

**Hydro One Networks Inc.**

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**Frank D'Andrea**

Vice President, Reliability Standards and Chief Regulatory Officer

BY EMAIL AND RESS

October 25, 2021

Ms. Christine E. Long  
Registrar  
Ontario Energy Board  
Suite 2700, 2300 Yonge Street  
P.O. Box 2319  
Toronto, ON M4P 1E4

Dear Ms. Long:

**EB-2021-0032 – Hydro One Networks' 2018-2022 Distribution Rate Application – 2022 Annual Rate Update – Application and Evidence OEB Staff Questions**

Hydro One Networks Inc. is submitting written responses to the Ontario Energy Board ("OEB") staff questions on Hydro One Networks' Distribution Rate Application - 2022 Annual Update.

An electronic copy of the responses has been submitted using the Board's Regulatory Electronic Submission System.

Sincerely,

A handwritten signature in black ink that reads "Frank D'Andrea". The signature is written in a cursive, flowing style.

Frank D'Andrea

**OEB STAFF QUESTION #1****OEB Staff - 1****Ref: 1) EB-2017-0049, Exhibit H1, Tab 1, Schedule 1, P. 24****2) Manager's Summary, p. 21**

In the 2018-2022 Custom IR application, Hydro One projected the 2022 Customer Supplied Transformer Allowance (CSTA) to be \$985,709. In the current application, Hydro One has forecasted and requested to recover a CSTA credit of \$687,211 for 2022.

a) Please explain the discrepancy between the 2018-2022 Custom IR application and this application and provide the calculations for the 2022 CSTA amount as requested in the current application.

**Response:**

In EB-2017-0049, Hydro One proposed the integration of the Acquired Utilities (Norfolk, Haldimand and Woodstock) into its rate structure effective January 1, 2021. In the referenced exhibit, the calculated 2022 Customer Supplied Transformer Allowance (CSTA) of \$985,709 included amounts for customers of the Acquired Utilities. As the integration was not approved by the OEB,<sup>1</sup> the CSTA amount of \$687,211 in the current application excludes amounts for those customers.

The calculation of the 2022 CSTA is shown in the table below.

Total kW for CSTA	CSTA Rate (\$/kW)	CSTA Credit Amount to be Recovered (\$)
(A)	(B)	(C = A*B)
1,145,351	0.6	687,211

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<sup>1</sup> EB-2017-0049, Decision and Order, March 7, 2019, Page 39.

## OEB STAFF QUESTION #2

### OEB Staff - 2

#### Ref: Manager's Summary, p. 22

The total bill impacts for low consumption Seasonal customers exceed 10%.

- a) Please explain if Hydro One has a mitigation plan for these customers. If no, please explain why a mitigation plan is not required.

#### Response:

In its Decision and Order in EB-2015-0079, the OEB ordered an eight-year transition period for the R1, R2 and Seasonal customer classes<sup>1</sup> to limit the transition period to a reasonable length while balancing the bill impact for low volume customers. Hydro One proposes to continue to transition the Seasonal class towards a fully fixed rate structure consistent with the OEB's decision in that proceeding.

The bill impact for low consumption Seasonal customers is predominantly driven by the transition to a fully fixed rate structure. Hydro One is not proposing a mitigation plan in this application as extending the transition period beyond eight years would further exacerbate the bill impact for low volume Seasonal customers moving to the R2 class when the Seasonal class is eliminated.<sup>2</sup>

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<sup>1</sup> EB-2015-0079, Decision and Order, December 22, 2015, Page 7

<sup>2</sup> EB-2019-0234/EB-2016-0315, Hydro One Report on Elimination of the Seasonal Class, October 15, 2020 Update, page 44, section 8.3, footnote #33

**OEB STAFF QUESTION #3**

**OEB Staff - 3**

**Ref: Manager's Summary, Tab 4**

OEB staff notes that the Retail Service Charges in Hydro One's proposed 2022 Tariff is the same as Hydro One's current 2021 Tariff, i.e. the Retail Service Charges have not been adjusted for inflation.

- a) Please confirm if Hydro One is requesting an inflationary increase to its Retail Service Charges. If yes, please ensure that the draft tariff correctly reflects the updated inflation-adjusted Retail Service Charges after the OEB issues the 2022 inflation factor (excluding the wireline pole attachment charge).

**Response:**

Confirmed.

Hydro One will ensure that the 2022 inflation factor is reflected in the Retail Service Charges once the OEB issues the 2022 inflation factor.

**OEB STAFF QUESTION #4**

**OEB Staff - 4**

**Ref: 1) Manager's Summary, p. 23**  
**2) EB-2017-0049, Exhibit H1, Tab 2, Schedule 3**

Hydro One provided the above reference to the 2018-2022 Custom IR application which shows updates to the Specific Service Charges for 2022. Within that schedule, OEB staff was unable to find the updates to the charges pertaining to "Specific Charge for LDCs Access to the Power Poles (\$/pole/year)" and "Specific Charge for Generator Access to the Power Poles (\$/pole/year)."

a) Please provide the calculations for the updates to the specific charges noted above.

**Response:**

The calculations for the updates to the specific charges pertaining to "Specific Charge for LDCs Access to the Power Poles (\$/pole/year)" and "Specific Charge for Generator Access to the Power Poles (\$/pole/year)" can be found in Exhibit H1, Tab 2, Schedule 3, Table 4 (page 107 of 112) and Table 5 (page 110 of 112) in the updated evidence filed in EB-2017-0049 on June 26, 2018, which is also included as Attachment 1 to this response.

**Hydro One Networks Inc.**

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**Frank D'Andrea**

Vice President  
Regulatory Affairs

BY COURIER

June 26, 2018

Ms. Kirsten Walli  
Board Secretary  
Ontario Energy Board  
Suite 2700, 2300 Yonge Street  
P.O. Box 2319  
Toronto, ON, M4P 1E4

Dear Ms. Walli,

**EB-2017-0049 Hydro One Networks Inc. 2018-2022 Distribution Custom IR Application  
(the "Application") – Corrections to Evidence**

Please find enclosed corrections to Exhibit H1-02-03, Interrogatories I-45-CME-067 and I-46-Staff-219, and an update to Table 4 in Exhibit E1-01-02 to reflect the impact of the Fair Hydro Plan on the late payment charges revenue forecast.

This filing has been submitted electronically using the Board's Regulatory Electronic Submission System and two (2) hard copies will be sent via courier.

Sincerely,

ORIGINAL SIGNED BY FRANK D'ANDREA

Frank D'Andrea

Enc.

## **SPECIFIC SERVICE CHARGES**

### **1. INTRODUCTION**

Specific Service Charges are charges for specific services over and above the standard level of service as defined by the Distribution System Code. Each miscellaneous service has an OEB-approved fixed rate and is charged to a customer based on a customer's request or as the result of a customer's action or inaction that would impose a cost on Hydro One.

