

INTERROGATORY RESPONSE - OEB-38

1-Staff-38

EXHIBIT REFERENCE:

Updated Revenue Requirement Work Form (RRWF) and Models

SUBJECT AREA: OEB Models

Upon completing all interrogatories from Ontario Energy Board (OEB) staff and intervenors, please provide an updated RRWF in working Microsoft Excel format with any corrections or adjustments that the Applicant wishes to make to the amounts in the populated version of the RRWF filed in the initial applications. Entries for changes and adjustments should be included in the middle column on sheet 3 Data_Input_Sheet. Sheets 10 (Load Forecast), 11 (Cost Allocation), 12 (Residential Rate Design) and 13 (Rate Design) should be updated, as necessary. Please include documentation of the corrections and adjustments, such as a reference to an interrogatory response or an explanatory note. Such notes should be documented on Sheet 14 Tracking Sheet, and may also be included on other sheets in the RRWF to assist understanding of changes.

In addition, please file an updated set of models that reflects the interrogatory responses.

RESPONSE:

Hydro Ottawa has not made any changes as a result of the interrogatories that impact the proposed revenue requirement for the 2021-2025 Custom IR term. However, as the Cost Allocation model has been updated, as described below, updated RRWF models have likewise been provided for 2021-2025.

Please find a list below of updated models appended to this interrogatory response as excel files. Details of the changes are provided in the ensuing paragraphs.

- 1 • Attachment OEB-38(A): OEB Workform - Cost Allocation Model
- 2 • Attachment OEB-38(B): 2021 Revenue Requirement Workform
- 3 • Attachment OEB-38(C): 2022 Revenue Requirement Workform
- 4 • Attachment OEB-38(D): 2023 Revenue Requirement Workform
- 5 • Attachment OEB-38(E): 2024 Revenue Requirement Workform
- 6 • Attachment OEB-38(F): 2025 Revenue Requirement Workform
- 7 • Attachment OEB-38(G): Updated OEB Workform - 2021 GA Analysis Workform
- 8 • Attachment OEB-38(H): OEB Workform 2020 Current and 2021 Proposed Tariff of Rates
9 and Charges
- 10 • Attachment OEB-38(I): HOL Bill Impacts Model 2021-2025
- 11 • Attachment OEB-38(J): OEB Workform - Deferral and Variance Account (Continuity
12 Schedule)
- 13 • Attachment OEB-38(K): REVISED OEB Workform 2014 LRAM VA Workform
- 14 • Attachment OEB-38(L): OEB Workform - 2014 Adjustments - LRAM VA Workform
- 15 • Attachment OEB-38(M): OEB Workform - 2015 (2011-2014) Adjustments - LRAM VA
16 Workform
- 17 • Attachment OEB-38(N): OEB Workform - 2015 (2015-2020) Adjustments - LRAM VA
18 Workform
- 19 • Attachment OEB-38(O): REVISED OEB Workform - 2016 Adjustments - LRAM VA
20 Workform
- 21
- 22 Hydro Ottawa has also updated the 2021 RTSR Workform. Please see the response to
23 interrogatory OEB-163 and excel Attachment OEB-163(A): 2021 RTSR Workform for details.
- 24
- 25 Hydro Ottawa has adjusted cost allocation inputs as a result of the interrogatory responses. In
26 addition, Hydro Ottawa has used the updated OEB Cost Allocation model issued May 14, 2020
27 for purposes of the utility's updates. The updated model is appended as excel Attachment
28 OEB-38(A): OEB Workform - Cost Allocation Model.

1 The following is a list of the changes made to the Cost Allocation Model as a result of the
2 responses to various interrogatories:

3

4 1. Correction to NCP4 and NCP12 demand (tab I8) for Standby customer class. Reference
5 IRR OEB-156.

6 2. The number of Standby meters has been changed from 2 to 3 (tab I7.2). Reference IRR
7 VECC-100.

8 3. Secondary Customer Base for Residential and GS < 50 customer classes have been
9 made equivalent to total customer count (tab I6.2). Reference IRR OEB-157.

10 4. Secondary Customer Base for customer classes GS 1,500-4,999 and Large Use have
11 been changed to zero (tab I6.2). Reference IRR VECC-100.

12 5. Primary/Secondary splits for Overhead (1835) and Underground (1845) conductors have
13 been changed to match the proportions for Pole, Towers and Fixtures (1830) and
14 Conduit (1840) respectively (tab I4). Reference IRR OEB-154.

15

16 Hydro Ottawa notes that there is one adjustment that the OEB has made to the new version of
17 the model. The Distribution and Transformers categorization factors in tab E1 have switched for
18 high-density local distribution companies ("LDCs"), including Hydro Ottawa. The customer
19 component of high-density distribution changed from 30% to 35% and the transformer customer
20 component changed from 35% to 30%. As more costs are allocated by customer count than by
21 demand, the net impact of this change is to allocate more cost to the Residential customer
22 class.

23

24 Please see Table A below for a summary of the impact of implementing the OEB's new Cost
25 Allocation Model as a result of interrogatory responses, and for a comparison of the adjustments
26 to the Cost Allocation Model originally filed on February 10, 2020.

1 **Table A – Comparison of Updated OEB Cost Allocation Model Results - 2021**

Customer Class	Revenue/Cost Ratio at Status Quo Rates		Allocated Costs (O1, Line 40)		
	Changes Per Interrogatories	OEB-38	Changes Per Interrogatories	OEB-38	Change
Residential	102.5%	100.2%	\$121,267,103	\$124,069,315	\$2,802,212
GS < 50 kW	118.4%	119.7%	\$22,593,179	\$22,333,837	\$(259,342)
GS > 50 to 1,499 kW	86.5%	89.7%	\$52,945,718	\$51,003,489	\$(1,942,229)
GS > 1,500 to 4,999 kW	107.1%	111.1%	\$10,288,874	\$9,902,160	\$(386,714)
Large Use	87.6%	90.8%	\$7,941,349	\$7,644,079	\$(297,270)
Street Lighting	124.6%	120.4%	\$992,419	\$1,028,009	\$35,590
Sentinel Lighting	55.5%	51.3%	\$9,617	\$10,463	\$846
Unmetered Scattered Load	115.3%	106.0%	\$538,337	\$586,579	\$48,242
Standby Power	35.9%	36.6%	\$61,019	\$59,684	\$(1,335)
TOTAL			\$216,637,615	\$216,637,615	

2

3 Updated RRWF Workforms, based on the updated Cost Allocation model and resulting changes
4 to rate design, have been submitted as excel Attachments OEB-38(B) through (F).

5

6 The OEB released an updated Global Adjustment (“GA”) Analysis Workform on May 20, 2020.
7 Hydro Ottawa has used this version and has submitted it as excel Attachment OEB-38(G):
8 Updated OEB Workform - 2021 GA Analysis Workform. Hydro Ottawa has made a formula
9 modification to the new OEB model issued on May 20, 2020. In the OEB’s model in the
10 Instructions tab, cell F35 pulled data from ‘GA 2019’C88. As this cell was blank, Hydro Ottawa
11 has assumed the correct reference should have been ‘GA 2019’C90 and has recreated the
12 model using this reference. All other aspects of the OEB model remain unchanged.

13

14 Hydro Ottawa notes that the OEB’s new model references GA Actual Rates in tab GA 2019
15 cells I41:I52. This differs from Hydro Ottawa’s use of billed rates in UPDATED Attachment
16 9-3-1(A): OEB Workform - Global Adjustment Analysis. The difference in the Net Change in
17 Expected GA Balance in the Year Per Analysis was not material. The new Unresolved
18 Difference is a credit of \$86K, versus a debit of \$75K in the previous version. This is due to the

1 difference in rates explained above and a formulaic difference in calculating the Unresolved
2 Difference which Hydro Ottawa has now corrected to be consistent with the OEB's new GA
3 Analysis Workform.

4

5 Hydro Ottawa has adjusted its Lost Revenue Adjustment Mechanism ("LRAM") claim. A
6 description of the changes are noted in the respective interrogatory responses, as noted in the
7 above list. Table 3 - AS REVISED below provides a summary of the revised LRAM claim that
8 was submitted in UPDATED Exhibit 4-5-2: LRAM Variance Account. It has been adjusted in
9 Attachment OEB-38(J): OEB Workform - Deferral and Variance Account (Continuity Schedule).

10

11 **Table 3 – AS ORIGINALLY SUBMITTED – Lost Revenue by Year by Rate Class 2014-2016**

	2014	2015	2016	Total
Residential	\$312,463	\$757,287	\$783,443	\$1,853,194
GS< 50 kW	\$248,850	\$424,600	\$148,643	\$822,093
General Service 50 to 1,499 kW	\$(35,981)	\$143,676	\$(342,987)	\$(235,293)
General Service 1,500 to 4,999 kW	\$(7,672)	\$60,292	\$91,021	\$143,641
Large Use	\$(5,407)	\$20,538	\$141,742	\$156,872
Unmetered	\$(4,051)	\$0	\$0	\$(4,051)
Streetlighting	\$(16,390)	\$0	\$13,285	\$(3,104)
TOTAL¹	\$ 491,812	\$ 1,406,393	\$ 835,147	\$ 2,733,351

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13

14 ¹ Totals may not sum due to rounding.

1 **Table 3 – AS REVISED – Lost Revenue by Year by Rate Class 2014-2016**

	2014	2015	2016	Total
Residential	\$312,463	\$757,287	\$783,443	\$1,853,194
GS< 50 kW	\$248,850	\$424,600	\$186,317	\$859,767
General Service 50 to 1,499 kW	\$(14,829)	\$143,676	\$(286,182)	\$(157,334)
General Service 1,500 to 4,999 kW	\$(3,162)	\$60,292	\$99,246	\$156,376
Large Use	\$(2,228)	\$20,538	\$74,491	\$92,800
Unmetered	\$(4,051)	\$0	\$0	\$(4,051)
Streetlighting	\$(16,390)	\$0	\$11,319	\$(5,071)
TOTAL²	\$520,653	\$ 1,406,393	\$868,635	\$2,795,681

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3 As a result of Hydro Ottawa's adjustment to the LRAM claim, the Earnings Sharing Mechanism
4 ("ESM") calculation for 2016 was also updated. In the response to interrogatory CCC-78, Hydro
5 Ottawa had provided Table A with updated ESM Calculations. A copy of this table is provided
6 below as Table CCC-78 A - AS ORIGINALLY SUBMITTED. Hydro Ottawa has made revisions
7 to CCC-78 Table A to reflect the updated 2016 LRAM claim. The revisions are highlighted below
8 in Table CCC-78 A - AS REVISED. For clarity, the ESM calculation presented in the response to
9 interrogatory CCC-78 is prior to impacts of changes to LRAM as a result of other interrogatories.

10 ² Totals may not sum due to rounding.

1 **Table CCC-78 A – AS ORIGINALLY SUBMITTED – 2016-2019 ESM Calculations (\$'000s)³**

	2016	2017	2018	2019
Net Income (per RRR)	\$33,483	\$36,114	\$34,605	\$37,250
Deduct Previous Years' LRAM ⁴	\$(1,042)	\$(1,081)	(\$482)	\$(1,322)
Add Current Year LRAM ⁵	\$773	\$1,429	\$411	\$1,322
PILS Grossed-up on CDM Adjustments ⁶	\$(97)	\$125	(\$26)	\$0
Net Income after Adjustments	\$33,311	\$36,336	\$34,559	\$37,250
Deemed Equity (per RRR)	\$341,540	\$357,578	\$378,652	\$422,211
ESM Achieved ROE	9.75%	10.16%	9.13%	8.82%
Deemed ROE	9.19%	9.19%	9.19%	8.98%
% Return Above Deemed	0.56%	0.97%	(0.06)%	(0.16)%
Earnings Above Regulated Return	\$1,924	\$3,475	(\$239)	\$(664)
50% of Earnings above Regulated Return	\$962	\$1,737	\$0	\$0
PILS Grossed-up ⁷	\$347	\$626	\$0	\$0
RATEPAYERS' SHARE OF OVEREARNING⁸	\$1,309	\$2,364	\$0	\$0

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³ "Current year" means 2016 for the purposes of the column with information for 2016, 2017 for the purposes of the column with information for 2017, and so on.

⁴ Previous years' LRAM includes adjustment to any year not related to the current year.

⁵ Current year LRAM includes adjustments in reporting years subsequent to the current year.

⁶ Tax rate = 26.5%.

⁷ Tax rate = 26.5%.

⁸ Totals may not sum due to rounding.

1 **Table CCC-78 A – AS REVISED – 2016-2019 ESM Calculations (\$'000s)⁹**

	2016	2017 ¹⁰	2018	2019
Net Income (per RRR)	\$33,483	\$36,114	\$34,605	\$37,250
Deduct Previous Years' LRAM ¹¹	\$(1,042)	\$(1,081)	(\$482)	(\$1,322)
Add Current Year LRAM ¹²	\$804	\$1,429	\$411	\$1,322
PILS Grossed-up on CDM Adjustments ¹³	\$(86)	\$125	(\$26)	\$0
Net Income after Adjustments	\$33,331	\$36,336	\$34,559	\$37,250
Deemed Equity (per RRR)	\$341,540	\$357,578	\$378,652	\$422,211
ESM Achieved ROE	9.76%	10.16%	9.13%	8.82%
Deemed ROE	9.19%	9.19%	9.19%	8.98%
% Return Above Deemed	0.57%	0.97%	(0.06)%	(0.16)%
Earnings Above Regulated Return	\$1,944	\$3,475	(\$239)	\$(664)
50% of Earnings above Regulated Return	\$972	\$1,737	\$0	\$0
PILS Grossed-up ¹⁴	\$350	\$626	\$0	\$0
RATEPAYERS' SHARE OF OVEREARNING¹⁵	\$1,322	\$2,364	\$0	\$0

- 2
- 3 As a result of the changes to the LRAM and ESM claims, Hydro Ottawa has provided a revised
- 4 DVA Workform, which has been submitted as excel Attachment OEB-38(J): OEB Workform -
- 5 Deferral and Variance Account (Continuity Schedule). The following changes were made:
- 6
- 7 • Updated clearance balance proposed for LRAMVA
 - 8 ○ This includes disposal amount on Billing Determinants tab
 - 9 • Updated clearance balance proposed for ESM
 - 10 • Updated allocation of Group 2 balances to be based on Distribution Revenue as
 - 11 Originally proposed

12 ⁹ "Current year" means 2016 for the purposes of the column with information for 2016, 2017 for the purposes of the

13 column with information for 2017, and so on.

