,251,442	$ -	$ 1,446,251,442	$ 346,355

Note

1   The class specific revenue requirements in column K must be the amounts used in the final rate design process. The total of column K should equate to the rates revenue requirement.

2   Rates should be entered with the number of decimal places that will show on the Tariff of Rates and Charges.

2019 Revenue Reconciliation

Rate Class	Customers/ Connections	Number of Customers/C onnections (Average)	Test Year Consumption		Draft Rates			Revenues at Draft Rates	Class Specific Revenue Requirement	Transformer Allowance Credit	Total	Difference
			kWh	kW	Monthly Service Charge	Volumetric						
						kWh	kW					
Residential – Urban [UR]	Customers	228,666	2,047,339,001	-	$ 31.23	$ 0.0047		$ 95,317,541	$ 95,379,475		$ 95,379,475	$ 61,934
Residential – Medium Density [R1]	Customers	449,958	4,917,201,793	-	$ 42.19	$ 0.0193		$ 322,706,814	$ 322,820,755		$ 322,820,755	$ 113,941
Residential – Low Density [R2]	Customers	330,076	4,478,345,990	-	$ 97.68	$ 0.0321		$ 530,657,237	$ 530,634,194		$ 530,634,194	-$ 23,043
Seasonal Residential	Customers	149,813	619,771,621	-	$ 45.07	$ 0.0528		$ 113,749,036	$ 113,720,446		$ 113,720,446	-$ 28,590
General Service Energy Billed (less than 50 kW) [GSe]	Customers	88,423	2,054,247,047	-	$ 30.20	$ 0.0613		$ 158,582,663	$ 158,524,312		$ 158,524,312	-$ 58,351
General Service Demand Billed (50 kW and above) [GSd]	Customers	5,457	2,316,983,638	7,940,259	$ 104.19		$ 17.3153	$ 144,310,696	$ 144,310,713		$ 144,310,713	$ 17
Urban General Service Energy Billed (less than 50 kW) [UGe]	Customers	18,166	592,270,624	-	$ 24.47	$ 0.0290		$ 22,510,211	$ 22,495,371		$ 22,495,371	-$ 14,839
Urban General Service Demand Billed (50 kW and above) [UGd]	Customers	1,753	1,047,731,808	2,797,926	$ 102.72		$ 9.9159	$ 29,904,398	$ 29,904,298		$ 29,904,298	-$ 99
Street Lighting	Customers	5,364	121,925,376	-	$ 4.20	$ 0.1011		$ 12,596,978	$ 12,600,715		$ 12,600,715	$ 3,738
Sentinel Lighting	Customers	23,822	20,235,185	-	$ 3.37	$ 0.1281		$ 3,555,508	$ 3,555,266		$ 3,555,266	-$ 241
Unmetered Scattered Load [USL]	Customers	5,633	24,560,309	-	$ 35.49	$ 0.0291		$ 3,113,848	$ 3,113,025		$ 3,113,025	-$ 823
Distributed Generation [DGen]	Customers	1,272	19,001,248	191,107	$ 196.16		$ 9.7580	$ 4,859,823	$ 4,859,832		$ 4,859,832	$ 9
Sub-Transmission [ST]	Customers	811	15,367,777,027	29,637,492	$ 1,046.24		$ 1.4928	$ 54,426,190	$ 54,426,454		$ 54,426,454	$ 264
Total								$ 1,496,290,941	$ 1,496,344,858	$ -	$ 1,496,344,858	$ 53,917

Note

1   The class specific revenue requirements in column K must be the amounts used in the final rate design process. The total of column K should equate to the rates revenue requirement.

2   Rates should be entered with the number of decimal places that will show on the Tariff of Rates and Charges.

2020 Revenue Reconciliation

Rate Class	Customers/ Connections	Number of Customers/C onnections (Average)	Test Year Consumption		Draft Rates			Revenues at Draft Rates	Class Specific Revenue Requirement	Transformer Allowance Credit	Total	Difference
			kWh	kW	Monthly Service Charge	Volumetric						
						kWh	kW					
Residential – Urban [UR]	Customers	231,390	2,064,454,439	-	$ 35.85	$ -		$ 99,543,995	$ 99,543,656		$ 99,543,656	-$ 339
Residential – Medium Density [R1]	Customers	453,821	4,953,183,920	-	$ 47.06	$ 0.0160		$ 335,532,934	$ 335,742,988		$ 335,742,988	$ 210,054
Residential – Low Density [R2]	Customers	331,741	4,456,998,731	-	$ 107.71	$ 0.0269		$ 548,674,946	$ 548,503,431		$ 548,503,431	-$ 171,514
Seasonal Residential	Customers	150,145	613,086,833	-	$ 50.05	$ 0.0439		$ 117,091,387	$ 117,085,947		$ 117,085,947	-$ 5,440
General Service Energy Billed (less than 50 kW) [GSe]	Customers	88,405	2,042,548,312	-	$ 30.88	$ 0.0633		$ 162,052,512	$ 162,105,409		$ 162,105,409	$ 52,897
General Service Demand Billed (50 kW and above) [GSd]	Customers	5,511	2,312,456,387	7,924,744	$ 105.19		$ 17.8594	$ 148,554,251	$ 148,554,571		$ 148,554,571	$ 319
Urban General Service Energy Billed (less than 50 kW) [UGe]	Customers	18,268	591,211,185	-	$ 25.10	$ 0.0299		$ 23,179,529	$ 23,202,627		$ 23,202,627	$ 23,098
Urban General Service Demand Billed (50 kW and above) [UGd]	Customers	1,762	1,046,863,808	2,787,731	$ 105.02		$ 10.2289	$ 30,736,022	$ 30,735,823		$ 30,735,823	-$ 199
Street Lighting	Customers	5,401	122,674,116	-	$ 4.33	$ 0.1043		$ 13,075,547	$ 13,073,829		$ 13,073,829	-$ 1,718
Sentinel Lighting	Customers	23,645	20,117,348	-	$ 3.57	$ 0.1354		$ 3,736,856	$ 3,736,431		$ 3,736,431	-$ 425
Unmetered Scattered Load [USL]	Customers	5,667	24,848,190	-	$ 36.66	$ 0.0298		$ 3,233,628	$ 3,234,318		$ 3,234,318	$ 690
Distributed Generation [DGen]	Customers	1,396	19,766,983	198,809	$ 196.16		$ 10.5803	$ 5,390,050	$ 5,390,057		$ 5,390,057	$ 7
Sub-Transmission [ST]	Customers	814	15,362,340,281	29,567,094	$ 1,073.56		$ 1.5407	$ 56,039,072	$ 56,039,031		$ 56,039,031	-$ 41
Total								$ 1,546,840,730	$ 1,546,948,119	$ -	$ 1,546,948,119	$ 107,389

Note

1 The class specific revenue requirements in column K must be the amounts used in the final rate design process. The total of column K should equate to the rates revenue requirement.