In its last distribution rate filing (EB-2013-0416), Hydro One proposed rates for miscellaneous services in Exhibit G2, Tab 5, Schedule 1 of that application. The rationale was that regular distribution rates only recover costs of providing standard distribution services. In its Decision issued on March 12, 2015 in relation to EB-2013-0416, the OEB directed Hydro One to file with this Application a study assessing whether its Specific Service Charges reflect its underlying costs to perform those services ("the Time Study") and propose changes accordingly. Hydro One has completed the Time Study and proposes the new charges detailed in this Exhibit.

### **2. THE STUDY**

In response to the OEB's direction, with the support of Elenchus Research Associates Inc., Hydro One completed a year-long time study of the tasks involved in providing miscellaneous services and the associated costs, including labour rates and burdens, fleet costs, material costs and pass-through charges. The charges studied included those included in Chapter 11 of the OEB's *2006 Electricity Distribution Rate Handbook* (the "Rate Handbook").

1 Hydro One used the approaches found in Chapter 11 of the Rate Handbook to define the  
2 level of the charge to bill the customer. The Study details its context and methodology  
3 and is included as Attachment 1 to this Exhibit.

4  
5 **3. THE PROPOSED SPECIFIC SERVICE CHARGES**

6  
7 A summary of all the proposed 2018-2022 charges can be found in Table 1 of this Exhibit  
8 (Schedule 11-1 of the Rate Handbook). Descriptions of the miscellaneous services (as  
9 found in Attachment 1 of this Exhibit) and details of the methodology used to determine  
10 the charges are provided in Appendices A and B to this Exhibit. Except where identified,  
11 the proposed charges align with the associated labour and materials identified in the Time  
12 Study.

13  
14 In Appendices A and B, the Specific Service Charge for each service is based on average  
15 elapsed hours required to carry out the work, as well as burdened labour rates, vehicle  
16 costs, and material. Refer to Exhibit E1, Tab 1, Schedule 2, and Table 2 of this Exhibit  
17 (“Capital Contributions”) for a summary of the historical volumes along with 2018-2022  
18 forecasted volumes and projected revenues for each service.

19  
20 Appendix A: Charges listed in Chapter 11 of the 2006 Rate Handbook and updated as  
21 per the Time Study.

22  
23 Appendix B: Hydro One-specific charges, primarily calculated based on labour, as per  
24 the Time Study.

25  
26 Appendix C: Hydro One-specific charges, calculated as per previously approved OEB  
27 methodology.



- 1 For the services listed in Appendix C, Specific Service Charges are determined by
- 2 methodologies that take into account the value of assets, volumes of those assets and the
- 3 costs associated with the maintenance of those assets.

**Table 1: Schedule 11-1 Specific Service Charges: Standard Amounts**

(\* indicates charges which reflect the average cost over the forecast period)

OEB Rate Code	Specific Service Charge Standard Name	Calculation Method	Currently Approved Rate	2018 Charge	2019 Charge	2020 Charge	2021 Charge	2022 Charge
1	Arrears Certificate	As described in Time Study (See Attachment 1)	N/A	N/A	N/A	N/A	N/A	N/A
2	Statement of Account*		\$15.00	\$13.00	\$13.00	\$13.00	\$13.00	\$13.00
3	Pulling post-dated cheques		\$15.00	N/A	N/A	N/A	N/A	N/A
4	Duplicate Invoices for Previous Billing*		\$15.00	\$13.00	\$13.00	\$13.00	\$13.00	\$13.00
5	Request for Other Billing Information*		\$15.00	\$13.00	\$13.00	\$13.00	\$13.00	\$13.00
6a	Easement Letter – Letter Request		\$15.00	\$86.90	\$88.29	\$89.67	\$91.12	\$92.51
6b	Easement Letter - Web Request		\$15.00	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00
7	Income Tax Letter*		\$15.00	\$13.00	\$13.00	\$13.00	\$13.00	\$13.00
8	Notification Charge		\$15.00	N/A	N/A	N/A	N/A	N/A
9	Account History*		\$15.00	\$13.00	\$13.00	\$13.00	\$13.00	\$13.00
10	Credit Reference/Credit Check *		\$15.00 plus Credit Agency Costs	\$13.00	\$13.00	\$13.00	\$13.00	\$13.00
11	Returned Cheque Charge*		\$15.00	\$7.00	\$7.00	\$7.00	\$7.00	\$7.00
12	Charge to Certify Cheque		\$15.00	N/A	N/A	N/A	N/A	N/A
13	Legal Letter Charge		\$15.00	N/A	N/A	N/A	N/A	N/A

14	Account Set Up Charge/Change of Occupancy Charge (Plus Credit Agency Costs, if applicable)*		\$30.00	\$38.00	\$38.00	\$38.00	\$38.00	\$38.00
15	Special Meter Reads*		\$30.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00
16	Collection of Account Charge – No Disconnection*		\$30.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00
17	Collection of Account Charge – No Disconnection – After Regular Hours		\$165.00	N/A	N/A	N/A	N/A	N/A
18 & 19	Collection – Disconnect/Reconnect at Meter & Install/Remove Load Control Device – During Regular Hours*		\$65.00	\$120.00	\$120.00	\$120.00	\$120.00	\$120.00
20 & 21	Collection – Disconnect/Reconnect at Meter & Install/Remove Load Control Device – After Regular Hours*		\$185.00	\$430.00	\$430.00	\$430.00	\$430.00	\$430.00
22	Collection – Disconnect/Reconnect at Pole – During Regular Hours*		\$185.00	\$320.00	\$320.00	\$320.00	\$320.00	\$320.00
23	Collection – Disconnect/Reconnect at Pole – After Regular Hours*		\$415.00	\$850.00	\$850.00	\$850.00	\$850.00	\$850.00
24	Meter Dispute Charge – Measurement Canada*		\$30.00	\$290.00 plus Measurement Canada fees	\$290.00 plus Measurement Canada fees	\$290.00 plus Measurement Canada fees	\$290.00 plus Measurement Canada fees	\$290.00 plus Measurement Canada fees
25	Service Call – Customer Owned Equipment – During Regular Hours		\$30.00	\$210.00	\$210.00	\$210.00	\$210.00	\$210.00
26	Service Call – Customer Owned Equipment – After Regular Hours		\$165.00	\$775.00	\$775.00	\$775.00	\$775.00	\$775.00
27	Temporary Service Install & Remove – Overhead – No Transformer		\$500.00	N/A	N/A	N/A	N/A	N/A