14 ¹⁰ Hydro Ottawa has not updated 2017 LRAM for impacts related to questions as part of the interrogatory responses.

15 ¹¹ Previous years' LRAM includes adjustment to any year not related to the current year.

16 ¹² Current year LRAM includes adjustments in reporting years subsequent to the current year.

17 ¹³ Tax rate = 26.5%.

18 ¹⁴ Tax rate = 26.5%.

19 ¹⁵ Totals may not sum due to rounding.

- 1 ○ The lone exception is with respect to giving back the previous clearance of
2 OPEB, which is proposed to be allocated on a kWh basis, similar to how it was
3 disposed in 2016
4 ○ PILS and Tax Variance to be cleared based on Distribution Revenue
5

6 As a result of these changes, the Group 2 and Account 1568 rate riders have been updated, as
7 shown in Tables B through E below.

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Table B – Rate Riders for Group 2 Accounts (2021)

Rate Class	Units	kW / kWh / # of Customers	Allocated Balance	Rate Rider	Billing Determinant
Residential	# of Customers	316,346	\$(1,555,530)	(0.41)	\$
General Service < 50 kW	kWh	699,871,000	\$(402,166)	(0.0006)	\$/kWh
General Service 50 to 1,499 kW	kW	6,815,129	\$(1,213,056)	(0.1780)	\$/kW
General Service 1,500 to 4,999 kW	kW	1,517,165	\$(296,299)	(0.1953)	\$/kW
Large Use	kW	1,052,091	\$(235,751)	(0.2239)	\$/kW
Unmetered Scattered Load	kWh	13,602,000	\$(8,547)	(0.0006)	\$/kWh
Sentinel Lighting	kW	132	\$(51)	(0.3887)	\$/kW
Street Lighting	kW	61,590	\$(15,176)	(0.2464)	\$/kW
TOTAL			\$(3,726,578)		

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Table C – Rate Riders for Group 2 Accounts (2022)

Rate Class	Units	kW / kWh / # of Customers	Allocated Balance	Rate Rider	Billing Determinant
Residential	# of Customers	319,386	\$(1,555,530)	(0.41)	\$
General Service < 50 kW	kWh	699,134,000	\$(402,166)	(0.0006)	\$/kWh
General Service 50 to 1,499 kW	kW	6,817,445	\$(1,213,056)	(0.1779)	\$/kW
General Service 1,500 to 4,999 kW	kW	1,516,028	\$(296,299)	(0.1954)	\$/kW
Large Use	kW	1,050,767	\$(235,751)	(0.2244)	\$/kW
Unmetered Scattered Load	kWh	13,130,000	\$(8,547)	(0.0007)	\$/kWh
Sentinel Lighting	kW	132	\$(51)	(0.3887)	\$/kW
Street Lighting	kW	58,864	\$(15,176)	(0.2578)	\$/kW
TOTAL			\$(3,726,578)		

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Table D – Rate Riders for Accounts 1568 (2021)

Rate Class	Units	kW / kWh / # of Customers	Allocated Balance	Rate Rider	Billing Determinant
Residential	# of Customers	316,346	\$926,597	0.24	\$
General Service < 50 kW	kWh	699,871,000	\$429,883	0.0006	\$/kWh
General Service 50 to 1,499 kW	kW	6,815,129	\$(78,667)	(0.0115)	\$/kW
General Service 1,500 to 4,999 kW	kW	1,517,165	\$78,188	0.0515	\$/kW
Large Use	kW	1,052,901	\$46,400	0.0441	\$/kW
Unmetered Scattered Load	kWh	13,602,000	\$(2,026)	(0.0001)	\$/kWh
Sentinel Lighting	kW	132	0	0	\$/kW
Street Lighting	kW	61,590	\$(2,535)	(0.0412)	\$/kW
TOTAL			\$1,397,840		

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Table E – Rate Riders for Accounts 1568 (2022)

Rate Class	Units	kW / kWh / # of Customers	Allocated Balance	Rate Rider	Billing Determinant
Residential	# of Customers	319,386	\$926,597	0.24	\$
General Service < 50 kW	kWh	699,134,000	\$429,883	0.0006	\$/kWh
General Service 50 to 1,499 kW	kW	6,817,445	\$(78,667)	(0.0115)	\$/kW
General Service 1,500 to 4,999 kW	kW	1,516,028	\$78,188	0.0516	\$/kW
Large Use	kW	1,050,767	\$46,400	0.0442	\$/kW
Unmetered Scattered Load	kWh	13,130,000	\$(2,026)	(0.0002)	\$/kWh
Sentinel Lighting	kW	132	0	0	\$/kW
Street Lighting	kW	58,864	\$(2,535)	(0.0431)	\$/kW
TOTAL			\$1,397,840		

2

3 Hydro Ottawa has included the OEB's Bill Impacts in excel Attachment OEB-38(H): OEB
4 Workform 2020 Current and 2021 Proposed Tariff or Rates and Charges. This includes the rate
5 order for 2021. Hydro Ottawa has also included Hydro Ottawa's Bill Impacts in excel Attachment
6 I: Bill Impacts Model 2021-2025. This includes the rate orders from 2021-2025.

7

8 Hydro Ottawa encountered issues with excel Attachment OEB-38(H): OEB Workform 2020
9 Current and 2021 Proposed Tariff of Rates and Charges. For the "Sentinel Lights Service
10 Classification", "Unmetered Scattered Load Service Classification", and "Street Lighting Service
11 Classification" there were errors with the rate riders. The rate rider for Group 2 accounts is being
12 calculated at both the sub total A and sub total B; however, it should only be in sub total A. In
13 addition, the model would not allow an update to the 2021 proposed rate for
14 retailer-consolidated billing monthly credit, per customer. Attachment OEB-38(I): HOL Bill
15 Impacts Model 2021-2025 provides the correct bill impacts and rates for retailer-consolidated
16 billing monthly credit, per customer.

17

18 Table F below summarizes the updates to bill impacts, based upon interrogatory responses.

1 **Table F – Summary of Bill Impacts (Based on Updated Interrogatory Responses)**

Rate Class		Approved	Proposed				
		2020	2021	2022	2023	2024	2025
Residential (750 kWh)	Distribution Charge	\$28.64	\$30.42	\$32.31	\$34.04	\$35.04	\$35.66
	Change in Distribution Charge		\$1.78	\$1.89	\$1.73	\$1.00	\$0.62
	% Distribution Increase		6.22%	6.21%	5.35%	2.94%	1.77%
	% Increase of Total Bill		1.28%	1.34%	1.52%	0.69%	0.43%
General Service <50 kW (2,000 kWh)	Distribution Charge	\$71.32	\$76.23	\$81.49	\$86.21	\$89.29	\$91.77
	Change in Distribution Charge		\$4.91	\$5.26	\$4.72	\$3.08	\$2.48
	% Distribution Increase		6.88%	6.90%	5.79%	3.57%	2.78%
	% Increase of Total Bill		1.13%	1.42%	1.57%	0.81%	0.65%
General Service 50 kW - 1,499 kW (250 kW)	Distribution Charge	\$1,461.93	\$1,520.75	\$1,631.21	\$1,788.23	\$1,846.25	\$1,898.64
	Change in Distribution Charge		\$58.83	\$110.46	\$147.02	\$68.02	\$52.40
	% Distribution Increase		4.02%	7.26%	9.01%	3.83%	2.84%
	% Increase of Total Bill		2.93%	(1.08)%	1.08%	0.38%	0.29%
General Service 1,500 kW - 4,999 kW (2,500 kW)	Distribution Charge	\$15,941.18	\$16,596.93	\$17,775.81	\$19,197.54	\$19,929.30	\$20,390.55
	Change in Distribution Charge		\$655.75	\$1,178.88	\$1,421.73	\$731.76	\$461.25
	% Distribution Increase		4.11%	7.10%	8.00%	3.81%	2.31%
	% Increase of Total Bill		2.90%	(1.01)%	1.06%	0.40%	0.25%
Large Use (7,500 kW)	Distribution Charge	\$48,420.32	\$50,117.57	\$53,527.22	\$57,937.19	\$59,998.94	\$61,297.94
	Change in Distribution Charge		\$1,697.25	\$3,409.65	\$4,409.97	\$2,061.75	\$1,299.00
	% Distribution Increase		3.51%	6.80%	8.24%	3.56%	2.17%
	% Increase of Total Bill		2.82%	(1.25)%	1.22%	0.37%	0.23%
Sentinel Lighting (0.4 kW)	Distribution Charge	\$9.53	\$11.22	\$13.57	\$16.03	\$18.22	\$20.33
	Change in Distribution Charge		\$1.70	\$2.34	\$2.46	\$2.19	\$2.11
	% Distribution Increase		17.79%	20.87%	18.16%	13.67%	11.56%
	% Increase of Total Bill		8.29%	9.09%	9.04%	7.15%	6.42%
Street Lighting (1 kW)	Distribution Charge	\$7.76	\$7.64	\$8.21	\$8.97	\$9.31	\$9.60
	Change in Distribution Charge		\$0.12	\$0.57	\$0.76	\$0.35	\$0.29
	% Distribution Increase		(1.57)%	7.40%	9.28%	3.85%	3.14%
	% Increase of Total Bill		0.19%	1.79%	3.04%	1.09%	0.92%
Unmetered Scattered Load (470 kWh)	Distribution Charge	\$17.08	\$17.77	\$19.43	\$21.44	\$22.79	\$23.93
	Change in Distribution Charge		\$0.70	\$1.66	\$2.00	\$1.35	\$1.15
	% Distribution Increase		4.09%	9.33%	10.31%	6.30%	5.04%
	% Increase of Total Bill		0.92%	1.91%	2.58%	1.49%	1.25%

INTERROGATORY RESPONSE - OEB-134

3-Staff-8

EXHIBIT REFERENCE:

Updated Exhibit 3/ Tab 1/ Schedule 1/ Tables 6 and 7

Exhibit 4/ Tab 1/ Schedule 6, p. 9

IESO CDM 2017 Final Verified Results Report, Tab “LDC Persistence”

SUBJECT AREA: CDM Adjustments

Preamble:

Exhibit 3, Tab 1, Schedule 1 includes the following five-year Conservation and Demand Management (CDM) adjustments provided below:

Table 6 – 2021-2025 Energy Sales CDM Adjustments by Customer Class (MWh)³

	2021	2022	2023	2024	2025
Residential	8,478	9,135	9,219	9,300	9,379
General Service < 50 kW	16,151	19,798	24,180	28,566	31,935
General Service 50 to 1,000 kW Non Interval	20,319	23,573	26,304	28,816	30,851
General Service 50 to 1,000 kW Interval	25,653	31,796	37,983	44,596	51,222
General Service 1,000 to 1,499 kW	8,487	10,056	11,313	12,369	13,090
General Service 1,500 to 4,999 kW	48,038	53,795	58,785	63,772	68,370
Large Use	29,971	31,374	32,230	33,085	33,873
Unmetered Scattered Load	112	131	149	168	179
Sentinel Lighting	0	0	0	0	0
Street Lighting	5,308	6,194	7,006	7,816	8,565
TOTAL MWh SALES	162,517	185,852	207,169	228,488	247,464

Table 7 – 2021-2025 Demand Sales CDM Adjustments by Customer Class (kW)

	2021	2022	2023	2024	2025
General Service > 50 to 1,499 kW	112,290	134,704	155,421	176,080	195,031
General Service 1,500 to 4,999 kW	87,899	98,431	107,562	116,692	125,101
Large Use	45,592	47,724	49,024	50,327	51,527
Standby Power	0	0	0	0	0
Sentinel Lighting	0	0	0	0	0
Street Lighting	14,272	17,025	19,270	21,515	23,358
TOTAL KW DEMAND SALES	260,053	297,884	331,277	364,614	395,017

Source: Updated Exhibit 3, Tab 1, Schedule 1

The five-year CDM adjustments are based on three components:

- i) contractual agreements between Hydro Ottawa and customers made on/before April 30, 2019
- ii) estimated rate-based savings of 2 GWh per year from commercial customers

Table 1 – 2021-2025 Forecasted Annual Energy and Demand Savings from Rate-Based CDM Activities for Commercial Customers

Commercial Accounts	2021	2022	2023	2024	2025
Annual Savings (MWh)	2,000	2,000	2,000	2,000	2,000
Persisting Savings (MWh)	2,000	4,000	6,000	8,000	10,000
Annual Savings* (kW)	298	298	298	298	298

*Note: A conversion rate of 6,702 kWh/kW was used to forecast annual demand savings. This conversion rate is based on an average taken from the 2017 Verified Savings Report issued by the IESO using totals from the entire suite of Provincial Business Programs.