2 Rates should be entered with the number of decimal places that will show on the Tariff of Rates and Charges.

2021 Revenue Reconciliation

Rate Class	Customers/ Connections	Number of Customers/Connections (Average)	Test Year Consumption kWh	Test Year Consumption kW	Monthly Service Charge	Volumetric kWh	Volumetric kW	Revenues at Draft Rates	Class Specific Revenue Requirement	Transformer Allowance Credit	Total	Difference
Residential – Urban [UR]	Customers	234,088	2,075,368,926	-	$ 36.67	$ -		$ 103,008,067	$ 103,020,760		$ 103,020,760	$ 12,693
Residential – Medium Density [R1]	Customers	457,608	4,971,183,532	-	$ 52.31	$ 0.0116		$ 344,915,497	$ 344,931,272		$ 344,931,272	$ 15,775
Residential – Low Density [R2]	Customers	333,473	4,425,991,400	-	$ 118.85	$ 0.0201		$ 564,561,347	$ 564,790,590		$ 564,790,590	$ 229,243
Seasonal Residential	Customers	150,445	605,493,061	-	$ 55.37	$ 0.0317		$ 119,156,030	$ 119,144,870		$ 119,144,870	-$ 11,160
General Service Energy Billed (less than 50 kW) [GSe]	Customers	88,435	2,017,505,440	-	$ 31.38	$ 0.0652		$ 164,842,617	$ 164,770,536		$ 164,770,536	-$ 72,082
General Service Demand Billed (50 kW and above) [GSd]	Customers	5,563	2,301,725,939	7,887,971	$ 107.59		$ 18.3492	$ 151,920,006	$ 151,920,097		$ 151,920,097	$ 91
Urban General Service Energy Billed (less than 50 kW) [UGe]	Customers	18,380	589,001,013	-	$ 25.55	$ 0.0308		$ 23,776,439	$ 23,766,126		$ 23,766,126	-$ 10,313
Urban General Service Demand Billed (50 kW and above) [UGd]	Customers	1,772	1,043,858,333	2,771,740	$ 106.68		$ 10.5113	$ 31,403,345	$ 31,403,266		$ 31,403,266	-$ 79
Street Lighting	Customers	5,445	132,827,621	-	$ 4.77	$ 0.1069		$ 14,510,924	$ 14,514,896		$ 14,514,896	$ 3,971
Sentinel Lighting	Customers	23,719	20,598,751	-	$ 3.72	$ 0.1383		$ 3,907,644	$ 3,906,978		$ 3,906,978	-$ 666
Unmetered Scattered Load [USL]	Customers	5,944	26,193,559	-	$ 37.37	$ 0.0303		$ 3,459,407	$ 3,458,577		$ 3,458,577	-$ 830
Distributed Generation [DGen]	Customers	1,508	20,331,530	204,487	$ 196.16		$ 11.3274	$ 5,865,263	$ 5,865,264		$ 5,865,264	$ 1
Sub-Transmission [ST]	Customers	825	15,132,132,885	29,457,615	$ 1,085.90		$ 1.5849	$ 57,433,285	$ 57,433,583		$ 57,433,583	$ 298
Residential – Acquired Urban [AUR]	Customers	15,312	92,804,245	-	$ 30.78			$ 5,655,605	$ 5,655,931		$ 5,655,931	$ 326
Urban Acquired General Service Energy Billed (less than 50 kW) [AUGe]	Customers	1,339	43,284,079	-	$ 30.26	$ 0.0174		$ 1,239,186	$ 1,239,832		$ 1,239,832	$ 647
Urban Acquired General Service Demand Billed (50 kW and above) [AUGd]	Customers	194	142,271,592	410,749	$ 207.78		$ 3.8268	$ 2,054,568	$ 2,054,547		$ 2,054,547	-$ 22
Residential – Acquired Mixed Density [AR]	Customers	37,769	287,240,419	-	$ 40.43			$ 18,323,938	$ 18,323,500		$ 18,323,500	-$ 438
Acquired General Service Energy Billed (less than 50 kW) [AGSe]	Customers	4,339	103,513,037	-	$ 40.92	$ 0.0188		$ 4,076,590	$ 4,072,971		$ 4,072,971	-$ 3,620
Acquired General Service Demand Billed (50 kW and above) [AGSd]	Customers	365	235,941,130	663,644	$ 206.23		$ 5.0842	$ 4,276,929	$ 4,276,928		$ 4,276,928	-$ 1
Total								$ 1,624,386,688	$ 1,624,550,523	$ -	$ 1,624,550,523	$ 163,834

Note

1   The class specific revenue requirements in column K must be the amounts used in the final rate design process. The total of column K should equate to the rates revenue requirement.