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28	Temporary Service Install & Remove – Underground – No Transformer		\$300.00	N/A	N/A	N/A	N/A	N/A
29	Temporary Service Install & Remove – Overhead – With Transformer		\$1,000.00	N/A	N/A	N/A	N/A	N/A
30	Specific Charge for Access to Power Poles – Telecom*		\$41.28	\$47.43	\$48.16	\$48.90	\$49.65	\$50.40
31a	Vacant Premise – Move in with Reconnect of Electrical Service at Meter*		NEW	\$95.00	\$95.00	\$95.00	\$95.00	\$95.00
31b	Vacant Premise – Move in with Reconnect of Electrical Service at Pole		NEW	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00
32	Reconnect Completed after Regular Hours (Customer/Contract Driven) – at Meter*		NEW	\$245.00	\$245.00	\$245.00	\$245.00	\$245.00
33	Reconnect Completed after Regular Hours (Customer/Contract) Driven) – at Pole*		NEW	\$475.00	\$475.00	\$475.00	\$475.00	\$475.00
34 & 35	Additional Service Layout Fee – Basic/Complex (more than one hour)		\$635/\$845	\$561.08	\$569.51	\$577.91	\$586.72	\$595.20
36	Pipeline Crossings		\$2,540.00	\$2,363.12	\$2,396.75	\$2,430.28	\$2,465.43	\$2,499.29
37	Water Crossings		\$3,225.00	\$3,522.56	\$3,570.65	\$3,618.57	\$3,668.82	\$3,717.21
38	Railway Crossings		\$6,095.00	\$4,690.71 plus Railway Feedthrough Costs	\$4,760.48 plus Railway Feedthrough Costs	\$4,830.33 plus Railway Feedthrough Costs	\$4,899.24 plus Railway Feedthrough Costs	\$4,965.66 plus Railway Feedthrough Costs
39a	Overhead Line Staking Per Meter		\$4.95	\$4.17	\$4.24	\$4.30	\$4.36	\$4.42
39b	Underground Line Staking Per Meter		\$4.95	\$3.00	\$3.05	\$3.09	\$3.14	\$3.18
39c	Subcable Line Staking Per Meter		\$4.95	\$2.62	\$2.66	\$2.70	\$2.74	\$2.78

40	Central Metering – New Service <45 kW		\$120.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00
41	Conversion to Central Metering <45 kW		\$1,035.00	\$1,534.07	\$1,553.47	\$1,572.92	\$1,593.19	\$1,612.75
42	Conversion to Central Metering ≥45 kW		\$915.00	\$1,434.07	\$1,453.47	\$1,472.92	\$1,493.19	\$1,512.75
43	Tingle/Stray Voltage Test – excess of 4 hours, if customer equipment is defective		\$140.00	N/A	N/A	N/A	N/A	N/A
44	Standby Administration Charge		N/A	N/A	N/A	N/A	N/A	N/A
45a	Connection Impact Assessments – Net Metering		\$5,620.00	\$3,146.11	\$3,192.85	\$3,239.70	\$3,285.66	\$3,329.86
45b	Connection Impact Assessments – Embedded LDC Generators		\$5,620.00	\$2,825.21	\$2,873.57	\$2,921.93	\$2,960.07	\$2,996.97
45c	Connection Impact Assessments – Small Projects ≤ 500 kW		\$5,620.00	\$3,216.36	\$3,266.07	\$3,315.83	\$3,361.46	\$3,405.38
45d	Connection Impact Assessments – Small Projects ≤ 500 kW, Simplified		\$5,620.00	\$1,941.06	\$1,971.27	\$2,001.42	\$2,028.44	\$2,054.41
45e	Connection Impact Assessments – Greater than Capacity Allocation Exempt Projects – Capacity Allocation Required Projects		\$12,055.00	\$8,518.75	\$8,641.91	\$8,765.05	\$8,890.57	\$9,011.83
45f	Connection Impact Assessments – Greater than Capacity Allocation Exempt Projects – TS Review for LDC Capacity Allocation Required Projects		\$12,055.00	\$5,637.93	\$5,727.89	\$5,817.80	\$5,895.15	\$5,969.89
46a	Retailer Services – Establishing Service Agreements (rates as per the Handbook)		\$100/agreement/ Retailer +\$20/month/ Retailer +\$0.50/month/ customer + other	\$100/agreement/ Retailer +\$20/month/ Retailer +\$0.50/month/ customer + other	\$100/agreement/ Retailer +\$20/month/Retailer +\$0.50/month/ customer + other	\$100/agreement/ Retailer +\$20/month/ Retailer +\$0.50/month/ customer + other	\$100/agreement /Retailer +\$20/month/ Retailer +\$0.50/month/ customer + other	\$100/agreement/Retailer +\$20/month/ Retailer +\$0.50/month/ customer + other
46b	Retailer Services – Other (includes Bill Ready for Retailers)		\$0.30/month/ customer +	\$0.30/month/ customer +	\$0.30/month/ customer +	\$0.30/month/ customer +	\$0.30/month/ customer +	\$0.30/month/ customer +

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	and Service Transaction Requests) as per the Handbook		\$0.25/request for request fee + \$0.50/request for process fee	\$0.25/request for request fee + \$0.50/request for process fee	\$0.25/request for request fee + \$0.50/request for process fee	\$0.25/request for request fee + \$0.50/request for process fee	\$0.25/request for request fee + \$0.50/request for process fee	\$0.25/request for request fee + \$0.50/request for process fee
47	Specific Charge for Access to Power Poles – LDC (for 10' of power space)*		\$47.82	\$85.25	\$86.56	\$87.90	\$89.24	\$90.60
48	Specific Charge for Access to Power Poles – Generators (for 10' of power space)*		\$47.82	\$85.25	\$86.56	\$87.90	\$89.24	\$90.60
49	Specific Charge for Access to Power Poles – Municipal Streetlights		\$2.04	\$2.04	\$2.04	\$2.04	\$2.04	\$2.04
50	Sentinel Light Rental Charge		\$9.51	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00
51	Sentinel Light Pole Rental Charge		\$4.15	\$7.00	\$7.00	\$7.00	\$7.00	\$7.00
52	Late Payment Charge		1.5%/month	1.5%/month	1.5%/month	1.5%/month	1.5%/month	1.5%/month

1 \*Updated to incorporate modified productivity factor (as per Exhibit A, Tab 3, Schedule 2) and 2016 actual cost data.