Source: Exhibit 4, Tab 1, Schedule 6, p. 9

- iii) estimated impacts related to the continuation of CDM programs which are still being administered at the provincial level by the IESO

1 Based on the CDM forecasts in Tables 6 and 7, it shows a progressive increase in forecasted
2 energy and demand savings from ongoing and potentially new programs. The forecasted
3 demand savings in Table 7 are significantly higher than the persistence of demand savings of
4 2017 programs in the former Conservation First Framework (CFF) into the 2021-2025 years:

Year	Energy savings (kWh)	Demand savings (kW)
2021	273,675,778	36,977
2022	268,541,589	35,959
2023	267,015,594	35,625
2024	262,747,721	34,966
2025	248,446,183	33,009

Source: 2017 Final Verified Results Report

6 Question(s)

- 7
- 8 a) In excel format, please re-file Tables 6 and 7 (Exhibit 3, Tab 1, Schedule 1) with the
9 breakdown of each of the rate class savings into the following three categories:
- 10 i) amount of persisting savings from remaining contracts executed under the CFF
11 on/before April 30, 2019
 - 12 ii) “rate-based” savings from new projects (showing the allocation of 2 GWh/year of
13 projected savings across commercial classes)
 - 14 iii) continuation of CDM programs which are still being administered at the provincial
15 level by the IESO
- 16
- 17 b) For the first category of savings related to i) persisting savings from remaining contracts
18 executed on/before April 30, 2019:
- 19 i) Please discuss how Hydro Ottawa has revised its future estimated CDM savings
20 from CFF programs following the cancellation of the CFF.
 - 21 ii) Please reconcile the CDM savings (in Tables 6 and 7) with the savings from the
22 CDM-IS project reports that were part of the former CFF.

Please file the project lists from the CDM-IS savings report in excel format, inclusive of the following information:

- (1) What CFF program the project(s) are being completed under
- (2) The timing of approval for each project
- (3) Confirmation that Hydro Ottawa and its customer(s) have entered into a contractual agreement for the energy efficiency project(s) to be completed
- (4) The total estimated savings and project timeframe for each CFF-project(s) that Hydro Ottawa is contractually obligated to complete

c) For the second category of savings related to ii) on “rate-based” savings from commercial customers, please clarify what “rate-based” savings mean. It appears that Hydro Ottawa is not seeking approval of a distributor-specific, ratepayer funded CDM program in this Application.

- i) Please confirm these savings will only be achieved from yet to be approved annual costs of \$0.2-0.5 million related to compensation, marketing and miscellaneous costs in OM&A. If not, please clarify.
- ii) Please explain the appropriateness of including CDM staffing costs in OM&A, as they were formerly not included in the revenue requirement¹. Please explain the need for new CDM staff, if there are existing staff available for delivery of conservation activities related to the former CFF, and provide greater clarity on what planning tools, reports and information Hydro Ottawa is relying on to support the need for an increase to its OM&A.
- iii) Please discuss whether Hydro Ottawa has sought approval or engaged in discussions with the IESO related to the projected rate-based savings from commercial customers. In Hydro Ottawa’s response, please provide any correspondence with the IESO on this topic.

- (1) If the OEB does not approve of the requested OM&A funding for these rate-based CDM activities, please discuss whether Hydro Ottawa will continue to pursue these opportunities.

¹ Section 2.4.6 of Chapter 2 Filing Requirements (2018 Edition for 2019 Rate Applications), July 12, 2018.

- 1 iv) In excel format, please file the following details by project to support the inclusion
2 of rate-based savings in the CDM adjustment:
- 3 (1) What program (e.g., interim framework, post-CFF) the project(s) or CDM
4 activities will be completed under
- 5 (2) What entity (e.g., IESO, Hydro Ottawa) will be delivering each project or
6 CDM activity?
- 7 (3) The timing of approval for each project or CDM activity
- 8 (4) What kind of confirmation Hydro Ottawa will receive to indicate that the
9 project will be completed
- 10 (5) The total estimated savings (including net-to-gross ratios) and project
11 timeframe for each project or CDM activity. Please provide all relevant
12 input assumptions including savings by measure and customer
13 participation rates, if available.
- 14 v) Please discuss the appropriateness of including projected savings from
15 rate-based activities in the CDM adjustment, as they have yet to be defined and
16 appear to be beyond the scope of the former CFF.
- 17 (1) What OEB policy guidance is Hydro Ottawa relying on in making this
18 proposal?
- 19 (2) How will Hydro Ottawa ensure these potential savings can be achieved
20 and verified?
- 21 (3) Please discuss the proposed process that would follow in the event the
22 projected CDM savings do not materialize, including cost responsibility.
- 23
- 24 d) For the third category of savings related to iii) continuation of CDM projects administered
25 at the provincial level, please address the following:
- 26 i) Please clarify what “the continuation of CDM projects administered at the
27 provincial level” specifically refers to.
- 28 (1) Please explain how Hydro Ottawa has estimated lost revenue results at
29 the distributor level.

- 1 (2) Please discuss whether Hydro Ottawa has sought direction, approval or
2 advice from the IESO in developing these savings estimates. In Hydro
3 Ottawa's response, please provide all correspondence between Hydro
4 Ottawa and the IESO on this topic.
- 5 ii) As the IESO will no longer be providing distributor-level savings reports to LDCs,
6 please discuss the appropriateness of including an estimate of savings from the
7 continuation of CDM projects administered at the provincial level in the CDM
8 adjustment.
- 9 iii) In excel format, please file the following details by project to support the
10 estimated savings from the continuation of CDM projects administered at the
11 provincial level:
- 12 (1) What program (e.g., interim framework, post-CFF) the project(s) will be
13 completed under
- 14 (2) What entity (e.g., IESO, Hydro Ottawa) will be delivering each project or
15 program?
- 16 (3) The timing of approval for each project
- 17 (4) What kind of confirmation Hydro Ottawa will receive to indicate that the
18 project will be completed
- 19 (5) The total estimated savings (including net-to-gross ratios) and project
20 timeframe for each project. Please provide all relevant input assumptions
21 including savings by measure and customer participation rates, if
22 available.
- 23
- 24 e) For the savings forecast from street lighting customers in Tables 6 and 7, please discuss
25 the source of funding for the street light retrofit upgrades, the planned number of
26 upgrades (also as % of total street lights) over the 2021-2025 period, and what the street
27 light bulbs will be upgraded to.

RESPONSE:

a) Please refer to excel Attachment OEB-134(A): CDM Savings by Program. The "Summary Explanation" tab provides an explanation of each tab and the data it contains.

i) The amount of annual persisting savings, by program and by year, for savings from contracts executed by Hydro Ottawa under the Conservation First Framework ("CFF") is found on "Persisting Savings by Year&Prog" tab, coloured in green. The persisting savings attributed to CFF have been broken into the following four sections:

1. CATEGORY 1, SECTION 1: This is data from the 2017 Final Verified Annual Hydro Ottawa CDM Program Results Report prepared by the IESO for the 2015-2017 CFF period. The savings in this category inform historical trends in establishing the load forecast, as outlined in the responses to interrogatories OEB-133 and VECC-69.
2. CATEGORY 1, SECTION 2: This is data from the most recent IESO Monthly Program Participation and Cost Report, which represents Hydro Ottawa's performance throughout the CFF, as of February 15, 2019. The savings in this category inform historical trends in establishing the load forecast, as outlined in the response to interrogatory OEB-133 and VECC-69.
3. CATEGORY 1, SECTION 3: This is Hydro Ottawa data stretching from February 15, 2019 to December 2, 2019. This represents forecasted persisting savings from remaining contracts executed under the CFF that were approved for incentive payment between February 15, 2019 and December 2, 2019 (and therefore are not part of the aforementioned unverified results released by the IESO). The savings in this category

1 inform historical trends in establishing the load forecast, as outlined in the
2 responses to interrogatories OEB-133 and VECC-69.

3 4. CATEGORY 1, SECTION 4: This is Hydro Ottawa data from December 3,
4 2019 to December 31, 2020. This represents forecasted persisting
5 savings from remaining contracts executed under the CFF that have been
6 approved for payment since December 3, 2019 or are expected to be
7 approved for payment by the December 31, 2020 deadline. These
8 savings are considered new savings, as presented in the response to
9 interrogatory VECC-69.

10
11 Note that for Category 1: Sections 3 and 4, Hydro Ottawa has used conservative
12 assumptions to markdown forecasted savings (i.e. 80% of Retrofit projects will be
13 approved for payment with 20% being deactivated for various reasons, while
14 90% of High Performance New Construction projects will be approved for
15 payment with the remaining 10% deactivated). These are conservative
16 assumptions based on historical deactivation rates. Hydro Ottawa is also using
17 IESO estimates to further markdown savings for net-to-gross adjustment, as well
18 as the persistence of savings. The methodology is outlined in excel Attachment
19 OEB-134(A): CDM Savings by Program, with reference tabs included. In the
20 Load Forecast, as presented in UPDATED Exhibit 3-1-1: Load Forecast, savings
21 are not discounted for persistence.

22
23 ii) The forecasted “rate base” savings are also found on “Persisting Savings by
24 Year&Prog” tab, coloured in yellow. These savings are referred to as “Category 3:
25 Future Rate Based CDM Activity” as per Table 1 of Exhibit 4-1-6: Conservation
26 and Demand Management.

27
28 In addition, please note that Hydro Ottawa has included savings from the
29 province-wide Affordability Fund Trust program that is available to Hydro Ottawa
30 customers on the “Persisting Savings by Year&Prog” tab. These savings are

likewise coloured in yellow. To confirm, these savings are not included in the “rate base” savings displayed in Table 1 of Exhibit 4-1-6: Conservation and Demand Management.

iii) The forecasted savings related to the continuation of CDM programs which are still being administered at the provincial level by the IESO are also found on “Persisting Savings by Year&Prog” tab, coloured in blue and in orange. The persisting savings attributed to these programs have been broken into the following two sections:

1. CATEGORY 2, SECTION 1: This covers Projected Future Savings within the Interim Framework. This represents forecasted persisting savings from future program activity until the end of the Interim Framework. In the tab, these savings are coloured in orange.
2. CATEGORY 2, SECTION 2: This covers Projected Future Savings which occur subsequent to the Interim Framework. This represents forecasted persisting savings from future program activity on the assumption that the CDM programs offered under the Interim Framework continue throughout Hydro Ottawa’s rate term (2021-2025) in a successor framework. The forecasted persisting savings from this assumed framework are coloured in blue.

Hydro Ottawa acknowledges that no such successor framework has been announced yet. However, given the advocacy work that has occurred through industry and customer channels recommending the extension of the Interim Framework beyond December 31, 2020, and the fact that energy efficiency remains Ontario’s most cost-effective resource at 1.69 cents per kWh, Hydro Ottawa believes that the establishment of a successor framework is a reasonable assumption.

1 Furthermore, as stated in the response to part (d)(i)(2) below, Hydro
2 Ottawa observes that the *Annual Planning Outlook* published by the IESO
3 in January 2020 includes two demand scenarios, one of which is an
4 energy efficiency case that assumes existing energy efficiency programs
5 continue beyond 2020, for the duration of the IESO's outlook period (i.e.
6 until 2040).²

7
8 b)

9 i) Please refer to excel Attachment OEB-134(A): CDM Savings by Program. The
10 "Summary Explanation" tab provides an explanation for the majority of the data
11 Hydro Ottawa used to estimate future savings following the cancellation of the
12 CFF. The IESO stopped issuing monthly Program Participation and Cost Reports
13 in March 2019. These monthly reports included preliminary, unverified results for
14 Hydro Ottawa based on information received by the IESO as of February 15,
15 2019. As such, to estimate savings from remaining contracts executed under the
16 CFF on/before April 30, 2019, Hydro Ottawa took the following steps:

- 17
18 1. Used IESO's unverified CFF results, as of February 15, 2019.
- 19 2. Estimated gross savings for projects that were approved for payment by
20 Hydro Ottawa between February 16, 2019 and December 2, 2019. This
21 date range represents the period of additional approved projects prior to
22 the date Hydro Ottawa compiled the savings data for this Application.
23 Hydro Ottawa also applied a net-to-gross markdown to the gross savings,
24 based on historical IESO net-to-gross markdown. The utility's
25 assumptions are outlined in excel Attachment OEB-134(A): CDM Savings
26 by Program.
- 27 3. Estimated savings beyond December 3, 2019 by analyzing all project
28 data for remaining contracts expected to be approved for incentive
29 payment between December 3, 2019 and December 31, 2020. Hydro

² Independent Electricity System Operator, *Annual Planning Outlook* (January 2020), page II.

Ottawa also discounted these estimated project savings by 20% to reflect an expected deactivation rate (as not all projects will close) and applied a net-to-gross markdown, based on historical IESO net-to-gross markdown. Hydro Ottawa's assumptions are outlined in excel Attachment OEB-134(A): CDM Savings by Program. Please note that no new contracts were executed by Hydro Ottawa after April 30, 2019, as per wind-down guidelines. An annual breakdown of forecasted savings by year for the Retrofit program only can be viewed in the "Future Rttf Projection by Year" tab in excel Attachment OEB-134(A): CDM Savings by Program.

ii) Hydro Ottawa does not use CDM-IS for program administration of all programs. What's more, Hydro Ottawa is not in a position to release project-level data as it contains sensitive customer information.

1. Please see Table A in part (b)(ii)(2) below.
2. Table A below provides, by program, a further breakdown of the expected timing of post-project approval of CFF projects that were executed on/before April 1, 2019. (Note that for the Retrofit Program only, the applicable date is April 30, 2019.) These projects were submitted to the IESO in May 2019 as part of Hydro Ottawa's wind-down cost estimate, which was subsequently approved on July 25, 2019.

1 **Table A – Timing of Approval for CFF Projects Executed On/Before April 1, 2019**

Program Name	Expected Quarter of Project Completion									Total
	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	
Audit Funding Program	50	5								55
Business Refrigeration Incentive Program	71									71
Energy Manager Program	4		4							8
High Performance New Construction	7	2	1		2		3			15
Monitoring and Targeting Program							6			6
New Construction Program	58			2			1			61
Process and Systems Upgrades Program	1	6	1	1	2	1	1		1	14
Retrofit ³	565	100	128	15	18	14	20			860
Small Business Lighting	9									9
Swimming Pool Efficiency Program	80									80
Total	845	113	134	18	22	15	31	0	1	1179

2

3 3. Hydro Ottawa confirms that all CFF wind-down projects have a
4 contractual agreement (known as a Participant Agreement) between the
5 utility and the customer.