2   Rates should be entered with the number of decimal places that will show on the Tariff of Rates and Charges.

2022 Revenue Reconciliation

Rate Class	Customers/ Connections	Number of Customers/C onnections (Average)	Test Year Consumption		Draft Rates			Revenues at Draft Rates	Class Specific Revenue Requirement	Transformer Allowance Credit	Total	Difference
			kWh	kW	Monthly Service Charge	Volumetric						
						kWh	kW					
Residential – Urban [UR]	Customers	236,737	2,090,411,223	-	$ 37.37	$ -		$ 106,162,122	$ 106,164,240		$ 106,164,240	$ 2,118
Residential – Medium Density [R1]	Customers	461,272	4,997,679,120	-	$ 58.26	$ 0.0066		$ 355,469,190	$ 355,379,977		$ 355,379,977	-$ 89,214
Residential – Low Density [R2]	Customers	335,223	4,408,437,098	-	$ 131.71	$ 0.0117		$ 581,404,595	$ 581,580,779		$ 581,580,779	$ 176,183
Seasonal Residential	Customers	150,701	600,089,302	-	$ 61.48	$ 0.0184		$ 122,222,525	$ 122,224,045		$ 122,224,045	$ 1,520
General Service Energy Billed (less than 50 kW) [GSe]	Customers	88,515	1,999,481,405	-	$ 31.94	$ 0.0670		$ 167,891,126	$ 167,860,402		$ 167,860,402	-$ 30,724
General Service Demand Billed (50 kW and above) [GSd]	Customers	5,612	2,296,967,927	7,871,666	$ 109.21		$ 18.8280	$ 155,562,278	$ 155,562,622		$ 155,562,622	$ 344
Urban General Service Energy Billed (less than 50 kW) [UGe]	Customers	18,501	588,566,373	-	$ 26.07	$ 0.0316		$ 24,386,634	$ 24,409,527		$ 24,409,527	$ 22,894
Urban General Service Demand Billed (50 kW and above) [UGd]	Customers	1,783	1,043,919,652	2,764,065	$ 108.50		$ 10.7876	$ 32,139,450	$ 32,139,402		$ 32,139,402	-$ 49
Street Lighting	Customers	5,481	133,429,997	-	$ 4.88	$ 0.1097		$ 14,958,249	$ 14,958,149		$ 14,958,149	-$ 100
Sentinel Lighting	Customers	23,605	20,494,533	-	$ 3.87	$ 0.1440		$ 4,047,438	$ 4,047,929		$ 4,047,929	$ 490
Unmetered Scattered Load [USL]	Customers	5,975	26,397,633	-	$ 38.30	$ 0.0309		$ 3,561,832	$ 3,563,169		$ 3,563,169	$ 1,336
Distributed Generation [DGen]	Customers	1,608	20,936,266	210,569	$ 196.16		$ 12.0863	$ 6,331,186	$ 6,331,186		$ 6,331,186	-$ 0
Sub-Transmission [ST]	Customers	828	15,149,405,058	29,499,182	$ 1,111.42		$ 1.6264	$ 59,020,227	$ 59,019,994		$ 59,019,994	-$ 233
Residential – Acquired Urban [AUR]	Customers	15,467	91,767,419	-	$ 31.59			$ 5,863,132	$ 5,863,141		$ 5,863,141	$ 9
Urban Acquired General Service Energy Billed (less than 50 kW) [AUGe]	Customers	1,352	43,685,012	-	$ 36.37	$ 0.0210		$ 1,507,525	$ 1,505,529		$ 1,505,529	-$ 1,996
Urban Acquired General Service Demand Billed (50 kW and above) [AUGd]	Customers	194	142,604,414	411,710	$ 283.62		$ 5.2141	$ 2,805,942	$ 2,805,951		$ 2,805,951	$ 9
Residential – Acquired Mixed Density [AR]	Customers	38,018	284,062,949	-	$ 41.49			$ 18,928,354	$ 18,926,985		$ 18,926,985	-$ 1,369
Acquired General Service Energy Billed (less than 50 kW) [AGSe]	Customers	4,337	102,300,056	-	$ 43.26	$ 0.0201		$ 4,307,481	$ 4,303,802		$ 4,303,802	-$ 3,679
Acquired General Service Demand Billed (50 kW and above) [AGSd]	Customers	371	235,706,494	662,981	$ 252.41		$ 6.3268	$ 5,316,882	$ 5,316,920		$ 5,316,920	$ 37
Total								$ 1,671,886,170	$ 1,671,963,747	$ -	$ 1,671,963,747	$ 77,578

Note

: The class specific revenue requirements in column K must be the amounts used in the final rate design process. The total of column K should equate to the rates revenue requirement.

2 Rates should be entered with the number of decimal places that will show on the Tariff of Rates and Charges.

Filed: 2018-02-12
EB-2017-0049
Exhibit I
Tab 51
Schedule BLC-7
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Balsam Lake Coalition Interrogatory # 7

Issue:

Issue 51: Are the revenue-to-cost ratios for all rate classes over the 2018 – 2022 period appropriate?

Reference:

H1-01-01 Page 9, Table 5

Interrogatory:

a) For the R1 and R2 classes, please calculate the revenue to cost ratio that illustrates the level of costs that will actually be recovered in rates as a result of Distribution Rate Protection.

b) Please confirm that as a result of Distribution Rate Protection, increasing the revenue to cost ratio for either of the R1 or R2 classes from the proposed levels will have no impact on the effective rates experienced by R1 and R2 customers. If not confirmed please explain how R1 and R2 customers would be affected by an increase in the revenue to cost ratios for their classes.

Response:

a) The rates for the R1 and R2 classes, as shown in Table 1 of Exhibit H1-1-1, fully recover the costs allocated to those classes and so the revenue to cost ratios in the referenced Table 5 appropriately reflect the costs being recovered from these classes. The Distribution Rate Protection is a subsidy provided by the government of Ontario to offset the distribution costs paid by the R1 and R2 rate classes and should not factor into the calculation of the revenue to cost ratios.

Please see the table below for the 2018 revenue-to-cost ratios calculated as per the requested assumption.

Rate Class	Allocated Costs* ($M)	Misc. Revenue* ($M)	Estimate of Revenue Collected from Customers net of DRP ($M)	R/C Ratio Calculated As Requested
	A	B	C	= (C+B)/A
R1	301.4	13.8	190.8	0.68
R2	557.7	17.0	378.4	0.71

* Data per 2018 Rate Design sheet filed at Exhibit H1-1-2, page 1.

Witness: ANDRE Henry

Filed: 2018-02-12
EB-2017-0049
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1   b) Confirmed for the majority of R1 and R2 customers, however, low volume customers in

2   those classes whose total base distribution cost (fixed plus variable charges) is currently

3   below the DRP limit of $36.43/month would see an increase in their distribution charge as a

4   result of increasing the R/C ratio for their classes.

Witness: ANDRE Henry

Filed: 2018-02-12
EB-2017-0049
Exhibit I
Tab 51
Schedule CME-91
Page 1 of 2

Canadian Manufacturers & Exporters Interrogatory # 91

Issue:

Issue 51: Are the revenue-to-cost ratios for all rate classes over the 2018 – 2022 period appropriate?

Reference:

H1-01-01

Interrogatory:

a) Please indicate which of the rate classes shown in Table 5 have customers that qualify for either the Distribution Rate Protection ("DRP") program or the First Nations On-Reserve Delivery Credit ("FNORDC) as set out under the Fair Hydro Act.

b) For each of the rate classes identified in part (a) above, please break down the revenue forecast from each of the rate classes in 2018 between the amount recovered through rates and the amounts that will be funded through other means as a result of the DRP and FNORDC under the Fair Hydro Act.

c) If the revenue to cost ratio for each of the rate classes that have customers that are impacted by the DRP and FNORDC were set to 1.0 for 2018, please provide a breakdown of the revenue recovered from each rate class between the amount recovered through rates and the amounts that will be funded through other means as a result of the DRP and FNORDC under the Fair Hydro Act.

d) How would any surplus or deficit in the revenue requirement that may result as a result of setting the revenue to cost ratios for the impacted rate classes noted in part (c) above to 1.0 be used to adjust the revenue to cost ratios for other rate classes?

Response:

a) All customers in the R1 and R2 residential rate classes qualify for the DRP program, and First Nations on-reserve customers that are in the R1 or R2 residential rate classes qualify for the FNORDC.

Witness: ANDRE Henry, LI Clement

Filed: 2018-02-12
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1   b) Please see table below for an estimate of the requested information.

Rate Class	Total Revenue to be Collected in 2018	Revenue Collected from Customers	Revenue Funded by RRRP	Revenue Funded Through DRP or FNORDC
R1	$309.8M	$190.8M	N/A	$119.0M
R2	$512.4M	$140.0M	$238.4M	$134.0M

2

3   c) Please see table below for an estimate of the requested information.