1

**Table 2: Capital Contributions**

Rate Code	Description					Bridge Year		Test Years									
		2013	2014	2015	2016	2017		2018		2019		2020		2021		2022	
		Volume	Volume	Volume	Volume	Volume Forecast	Proposed Capital	Volume Forecast	Proposed Capital	Volume Forecast	Proposed Capital	Volume Forecast	Proposed Capital	Volume Forecast	Proposed Capital	Volume Forecast	Proposed Capital
34 & 35	Additional Service Layout Fee – Basic/Complex (More than One Hour)	N/A	N/A	N/A	141	144	\$92,649.60	144	\$80,795.52	144	\$82,009.44	144	\$83,219.04	144	\$84,487.68	144	\$85,708.80
36	Crossing Application – Pipeline	N/A	N/A	N/A	0	1	\$2,540.00	1	\$2,363.12	1	\$2,396.75	1	\$2,430.28	1	\$2,465.43	1	\$2,499.29
37	Crossing Application – Water	N/A	N/A	N/A	0	1	\$3,225.00	1	\$3,522.56	1	\$3,570.65	1	\$3,618.57	1	\$3,668.82	1	\$3,717.21
38	Crossing Application – Railroad (Plus Railway Feedthrough Costs)	33	N/A	N/A	27	30	\$179,802.50	30	\$134,203.47	30	\$133,099.87	30	\$134,936.54	30	\$136,785.01	30	\$138,672.72
39a	Overhead Line Staking – per meter	81,200	86,800	137,900	108,031	97,650	\$483,367.50	97,650	\$407,200.50	97,650	\$414,036.00	97,650	\$419,895.00	97,650	\$425,754.00	97,650	\$431,613.00
39b	Underground Line Staking – per meter	34,800	37,200	59,100	46,299	41,850	\$207,157.50	41,850	\$125,550.00	41,850	\$127,642.50	41,850	\$129,316.50	41,850	\$131,409.00	41,850	\$133,083.00
39c	Subcable Line Staking – per meter	6,650	4,150	8,430	7,130	6,365	\$31,506.75	6,365	\$16,676.30	6,365	\$16,930.90	6,365	\$17,185.50	6,365	\$17,440.10	6,365	\$17,694.70
40	Central Metering – New service < 45 kW	148*	345*	387*	261*	796	\$95,520.00	796	\$79,600.00	796	\$79,600.00	796	\$79,600.00	796	\$79,600.00	796	\$79,600.00
41	Conversion to Central Metering < 45 kW	122*	285*	277*	241*	824	\$865,200.00	824	\$1,264,077.70	824	\$1,280,063.05	824	\$1,296,082.66	824	\$1,312,791.18	824	\$1,328,907.21
42	Conversion to Central Metering >= 45 kW	19*	67*	84*	72*	53	\$49,290.00	53	\$76,005.97	53	\$77,034.15	53	\$78,064.54	53	\$79,139.24	53	\$80,175.83
	<b>Total Capital Contributions</b>						<b>\$1,000,248.85</b>		<b>\$2,189,995.14</b>		<b>\$2,216,383.32</b>		<b>\$2,244,348.63</b>		<b>\$2,273,540.46</b>		<b>\$2,301,671.76</b>

2 \*Data unavailable at the time the Application was originally filed.

## **APPENDIX A**

The charges described in this section are listed in the Rate Handbook. Most of these charges are calculated based on the labour required to perform the work, as per the Time Study.

### **1. SPECIFIC SERVICE CHARGES: STANDARD FORMULAE, UPDATED AMOUNTS**

#### **1.1 SPECIFIC SERVICE CHARGES IN SCHEDULE 11-2(A) OF THE RATE HANDBOOK**

Hydro One determined the costs for these services using the OEB-approved methodology, adjusting for the labour hours and materials reported in the Time Study. It found that the costs to provide some of these services were higher or lower than the charges prescribed by the Handbook.

Hydro One provides a number of customer services described in Appendix A and Schedule 11-2 of the Rate Handbook. For these services, identified by the OEB rate codes 1 to 24 (excluding 6a), Hydro One proposes to charge customers flat fees over the 2018-2022 period in order to align with Hydro One's customer-friendly policies and avoid customer confusion. Furthermore, implementing changes to the following systems and processes on an annual basis would be costly: Hydro One's Customer Information System ("CIS"), customer correspondence, Hydro One's website and self-service portal, agent training, and internal work instructions.

In each case, the proposed fee is an average of the cost to provide the service over the 2018-2022 period, as indicated by the Time Study, rounded down to the nearest



1 dollar. For clarity, external revenue projections (as outlined in Exhibit E1, Tab 1,  
2 Schedule 2) are based on the actual cost to provide the service as indicated by the Time  
3 Study. As such, any corresponding revenue impacts would be borne by Hydro One and  
4 would not affect ratepayers. No cross-subsidy from ratepayers would occur.

5  
6 Hydro One does not offer the following services identified in the Rate Handbook for the  
7 reasons indicated below.

- 8
- 9 **1. Arrears Certificate (Rate Code 1)** – Prior to 2005 and market restructuring, Ontario  
10 Hydro recovered unpaid final bill arrears from property owners through the municipal  
11 property tax roll under the *Public Utilities Act*. Market restructuring brought about the  
12 corporatization of the distribution sector and removed this tool to collect arrears. The  
13 former practice was to provide an "arrears certificate" to the purchaser's solicitor to  
14 advise of any registered hydro liens and a final bill estimate for a hold back of funds if  
15 required. Hydro One no longer offers this service.
  - 16 **2. Pulling Post-Dated Cheques (Rate Code 3)** - Customers may elect to send Hydro One  
17 post-dated cheques at the beginning of the year. Hydro One's systems are unable to  
18 retrieve or pull post-dated cheques. Therefore, Hydro One does not offer this service,  
19 and customers must issue a stop payment on the cheque(s).
  - 20 **3. Notification Charge (Rate Code 8)** - Hydro One is unable to ascertain the definition of  
21 this service and has never charged this fee.
  - 22 **4. Charge to Certify Cheque (Rate Code 12)** – Hydro One does not perform this service.
  - 23 **5. Collection of Account Charge – No Disconnection – After Regular Hours (Rate**  
24 **Code 17)** - Hydro One does not perform collection tasks after regular hours. The cost of  
25 overtime to perform this service after regular hours would add to the underlying costs and  
26 may add further hardship to a customer.

1           **1.1.1    STATEMENT OF ACCOUNT (RATE CODE 2)**

2

3   Statements of account are used to satisfy customer requests for support documentation for  
4   income tax purposes and to satisfy requests for other billing information.

1

**Table 1: Statement of Account**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/ Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/ Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	2	Statement of Account	Direct Labour - Clerical	\$80.08	0.11	-	\$8.81	\$4.72		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	53.60%					<b>\$13.53</b>					<b>\$0.80</b>	<b>\$14.33</b>	<b>\$13.00</b>
2019	2	Statement of Account	Direct Labour - Clerical	\$81.00	0.11	-	\$8.91	\$4.84		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	54.30%					<b>\$13.75</b>					<b>\$0.80</b>	<b>\$14.55</b>	<b>\$13.00</b>
2020	2	Statement of Account	Direct Labour - Clerical	\$81.96	0.11	-	\$9.02	\$4.95		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	54.90%					<b>\$13.97</b>					<b>\$0.80</b>	<b>\$14.77</b>	<b>\$13.00</b>
2021	2	Statement of Account	Direct Labour - Clerical	\$82.92	0.11	-	\$9.12	\$5.07		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	55.60%					<b>\$14.19</b>					<b>\$0.80</b>	<b>\$14.99</b>	<b>\$13.00</b>
2022	2	Statement of Account	Direct Labour - Clerical	\$84.20	0.11	-	\$9.26	\$5.15		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	55.60%					<b>\$14.41</b>					<b>\$0.80</b>	<b>\$15.21</b>	<b>\$13.00</b>

1           **1.1.2    DUPLICATE INVOICES FOR PREVIOUS BILLING (RATE CODE**  
2                           **4)**

3

4    A customer may request a duplicate invoice to replace a lost or misplaced invoice or to  
5    satisfy the request for other billing information.