6 4. Please see the responses to parts (a)(i)(3) and (a)(i)(4) above. These
7 responses show persisting savings totals by program that are associated
8 with the projects which Hydro Ottawa is contractually obligated to
9 complete after February 15, 2019.

10

11 c) The savings associated with “rate base” CDM activities would be in addition to savings
12 attributed to the first and third bullets on page 6 in UPDATED Exhibit 3-1-1: Load
13 Forecast, under CDM Adjustments. That is to say, the savings would be in addition to
14 the savings described in the response to parts (a)(i) and (a)(iii) above.

15 ³ As noted above, April 30, 2019 is the applicable execution date for this program.

1 i) Yes, Hydro Ottawa confirms that the “rate base” savings outlined in Table 1 of
2 Exhibit 4-1-6: Conservation and Demand Management will only be achieved from
3 yet-to-be-approved annual costs of \$0.2-0.5M related to compensation,
4 marketing, and miscellaneous costs in OM&A.

5
6 ii) Hydro Ottawa acknowledges that there was previously not a requirement to
7 include CDM staffing costs in the utility’s revenue requirement, as these costs
8 were paid for under the utility’s Energy Conservation Agreement with the IESO.
9 This agreement was terminated effective June 21, 2019, as a result of the
10 Ministerial directive issued on March 21, 2019 mandating the discontinuance and
11 wind-down of the CFF framework. Since then, Hydro Ottawa has taken the
12 necessary steps to wind down its CFF activities in an orderly manner. The scope
13 of the utility’s wind-down includes the marketing of programs, the solicitation of
14 participants, and the execution of Participant Agreements in accordance with the
15 utility’s wind-down estimate which received IESO approval on July 25, 2019.

16
17 By way of this Application, Hydro Ottawa is proposing to continue CDM activities
18 starting in mid-2021. Through rates, Hydro Ottawa is seeking recovery of funding
19 for staff totalling \$0.2M in 2021 and \$0.5M from 2022-2025. The CDM staffing
20 costs requested for inclusion in the revenue requirement in 2021 are only partial,
21 so as to not overlap with the final CFF wind-down activities, which are scheduled
22 to be completed by mid-2021.

23
24 To confirm, this funding is not for new staff, but rather to retain existing CDM staff
25 after obligations for both the CFF wind-down and the delivery of IESO-funded
26 local programs under the Interim Framework are complete. The request to retain
27 CDM staff to fulfill the activities outlined in Exhibit 4-1-6: Conservation and
28 Demand Management subsequent to the CFF wind-down was based on the
29 following planning tools, reports, and information:

- CDM has always been an essential aspect of the utility's business and programming. It has likewise been a core activity in Hydro Ottawa's customer engagement strategy and asset planning strategy, in support of "Conservation First" in infrastructure planning for electricity. Exhibit 1-2-1: Customer Engagement Overview highlights the important role CDM has played in the utility's Key Accounts program, community engagement program, major project customer consultations, and the deployment of productivity tools such as the Hydro Ottawa mobile app. Furthermore, the utility's CDM team has been very active on industry committees involved in the delivery of energy efficiency programs and measures through the Ontario Energy Association, Electricity Distributors Association, and IESO to lend its expertise, input, and provide customer feedback to inform future CDM programming. As noted in Attachment 1-1-10(B): 2017 Annual Summary - Achieving Ontario Energy Board Renewed Regulatory Framework Performance Outcomes, Hydro Ottawa has been recognized on multiple occasions by the IESO and its peers for achieving excellence in the promotion of Save on Energy programs and in the delivery of CDM customer service and sales training to other distributors and channel partners in Ontario. Hydro Ottawa's commitment to, and expertise in, CDM has likewise been on display in the utility's engagement in the City of Ottawa's "Energy Evolution" renewable energy strategy and climate change action initiative. Please see the response to interrogatory ED-11 for additional information in this regard.
- Over the past 15 years, Hydro Ottawa has established a solid reputation as a trusted energy advisor, providing personalized energy conservation expertise to customers through the utility's CDM team. In the smart energy future that is emerging, the utility believes that this positioning of Hydro Ottawa as the "go-to" resource for electricity optimization services and programs is a critical customer service that is fundamental to the future success of the utility. Helping customers with conservation and

1 investigating cost-saving opportunities (whether at their request or
2 proactively) continues to be a priority for Hydro Ottawa. This posture on
3 the part of the utility is supported by the following information:

4 ○ Detailed results of Hydro Ottawa's consultation with customers, as
5 summarized in the consolidated Customer Engagement Overview
6 report produced by Innovative Research Group Inc. ("Innovative").
7 For more details, please see pages 55-58 of Attachment 1-2-2(A):
8 Innovative Research Group - Customer Engagement Report on
9 Hydro Ottawa's 2021-2025 Rate Application.

10 ○ On May 8, 2019, Hydro Ottawa hosted a Key Accounts
11 symposium, attended by approximately 70 of the utility's largest
12 commercial customers. Over the course of the event,
13 approximately 40 customers participated in the live poll survey tool
14 that Hydro Ottawa made available, for the purposes of canvassing
15 customers on the topics addressed during the symposium and
16 gaining their insights. Among the questions asked was the
17 following: *"With significant cuts to spending on electricity*
18 *conservation, how important is it to you that Hydro Ottawa*
19 *continue to actively promote, educate, and support your business*
20 *with your efforts to conserve electricity?"* Options for responding
21 were as follows:

- 22 ■ a. Extremely important
- 23 ■ b. Very important
- 24 ■ c. Moderately important
- 25 ■ d. Slightly important
- 26 ■ e. Not at all important

27 In total, 31 out of 39 customers selected "extremely important"
28 with the remaining eight selecting "very important." A copy of the
29 live poll questions and results has been attached as Attachment
30 OEB-134(B): 2019 Key Accounts Symposium - Live Poll Results.

- 1 ○ Exhibit 1-1-13: Productivity and Continuous Improvement
2 Initiatives outlines how customer engagement is increasing
3 through Hydro Ottawa's mobile application, with nearly 1,100 new
4 customers downloading the app each month. The app provides
5 useful alert notifications about electricity usage, along with insights
6 to help reduce consumption. The CDM team has been a key
7 stakeholder in developing actionable energy-saving tips and
8 informing the utility's future roadmap for enhancements to the app.
- 9 ● As noted above in the response to part (a)(iii), Hydro Ottawa believes that
10 it is reasonable to anticipate the establishment of some kind of successor
11 framework for CDM programming once the Interim Framework expires. At
12 present, however, the reality for electricity distributors is that they are
13 operating in an environment in which there are no longer any
14 province-wide, IESO-funded CDM programs for which distributors are
15 playing the lead role as delivery agents. The discontinuance of the CFF
16 framework represented a shift in the historical paradigm (which, it should
17 be noted, enjoyed strong support from customers) of distributors serving
18 as the primary point of interface for CDM program delivery and customer
19 interaction and support. At this time, Hydro Ottawa has no way of
20 knowing if there will be means made available to distributors beyond
21 December 31, 2020 to apply for funding to design and deliver
22 cost-effective CDM programs that are not duplicative of IESO CDM
23 programs.
- 24 ● Hydro Ottawa remains committed to taking a "Conservation First"
25 approach to electricity infrastructure planning and to leveraging CDM as a
26 tool for addressing local distribution constraints. This commitment is on
27 display in the utility's 2021-2025 Distribution System Plan ("DSP"), which
28 includes local, targeted CDM solutions developed by the utility's CDM
29 team. Please see pages 273-274 of Hydro Ottawa's DSP (Exhibit 2-4-3)
30 for a discussion on the role of non-distribution activities within the utility's

1 five-year capital plan. What's more, the DSP anticipates that there will be
2 eight stations which will be exceeding their planning rating capacity in
3 2025. (See Figure 8.4 on page 276 of Exhibit 2-4-3). Within the basket of
4 solutions that is planned to help plan for and address this situation is an
5 evaluation of potential non-wire alternatives to manage future demand
6 growth in Hydro Ottawa's service territory, especially on the 115 kV
7 system. These plans and their potential benefits are likewise affirmed in
8 the most recent Integrated Regional Resource Plan ("IRRP") for the
9 Greater Ottawa Region, prepared by the IESO. Hydro Ottawa is very
10 supportive of the IRRP's exploration and treatment of the potential role for
11 non-wires solutions, and looks forward to facilitating the development and
12 deployment of these solutions. For more information, please see sections
13 7.1.1 and 7.1.2 in the IRRP. (A copy of the 2020 IRRP has been
14 appended to Hydro Ottawa's interrogatory responses as Attachment
15 PP-11(A): Ottawa Sub-Region 2020 IRRP).

- 16 ● In step with the above, Hydro Ottawa affirms its commitment to
17 addressing local distribution constraints through rate-based CDM
18 activities by engaging and working in concert with the following external
19 stakeholders:
 - 20 ○ IESO: engagement will focus on pursuing more local programs
21 that will help alleviate and assist with system constraints. Please
22 see the response to part (c)(iii) below for two specific local
23 program examples that were approved in 2020 through
24 consultation with the IESO, in support of recommendations
25 identified in a Local Achievable Potential Study commissioned by
26 the utility (see Attachment 2-4-3(K) as filed on February 10, 2020).
27 This study evaluates the potential for non-wires solutions to offset
28 load growth or defer infrastructure in a specific area of the utility's
29 service territory. In addition, as noted above, the utility will
30 continue to partner with the IESO on the exploration of non-wires

solutions, in the context of the implementation of the recommendations included in the 2020 IRRP for the Greater Ottawa Region.

- Business customers in specific constrained areas: engagement will focus on enabling more energy efficiency projects that help address local distribution constraints and that are not financed by any incentives from the IESO, the provincial government, or the Government of Canada.

- Finally, Hydro Ottawa's request to retain CDM staff to fulfill the activities outlined in Exhibit 4-1-6: Conservation and Demand Management subsequent to the CFF wind-down is intended to align with the OEB's CDM guidelines for electricity distributors.⁴ The utility has every intent of utilizing these guidelines to further inform and initiate the types of CDM activities contemplated by the OEB for funding through distribution rates.

- iii) Hydro Ottawa has not specifically discussed the projected rate-based savings from commercial customers with the IESO. However, the utility has used the IESO's Save On Energy Energy Manager Program Requirements and verified results, as well as the IESO's Evaluation, Measurement, and Verification ("EM&V") protocols, to inform the rate-based savings Hydro Ottawa expects to achieve through projects with commercial customers.

What's more, the utility did consult with IESO staff prior to submitting two proposals to Save On Energy's local program fund in 2019. These consultations were informed by the results of the aforementioned Local Achievable Potential Study (see Attachment 2-4-3(K) as filed on February 10, 2020) which examines the potential for non-wires solutions in the area of Kanata Stittsville. Subsequent to these consultations, Hydro Ottawa formulated and submitted proposals that

⁴ Ontario Energy Board, *Conservation and Demand Management Requirement Guidelines for Electricity Distributors*, EB-2014-0278 (issued December 19, 2014; updated August 11, 2016).

1 were focused on serving the needs of specific customers in the area and helping
2 to reduce the reliability risk associated with heavily loaded stations in the area.
3 The proposals contemplated a residential program (Kanata North Smart
4 Thermostat Program) and a commercial program (Kanata North Retrofit+
5 Program). Both programs were subsequently approved by the IESO on the basis
6 that they demonstrate cost-effectiveness when comparing the program
7 investment (cost) against provincial average avoided costs of generating and
8 delivering electricity (benefit). As such, the inference that can be drawn is that
9 these programs will benefit ratepayers province-wide. Both of these programs
10 leverage existing delivery infrastructure of current electricity and natural gas
11 province-wide programs, which will reduce costs and streamline the customer
12 experience, while also avoiding customer confusion. More information on these
13 local programs is available in the 2020 IRRP for the Greater Ottawa Region.

14
15 These two programs are examples of how Hydro Ottawa is able to leverage its
16 CDM staff to address local system needs using cost-effective energy efficiency.
17 The utility's proposed CDM staffing costs will focus on identifying and informing
18 similar approaches in the future.

19
20 (1) In the absence of OEB approval for OM&A funding to enable the
21 continuation of Hydro Ottawa's CDM activities, the utility would need to
22 explore what other mechanisms might be available to support these
23 activities.

24
25 iv) Details by project for rate-based CDM activities do not yet exist. The responses
26 below, however, provide additional context.

27
28 (1) Rate-based savings will not be achieved within the IESO's CDM
29 framework or programming. Please see the response to part (c)(v)(2)
30 below for more information on verifying the savings achieved.

- 1 (2) Hydro Ottawa will be the delivery agent for the proposed CDM activity.
2 Please see the response to part (c)(v)(2) below for more information.
3 (3) The timing of approval for each project or activity is not yet known, as
4 specific projects requested to be funded through rates do not yet exist.
5 (4) Should the OEB approve the utility's request for rate-based CDM staffing
6 costs, Hydro Ottawa will engage with participating customers to support
7 the project activity that will be captured within these rate-based efforts.
8 (5) Rate-based savings estimates are found in Table 1 of Exhibit 4-1-6:
9 Conservation and Demand Management. To confirm, no specific projects
10 exist as of yet. Hydro Ottawa is modeling projected savings from
11 rate-based CDM activity off of the IESO's Energy Manager program.
12 Please see the response to part (c)(v)(2) below.

13
14 v)

- 15 (1) As a general matter, Hydro Ottawa's approach to including projected
16 savings from rate-based activities in its CDM adjustment is informed by
17 the aforementioned OEB CDM guidelines. Hydro Ottawa acknowledges
18 that not all of the OEB's CDM guidelines remain applicable, in light of the
19 March 2019 Ministerial directive which centralized the delivery of
20 province-wide conservation programs with the IESO and removed
21 distributors as delivery agents.
22 (2) As a result of the activities that Hydro Ottawa's CDM staff will undertake
23 during the 2021-2025 rate period, the associated savings achieved will be
24 solely attributed to new (separate and unique) projects that are not
25 captured in existing province-wide CDM programming. These projects will
26 not overlap with any projects receiving incentives from the IESO, the
27 Government of Ontario, or the Government of Canada. These savings will
28 be quantifiable and transparent, reported at a regular frequency, with
29 supporting documentation accessible to validate the savings claims and

1 to justify the value for Hydro Ottawa customers.