Rate Class	Total Revenue to be Collected in 2018 of R/C=1	Revenue Collected from Customers	Revenue Funded by RRRP	Revenue Funded Through DRP or FNORDC
R1	$287.6M	$190.8M	N/A	$96.8M
R2	$540.7M	$140.0M	$238.4M	$162.3M

4

5   d) The net surplus in revenue from adjusting the R1 and R2 rate classes to a R/C ratio of 1 in
6   2018 would be used to lower the R/C ratios for the Seasonal, USL and UR rate classes who
7   currently have the highest R/C ratios.

Witness: ANDRE Henry, LI Clement

Filed: 2018-02-12
EB-2017-0049
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Tab 51
Schedule EnergyProbe-66
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1 ### *Energy Probe Research Foundation Interrogatory # 66*

2

3 ### *Issue:*

4 Issue 51: Are the revenue-to-cost ratios for all rate classes over the 2018 – 2022 period
5 appropriate?

6

7 ### *Reference:*

8 H1-01-01 Page: 9 - Tables 5-7

9

10 ### *Interrogatory:*

11 Please re-create these charts, but put all residential rate classes (UR, R1, R2 and Seasonal) at a
12 revenue-to-cost ratio of 100%.

13

14 ### *Response:*

15 H1-01-01 Tables 5-7 are revised to move UR, R1 and R2 revenue to cost ratios to 100% over 3
16 years, from 2018 to 2020, as shown below.

Witness: ANDRE Henry

Filed: 2018-02-12
EB-2017-0049
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Revised Table 5 - Revenue-to-Cost Ratios and Class Revenue Recoveries – 2017 to 2018

Rate Class	2017		2018			
	R/C	Revenue Requirement ($ M)	R/C		Revenue Requirement ($ M)	
			CAM	After Rate Design	CAM	After Rate Design
UR	1.10	87.6	1.05	1.03	96.2	94.7
R1	1.10	310.9	1.07	1.05	323.5	316.2
R2	0.95	519.4	0.95	0.97	529.4	538.8
Seasonal	1.04	113.4	1.09	1.06	114.1	111.0
GSe	0.99	160.6	1.01	1.01	160.5	160.5
UGe	0.95	21.8	1.02	1.12	22.7	25.0
GSd	0.95	145.5	0.97	0.97	143.5	143.5
UGd	0.95	30.3	0.95	0.95	29.8	29.8
St Lgt	0.95	12.1	0.93	0.93	12.5	12.5
Sen Lgt	0.95	7.3	1.03	1.03	6.4	6.4
USL	1.10	3.2	1.15	1.12	3.4	3.3
DGen	0.61	4.6	0.57	0.63	3.7	4.1
ST	0.95	51.0	0.98	0.98	54.2	54.2
TOTAL		1,467.6			1,499.9	1,499.9

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Witness: ANDRE Henry

Filed: 2018-02-12
EB-2017-0049
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Revised Table 6 - Revenue-to-Cost Ratios and Class Revenue Recoveries – 2018 to 2019

Rate Class	2018		2019			
	R/C	Revenue Requirement (S M)	R/C		Revenue Requirement (S M)	
			Before Rate Design	After Rate Design	Before Rate Design	After Rate Design
UR	1.03	94.7	1.04	1.02	99.1	97.0
R1	1.05	316.2	1.06	1.03	329.3	320.5
R2	0.97	538.8	0.97	0.98	557.6	567.2
Seasonal	1.06	111.0	1.06	1.03	114.4	111.3
GSe	1.01	160.5	1.00	1.04	163.8	169.8
UGe	1.12	25.0	1.12	1.04	25.7	23.9
GSd	0.97	143.5	0.96	0.96	147.2	147.2
UGd	0.95	29.8	0.94	0.94	30.5	30.5
St Lgt	0.93	12.5	0.94	0.94	13.0	13.0
Sen Lgt	1.03	6.4	1.04	1.04	6.7	6.7
USL	1.12	3.3	1.13	1.04	3.4	3.1
DGen	0.63	4.1	0.68	0.76	4.5	5.0
ST	0.98	54.2	0.97	0.97	55.7	55.7
TOTAL		1,499.9			1,551.0	1,551.0

Witness: ANDRE Henry

Filed: 2018-02-12
EB-2017-0049
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Revised Table 7 - Revenue-to-Cost Ratios and Class Revenue Recoveries – 2019 to 2020

| Rate Class | 2019 | | 2020 | | | |
| | R/C | Revenue Requirement ($ M) | R/C | | Revenue Requirement ($ M) | |
			Before Rate Design	After Rate Design	Before Rate Design	After Rate Design
UR	1.02	97.0	1.03	1.00	101.1	98.1
R1	1.03	320.5	1.03	1.00	332.9	321.9
R2	0.98	567.2	0.98	1.00	585.8	595.6
Seasonal	1.03	111.3	1.02	1.00	114.6	111.8
GSe	1.04	169.8	1.03	1.06	173.5	179.6
UGe	1.04	23.9	1.04	1.06	24.6	25.3
GSd	0.96	147.2	0.96	0.96	151.4	151.4
UGd	0.94	30.5	0.94	0.94	31.4	31.4
St Lgt	0.94	13.0	0.94	0.94	13.5	13.5
Sen Lgt	1.04	6.7	1.04	1.06	6.9	7.1
USL	1.04	3.1	1.04	1.06	3.2	3.3
DGen	0.76	5.0	0.81	0.81	5.6	5.6
ST	0.97	55.7	0.97	0.97	57.3	57.3
TOTAL		1,551.0			1,601.9	1,601.9

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Witness: ANDRE Henry

Filed: 2018-02-12
EB-2017-0049
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Energy Probe Research Foundation Interrogatory # 67

Issue:

Issue 51: Are the revenue-to-cost ratios for all rate classes over the 2018 – 2022 period appropriate?

Reference:

H1-01-02 Page: 1-5

Interrogatory:

Please explain Hydro One's reasoning for allowing the revenue-to-cost ratio for the UR and R1 rate classes to get worse (increase from 2018 levels to 2022)?

Response:

As discussed in Hydro One's response to I-51-Staff-248, Hydro One proposes to adopt the standard revenue-to-cost ("R/C") ratio ranges approved by the Board under proceeding EB-2010-0219. The proposed R/C ratios for UR and R1 in the period 2018 to 2022 range from 1.05 to 1.11 and are within the OEB policy range, which is 85% to 115% for residential classes. Hydro One did not actively increase the R/C ratios for the UR and R1 classes by shifting additional revenue to these classes during this period. The observed increase in R/C ratio for these classes is a natural outcome of the Board's cost allocation methodology.

Witness: ANDRE Henry

Filed: 2018-02-12
EB-2017-0049
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1 **_Energy Probe Research Foundation Interrogatory # 68_**

2

3 **_Issue:_**

4 Issue 51: Are the revenue-to-cost ratios for all rate classes over the 2018 – 2022 period

5 appropriate?

6

7 **_Reference:_**

8 H1-04-01 Page: 2 - Table 1

9

10 **_Interrogatory:_**

11 Please refile this table, but hold all residential rate classes at a revenue-to-cost ratio of between

12 95% to 105%.