1 **Table 2: Duplicate Invoices for Previous Billing**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	4	Duplicate Invoices for Previous Billing	Direct Labour - Clerical	\$80.08	0.10		\$8.01	\$4.29		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	53.60%					<b>\$12.30</b>					<b>\$0.80</b>	<b>\$13.10</b>	<b>\$13.00</b>
2019	4	Duplicate Invoices for Previous Billing	Direct Labour - Clerical	\$81.00	0.10		\$8.10	\$4.40		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	54.30%					<b>\$12.50</b>					<b>\$0.80</b>	<b>\$13.30</b>	<b>\$13.00</b>
2020	4	Duplicate Invoices for Previous Billing	Direct Labour - Clerical	\$81.96	0.10		\$8.20	\$4.50		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	54.90%					<b>\$12.70</b>					<b>\$0.80</b>	<b>\$13.50</b>	<b>\$13.00</b>
2021	4	Duplicate Invoices for Previous Billing	Direct Labour - Clerical	\$82.92	0.10		\$8.29	\$4.61		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	55.60%					<b>\$12.90</b>					<b>\$0.80</b>	<b>\$13.70</b>	<b>\$13.00</b>
2022	4	Duplicate Invoices for Previous Billing	Direct Labour - Clerical	\$84.20	0.10		\$8.42	\$4.68		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	55.60%					<b>\$13.10</b>					<b>\$0.80</b>	<b>\$13.90</b>	<b>\$13.00</b>

- 1           **1.1.3   REQUEST FOR OTHER BILLING INFORMATION (RATE CODE**
- 2                           **5)**
- 3
- 4   A customer may request other billing information for a variety of reasons.
- 5

1

**Table 3: Request for Other Billing Information**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	5	Request for Other Billing Information	Direct Labour - Clerical	\$80.08	0.11		\$8.81	\$4.72		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	53.60%					<b>\$13.53</b>					<b>\$0.80</b>	<b>\$14.33</b>	<b>\$13.00</b>
2019	5	Request for Other Billing Information	Direct Labour - Clerical	\$81.00	0.11		\$8.91	\$4.84		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	54.30%					<b>\$13.75</b>					<b>\$0.80</b>	<b>\$14.55</b>	<b>\$13.00</b>
2020	5	Request for Other Billing Information	Direct Labour - Clerical	\$81.96	0.11		\$9.02	\$4.95		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	54.90%					<b>\$13.97</b>					<b>\$0.80</b>	<b>\$14.77</b>	<b>\$13.00</b>
2021	5	Request for Other Billing Information	Direct Labour - Clerical	\$82.92	0.11		\$9.12	\$5.07		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	55.60%					<b>\$14.19</b>					<b>\$0.80</b>	<b>\$14.99</b>	<b>\$13.00</b>
2022	5	Request for Other Billing Information	Direct Labour - Clerical	\$84.20	0.11		\$9.26	\$5.15		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	55.60%					<b>\$14.41</b>					<b>\$0.80</b>	<b>\$15.21</b>	<b>\$13.00</b>

1           **1.1.4   EASEMENT LETTERS (RATE CODE 6)**

2  
3   An easement or right-of-way is an agreement that confers on an individual, company or  
4   municipality the right to use a landowner's property in some way. While these agreements  
5   grant rights, they also have the effect of partially restricting an owner's use of the affected  
6   portions of land. The holder (beneficiary or grantee) of an easement or right-of-way holds  
7   certain rights regarding usage of the property described in the agreement. The holder's rights  
8   of use are described and restricted by the agreement. The landowner continues to own the  
9   land and has only given up defined rights on the portion of land used for the right-of-way or  
10   easement. The Hydro One Easement / Real Estate department deals with payments and  
11   issues related to new easement and unregistered easements only. Search for unregistered  
12   easements can be conducted on-line or by sending a letter of request to Hydro One with a  
13   legal description of the property in question.

14  
15                   **1.1.4.1           EASEMENT LETTER – LETTER REQUESTS (RATE**  
16                   **CODE 6A)**

17  
18   Based on the Time Study, the proposal is to increase the easement letter charge (for when the  
19   request is made by letter to the Real Estate department) to the applicable rates as seen in  
20   Table 4.



1 **Table 4: Easement Letters – Letter Requests**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/ Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/ Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	6a	Easement Letters - Letter Requests	Direct Labour - Clerical	\$80.08	0.70		\$56.06	\$30.05		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	53.60%					<b>\$86.10</b>					<b>\$0.80</b>	<b>\$86.90</b>	<b>\$86.90</b>
2019	6a	Easement Letters - Letter Requests	Direct Labour - Clerical	\$81.00	0.70		\$56.70	\$30.79		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	54.30%					<b>\$87.49</b>					<b>\$0.80</b>	<b>\$88.29</b>	<b>\$88.29</b>
2020	6a	Easement Letters - Letter Requests	Direct Labour - Clerical	\$81.96	0.70		\$57.37	\$31.50		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	54.90%					<b>\$88.87</b>					<b>\$0.80</b>	<b>\$89.67</b>	<b>\$89.67</b>
2021	6a	Easement Letters - Letter Requests	Direct Labour - Clerical	\$82.92	0.70		\$58.04	\$32.27		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	55.60%					<b>\$90.32</b>					<b>\$0.80</b>	<b>\$91.12</b>	<b>\$91.12</b>
2022	6a	Easement Letters - Letter Requests	Direct Labour - Clerical	\$84.20	0.70		\$58.94	\$32.77		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	55.60%					<b>\$91.71</b>					<b>\$0.80</b>	<b>\$92.51</b>	<b>\$92.51</b>

**1.1.4.2 EASEMENT LETTERS – WEB REQUESTS (RATE CODE 6B)**

Hydro One currently charges \$25 for web-based easement searches to cover the costs of web development, maintenance, data updates (i.e. as utilities are acquired), planned enhancements, e-billing services and credit card fees. Hydro One has continued to charge the historical fee of \$25 that Ontario Hydro had been charging for easement letters irrespective of whether it was an easement letter request or self-initiated web inquiry. This provides parties with an equal cost for inquiries irrespective of source option. This fee did not reflect either the true cost of responding to letter inquiries, which based on the Time Study should be a charge of approximately \$90, or the cost to develop the web application.

The initial development cost of the web application was approximately \$500,000 with an annual maintenance cost of \$10,000 to \$20,000 for database management. On a present value basis and considering future enhancements of approximately \$100,000, such as a GIS search interface and expanded payment capabilities, the costs are not estimated to be fully recovered until 2022 at the present rate of \$25 per inquiry. More so, the future enhancements in 2018 are considered key to the forecast for easement letters in the forecast period.

**1.1.5 INCOME TAX LETTERS (RATE CODE 7)**

An income tax letter is usually used to satisfy customer requests for support documentation for income tax purposes.