2
3 Hydro Ottawa will track and verify these savings using the methodology
4 prescribed by the IESO for its Save On Energy Energy Manager
5 Program. IESO defines these savings as Program Enabled Savings.
6 (Please see page 85 of the IESO's "E-M&V Evaluation, Measurement and
7 Verification Protocols and Requirements V2.0"⁵ for Program Enabled
8 Savings ("PES") definition and reporting). These PES are attributed to
9 projects related to the Energy Manager's duties, but which do not receive
10 financial incentives. The projects delivering these savings typically consist
11 of measurable and verifiable savings brought about by implementing
12 operational and behavioural improvements resulting from CDM team
13 interactions with commercial customers. This can include, but is not
14 limited to, educational seminars, site meetings, walk-through audits, or
15 training opportunities. The savings will be quantified using the
16 International Performance Measurement and Verification Protocol⁶ as
17 published by the Efficiency Valuation Organization and required by the
18 IESO Retrofit Program's measurement and verification procedures.⁷

19
20 Hydro Ottawa already has a proven track record for working with
21 customers to encourage PES and report them to the IESO. For example,
22 in 2018, Hydro Ottawa submitted a PES claim to the IESO for KRP
23 Properties. KRP Properties owns and operates 32 commercial properties
24 in Kanata North, which, as noted above, has been identified as a

⁵ Independent Electricity System Operator, Evaluation Measurement and Verification (EM&V) Protocols and Requirements, V2.0. Available at: <http://www.ieso.ca/-/media/Files/IESO/Document-Library/conservation/LDC-toolkit/EMV-Protocols-and-Requirements-10312014.pdf?la=en>.

⁶ Efficiency Valuation Organization, International Performance Measurement and Verification Protocol. Available at: <https://evo-world.org/en/products-services-mainmenu-en/protocols/ipmvp>.

⁷ Independent Electricity System Operator, Retrofit Program M&V Procedures. Available at: <https://saveonenergy.ca/-/media/Files/SaveOnEnergy/Industry/Retrofit-Documents/Retrofit-program-project-measurement-and-verification-procedures.pdf?la=en&hash=57AF98B2B180983D4F851EAC048773D5E1566559&hash=57AF98B2B180983D4F851EAC048773D5E1566559>.

1 grid-constrained area. The PES claim included activity at 12 buildings
2 within the KRP Properties portfolio.

3
4 This claim demonstrated that the impact of Hydro Ottawa's influence,
5 knowledge, and training was measurable and verifiable. The PES claim
6 was accepted by the IESO showing annual persistent savings that
7 increased from 2 GWh/yr in 2015 to nearly 4 GWh in 2017.

8
9 (3) Hydro Ottawa is proposing that rate-base saving become part of Hydro
10 Ottawa's Lost Revenue Adjustment Mechanism Variance Account
11 ("LRAMVA"). As such, if savings are not achieved, customers will be
12 trued-up as part of the LRAMVA.

13 Intangible benefits will also result from continued education and
14 engagement under Hydro Ottawa's CDM program. These benefits will
15 not be quantifiable through the LRAMVA. Hydro Ottawa is not proposing
16 any true-up on the costs to run this type of programing or costs funded
17 through rates.

18
19 d)

20 i) "The continuation of CDM projects administered at the provincial level" refers to
21 CDM programs that are still in market and are being delivered centrally by the
22 IESO. Please see the response to part (a)(iii) above.

23
24 (1) Hydro Ottawa has included estimates related to these projects and
25 included kWh and kW savings as part of CDM adjustments to the Load
26 Forecast (please see the response to part (a) above). Hydro Ottawa is
27 proposing that savings become part of the utility's LRAMVA. As such, if
28 savings are not achieved, customers will be trued-up as part of the
29 LRAMVA. Hydro Ottawa is expecting that the IESO will be required to
30 produce some level of reporting similar to distributors to validate progress

1 and provide distributors information for regional planning. Hydro Ottawa
2 intends to use this reporting to support its LRAM claims.

3 (2) Through industry association advocacy and committee participation,
4 Hydro Ottawa has inquired with the IESO about CDM programming
5 beyond 2020. No clear direction has been provided as of yet. Hydro
6 Ottawa has not sought approval or advice from the IESO in developing
7 these savings estimates. In its recent *Annual Planning Outlook*⁸, the IESO
8 confirms that it has modeled two scenarios that serve to underpin the
9 report's analysis. In Scenario 1, existing energy efficiency programs
10 continue beyond 2020, for the duration of the outlook period (i.e. until
11 2040). In Scenario 2, programs cease at the end of 2020. For the
12 purposes of its own forecast, Hydro Ottawa has assumed the former
13 scenario (i.e. in which current programs continue forward). Please see the
14 response to part (a)(iii) above for more information.

15
16 ii) Regardless of the IESO no longer providing distributor-level savings reports, the
17 savings activities will impact local distributors' actual load and regional planning.
18 As discussed in part (d)(i) above, it is Hydro Ottawa's expectation that some level
19 of reporting will be required to validate the continued impact and savings related
20 to CDM in comparison to program costs (similar to when CDM programs were
21 administered by distributors under the provincial framework). In the absence of
22 IESO reporting, Hydro Ottawa does not suggest ignoring the impact on the
23 utility's Load Forecast.

24
25 iii) At this time, project level details do not yet exist, as they are forecasted savings.
26 Hydro Ottawa has estimated savings by program, where possible. Please see
27 the response to part (a)(iii) above for more details.
28

29 ⁸ Independent Electricity System Operator, *Annual Planning Outlook*, (January 2020).

- (1) These savings are estimated by program, assuming they continue in their current form under a framework that would serve as the successor to the current Interim Framework. For more detail, please see the response to part (a)(iii) above.
- (2) Hydro Ottawa has assumed that the IESO will be responsible for these programs and deliver them, as per the current arrangement under the Interim Framework.
- (3) These are forecasted savings which assume the continuation of current CDM programs following the expiration of the Interim Framework and through the utility's 2021-2025 rate term. Actual projects do not yet exist. Please see the response to part (a)(iii) above for more information.
- (4) Hydro Ottawa has assumed that it will not be involved in the administration of these programs/projects and that the IESO will be handling the administration of future CDM programs.
- (5) Projects do not exist as of yet. Savings were estimated by program based on historical participation within programs that were previously administered by Hydro Ottawa. For the Retrofit Program, savings were estimated using IESO's RFP-223 issued on July 5, 2019 to contract a regional delivery agent for the Retrofit Program. Hydro Ottawa has used conservative assumptions to markdown forecasted savings (i.e. 80% of Retrofit projects will be approved for payment with 20% being deactivated for various reasons). These assumptions are based on historical deactivation rates. Hydro Ottawa is also using IESO estimates to further markdown savings for net-to-gross adjustment, as well as the persistence of savings. The methodology is outlined in excel Attachment OEB-134(A): CDM Savings by Program, with reference tabs included. For more detail, please see the response to part (a)(iii) above.

- 1 e) The street lighting project will be funded, in part, by incentives from the Save on Energy
- 2 Retrofit Program. Detailed measure information will be provided upon project
- 3 completion, as data is not available at this time.

INTERROGATORY RESPONSE - OEB-136

3-Staff-10

EXHIBIT REFERENCE:

Appendix 2-I

Updated Exhibit 3/ Tab 1/ Schedule 1/ Tables 6 and 7

SUBJECT AREA: CDM Adjustments

Question(s):

Based on the responses to the above CDM adjustment interrogatories:

- a) Please confirm whether there were any change(s) made. If yes, please re-file revised forecasts of CDM savings and updates to all related models from 2021 to 2025.
- b) Please provide the LRAMVA thresholds (i.e., annualized equivalent of the CDM adjustments) for each year from 2021 to 2025, as the tables in Appendix 2-I did not include the test years' CDM adjustments and LRAMVA threshold amounts.

RESPONSE:

- a) Hydro Ottawa confirms that there were no CDM changes that the utility has adjusted for, with respect to forecasted CDM Savings.

While reviewing and creating detailed reconciliations for the response to interrogatory OEB-134, Hydro Ottawa noted some discrepancies between actual 2019 historical data and that provided for the Load Forecast. Hydro Ottawa has not adjusted for these discrepancies as preliminary analysis indicates the change is not material.

1 In addition, it was realized that a historical estimate for future CDM savings related to the
2 small commercial class was used. As this does not result in a material change, Hydro
3 Ottawa has not adjusted the future CDM savings as part of the Load Forecast.

4
5 Please see below a revised version of Table 7 from UPDATED Exhibit 3-1-1: Load
6 Forecast. As the demand savings for future CDM are based on kWh savings and
7 historical demand, as described in the response to VECC-65, the Updated Load
8 Forecast resulted in a change to the demand savings thresholds proposed.

9
10 **Table 7 – AS ORIGINALLY SUBMITTED – 2021-2025 Demand Sales CDM Adjustments by**
11 **Customer Class (kW)**

	2021	2022	2023	2024	2025
General Service > 50 to 1,499 kW	112,290	134,704	155,421	176,080	195,031
General Service 1,500 to 4,999 kW	87,899	98,431	107,562	116,692	125,101
Large Use	45,592	47,724	49,024	50,327	51,527
Standby Power	0	0	0	0	0
Sentinel Lighting	0	0	0	0	0
Street Lighting	14,272	17,025	19,270	21,515	23,358
TOTAL KW DEMAND SALES	260,053	297,884	331,277	364,614	395,017

12
13 **Table 7 – AS REVISED – 2021-2025 Demand Sales CDM Adjustments by Customer Class**
14 **(kW)**

	2021	2022	2023	2024	2025
General Service > 50 to 1,499 kW	110,783	132,709	152,945	173,227	191,572
General Service 1,500 to 4,999 kW	88,230	98,809	107,979	117,152	125,601
Large Use	45,590	47,724	49,024	50,327	51,527
Standby Power	0	0	0	0	0
Sentinel Lighting	0	0	0	0	0
Street Lighting	14,270	17,024	19,270	21,514	23,358
TOTAL KW DEMAND SALES	258,873	296,266	329,218	362,220	392,058

- 1 b) Please see UPDATED Exhibit 3-1-1: Load Forecast Table 6 and the revised version of
2 Table 7, as presented above, for Lost Revenue Adjustment Mechanism Variance
3 Account ("LRAMVA") thresholds. Please also refer to the responses to interrogatories
4 OEB-134 and VECC-65 for the detailed calculation of the 2021-2025 LRAMVA
5 thresholds.

INTERROGATORY RESPONSE - OEB-169

9-Staff-2

EXHIBIT REFERENCE:

EB-2015-0004/Exhibit D/Tab 5/Schedule 2

Updated Exhibit 4/Tab 5/Schedule 2/p. 3

LRAMVA Workform A ("2014LRAMVA_452A")

LRAMVA Workform B ("2014Adjustments_LRAMVA_452B")

SUBJECT AREA: Deferral and Variance Accounts

Preamble:

In the 2016-2020 CIR proceeding (EB-2015-0004), Hydro Ottawa was approved to dispose of lost revenues related to 2011 to 2013 CDM activity.

In the current proceeding, Hydro Ottawa is requesting to dispose of a total debit balance of \$491,812 for 2014 activity based on:

- i) new 2014 CDM amounts (debit of \$424,027) per Workform A ("2014LRAMVA_452A")
- ii) 2013 adjustments (debit of \$67,785) that were not included in its previous claim per Workform B ("2014Adjustments_LRAMVA_452B")

As noted above, these two components were filed in two separate workforms:

- In Workform A ("2014LRAMVA_452A"), the 2014 LRAMVA balance of \$424,027 is inclusive of persistence from 2011-2013 program savings in 2014, and persistence of 2013 savings adjustments in 2014.

- 1 • In Workform B (“2014Adjustments_LRAMVA_452B”), the LRAMVA balance of \$67,785 is
2 inclusive of 2013 adjustments and the persistence of 2012 program savings in 2013.

3

4 Hydro Ottawa stated that it has complied with the OEB’s direction to dispose of the LRAMVA
5 balance as part of their COS application. Hydro Ottawa notes that it would have waited to clear
6 the 2013 year (as IESO reports could include significant adjustments) had it received further
7 clarity from the OEB that the LRAMVA balance was related to calendar year savings rather than
8 the IESO report.

9

10 Question(s):

11

12 a) As 2013 CDM amounts were disposed of in its 2016-2020 CIR proceeding, please
13 explain how claiming 2013 savings adjustments in this proceeding would not constitute
14 rate retroactivity, and how it falls within prospective treatment of changes.

15

16 b) Please clarify which appropriate guideline, filing requirement or workform was
17 referenced by Hydro Ottawa where it learned the “LRAMVA balance was related to
18 calendar year savings rather than the IESO report”.

19

20 c) In light of the OEB’s guidance (Chapter 2 Filing Requirements for [2018 COS Filers](#)) and
21 prior decisions¹ where the OEB did not allow for retroactivity, please explain why Hydro
22 Ottawa is seeking to recover 2013 adjustments (as per
23 “2014Adjustments_LRAMVA_452B”) and the appropriateness of doing so. In response
24 to this interrogatory, please indicate if Hydro Ottawa seeks to maintain its retroactive
25 request to recover 2013 adjustments filed in Workform B.

26 ¹ EB-2016-0075 (Guelph Hydro 2017 IRM); EB-2016-0080 (Hydro One Brampton 2017 IRM); EB-2016-0214 (North Bay Hydro 2017 IRM)

1
2 **RESPONSE:**

3
4 a) Deferral and variance accounts (“DVAs”), by their nature, generally adjust future rates for
5 past activities. Some Regulatory Accounts include portions of costs that are to be
6 trued-up at a later time, while others are to be cleared once on a final basis.