13

14 **_Response:_**

15 The table below is a summary of the revenue-to-cost (R/C) ratios in Exhibit H1, Tab 1, Schedule

16 1, Tables 5 to 9, compared to the revised R/C ratios with all residential classes held in between

17 95% and 105%.

18

19 The bill impacts corresponding to the revised R/C ratios shown below are provided in

20 Attachment 1 to this response.

21

Rate Class	Filed (June Filing)					Revised				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
UR	1.05	1.06	1.07	1.10	1.10	1.05	1.05	1.05	1.05	1.05
R1	1.07	1.08	1.09	1.10	1.10	1.05	1.05	1.05	1.05	1.05
R2	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.98	0.98
Seasonal	1.09	1.08	1.08	1.10	1.09	1.05	1.05	1.04	1.05	1.05
AUR				0.86	0.87				0.98	0.98
AR				0.85	0.85				0.98	0.98

22

Witness: ANDRE Henry

TABLE 1 - DISTRIBUTION AND TOTAL BILL IMPACTS BY RATE CLASS FOR HYDRO ONE CUSTOMER

Rate Class	Consumption Level	Monthly Consumption (kWh)	Monthly Peak (kW)	2018				2019		2020				2021				2022			
				Change in DX Bill ($)	Change in DX Bill (%)	Change in Total Bill ($)	Change in Total Bill (%)	Change in DX Bill ($)	Change in Total Bill (%)	Change in DX Bill ($)	Change in DX Bill (%)	Change in Total Bill ($)	Change in Total Bill (%)	Change in DX Bill ($)	Change in DX Bill (%)	Change in Total Bill ($)	Change in Total Bill (%)	Change in DX Bill ($)	Change in DX Bill (%)	Change in Total Bill ($)	Change in Total Bill (%)
UR	Low	350		$ 1.77	6.2%	$ 2.97	3.9%	$ 2.21	2.9%	$ 2.54	7.8%	$ 2.67	3.3%	$ (0.84)	-2.3%	$ (0.99)	-1.2%	$ 0.65	1.8%	$ 0.66	0.8%
	Typical	750		$ 1.26	3.9%	$ 3.71	2.8%	$ 0.88	0.7%	$ 0.74	2.2%	$ 0.78	0.6%	$ (0.84)	-2.3%	$ 11.10	-0.8%	$ 0.63	1.8%	$ 0.66	0.5%
	Average	755		$ 1.26	3.9%	$ 3.72	2.8%	$ 0.87	0.7%	$ 0.72	2.1%	$ 0.76	0.6%	$ (0.84)	-2.3%	$ (1.10)	-0.8%	$ 0.63	1.8%	$ 0.66	0.5%
	High	1,400		$ 0.44	1.1%	$ 4.91	2.2%	$ (1.26)	-0.6%	$ (2.18)	-5.8%	$ (2.29)	-1.0%	$ (0.84)	-2.3%	$ (1.30)	-0.6%	$ 0.63	1.8%	$ 0.66	0.3%
R1	Low	400		$ 2.11	4.8%	$ 3.18	3.2%	$ 3.05	3.1%	$ 3.13	6.4%	$ 3.29	3.1%	$ 1.35	2.5%	$ 1.35	1.2%	$ 3.50	6.4%	$ 3.68	3.3%
	Typical	750		$ 1.35	2.6%	$ 3.23	2.1%	$ 2.14	1.4%	$ 1.98	3.6%	$ 2.07	1.3%	$ (0.68)	-1.2%	$ (0.83)	-0.5%	$ 1.96	3.4%	$ 2.06	1.3%
	Average	920		$ 0.98	1.8%	$ 3.23	1.8%	$ 1.70	1.0%	$ 1.41	2.4%	$ 1.48	0.8%	$ (1.67)	-2.7%	$ (1.89)	-1.0%	$ 1.31	2.0%	$ 1.27	0.7%
	High	1,800		$ (0.94)	-1.2%	$ 3.36	1.1%	$ (0.59)	-0.2%	$ (1.49)	-2.0%	$ (1.56)	-0.5%	$ (6.77)	-8.9%	$ (7.39)	-2.3%	$ (2.66)	-3.8%	$ (2.79)	-0.9%
R2	Low	450		$ 4.42	11.6%	$ 5.56	5.5%	$ 7.75	7.7%	$ 8.10	16.1%	$ 8.50	7.4%	$ 9.32	16.6%	$ 9.75	8.1%	$ 9.02	13.8%	$ 9.48	7.3%
	Typical	750		$ 4.54	9.2%	$ 6.31	4.2%	$ 6.55	4.3%	$ 6.45	10.7%	$ 6.77	4.1%	$ 7.22	11.2%	$ 7.52	4.4%	$ 6.54	9.1%	$ 6.86	3.9%
	Average	1,152		$ 4.70	7.3%	$ 7.30	3.3%	$ 4.94	2.3%	$ 4.23	5.7%	$ 4.45	1.9%	$ 4.41	5.9%	$ 4.53	1.9%	$ 3.20	4.0%	$ 5.36	1.4%
	High	2,300		$ 5.17	4.8%	$ 10.16	2.4%	$ 0.35	0.1%	$ (2.08)	-1.8%	$ (2.18)	-0.5%	$ (3.63)	-3.4%	$ (4.00)	-1.0%	$ (6.33)	-6.2%	$ (6.65)	-1.6%
Seasonal	Low	50		$ 2.58	6.4%	$ 2.78	5.6%	$ 3.91	7.8%	$ 4.24	9.1%	$ 4.45	7.8%	$ 2.84	5.4%	$ 2.98	4.8%	$ 4.88	8.9%	$ 5.12	7.8%
	Average	352		$ (0.10)	-0.2%	$ 0.37	0.3%	$ 2.10	2.0%	$ 1.82	3.0%	$ 1.92	1.7%	$ (1.99)	-3.0%	$ (2.08)	-1.8%	$ 1.40	2.2%	$ 1.47	1.3%
	High	1,000		$ (5.86)	-5.8%	$ (4.79)	-2.0%	$ (1.79)	-0.8%	$ (3.36)	-3.6%	$ (3.53)	-1.5%	$ (2.36)	-13.2%	$ (12.93)	-5.6%	$ (6.05)	-7.4%	$ (6.33)	-2.7%
GSe	Low	1,000		$ 3.68	4.3%	$ 4.40	1.9%	$ 3.04	1.4%	$ 2.69	2.9%	$ 2.82	1.2%	$ 2.40	2.5%	$ 2.33	1.0%	$ 2.36	2.4%	$ 2.48	1.0%
	Typical	2,000		$ 6.40	4.5%	$ 7.80	1.8%	$ 5.44	1.3%	$ 4.69	3.1%	$ 4.92	1.1%	$ 4.30	2.7%	$ 4.13	0.9%	$ 4.16	2.6%	$ 4.37	1.0%
	Average	1,982		$ 6.35	4.5%	$ 7.74	1.8%	$ 5.40	1.3%	$ 4.65	3.1%	$ 4.89	1.1%	$ 4.27	2.7%	$ 4.10	0.9%	$ 4.13	2.6%	$ 4.33	1.0%
	High	15,000		$ 41.76	4.8%	$ 51.91	1.7%	$ 36.64	1.3%	$ 30.69	3.2%	$ 32.22	1.1%	$ 29.00	3.0%	$ 27.57	0.9%	$ 27.56	2.7%	$ 28.94	0.9%
UGe	Low	1,000		$ 1.65	3.5%	$ 2.13	1.1%	$ 1.79	1.0%	$ 1.53	2.9%	$ 1.61	0.8%	$ 1.35	2.5%	$ 1.13	0.6%	$ 1.32	2.3%	$ 1.39	0.7%
	Typical	2,000		$ 3.58	4.4%	$ 4.35	1.2%	$ 2.99	0.9%	$ 2.43	2.9%	$ 2.55	0.7%	$ 2.25	2.6%	$ 1.78	0.5%	$ 2.12	2.4%	$ 2.23	0.6%
	Average	2,759		$ 4.69	4.9%	$ 6.03	1.3%	$ 3.90	0.9%	$ 3.11	3.0%	$ 3.27	0.7%	$ 2.93	2.7%	$ 2.28	0.5%	$ 2.73	2.5%	$ 2.86	0.6%
	High	15,000		$ 25.87	6.2%	$ 33.18	1.4%	$ 18.59	0.8%	$ 14.13	3.1%	$ 14.84	0.6%	$ 13.95	2.9%	$ 10.31	0.4%	$ 12.52	2.6%	$ 13.15	0.5%
GSd	Low	15,000	60	$ 70.04	6.7%	$ 86.34	2.7%	$ 49.56	1.7%	$ 40.92	3.5%	$ 46.24	1.4%	$ 79.42	6.6%	$ 85.26	2.5%	$ 28.63	3.2%	$ 32.35	0.9%
	Average	36,104	124	$ 137.72	6.7%	$ 170.51	2.4%	$ 99.39	1.5%	$ 81.85	3.6%	$ 92.49	1.2%	$ 161.48	6.6%	$ 172.91	2.3%	$ 58.94	2.3%	$ 66.60	0.8%