1

**Table 5: Income Tax Letters**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	7	Income Tax Letters	Direct Labour - Clerical	\$80.08	0.10		\$8.01	\$4.29		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	53.60%					<b>\$12.30</b>					<b>\$0.80</b>	<b>\$13.10</b>	<b>\$13.00</b>
2019	7	Income Tax Letters	Direct Labour - Clerical	\$81.00	0.10		\$8.10	\$4.40		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	54.30%					<b>\$12.50</b>					<b>\$0.80</b>	<b>\$13.30</b>	<b>\$13.00</b>
2020	7	Income Tax Letters	Direct Labour - Clerical	\$81.96	0.10		\$8.20	\$4.50		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	54.90%					<b>\$12.70</b>					<b>\$0.80</b>	<b>\$13.50</b>	<b>\$13.00</b>
2021	7	Income Tax Letters	Direct Labour - Clerical	\$82.92	0.10		\$8.29	\$4.61		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	55.60%					<b>\$12.90</b>					<b>\$0.80</b>	<b>\$13.70</b>	<b>\$13.00</b>
2022	7	Income Tax Letters	Direct Labour - Clerical	\$84.20	0.10		\$8.42	\$4.68		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	55.60%					<b>\$13.10</b>					<b>\$0.80</b>	<b>\$13.90</b>	<b>\$13.00</b>

1           **1.1.6   ACCOUNT HISTORY (RATE CODE 9)**

2

3   Customer requests for account history only occur when there has been a change in the  
4   Hydro One billing system. Customer account information for customers billed through  
5   Hydro One's old retail customer information system until mid-1998 has been archived to  
6   Microfiche. Account history information for customers billed using the Customer  
7   Service System after mid-1998, is archived in Hydro One's Heritage Data Library.

1

**Table 6: Account History**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	9	Account History	Direct Labour - Clerical	\$80.08	0.11		\$8.81	\$4.72		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	53.60%					<b>\$13.53</b>					<b>\$0.80</b>	<b>\$14.33</b>	<b>\$13.00</b>
2019	9	Account History	Direct Labour - Clerical	\$81.00	0.11		\$8.91	\$4.84		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	54.30%					<b>\$13.75</b>					<b>\$0.80</b>	<b>\$14.55</b>	<b>\$13.00</b>
2020	9	Account History	Direct Labour - Clerical	\$81.96	0.11		\$9.02	\$4.95		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	54.90%					<b>\$13.97</b>					<b>\$0.80</b>	<b>\$14.77</b>	<b>\$13.00</b>
2021	9	Account History	Direct Labour - Clerical	\$82.92	0.11		\$9.12	\$5.07		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	55.60%					<b>\$14.19</b>					<b>\$0.80</b>	<b>\$14.99</b>	<b>\$13.00</b>
2022	9	Account History	Direct Labour - Clerical	\$84.20	0.11		\$9.26	\$5.15		Material	\$0.80	1.00	\$0.80			
			Payroll Burden	55.60%					<b>\$14.41</b>					<b>\$0.80</b>	<b>\$15.21</b>	<b>\$13.00</b>

1           **1.1.7   CREDIT REFERENCE/CREDIT CHECK (RATE CODE 10)**

2

3   The fee for performing this specific service is charged when a customer requests a credit  
4   reference letter from Hydro One, to be used to show other utilities that they are a  
5   satisfactory credit risk. This may determine whether the customer's security deposit can  
6   be waived or not.

1

**Table 7: Credit Reference/Credit Check**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	10	Credit Reference/Credit Check	Direct Labour - Clerical	\$80.08	0.16		\$12.81	\$6.87								
			Payroll Burden	53.60%					<b>\$19.68</b>					<b>\$0.00</b>	<b>\$19.68</b>	<b>\$13.00</b>
2019	10	Credit Reference/Credit Check	Direct Labour - Clerical	\$81.00	0.16		\$12.96	\$7.04								
			Payroll Burden	54.30%					<b>\$20.00</b>					<b>\$0.00</b>	<b>\$20.00</b>	<b>\$13.00</b>
2020	10	Credit Reference/Credit Check	Direct Labour - Clerical	\$81.96	0.16		\$13.11	\$7.20								
			Payroll Burden	54.90%					<b>\$20.31</b>					<b>\$0.00</b>	<b>\$20.31</b>	<b>\$13.00</b>
2021	10	Credit Reference/Credit Check	Direct Labour - Clerical	\$82.92	0.16		\$13.27	\$7.38								
			Payroll Burden	55.60%					<b>\$20.64</b>					<b>\$0.00</b>	<b>\$20.64</b>	<b>\$13.00</b>
2022	10	Credit Reference/Credit Check	Direct Labour - Clerical	\$84.20	0.16		\$13.47	\$7.49								
			Payroll Burden	55.60%					<b>\$20.96</b>					<b>\$0.00</b>	<b>\$20.96</b>	<b>\$13.00</b>

1           **1.1.8    RETURNED CHEQUE CHARGE (RATE CODE 11)**

2

3   Hydro One charges customers a fee if insufficient funds are available in the account on  
4   which the money was drawn. There are no other pass-through costs; the banks invoice  
5   their fees directly to the customer.



1

**Table 8: Returned Cheque**

Charge Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	11	Returned Cheque Charge	Direct Labour - Clerical	\$80.08	0.06		\$4.80	\$2.58								
			Payroll Burden	53.60%					<b>\$7.38</b>					<b>\$0.00</b>	<b>\$7.38</b>	<b>\$7.00</b>
2019	11	Returned Cheque Charge	Direct Labour - Clerical	\$81.00	0.06		\$4.86	\$2.64								
			Payroll Burden	54.30%					<b>\$7.50</b>					<b>\$0.00</b>	<b>\$7.50</b>	<b>\$7.00</b>
2020	11	Returned Cheque Charge	Direct Labour - Clerical	\$81.96	0.06		\$4.92	\$2.70								
			Payroll Burden	54.90%					<b>\$7.62</b>					<b>\$0.00</b>	<b>\$7.62</b>	<b>\$7.00</b>
2021	11	Returned Cheque Charge	Direct Labour - Clerical	\$82.92	0.06		\$4.98	\$2.77								
			Payroll Burden	55.60%					<b>\$7.74</b>					<b>\$0.00</b>	<b>\$7.74</b>	<b>\$7.00</b>
2022	11	Returned Cheque Charge	Direct Labour - Clerical	\$84.20	0.06		\$5.05	\$2.81								
			Payroll Burden	55.60%					<b>\$7.86</b>					<b>\$0.00</b>	<b>\$7.86</b>	<b>\$7.00</b>

1           **1.1.9   LEGAL LETTER CHARGE (RATE CODE 13)**

2  
3   Legal letters are processed for many reasons and may include the requirement for Hydro  
4   One's legal department to do research into the matter. Hydro One proposes that actual  
5   costs, based on time, equipment and materials, be charged for the performance of this  
6   service.

7  
8           **1.1.10   ACCOUNT SET UP CHARGE/CHANGE OF OCCUPANCY**  
9           **CHARGE (RATE CODE 14)**

10  
11   This charge is levied when a new account is set up or an account is transferred from one  
12   person to another. A property owner or occupant requesting to open an account agrees to  
13   be a Hydro One customer and assumes responsibility for distribution service charges  
14   provided to the service address. This process is triggered by a Customer / Landlord  
15   request for a Start / Transfer Contract via phone, fax or e-mail. A new account set up  
16   charge applies to the new accounts and appears on the customer's first electricity bill.  
17   This occurs when a customer is opening a new electricity account or moving from one  
18   Hydro One property to another.