7
8 At the time Hydro Ottawa cleared the 2013 LRAM balance, it considered the 2013
9 adjustments to be part of the results of the IESO Final Verified 2014 CDM Report (“2014
10 CDM Report”). Therefore, the 2013 adjustments were considered part of the balances
11 recorded as a result of the 2014 CDM Report. The 2014 CDM Report was not available
12 at the time of proposed clearing or as part of audited balances available for clearance.
13 With OEB Filing Requirements stating that, “[a]t a minimum, distributors must apply for
14 the disposition of the balance in the LRAMVA as part of their COS applications,”² it was
15 reasonable for Hydro Ottawa to assume that it was requesting final approval based on
16 known information provided by IESO reporting, as well as the understanding that the
17 IESO CDM reports can have significant lags that should be included in future clearance.

18
19 Hydro Ottawa looked at the IESO adjustments as current year activity, similar to
20 adjustments on IESO settlement invoices. As such, in light of OEB Filing Requirements
21 at the time of the 2013 LRAM balance clearance and its understanding of how IESO
22 CDM reports worked in general, Hydro Ottawa does not believe that requesting
23 clearance of 2013 adjustments constitutes rate retroactivity. In addition, as policy
24 changes are generally treated on a prospective basis, Hydro Ottawa would likewise
25 anticipate that distributors should expect the change to be treated on a prospective
26 basis.

27 ² Ontario Energy Board, *Chapter 2 Filing Requirements for Electricity Distribution Rate Applications* (as updated on
28 July 18, 2014), page 43.

1 In light of the change in OEB (as discussed further in part (b) of this response below),
2 Hydro Ottawa now assumes that the statement “[a]t a minimum, distributors must apply
3 for the clearance of energy and/or demand-related LRAMVA balances attributable to
4 approved energy efficiency programs in a CoS application”³ allows distributors to
5 consider and choose which years of LRAM balances to clear.

6
7 b) The *Chapter 2 Filing Requirements for Electricity Distribution Rate Applications*,
8 as updated on July 20, 2017, introduced the guidance to which Hydro Ottawa is
9 referring when making the statement that it was clarified that LRAMVA balances
10 are related to calendar year savings rather than the IESO report year.
11 Specifically, the 2017 filing requirements update states the following:

12
13 “In July 2016, the OEB developed a generic LRAMVA work form to provide distributors
14 with a consistent approach to calculate LRAMVA. The LRAMVA work form consolidates
15 information that LDCs have received from the IESO. In December 2016, the OEB
16 indicated in various decisions¹⁷ that changes to an approved LRAMVA amount were not
17 permitted. This policy (emphasis added) affects the treatment of verified savings
18 adjustments that can be claimed by distributors. If an LRAMVA amount was approved,
19 the persistence of the savings adjustment(s) can only be claimed on a go-forward basis.¹⁸
20 LDCs cannot seek recovery of LRAMVA amounts related to savings adjustments for a
21 year in which the corresponding LRAMVA amount has been approved by the OEB on a
22 final basis. For example, if an LDC has received approval of its 2014 LRAMVA balance,
23 excluding 2014 savings adjustments, the LDC must forego any LRAMVA amounts related
24 to the 2014 savings adjustments as the 2014 LRAMVA balance was approved by the
25 OEB on a final basis.”⁴

26
27 In addition, during an orientation session held on July 25, 2017 for electricity distributors
28 planning to file a Cost of Service or Custom IR application, the OEB stated the following:

29 ³ Ontario Energy Board, *Chapter 2 Filing Requirements for Electricity Distribution Rate Applications* (as updated on
30 May 14, 2020), page 40.

31 ⁴ Ontario Energy Board, *Chapter 2 Filing Requirements for Electricity Distribution Rate Applications* (as updated on
32 July 20, 2017), page 40.

1 “LRAMVA workform has enhanced functionality and more explicit instructions on the
2 treatment of IESO verified savings adjustments and use of the LRAMVA threshold”
3 (emphasis added).⁵

4

5 c) In formulating this response, Hydro Ottawa reviewed the previous OEB decisions cited in
6 this interrogatory as they relate to LRAM. Hydro Ottawa has not conducted a full review
7 of all of the evidence in the applicable proceedings, as it relates to CDM adjustments
8 and LRAM claims.

9

10 In the decision in EB-2016-0075 (Guelph Hydro 2017 IRM), the OEB states the
11 following: “Guelph Hydro proposed to include the persistence of peak demand savings
12 between 2011 and 2013 in this application because these amounts were not claimed in
13 Guelph’s Hydro’s 2016 cost of service application (EB-2015-0073). This omission
14 resulted in an under-recovery of \$464,825 in rates for 2016.”⁶ This is not a similar
15 situation to that of Hydro Ottawa, as Hydro Ottawa did not omit the 2013 adjustments.
16 Rather, the 2013 adjustments did not exist at the time Hydro Ottawa 2016-2020 Custom
17 IR application was filed.

18

19 The same OEB decision also speaks to CDM saving adjustments. However, it is unclear
20 to Hydro Ottawa if Guelph Hydro had requested clearance of these amounts or made
21 arguments to clear the amounts. The original evidence in the Guelph Hydro proceeding
22 states the following: “If the Board requires, Guelph Hydro is willing to update the
23 LRAMVA model and claim to take into consideration the OPA’s historical adjustments,
24 and exclude the 2011 to 2013 demand response results.” It therefore does not appear to
25 Hydro Ottawa that Guelph Hydro requested clearance of historical adjustments.
26 However, as stated earlier, Hydro Ottawa has not completed a thorough review of the
27 application evidence.

28 ⁵ Ontario Energy Board, 2018 Orientation Session Presentation on Cost of Service Filing Requirements - 2017
29 Update for 2018 Applications (July 25, 2017), slide 14.

30 ⁶ Ontario Energy Board, *Decision and Rate Order*, EB-2016-0075 (December 8, 2016), page 11.

1 In the EB-2016-0080 proceeding (Hydro One Brampton 2017 IRM), Hydro One
2 Brampton did not request adjustments related to historical CDM savings reports for
3 years that had been approved. Hydro One Brampton requested the ability to claim future
4 adjustments after being aware of the updated policy requirement related to CDM savings
5 reports. Therefore, Hydro Ottawa likewise does not view the proceeding involving Hydro
6 One Brampton as being similar to Hydro Ottawa's present situation.

7
8 The EB-2016-0214 proceeding (North Bay Hydro 2017 IRM) appears to have similar
9 circumstances to those of Hydro Ottawa. However, based upon its cursory review of
10 evidence in that proceeding, Hydro Ottawa did not see any reasons put forth by North
11 Bay Hydro for claiming the adjustment other than that they were material. To clarify, this
12 is not the basis for which Hydro Ottawa is claiming the 2013 adjustments. Hydro Ottawa
13 is suggesting that the OEB Filing Requirements required distributors to make a claim
14 during a Cost of Service application and the policy was later changed for clearance
15 related to adjustments. Hydro Ottawa suggests that this policy change should be applied
16 on a prospective basis.

17
18 Hydro Ottawa made a similar request in its 2020 annual rate adjustment application
19 related to the clearance of its 1595 Sub-account 2014. The filing requirements had been
20 amended after Hydro Ottawa had initially cleared the 1595 Sub-account 2014. Hydro
21 Ottawa had also indicated that it believed that the change should be on a go forward
22 basis. Clearance of Hydro Ottawa's 1595 Sub-account 2014 was approved as part of the
23 OEB's Decision on Hydro Ottawa's 2019 annual rate adjustment application.⁷

24
25 In light of the foregoing discussion, Hydro Ottawa believes that the 2013 adjustments are
26 not a retroactive rate request and continues to seek approval for the 2013 adjustments
27 as part of this Application.

28 ⁷ Ontario Energy Board, *Decision and Rate Order*, EB-2019-0046 (December 17, 2019; corrected January 22, 2020)
29 page 14.

INTERROGATORY RESPONSE - OEB-170

9-Staff-3

EXHIBIT REFERENCE:

LRAMVA Workforms A, B, C and D

EB-2011-0054/2012 Settlement Agreement/Section 3.3 (p. 13 of 33)

EB-2011-0054/IRRs – Part I/Exhibit K3/Issue 3.3/IR #2 (Energy Probe #28b) / PDF p. 407 of 729

SUBJECT AREA: Deferral and Variance Accounts

Preamble:

In this proceeding, Workforms A and C included a LRAMVA threshold of 29,390,965 kWh, which are the forecast savings applied against actual savings in 2014 and 2015. An extract of the LRAMVA threshold (and its rate class breakdown) is provided below:

	Total	Residential	GS<50 kW	Commercial 50 kW to Large Use	Unmetered Scattered Load	Street Lighting
	kWh	kWh	kWh	kW	kWh	kW
kWh	29,390,965	22,228,164	6,993,000		169,801	
kW	322,951			319193		3758
Summary		22228164	6993000	319193	169800.7857	3758

Years Included in Threshold

Source of Threshold 20XX Settlement Agreement, p. X

Source: LRAMVA Workforms A and C, Tab 2

The 2012 Settlement Agreement noted that the CDM adjustment to the load forecast was 75 million kWh (p. 13) but this amount is not reflected in its entirety in the workform.

1 Notwithstanding the above, Table 6 from Part 1 of its 2012 COS proceeding IRRs showed
2 different 2011 and 2012 CDM adjustment figures than the amounts included in the LRAMVA
3 workform:

Table 6 – CDM Adjusted Load Forecast

	Forecasted System Peak (MW)				Forecasted System Energy (GWh)			
	Without CDM	With CDM	CDM Reduction	% Change	Without CDM	With CDM	CDM Reduction	% Change
2011	1,435	1,426	9	-0.6%	7,957	7,919.5	37.5	-0.5%
2012	1,448	1,422	26	-1.8%	8,030	7,917.5	112.5	-1.4%

4
5 Source: EB-2011-0054, Part 1 IRRs, K3-3-2 (Energy Probe #28b)

6

7 Question(s):

8

9 a) Please clarify whether the 29,390,965 kWh used as LRAMVA threshold in Workforms A
10 and C is a component of the 75 GWh CDM adjustment associated with energy billed
11 customers.

12

13 b) Please confirm the figures in Table 6 (preamble):

14 i) 75 GWh reflects the incremental CDM adjustment to the 2012 load forecast
15 based on the difference between 112.5 GWh (2012 figure) and 37.5 GWh (2011
16 figure)

17 ii) 112.5 GWh reflects the cumulative CDM impact included in the 2012 load
18 forecast

19

20 c) In light of the OEB's partial decision in Alectra's 2020 IRM application where a
21 cumulative LRAMVA threshold was used in the Horizon Rate Zone¹, please explain why
22 Hydro Ottawa is using an 'incremental' LRAMVA threshold of 29,390,965 kWh (LRAMVA
23 Workforms A and C) rather than 'cumulative' forecast savings of 112.5 million kWh (per
24 Table 6 in K3-3-2 (#28) to EP).

25 ¹ EB-2019-0018, Partial Decision and Interim Rate Order, December 12, 2019, p. 20-21

1 d) Please update Tab 2 of Workforms A, B (if applicable), C and D with a LRAMVA
2 threshold value of 112.5 million kWh along with the appropriate rate class breakdown.
3 Please ensure that the total kWh LRAMVA threshold by rate class (as entered in
4 LRAMVA workform) matches the LRAMVA threshold amounts on the EB-2011-0054
5 record.

6
7 **RESPONSE:**

8
9 a) Hydro Ottawa confirms that the 29,390,965 kWh used as the Lost Revenue Adjustment
10 Mechanism Variance Account ("LRAMVA") threshold in Workforms A and C is a
11 component of the 75 GWh CDM adjustment associated with energy billed customers.

12
13 b) Hydro Ottawa confirms that the numbers in Table 6 from the preamble (i.e. from
14 EB-2011-0054, Part 1 IRRs, K3-3-2, Energy Probe #28b) have been replicated in
15 questions (b)(i) and (b)(ii) of this interrogatory. However, these numbers do not reflect
16 the approved 2012 Settlement Agreement.

17
18 Table A and Table B below are reproductions of Table 5 and Table 6, respectively, from
19 Exhibit C1-1-1 of Hydro Ottawa's 2012 Rate Application.²

20
21 **Table A – Estimated Achievement of CDM Targets**

	Net Annual Peak Demand Savings (MW)		Net Cumulative Energy Savings (GWh)	
	Per Year	Cumulative	Per Year	Cumulative
2011	13.72	13.72	60.016	60.016
2012	24.00	37.72	105.028	165.044
2013	24.86	62.58	108.779	273.823
2014	23.14	85.72	101.277	375.100

22
23 ² Hydro Ottawa Limited, *2012 Electricity Distribution Rate Application*, EB-2011-0054 (June 17, 2011).

Table B – CDM Adjusted Load Forecast

	Forecasted System Peak (MW)				Forecasted System Energy (GWh)			
	Without CDM	With CDM	CDM Reduction	% Change	Without CDM	With CDM	CDM Reduction	% Change
2011	1,435	1,421	14	-1.0%	7,957	7,897	60	-0.8%
2012	1,448	1,410	38	-2.6%	8,030	7,865	165	-2.1%

As per the approved 2012 Settlement Agreement, “For the purposes of settlement, the Participating Parties agreed to reduce the impact of CDM reflected in the load forecast for 2012 from 165 GWhs to 75 GWhs and a reduction to the forecasted system peak of 38 MW in 2012. The revision to the GWh CDM reduction reflects the changed interpretation of ‘cumulative’ targets.”³

As noted in Table A and Table B above, the original cumulative CDM savings embedded in the Load Forecast was 165 GWh. As such, the approved 75 GWh also represents a cumulative CDM savings.

- c) As per the response to part (b) above, Hydro Ottawa is using a cumulative threshold rather than an incremental threshold.
- d) No adjustments are required as part of this response, seeing as 112.5 GWh is not Hydro Ottawa’s cumulative threshold.