	High	175,000	500	$ 551.17	6.9%	$ 682.84	2.1%	$ 393.55	1.4%	$ 322.26	3.6%	$ 364.15	1.1%	$ 610.41	6.6%	$ 652.40	1.9%	$ 224.74	2.3%	$ 253.96	0.7%
UGd	Low	15,000	60	$ 63.41	10.1%	$ 100.99	3.6%	$ 32.45	1.3%	$ 26.57	3.7%	$ 30.65	1.0%	$ 54.96	7.4%	$ 57.20	1.9%	$ 16.71	2.1%	$ 18.88	0.6%
	Average	50,525	135	$ 151.44	11.9%	$ 237.14	2.9%	$ 68.90	0.9%	$ 55.95	3.7%	$ 63.22	0.7%	$ 113.42	7.2%	$ 116.89	1.4%	$ 35.53	2.1%	$ 40.15	0.5%
	High	175,000	500	$ 529.01	11.8%	$ 842.27	3.0%	$ 246.25	0.9%	$ 198.92	3.8%	$ 224.78	0.8%	$ 384.78	7.1%	$ 393.94	1.3%	$ 122.88	2.1%	$ 138.85	0.5%
St Lgt	Low	100		$ 0.72	5.3%	$ 0.95	3.5%	$ 0.51	1.7%	$ 0.47	3.2%	$ 0.49	1.7%	$ 1.09	7.4%	$ 0.97	3.4%	$ 0.59	2.5%	$ 0.41	1.4%
	Average	517		$ 1.14	7.9%	$ 5.40	4.5%	$ 2.05	1.7%	$ 1.85	3.1%	$ 1.94	1.5%	$ 3.30	3.7%	$ 2.56	2.0%	$ 1.56	2.4%	$ 1.64	1.3%
	High	2,000		$ 16.39	8.6%	$ 21.21	4.5%	$ 7.54	1.6%	$ 6.74	3.1%	$ 7.09	1.4%	$ 11.16	5.2%	$ 5.21	1.6%	$ 3.71	2.5%	$ 6.00	1.2%
Sen Lgt	Low	20		$ 0.42	8.2%	$ 0.48	5.9%	$ 0.38	4.7%	$ 0.35	5.9%	$ 0.37	4.0%	$ 0.42	6.7%	$ 0.41	4.3%	$ 0.28	4.2%	$ 0.29	3.0%
	Average	71		$ 0.48	4.3%	$ 0.65	3.1%	$ 0.89	3.9%	$ 0.73	5.8%	$ 0.76	3.4%	$ 0.80	6.1%	$ 0.72	3.1%	$ 0.59	4.2%	$ 0.62	2.6%
	High	200		$ 0.62	2.4%	$ 1.07	2.0%	$ 1.56	3.6%	$ 1.68	5.8%	$ 1.76	3.1%	$ 1.77	5.8%	$ 1.51	2.6%	$ 1.36	4.2%	$ 1.43	2.4%
USL	Low	100		$ 1.49	3.9%	$ 1.65	3.1%	$ 1.47	2.8%	$ 1.54	3.2%	$ 1.41	2.3%	$ 1.08	2.7%	$ 1.13	2.1%	$ 1.03	2.7%	$ 1.13	2.0%
	Average	364		$ 1.97	4.3%	$ 2.38	2.5%	$ 1.79	1.9%	$ 1.55	3.1%	$ 1.63	1.6%	$ 1.26	2.7%	$ 1.30	1.3%	$ 1.26	2.6%	$ 1.33	1.4%
	High	1,000		$ 3.13	4.9%	$ 4.16	2.1%	$ 2.55	1.3%	$ 2.06	3.0%	$ 2.16	1.0%	$ 1.71	2.6%	$ 1.72	0.8%	$ 1.71	2.5%	$ 1.80	0.9%
DGen	Low	300	10	$ 37.63	16.9%	$ 45.55	15.2%	$ 33.91	11.1%	$ 6.13	21.8%	$ 72.46	18.9%	$ 8.93	2.5%	$ 10.26	2.2%	$ 3.21	2.2%	$ 9.28	2.0%
	Average	1,328	13	$ 36.68	15.1%	$ 45.39	10.0%	$ 44.08	10.0%	$ 83.36	25.7%	$ 94.20	17.2%	$ 10.71	2.7%	$ 12.31	2.0%	$ 9.85	2.4%	$ 11.13	1.8%
	High	5,000	100	$ (18.57)	-2.2%	$ 9.34	0.6%	$ 339.10	22.5%	$ 641.25	54.4%	$ 724.61	34.8%	$ 89.28	4.9%	$ 102.61	3.7%	$ 82.11	4.3%	$ 92.78	3.2%
ST	Low	200,000	500	$ (30.70)	-1.7%	$ 67.02	0.2%	$ 52.60	0.2%	$ 55.96	3.6%	$ 63.23	0.2%	$ 32.44	1.7%	$ 92.76	0.3%	$ 260.14	13.5%	$ 293.96	1.0%
	Average	1,601,036	3,091	$ 526.12	12.2%	$ 1,223.27	0.6%	$ 196.74	0.1%	$ 180.02	3.6%	$ 203.42	0.1%	$ 121.02	2.4%	$ 468.85	0.2%	$ 758.93	14.7%	$ 857.59	0.4%
	High	4,000,000	10,000	$ 628.49	5.1%	$ 2,744.34	0.5%	$ 581.09	0.1%	$ 510.82	3.8%	$ 577.23	0.1%	$ 374.52	2.7%	$ 1,545.15	0.3%	$ 2,186.36	15.2%	$ 2,470.59	0.4%
AUR	Low	350		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 0.92	2.6%	$ 0.97	1.2%
	Typical	750		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 0.92	2.6%	$ 0.97	0.7%
	Average	505		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 0.92	2.6%	$ 0.97	0.9%
	High	1,400		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 0.92	2.6%	$ 0.97	0.4%
AUGe	Low	1,000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 9.71	20.4%	$ 10.20	5.5%
	Typical	2,000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 13.31	20.5%	$ 13.98	4.2%
	Average	2,695		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 15.81	20.5%	$ 16.60	3.8%
	High	15,000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 60.11	20.6%	$ 63.12	2.7%
AUGd	Low	15,000	60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	See Table 2 for Bill Impacts on Acquired Customers		$ 154.15	34.5%	$ 174.19	6.8%
	Average	61,239	177	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 306.86	33.6%	$ 346.75	3.8%
	High	175,000	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 728.44	33.1%	$ 823.13	3.2%
AR	Low	400		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 1.22	2.6%	$ 1.28	1.3%
	Typical	750		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 1.22	2.6%	$ 1.28	0.9%
	Average	634		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 1.22	2.6%	$ 1.28	1.0%
	High	1,800		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 1.22	2.6%	$ 1.28	0.5%
AGSe	Low	1,000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 3.64	6.1%	$ 3.82	1.9%
	Typical	2,000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 4.94	6.3%	$ 5.19	1.5%
	Average	1,988		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 4.92	6.3%	$ 5.17	1.5%
	High	15,000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 21.84	6.8%	$ 22.93	1.0%
AGSd	Low	15,000	60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 115.81	22.2%	$ 130.87	4.9%
	Average	53,895	152	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 222.55	22.2%	$ 251.51	3.0%
	High	175,000	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			$ 626.43	22.1%	$ 707.87	2.7%