1

**Table 9: Account Set Up Charge/Change of Occupancy Charge**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	14	Account Set Up Charge/Change of Occupancy Charge	Direct Labour - Clerical	\$80.08	0.30		\$24.02	\$12.88								
			Payroll Burden	53.60%					<b>\$36.90</b>					<b>\$0.00</b>	<b>\$36.90</b>	<b>\$38.00</b>
2019	14	Account Set Up Charge/Change of Occupancy Charge	Direct Labour - Clerical	\$81.00	0.30		\$24.30	\$13.19								
			Payroll Burden	54.30%					<b>\$37.49</b>					<b>\$0.00</b>	<b>\$37.49</b>	<b>\$38.00</b>
2020	14	Account Set Up Charge/Change of Occupancy Charge	Direct Labour - Clerical	\$81.96	0.30		\$24.59	\$13.50								
			Payroll Burden	54.90%					<b>\$38.09</b>					<b>\$0.00</b>	<b>\$38.09</b>	<b>\$38.00</b>
2021	14	Account Set Up Charge/Change of Occupancy Charge	Direct Labour - Clerical	\$82.92	0.30		\$24.88	\$13.83								
			Payroll Burden	55.60%					<b>\$38.71</b>					<b>\$0.00</b>	<b>\$38.71</b>	<b>\$38.00</b>
2022	14	Account Set Up Charge/Change of Occupancy Charge	Direct Labour - Clerical	\$84.20	0.30		\$25.26	\$14.04								
			Payroll Burden	55.60%					<b>\$39.30</b>					<b>\$0.00</b>	<b>\$39.30</b>	<b>\$38.00</b>

**1.1.11 SPECIAL METER READS - RETAILER REQUESTED OFF-  
CYCLE READ (RATE CODE 15)**

Where a Service Transfer Request is made, a switch bill will be issued to the customer. This bill will be based on an actual meter read unless the Customer, Hydro One and the Retailer agree in writing to an alternative. The effective date of the service transfer shall be the next scheduled meter reading date unless a request is made for a special meter reading and Hydro One can accommodate the request. In these instances, Hydro One proposes to recover the cost of labour and material by implementing the charge in Table 10.

1

**Table 10: Special Meter Reads (Retailer Requested Off-Cycle Read)**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	15	Special Meter Reads (retailer requested off-cycle read)	Direct Labour - Clerical	\$80.08	0.11		\$8.81	\$4.72	\$13.53	Small Vehicle Time	\$10.00	0.75	\$7.50			
			Direct Labour - Field Staff (MRDC)	\$60.55	0.75		\$45.41	\$24.34	\$69.75							
			Payroll Burden	53.60%					<b>\$83.28</b>					<b>\$7.50</b>	<b>\$90.78</b>	<b>\$90.00</b>
2019	15	Special Meter Reads (retailer requested off-cycle read)	Direct Labour - Clerical	\$81.00	0.11		\$8.91	\$4.84	\$13.75	Small Vehicle Time	\$10.00	0.75	\$7.50			
			Direct Labour - Field Staff (MRDC)	\$60.91	0.75		\$45.68	\$24.81	\$70.49							
			Payroll Burden	54.30%					<b>\$84.24</b>					<b>\$7.50</b>	<b>\$91.74</b>	<b>\$90.00</b>
2020	15	Special Meter Reads (retailer requested off-cycle read)	Direct Labour - Clerical	\$81.96	0.11		\$9.02	\$4.95	\$13.97	Small Vehicle Time	\$10.00	0.75	\$7.50			
			Direct Labour - Field Staff (MRDC)	\$61.31	0.75		\$45.98	\$25.24	\$71.23							
			Payroll Burden	54.90%					<b>\$85.19</b>					<b>\$7.50</b>	<b>\$92.69</b>	<b>\$90.00</b>
2021	15	Special Meter Reads (retailer requested off-cycle read)	Direct Labour - Clerical	\$82.92	0.11		\$9.12	\$5.07	\$14.19	Small Vehicle Time	\$10.00	0.75	\$7.50			
			Direct Labour - Field Staff (MRDC)	\$61.71	0.75		\$46.28	\$25.73	\$72.02							
			Payroll Burden	55.60%					<b>\$86.21</b>					<b>\$7.50</b>	<b>\$93.71</b>	<b>\$90.00</b>
2022	15	Special Meter Reads (retailer requested off-cycle read)	Direct Labour - Clerical	\$84.20	0.11		\$9.26	\$5.15	\$14.41	Small Vehicle Time	\$10.00	0.75	\$7.50			
			Direct Labour - Field Staff (MRDC)	\$62.35	0.75		\$46.76	\$26.00	\$72.76							
			Payroll Burden	55.60%					<b>\$87.17</b>					<b>\$7.50</b>	<b>\$94.67</b>	<b>\$90.00</b>

1           **1.1.12    COLLECTION OF ACCOUNT CHARGES**

2  
3    As outlined in Chapter 11 of the Rate Handbook, Section 11.3.2, pursuant to section 31  
4    of the *Electricity Act*, a distributor may consider disconnection of electricity services for  
5    non-payment of account. The collection of account charge is intended to cover the field  
6    costs, or part of the costs, of additional collection activities that are beyond the routine of  
7    a distributor, as a result of an individual customer's non-payment of its account. The  
8    Distribution System Code defines a disconnect/collect trip as, a visit to a customer's  
9    premises by an employee or agent of the distributor to demand payment of any  
10   outstanding amount, or to shut off or limit distribution of electricity to the customer  
11   failing payment. Furthermore, as outlined in Section 11.3.3 of the Rate Handbook, a  
12   distributor may establish a reconnection of electricity service charge. This charge would  
13   recover the costs of the physical process of re-establishing power to the customer.

14  
15           **1.1.12.1       COLLECTION OF ACCOUNT CHARGE - NO**  
16                           **DISCONNECTION - DURING REGULAR HOURS (RATE**  
17                           **CODE 16)**

18  
19   This service covers the field collection activities due to customer non-payment of bill.  
20   The work is initiated by a notification / order. If on arrival at the customer's site, the  
21   customer pays the outstanding balance, no disconnect will occur, however this charge  
22   will still apply to recover the cost of scheduling the visit and the staff making the visit to  
23   the customer's property.