³ Hydro Ottawa Limited, *2012 Cost of Service Approved Settlement Proposal*, EB-2011-0054 (December 28, 2011), page 13.

INTERROGATORY RESPONSE - OEB-171

9-Staff-4

EXHIBIT REFERENCE:

LRAMVA Workform A ("2014LRAMVA_452A")/ Tab

LRAMVA Workform B ("2014Adjustments_LRAMVA_452B")/ Tab 4

SUBJECT AREA: Deferral and Variance Accounts

Preamble:

It appears there are two 2013 adjustments entered into Workform B ("2014Adjustments_LRAMVA_452B") that were not included in Workform A ("2014LRAMVA_452A").

- Energy Manager (846,892 kWh in 2013; 1,141,184 kWh in 2014)
- High Performance New Construction (-949,590 kWh in 2013 and 2014)

Question(s):

a) Please re-file Workform A ("2014LRAMVA_452A") with the two above-noted adjustments included.

b) If Hydro Ottawa believes that the adjustments should not be included, please explain why.

RESPONSE:

a) Hydro Ottawa notes that both adjustments missing on tab 4 (2011-2014 LRAM) appeared on tab 7 (Persistence Report).

1 For the first item missing on tab 4, the IESO initiative description on tab 7 is “Energy
2 Managers” while the description on tab 4 is “Energy Manager.” As a result, the formulas
3 did not capture the adjustments. Hydro Ottawa has removed the letter “s” from four line
4 items related to Energy Managers on tab 7 in order to have them captured on tab 4. The
5 update has increased Hydro Ottawa’s LRAM claim by \$26K.

6
7 Hydro Ottawa has corrected a formula on tab 4 related to the High Performance New
8 Construction initiative. The kWh now display on tab 4. The kW values were already
9 being captured on tab 7. There is no change to the requested LRAM amount as a result
10 of the formula correction, as the program is a commercial class program and any dollar
11 saving is based on kW.

12
13 For a revised LRAM model (Workform 4-5-2(A)), please see excel Attachment
14 OEB-38(K): REVISED OEB Workform - 2014 - LRAM VA Workform.

15

16 b) Please see the response to part (a) above.

INTERROGATORY RESPONSE - OEB-172

9-Staff-5

EXHIBIT REFERENCE:

LRAMVA Workforms A, B, C, D and E / Tabs 4 and 5

Updated Exhibit 4/Tab 5/Schedule 2/pp. 4-5

SUBJECT AREA: Deferral and Variance Accounts

Preamble:

For 2014, Hydro Ottawa noted that it does not have customer-level data to allocate savings to the GS> 50 kW customer classes. The utility has continued to use the same methodology for disposing of LRAM claims for the 2014 Report as was used for the 2011-2013 reports. Hydro Ottawa has confirmed that, for years after 2014, customer-level data will be used to allocate savings to customer classes.

In its re-filing of 2019 actuals, Hydro Ottawa updated the allocation of GS 50-1,499 kW, GS 1,500-4,999 kW, and Large Use classes based on 2019 actual non-RPP consumption.

Table 2 – UPDATED FOR 2019 ACTUALS – > 50 kW Commercial Allocation

	kW	Allocated %	Allocated \$
General Service 50 to 1,499 kW	6,702,839	73.3%	\$(35,981)
General Service 1,500 to 4,999 kW	1,429,266	15.6%	\$(7,672)
Large Use	1,007,309	11.0%	\$(5,407)
TOTAL⁷	9,139,414	100%	\$(49,061)

Source: Updated Exhibit 4, Tab 5, Schedule 2, p. 5

1 Question(s):

2

3 a) As Hydro Ottawa did not have customer-level data to allocate savings to GS>50 kW
4 classes for 2014 and prior, please clarify the basis of the customer class allocations by
5 residential, commercial and industrial CDM programs from 2014 and prior years. As the
6 utility has continued to use the same methodology for disposing of LRAMVA claims for
7 the 2014 Report as was used for the 2011-2013 reports, please discuss the
8 methodology applied

9

10 b) For the GS>50 kW class allocations, please explain how these class allocations in Table
11 2 (included in preamble) reconcile with the allocations used in Tab 4 (of the LRAMVA
12 Workforms D and E) which show class specific allocations broken down by program in
13 2015 and 2016.

14

15 c) Please explain whether the basis of GS>50 kW class allocations derived from non-RPP
16 consumption is reflective of the consumption from participating customers for the
17 purposes of allocating lost revenues.

18

19 **RESPONSE:**

20

21 a) Hydro Ottawa's historical methodology was partially discussed in Exhibit D-5-2: LRAM
22 Variance Account of Hydro Ottawa's 2016-2020 rate application.¹ In that Exhibit, Hydro
23 Ottawa provided rate class allocations by initiatives for the 2011-2013 years. Please find
24 below a list of initiatives organized by residential, small commercial (GS<50 kW), and
25 commercial classes. The initiative classifications were the same for the year 2014, with
26 the exception of the Home Assistance Program.

27 ¹ Hydro Ottawa Limited, *2016-2020 Custom Incentive Rate-setting Distribution Rate Application*, EB-2015-0004 (April
28 29, 2105).

1 The initiatives identified as part of the commercial class savings were further allocated
2 for clearance based on the 2016 Test Year kW Load Forecast for these classes.
3 Similarly, the initiatives identified in this Application as part of the commercial class
4 savings have been further allocated based on the 2019 RRR kW data for these classes.

5

6 Residential

- 7 • Appliance Retirement
- 8 • Appliance Exchange
- 9 • HVAC Incentives
- 10 • Conservation Instant Coupon Booklet
- 11 • Bi-Annual Retailer Event
- 12 • Residential Demand Response (no claim made for 2014)
- 13 • Residential New Construction
- 14 • Home Assistance Program (2014)

15

16 Small Commercial (GS<50kW)

- 17 • Direct Install Lighting
- 18 • Small Commercial Demand Response

19

20 Commercial (GS>50kW)

- 21 • Retrofit - Business
- 22 • New Construction
- 23 • Energy Audit
- 24 • Demand Response 3 - Business (no claim made for 2014)
- 25 • Energy Manager
- 26 • Retrofit - Industrial
- 27 • Demand Response 3 - Industrial (no claim made for 2014)
- 28 • Home Assistance Program (2011-2013)
- 29 • Electricity Retrofit Incentive Program
- 30 • High Performance New Construction

1 b) Hydro Ottawa notes that data is not provided in tab 4 of UPDATED Attachment D and
2 UPDATED Attachment E. The utility has therefore interpreted this interrogatory as
3 intending to refer to tab 5.

4
5 Table 2 in UPDATED Exhibit 4-5-2: LRAM Variance Account allocates savings from the
6 2011-2014 CDM savings with respect to the 2013 adjustments and 2014 current year
7 savings as provided in the 2014 Participation and Cost Report.

8
9 Tab 5 of the LRAMVA Workforms included as UPDATED Attachment D and UPDATED
10 Attachment E shows class-specific allocations by program for 2015 and 2016,
11 respectively. These allocations are for the savings achieved in 2015 and 2016, as
12 provided in the 2018 Participation and Cost Report, which does not include the 2013 and
13 2014 savings.

14
15 As such, Table 2 from UPDATED Exhibit 4-5-2: LRAM Variance Account and the
16 allocations provided in tab 5 of the LRAMVA Workforms included as UPDATED
17 Attachment D and UPDATED Attachment E do not reconcile and are not intended to
18 reconcile. This is because they relate to different time periods with different customer
19 participation.

20
21 c) As discussed in UPDATED Exhibit 4-5-2: LRAM Variance Account, Hydro Ottawa does
22 not have sufficient data to link the 2014 savings to customers. Hydro Ottawa believes
23 the allocation to the three savings groups of residential, small commercial (GS<50kW),
24 and commercial is representative of the customers who took part in the initiatives. In
25 addition, using the 2019 Actual kW is a good proxy in which to allocate the commercial
26 group savings. Seeing as the same method, with the two exceptions noted, was
27 accepted as part of the utility's 2016-2020 rate application, Hydro Ottawa believed that
28 maintaining the methodology for the last year of savings in the 2011-2014 program
29 would be appropriate.

INTERROGATORY RESPONSE - OEB-173

9-Staff-6

EXHIBIT REFERENCE:

LRAMVA Workform E/Tab 2

EB-2015-0004/Settlement Proposal/Attachment 4 (pp. 57-58)

EB-2015-0004/IRRs to VECC/Question #27/ PDF p. 59 of 159

SUBJECT AREA: Deferral and Variance Accounts

Preamble:

In this proceeding, Workform E included a LRAMVA threshold of 27,452,000 kWh, which are the forecast savings applied against actual savings in 2016. An extract of the LRAMVA threshold (and its rate class breakdown) is provided below:

	Total	Residential	GS<50 kW	GS 50 TO 1,499 KW	GS 1,500 TO 4,999	Large User	Unmetered Scattered Load	Street Lighting
	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh
	27,452,000	16,725,000	10,727,000	191,563				
	191,563							
Summary		16725000	10727000	191563	0	0	0	0
Threshold	2016							
Source of Threshold	2016-2020 Settlement Agreement, p. 57 & 58							

Source: LRAMVA Workform E, Tab 2

In the 2016-2020 Custom IR Settlement Proposal, the following approved CDM adjustments were included in Attachment 4:

9-Staff-6-1:

CDM Adjustment

	2016	2017	2018	2019	2020
RESIDENTIAL	16,725	28,574	39,437	49,312	59,186
GENERAL SERVICE <50KW	10,727	18,627	25,869	32,452	39,035
GENERAL SERVICE 50-1000KW Non Interval	37,380	64,684	89,512	111,938	134,259
GENERAL SERVICE 50-1000KW Interval	32,771	57,538	80,453	101,447	122,573
GENERAL SERVICE 1000-1500KW	9,666	16,844	23,414	29,368	35,296
GENERAL SERVICE 1500-5000 KW	0	0	0	0	0
LARGE USER	0	0	0	0	0
STREETLIGHTING	0	0	0	0	0
MU	0	0	0	0	0
SENTINEL LIGHTS	0	0	0	0	0
TOTAL MWH SALES	107,269	186,267	258,685	324,517	390,349

2 9-Staff-6-2:

CDM

	2016	2017	2018	2019	2020
GENERAL SERVICE 50-1000KW Non Interval	5,215	10,723	16,118	20,642	25,146
GENERAL SERVICE 50-1000KW Interval	6,730	11,679	16,227	20,422	24,643
GENERAL SERVICE 1000-1500KW	1,825	3,220	4,506	5,663	6,814
GENERAL SERVICE 1500-5000 KW	0	0	0	0	0
STANDBY	0	0	0	0	0
LARGE USER	0	0	0	0	0
STREETLIGHTING	0	0	0	0	0
SENTINEL LIGHTS	0	0	0	0	0
TOTAL	13,770	25,622	36,851	46,727	56,603

4 Source: EB-2015-0004, Settlement Proposal, refiled December 7, 2015, Attachment 4

5 The LRAMVA threshold (kWh) in the Settlement Proposal is consistent with the cumulative
6 savings embedded in the 2016 to 2020 load forecasts.

7 9-Staff-6-3:

Table 1 - CDM Adjustment to Load Forecast (MWh)

	Yearly Target	Savings related to Current Year A	Savings Related to Previous Year B	Total Savings in Year A+B	Cumulative Savings
2014	42,400	7,611		7,611	7,611
2015	39,500	19,750	20,656	40,406	48,017
2016	79,000	39,500	19,750	59,250	107,267
2017	79,000	39,500	39,500	79,000	186,267
2018	65,833	32,917	39,500	72,417	258,684
2019	65,833	32,917	32,917	65,834	324,518
2020	65,833	32,917	32,917	65,834	390,352
2015 to 2020 CDM Impact				390,352	

2 Source: EB-2015-0004, IRR 3-VECC#27

3

4 Question(s):

5

6 a) Please reconcile the LRAMVA threshold (199,563 kW) in Tab 2 of the LRAMVA workform
7 with Table 2 in the preamble, and explain whether the LRAMVA threshold (kW) used in
8 the lost revenue calculation is correct.

9

10 b) Please provide the inputs and assumptions used to arrive at the class breakdown of
11 CDM adjustments of 199,543 kW for the GS>kW class.

12

13 c) For consistency, please revise Tab 2 of LRAMVA Workform E to show the LRAMVA
14 threshold (kWh) for all classes, in order to match the approved LRAMVA threshold of
15 107,267,000 kWh in 2016.

16

17 **RESPONSE:**

18

19 a) Hydro Ottawa has interpreted this interrogatory as intending to refer to the Lost Revenue
20 Adjustment Mechanism Variance Account ("LRAMVA") threshold in tab 2 as 191,563 kW.

1 In Attachment 4 of the Approved Settlement Agreement governing the utility's 2016-2020
2 rate term, three tables were provided in relation to Hydro Ottawa's Demand Forecast.
3 These tables were titled as follows:

- 4
- 5 • Hydro Ottawa Demand Forecast CDM Built In;
 - 6 • Hydro Ottawa Demand Forecast without CDM; and
 - 7 • CDM
- 8

9 In conducting its lost revenue calculation, Hydro Ottawa discovered that the second and
10 third tables in the above list/Attachment 4 of the Approved Settlement Agreement
11 contained data entry errors. More specifically, the third table (CDM) only presented a
12 single month's cumulative peak demand rather than the 12 months' billing sales peaks.
13 When these errors are corrected, the result is a higher threshold and a lower LRAM
14 claim in this Application than the tables presented in the above list/Approved Settlement
15 Agreement would produce.