* Refer to H1-04-01 Table 2 for Bill Impacts on customers formerly served by NOPI, HCHI and WHSI

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EB-2017-0049
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1 ### _School Energy Coalition Interrogatory # 89_

2

3 ### _Issue:_

4 Issue 52: Are the proposed fixed and variable charges for all rate classes over the 2018 - 2022

5 period, appropriate, including implementation of the OEB's residential rate design?

6

7 ### _Reference:_

8 None

9

10 ### _Interrogatory:_

11 If the Board approves the application as filed, and renders a decision that allows for

12 implementation of rates by October 1, 2018, but effective January 1, 2018, please provide Hydro

13 One's proposal for how it will implement a foregone revenue rate rider. Please forecast that the

14 specific rider amounts for each rate class and their durations.

15

16 ### _Response:_

17 Hydro One proposes that the foregone revenue be determined in a manner similar to that

18 approved by the Board for disposing of the 2015 foregone revenue under EB-2013-0416, except

19 that the foregone revenue rider would consist of separate fixed and variable components to more

20 closely align with how the foregone revenue would have been collected from customers. The

21 foregone revenue would be calculated as the difference between fixed and variable revenues

22 collected at 2017 rates versus approved 2018 rates, by rate class, and using the approved 2018

23 load forecast. Hydro One would further propose that the foregone revenue be disposed over the

24 period of October 1, 2018 to December 31, 2019. An estimate of the rider amounts by rate class

25 is provided in the attached table.

Witness: ANDRE Henry

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1

2

Estimate of Foregone Revenue Rider Assuming October 1, 2018 Implementation of Rates Effective January 1, 2018

Rate Class	2018 Load forecast			Current (2017) Charges		2018 Blue Page Proposed Charges		Foregone Revenue Amount		2019 Load Forecast			Foregone Rate Rider Values Assuming Recovery from Oct. 1, 2018 to Dec.31, 2019	
	Number of Cust	kWh	kW	Fixed ($/Month)	Variable ($/kWh or $/kW)	Fixed ($/Month)	Variable ($/kWh or $/kW)	Fixed ($)	Variable* ($)	Number of Cust	kWh	kW	Fixed Rider ($/Month)	Variable Rider ($/kWh or $/kW)
UR	225,944	2,047,262,889		24.78	0.0094	27.71	0.0078	$5,958,148	(2,456,715)	228,666	2,047,339,001		$1.74	($0.0010)
R1	446,102	4,924,068,303		33.77	0.023	37.79	0.0218	$16,139,953	(4,431,661)	449,958	4,917,201,793		$2.39	($0.0007)
R2	328,410	4,539,367,306		80.33	0.0374	88.61	0.0359	$24,473,140	(5,106,788)	330,076	4,478,345,990		$4.94	($0.0009)
Seasonal	149,485	631,921,216		36.28	0.0635	40.52	0.0601	$5,704,334	(1,611,399)	149,813	619,771,621		$2.54	($0.0021)
GSe	88,484	2,104,034,980		27.87	0.0560	29.56	0.0589	$1,345,840	4,576,276	88,423	2,064,247,047		$1.01	$0.0018
UGe	18,074	598,366,765		23.3	0.0262	23.88	0.0278	$94,346	718,040	18,166	592,270,624		$0.35	$0.0010
GSd	5,406		8,025,918	89.48	15.9121	102.52	16.6975	$634,407	4,727,667	5,457		7,940,259	$7.75	$0.4753
UGd	1,744		2,832,322	93.97	9.0851	100.72	9.5589	$105,962	1,006,466	1,753		2,797,926	$4.03	$0.2871
St Lgt	5,323	121,367,848		4.25	0.0924	4.07	0.0976	-$8,624	473,335	5,364	121,925,376		-$0.11	$0.0031
Sen Lgt	23,987	20,385,578		2.71	0.1178	3.15	0.1199	$94,988	32,107	23,822	20,235,185		$0.27	$0.0013
USL	5,597	24,437,190		35.18	0.0285	34.76	0.0284	-$21,158	(1,833)	5,633	24,560,309		-$0.25	($0.0001)
DGen	1,152		184,739	149.34	6.9518	196.16	6.3673	$485,633	(80,985)	1,272		191,107	$25.45	($0.3413)
ST	808		29,977,946	948.13	1.3113	1,022.07	1.4367	$537,856	2,819,426	811		29,637,492	$44.21	$0.0759

3 * For the purpose of this response, the variable foregone revenue assumes that 9/12 of the annual load (Jan.1, 2018 to Sep.30, 2018)

Witness: ANDRE Henry

Filed: 2018-02-12
EB-2017-0049
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Tab 46
Schedule EnergyProbe-65
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Energy Probe Research Foundation Interrogatory # 65

Issue:
Issue 46: Is the load forecast methodology including the forecast of CDM savings appropriate?