16

17 Hydro Ottawa has prepared Tables A, B, and C below, which respectively correspond to
18 the first, second, and third tables in the foregoing list, as follows:

- 19
- 20 • Table A provides the demand forecast with CDM incorporated and is as
21 presented in Exhibit C-1-1: Load Forecast of the original evidence in the utility's
22 2016-2020 rate application,¹ as well as in the Approved Settlement Agreement.
23 The only modification to the table that has been made relative to the original
24 version is the addition of a column for the year 2015, which has been included to
25 more easily identify the cumulative balance from 2015. (A column for 2015 data
26 has likewise been included in Tables B and C as well).
- 27

28 ¹ Hydro Ottawa Limited, *2016-2020 Custom Incentive Rate-setting Distribution Rate Application*, EB-2015-0004 (April
29 29, 2015).

- 1 • Table B represents a revised version of the utility's Demand Forecast without
2 CDM.
3
4 • Table C represents a revised version of the utility's CDM thresholds (and is
5 calculated by subtracting the values in Table A from the values in Table B).

6

7 As noted above, the correction of the data entry errors results in a higher threshold and
8 a lower LRAM claim than the tables presented in the Approved Settlement Agreement
9 would produce.

10

11 The 2016 threshold in Table C matches the threshold presented in UPDATED
12 Attachment 4-5-2(E): OEB Workform - 2016 Adjustments - LRAM VA Workform.

1

Table A – Hydro Ottawa Demand Forecast CDM Built In

	2015	2016	2017	2018	2019	2020
General Service 50 to 1,000 kW Non Interval	3,693,048	3,533,354	3,406,354	3,301,064	3,208,582	3,123,291
General Service 50 to 1,000 kW Interval	2,618,770	2,725,183	2,740,805	2,766,375	2,798,890	2,835,076
General Service 1,000 to 1,499 kW	758,963	769,442	761,481	756,911	754,458	753,212
General Service 1,500 to 4,999 kW	1,885,562	1,847,365	1,877,691	1,916,044	1,957,009	2,001,525
Standby	4,800	4,800	4,800	4,800	4,800	4,800
Large User	1,121,629	1,121,449	1,119,726	1,118,300	1,115,702	1,112,342
Street Lighting	123,144	123,144	123,144	123,144	123,144	123,144
Sentinel Lighting	216	216	216	216	216	216
TOTAL	10,206,132	10,124,953	10,034,217	9,986,854	9,962,801	9,953,606

2

3

Table B – Hydro Ottawa Demand Forecast without CDM

	2015	2016	2017	2018	2019	2020
General Service 50 to 1,000 kW Non Interval	3,736,059	3,629,693	3,572,522	3,530,611	3,495,485	3,467,282
General Service 50 to 1,000 kW Interval	2,651,309	2,799,115	2,870,356	2,947,322	3,026,976	3,110,601
General Service 1,000 to 1,499 kW	768,413	790,734	798,525	808,360	818,972	830,735
General Service 1,500 to 4,999 kW	1,885,562	1,847,365	1,877,691	1,916,044	1,957,009	2,001,525
Standby	4,800	4,800	4,800	4,800	4,800	4,800
Large User	1,121,629	1,121,449	1,119,726	1,118,300	1,115,702	1,112,342
Street Lighting	123,144	123,144	123,144	123,144	123,144	123,144
Sentinel Lighting	216	216	216	216	216	216
TOTAL	10,291,132	10,316,516	10,366,980	10,448,797	10,542,304	10,650,645

4

1

Table C – CDM (Thresholds)

	2015	2016	2017	2018	2019	2020
General Service 50 to 1,000 kW Non Interval	43,011	96,339	166,168	229,547	286,903	343,991
General Service 50 to 1,000 kW Interval	32,539	73,932	129,551	180,947	228,086	275,525
General Service 1,000 to 1,499 kW	9,450	21,292	37,044	51,449	64,514	77,523
General Service 1,500 to 4,999 kW	0	0	0	0	0	0
Standby	0	0	0	0	0	0
Large User	0	0	0	0	0	0
Street Lighting	0	0	0	0	0	0
Sentinel Lighting	0	0	0	0	0	0
TOTAL	85,000	191,563	332,763	461,943	579,503	697,039

2

3 b) Please see the response to part (a) above.

4

5 c) Please see the response to interrogatory OEB-38 for a revised version of UPDATED
6 Attachment 4-5-2(E): OEB Workform - 2016 Adjustments - LRAM VA Workform related
7 to other interrogatory responses. This has been filed as excel Attachment OEB-38(O):
8 REVISED OEB Workform - 2016 Adjustments - LRAM VA Workform.

INTERROGATORY RESPONSE - OEB-174

9-Staff-7

EXHIBIT REFERENCE:

LRAMVA Workform E/Tab 8

SUBJECT AREA: Deferral and Variance Accounts

Preamble:

As part of the filing of 2019 actuals, Hydro Ottawa included street light demand savings amounting to a debit of \$12,301 (principal) as part of its 2016 lost revenue claim. The savings were achieved through the streetlight upgrades on a monthly basis, and detailed tables were provided to show the change in demand by type of bulb for several months of 2016.

Question(s):

- a) Please confirm whether street light demand savings were funded through the IESO saveOnEnergy retrofit program in 2016.
- b) Please confirm whether there were any street lighting upgrades completed outside of the IESO's saveOnEnergy Retrofit program that are counted in total billed demand. If yes, please quantify and remove the impact of these savings in the LRAMVA.
- c) If yes to a) above, please confirm whether the energy savings from street light projects have been deducted from the respective 2016 saveOnEnergy retrofit program. If not, please revise Tab 5 of LRAMVA Workform E to show that the 2016 retrofit program's energy savings (claimed in the LRAMVA) are exclusive of street light retrofits.

d) Please discuss whether Hydro Ottawa received reports from the City of Ottawa to confirm the number of bulbs, types of bulbs and timing of the bulbs replaced. If not, please discuss whether the number or wattage of bulb retrofits were validated.

e) Please confirm that the change in demand savings were tracked on a monthly basis; and thus, it is appropriate to multiple the monthly savings by the number of months the new bulbs were in-service for the remainder of the year.

f) Without a net-to-gross ratio (NTG) applied, savings from street light upgrades are gross values. Please explain why it is appropriate not to apply a free ridership assumption to municipal streetlighting projects. Alternatively, please discuss whether it is reasonable to apply a 85% NTG ratio¹ based on similar retrofit projects in Hydro Ottawa's service territory. Please make the necessary revision(s) to Tab 8, as applicable.

RESPONSE:

a) Hydro Ottawa confirms that the 2016 Street Light savings were funded through the IESO Save on Energy Retrofit Program.

b) Hydro Ottawa confirms that the number of lights included in the Lost Revenue Adjustment Mechanism ("LRAM") calculation matches the number of lights approved as part of the Retrofit Projects. The utility has only included demand savings for the number of lights in the approved projects.

c) Hydro Ottawa did not deduct the savings associated with the Save on Energy Retrofit Program. However, it was the utility's intention to allocate a percentage of savings to the Street Light Class. In reviewing the LRAM claim for purposes of this interrogatory, Hydro Ottawa notes that it had kept the 2015 percentage allocation when allocating 2016 savings for the Save on Energy Retrofit Program. Hydro Ottawa has updated the

¹ 2017 verified program results, Tab "LDC Progress", Col. FQ, NTG for the 2016 retrofit program

1 percentage allocation to the 2016 year and has removed the Street Light savings from
2 the percentage calculation, per the request to remove Street Light savings from the kWh
3 savings.

4

5 Hydro Ottawa adjusted the Retrofit Program by adding a negative adjustment to tab 7,
6 Persistence Report. In the Portfolio column, a note has been added to indicate the
7 adjustment in a manual one. In addition, the line has been changed to red font.

8

9 A revised version of UPDATED Attachment 4-5-2(E): OEB Workform - 2016 Adjustments
10 - LRAM VA Workform has been provided as part of the response to interrogatory
11 OEB-38. It has been filed as excel Attachment OEB-38(O): REVISED OEB Workform -
12 2016 Adjustments - LRAM VA Workform.

13

14 d) Hydro Ottawa confirms that it receives reports from the City of Ottawa which provide the
15 number of bulbs, types of bulbs, and timing of the bulbs replaced.

16

17 e) Hydro Ottawa tracks changes on a monthly basis. The utility used the 2018 year-end
18 database to support the 2016 LRAM claim. Hydro Ottawa has not reconciled the monthly
19 savings to the amount billed.

20

21 f) Hydro Ottawa has adjusted the 2016 LRAM claims to account for the net-to-gross ratio.
22 As per the response to part (c) above, a revised version of UPDATED Attachment
23 4-5-2(E): OEB Workform - 2016 Adjustments - LRAM VA Workform has been provided
24 as part of the response to interrogatory OEB-38. It has been filed as excel Attachment
25 OEB-38(O): REVISED OEB Workform - 2016 Adjustments - LRAM VA Workform.

INTERROGATORY RESPONSE - OEB-175

9-Staff-8

EXHIBIT REFERENCE:

LRAMVA Workforms A, B, C, D and E

Updated Exhibit 4/Tab 5/Schedule 2/p. 6/Table 3

SUBJECT AREA: Deferral and Variance Accounts

Question(s):

a) Please file the 2011-2015 Persistence Savings Report.

b) Please file updated LRAMVA workform(s) as requested in the above LRAMVA interrogatories or as one consolidated LRAMVA workform with all years inclusive, if this can be done. Please confirm the LRAMVA balance requested for disposition, the disposition period and the revised rate riders.

c) Please confirm any changes to the LRAMVA workform in response to these LRAMVA interrogatories in "Table A-2. Updates to LRAMVA Disposition (Tab 1-a)".

RESPONSE:

a) Hydro Ottawa is interpreting the interrogatory as requesting the 2011-2015 persistence as it relates to the 2011-2014 Framework. Please find appended to this interrogatory excel Attachment OEB-175(A): 2011-2014 Persistence Savings Report as provided by the IESO.

1 The 2015 persistence related to the 2015-2020 Framework has been provided in IESO
2 Annual Final Verified CDM Reports. It can be found in Attachment 4-5-1(B) of Hydro
3 Ottawa's original evidence submitted on February 10, 2020.

4

5 b) As described in the response to interrogatory OEB-168 part (c), Hydro Ottawa has not
6 been able to compile all LRAM claims into one file. Please see the response to
7 interrogatory OEB-38 and excel Attachments OEB-38(K) through (O) for updated LRAM
8 Workforms.

9

10 c) Hydro Ottawa has updated Table A-2. Please see the updates to LRAMVA Disposition
11 (Tab 1-a) for any changes to the LRAM Workforms, which are filed as Attachments
12 OEB-38(K) through (O).

INTERROGATORY RESPONSE - OEB-180

9-Staff-13

EXHIBIT REFERENCE:

Updated Exhibit 9/Tab 1/Schedule 3/Table 8 on page 20

Updated Exhibit 9/Tab 1/Schedule 1/Attachment A: DVA Workform

SUBJECT AREA: Deferral and Variance Accounts

Preamble:

As stated in Hydro Ottawa's 2019 Decision¹, Hydro Ottawa recorded \$1,384,801 in the Sub-account 1508 Earning Sharing Mechanism (ESM) in 2017 related to 2016 earnings.

As stated in Hydro Ottawa's 2020 Decision², Hydro Ottawa recorded \$2,149,000 in the Sub-account 1508 Earning Sharing Mechanism (ESM) in 2018 related to 2017 earnings.

In the current application, Hydro Ottawa presented the calculations for the 2016 ESM as a credit balance of \$1,309,000 and 2017 ESM as a credit balance of \$2,364,000.

Hydro Ottawa stated that no ESM was recorded related to 2018 earnings as it didn't over earn in 2018.

In the updated DVA Workform in the current application, Hydro Ottawa recorded a credit balance of \$1,384,801 (column AJ) and a credit balance of \$1,976,394 (column AT) in the transaction columns for 2017 and 2018 related to 2016 and 2017 ESM for a total credit principal amount of \$3,361,195. Hydro Ottawa also recorded a credit balance of \$311,490 (column BD) in the transaction column for 2019.

¹ EB-2018-0044, section 4 Base Rate Adjustment pp. 6-7

² EB-2019-0046, section 4 Base Rate Adjustment pp. 5-6

1 Question(s):

2

3 a) Please explain the differences and confirm the balances recorded in the Sub-account
4 1508 ESM related to 2016 and 2017 earnings

5

6 b) Please explain what the credit balance of \$311,490 relates to.

7

8 c) Please update the DVA Workform if necessary.

9

10 **RESPONSE:**

11

12 a) For clarity, the Deferral and Variance Account Workform ("DVA Workform") related to the
13 Earnings Sharing Mechanism ("ESM") has been completed in the same manner for this
14 Application as for the 2019 and 2020 annual rate adjustment applications. The relevant
15 credits identified above are the same credits as presented in the 2019 and 2020 DVA
16 Workforms provided in those rate applications. The amounts referenced in the decisions
17 relate to evidence presented in Exhibit 9-1-1: Current Deferral and Variance Accounts of
18 each rate adjustment application, which reflect annual Lost Revenue Adjustment
19 Mechanism ("LRAM") adjustments.

20

21 Hydro Ottawa adjusts the ESM to reflect revenue associated with LRAM adjustments in
22 the year to which they relate. As a result, if there is an LRAM adjustment that impacts a
23 previous year, the ESM is adjusted to reflect it. The amounts recorded in each year can
24 therefore include an adjustment for prior years.

25

26 In addition, Hydro Ottawa noted in the initial ESM recorded for 2016 that the calculation
27 did not include a PILS true-up for the LRAM adjustments. This was corrected with the
28 adjustments recorded in 2018.

- 1 Any change to the LRAM calculation for 2016 as part of this proceeding will result in a
2 change to the ESM calculation.
3
- 4 b) The amount of \$311,490 recorded in 2019 relates to LRAM adjustments for 2016 and
5 2017. As part of the response to interrogatory CCC-78, Hydro Ottawa corrected data
6 entry errors in the ESM table (Table 4 in UPDATED Exhibit 9-1-3: Group 2 Accounts).
7
- 8 c) No adjustment to the DVA Workform is necessary as part of this interrogatory response.