Reference:
H1-05-01 Page: 3

Interrogatory:
Will Hydro One's capital spending program – and the updating of many of its assets – have any impact on its Total Loss Factors? Please provide any documents, memos or evidence that discuss the impact that the utility's capital spending program will have on Total Loss Factors.

Response:
The potential for reducing losses is a consideration in assessing capital spending programs, where appropriate, while the replacement and reconfiguration of distribution assets can have an impact on system losses. However, there are no documents, memos or evidence that quantifies the impact of the capital spending programs on Total Loss Factors.

Witness: ANDRE Henry

Filed: 2018-02-12
EB-2017-0049
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Canadian Manufacturers & Exporters Interrogatory # 71

Issue:

Issue 47: Are the customer and load forecasts a reasonable reflection of the energy and demand requirements for 2018 – 2022?

Reference:

E1-02-01

Interrogatory:

The evidence indicates that the annual econometric model uses relative energy price.

a) Please confirm that the relative energy price is electricity as compared to natural gas. If this cannot be confirmed, please explain fully what the relative energy price is.

b) Please confirm that the Hydro One forecast takes into account the increase in natural gas prices due to the addition of cap & trade related charges effective January 1, 2017? If this cannot be confirmed, please explain.

c) Please confirm that the Hydro One forecast takes into account the reduction in electricity prices that have resulted from the Fair Hydro Act, including changes to the commodity cost and the introduction of distribution rate protected residential customers and the delivery credit for on-reserve customers? If this cannot be confirmed, please explain.

Response:

a) Confirmed.

b) Confirmed.

c) Confirmed.

Witness: ALAGHEBAND Bijan

Filed: 2018-02-12
EB-2017-0049
Exhibit I
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Schedule VECC-98
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1   ***Vulnerable Energy Consumers Coalition Interrogatory # 98***

2

3   ***Issue:***

4   Issue 49: Are the inputs to the cost allocation model appropriate and are costs appropriately
5   allocated?

6

7   ***Reference:***

8   H1-01-01 Page: 15-16
9   EB-2012-0410, Board Report, page 26

10

11   ***Interrogatory:***

12   a) For each customer class that is transitioning to a 100% fixed charge, please provide a
13   schedule that for each year of transition demonstrates whether the change in the fixed charge
14   meets the Board's $4 criterion.

15

16   ***Response:***

17   a) The Table below provides the requested information:

18

Rate Class		2015	2016	2017	2018	2019	2020	2021	2022
UR	Fixed Charge ($/Month)	$ 19.07	$ 22.29	$ 24.78	$ 27.71	$ 31.23	$ 35.85		
	Yr-Over-Yr Difference ($)		$ 3.22	$ 2.49	$ 2.93	$ 3.52	$ 4.62		
R1	Fixed Charge ($/Month)	$ 26.03	$ 30.11	$ 33.77	$ 37.79	$ 42.19	$ 47.06	$ 52.39	$ 58.53
	Yr-Over-Yr Difference ($)		$ 4.08	$ 3.66	$ 4.02	$ 4.40	$ 4.87	$ 5.33	$ 6.14
R2	Fixed Charge ($/Month)	$ 65.52	$ 72.86	$ 80.33	$ 88.61	$ 97.68	$ 107.71	$ 118.85	$ 131.71
	Yr-Over-Yr Difference ($)		$ 7.34	$ 7.47	$ 8.28	$ 9.07	$ 10.02	$ 11.15	$ 12.86
Seasonal	Fixed Charge ($/Month)	$ 28.62	$ 32.47	$ 36.28	$ 40.52	$ 45.07	$ 50.05	$ 55.44	$ 61.63
	Yr-Over-Yr Difference ($)		$ 3.85	$ 3.80	$ 4.24	$ 4.55	$ 4.98	$ 5.39	$ 6.18

19

20

21   Hydro One acknowledges the fact that the fixed charge increases in some cases do not meet the
22    $4 limit set by the OEB. However, Hydro One has followed the direction provided by the OEB
23   in its December 22, 2015 Decision and Order in EB-2015-0079 to transtion the UR rate class to
24   fully-fixed rates over 5 years and R1, R2 and Seasonal classes over 8 years.

Witness: ANDRE Henry

UR	2018	2019	2020	2021	2022	% Change 2018-2022
No. of Customers	225,944	228,666	231,390	234,088	236,737	4.78%
KWh	2,047,262,889	2,047,339,001	2,064,454	2,075,368,926	2,090,411,223	2.11%
Total Revenue at Draft Rates	$ 91,059,278	$ 95,379,475	$ 99,543,656	$ 103,020,760	$ 106,164,240	16.59%
R/C	1.05	1.06	1.07	1.10	1.10	

R1	2018	2019	2020	2021	2022	% Change 2018-2022
No. of Customers	446,102	449,958	453,821	457,608	461,272	3.40%
KWh	4,924,068,303	4,917,201,793	4,953,183,920	4,971,183,532	4,997,679,120	1.49%
Total Revenue at Draft Rates	$ 309,776,676	$ 322,820,755	$ 335,742,988	$ 344,931,272	$ 355,379,977	14.72%
R/C	1.07	1.08	1.09	1.10	1.10	

R2	2018	2019	2020	2021	2022	% Change 2018-2022
No. of Customers	328,410	330,076	331,741	333,473	335,223	2.07%
KWh	4,539,367,306	4,478,345,990	4,456,998,731	4,425,991,400	4,408,437,098	-2.88%
Total Revenue at Draft Rates	$ 512,389,870	$ 530,634,194	$ 548,503,431	$ 564,790,590	$ 581,580,779	13.50%
R/C	0.95	0.95	0.95	0.97	0.97	

Seasonal	2018	2019	2020	2021	2022	% Change 2018-2022
No. of Customers	149,485	149,813	150,145	150,445	150,701	0.81%
KWh	631,921,216	619,771,621	613,086,833	605,493,061	600,089,302	-5.04%
Total Revenue at Draft Rates	$ 110,674,030	$ 113,720,446	$ 117,085,947	$ 119,144,870	$ 122,224,045	10.44%
R/C	1.09	1.08	1.08	1.1	1.09	

Source: Exhibit H1-1-4,
Attachment 1