1 **Table 11: Collection of Account Charge - No Disconnection - During Regular Hours**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	16	Collection of Account Charge - No Disconnection - During Regular Hours	Direct Labour - Clerical	\$80.08	0.25		\$20.02	\$10.73	\$30.75	Small Vehicle Time	\$10.00	0.66	\$6.60			
			Direct Labour - Field Staff (MRDC)	\$60.55	0.66		\$39.96	\$21.42	\$61.38							
			Payroll Burden	53.60%					<b>\$92.13</b>					<b>\$6.60</b>	<b>\$98.73</b>	<b>\$100.00</b>
2019	16	Collection of Account Charge - No Disconnection - During Regular Hours	Direct Labour - Clerical	\$81.00	0.25		\$20.25	\$11.00	\$31.25	Small Vehicle Time	\$10.00	0.66	\$6.60			
			Direct Labour - Field Staff (MRDC)	\$60.91	0.66		\$40.20	\$21.83	\$62.03							
			Payroll Burden	54.30%					<b>\$93.28</b>					<b>\$6.60</b>	<b>\$99.88</b>	<b>\$100.00</b>
2020	16	Collection of Account Charge - No Disconnection - During Regular Hours	Direct Labour - Clerical	\$81.96	0.25		\$20.49	\$11.25	\$31.74	Small Vehicle Time	\$10.00	0.66	\$6.60			
			Direct Labour - Field Staff (MRDC)	\$61.31	0.66		\$40.46	\$22.22	\$62.68							
			Payroll Burden	54.90%					<b>\$94.42</b>					<b>\$6.60</b>	<b>\$101.02</b>	<b>\$100.00</b>
2021	16	Collection of Account Charge - No Disconnection - During Regular Hours	Direct Labour - Clerical	\$82.92	0.25		\$20.73	\$11.53	\$32.26	Small Vehicle Time	\$10.00	0.66	\$6.60			
			Direct Labour - Field Staff (MRDC)	\$61.71	0.66		\$40.73	\$22.65	\$63.37							
			Payroll Burden	55.60%					<b>\$95.63</b>					<b>\$6.60</b>	<b>\$102.23</b>	<b>\$100.00</b>
2022	16	Collection of Account Charge - No Disconnection - During Regular Hours	Direct Labour - Clerical	\$84.20	0.25		\$21.05	\$11.70	\$32.75	Small Vehicle Time	\$10.00	0.66	\$6.60			
			Direct Labour - Field Staff (MRDC)	\$62.35	0.66		\$41.15	\$22.88	\$64.03							
			Payroll Burden	55.60%					<b>\$96.78</b>					<b>\$6.60</b>	<b>\$103.38</b>	<b>\$100.00</b>

1           **1.1.12.2 COLLECTION OF ACCOUNT CHARGE –**  
2                   **DISCONNECT/RECONNECT AT METER &**  
3                   **INSTALL/REMOVE LOAD CONTROL DEVICE – DURING**  
4                   **REGULAR HOURS (RATE CODES 18 & 19)**  
5

6 When a customer has not paid their electricity bill for an extensive period (45 days) of  
7 time, an electricity disconnection notice is issued. If payment is still not received, a  
8 disconnection or the installation of a load limiter is performed. These activities are  
9 performed in accordance with Subsection 31(1) of the *Electricity Act, 1998* which  
10 provides that:

11  
12           *A distributor may shut off the distribution of electricity to a property if any*  
13           *amount payable by a person for the distribution or retail of electricity to*  
14           *the property pursuant to Section 29 is overdue.*



1 **Table 12: Disconnect/Reconnect at Meter & Install/Remove Load Control Device – During Regular Hours**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	18&19	Collection - Disconnect/Reconnect at Meter & Install/Remove Load Control Device - During Regular Hours	Direct Labour - Clerical	\$80.08	0.43		\$34.43	\$18.46	\$52.89	Small Vehicle Time	\$10.00	0.62	\$6.20			
			Direct Labour - Field Staff (MRDC)	\$60.55	0.62		\$37.54	\$20.12	\$57.66	Meter Seal	\$0.17	1.00	\$0.17			
			Payroll Burden	53.60%						Meter Ring	\$4.95	0.10	\$0.50			
									<b>\$110.55</b>	Sleeves	\$0.07	2.00	\$0.14	<b>\$7.01</b>	<b>\$117.56</b>	<b>\$120.00</b>
2019	18&19	Collection - Disconnect/Reconnect at Meter & Install/Remove Load Control Device - During Regular Hours	Direct Labour - Clerical	\$81.00	0.43		\$34.83	\$18.91	\$53.74	Small Vehicle Time	\$10.00	0.62	\$6.20			
			Direct Labour - Field Staff (MRDC)	\$60.91	0.62		\$37.76	\$20.51	\$58.27	Meter Seal	\$0.17	1.00	\$0.17			
			Payroll Burden	54.30%						Meter Ring	\$4.95	0.10	\$0.50			
									<b>\$112.01</b>	Sleeves	\$0.07	2.00	\$0.14	<b>\$7.01</b>	<b>\$119.02</b>	<b>\$120.00</b>
2020	18&19	Collection - Disconnect/Reconnect at Meter & Install/Remove Load Control Device - During Regular Hours	Direct Labour - Clerical	\$81.96	0.43		\$35.24	\$19.35	\$54.59	Small Vehicle Time	\$10.00	0.62	\$6.20			
			Direct Labour - Field Staff (MRDC)	\$61.31	0.62		\$38.01	\$20.87	\$58.88	Meter Seal	\$0.17	1.00	\$0.17			
			Payroll Burden	54.90%						Meter Ring	\$4.95	0.10	\$0.50			
									<b>\$113.47</b>	Sleeves	\$0.07	2.00	\$0.14	<b>\$7.01</b>	<b>\$120.48</b>	<b>\$120.00</b>

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2021	18&19	Collection - Disconnect/Reconnect at Meter & Install/Remove Load Control Device - During Regular Hours	Direct Labour - Clerical	\$82.92	0.43		\$35.66	\$19.82	\$55.48	Small Vehicle Time	\$10.00	0.62	\$6.20			
			Direct Labour - Field Staff (MRDC)	\$61.71	0.62		\$38.26	\$21.27	\$59.53	Meter Seal	\$0.17	1.00	\$0.17			
			Payroll Burden	55.60%						Meter Ring	\$4.95	0.10	\$0.50			
									<b>\$115.01</b>	Sleeves	\$0.07	2.00	\$0.14	<b>\$7.01</b>	<b>\$122.02</b>	<b>\$120.00</b>
2022	18&19	Collection - Disconnect/Reconnect at Meter & Install/Remove Load Control Device - During Regular Hours	Direct Labour - Clerical	\$84.20	0.43		\$36.21	\$20.13	\$56.34	Small Vehicle Time	\$10.00	0.62	\$6.20			
			Direct Labour - Field Staff (MRDC)	\$62.35	0.62		\$38.66	\$21.49	\$60.15	Meter Seal	\$0.17	1.00	\$0.17			
			Payroll Burden	55.60%						Meter Ring	\$4.95	0.10	\$0.50			
									<b>\$116.49</b>	Sleeves	\$0.07	2.00	\$0.14	<b>\$7.01</b>	<b>\$123.49</b>	<b>\$120.00</b>

1           **1.1.12.3       COLLECTION OF ACCOUNT CHARGE –**  
2                           **DISCONNECT/RECONNECT AT METER &**  
3                           **INSTALL/REMOVE LOAD CONTROL DEVICE – AFTER**  
4                           **REGULAR HOURS (RATE CODES 20 & 21)**

5  
6   When a customer has been disconnected or a load control device has been installed, and  
7   they later make payment on their current bill and agree to pay the after hours fee to have  
8   the meter reconnected or the load control device removed after regular hours, the charges  
9   in Table 13 below are incurred.

**Table 13: Collection of Account Charge – Disconnect/Reconnect at Meter & Install/Remove Load Control Device  
– After Regular Hours**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	20& 21	Collection - Disconnect/Reconnect at Meter & Install/Remove Load Control Device - After Regular Hours	Direct Labour - Clerical	\$80.08	0.43		\$34.43	\$18.46	\$52.89	Small Vehicle Time	\$10.00	2.02	\$20.20			
			Direct Labour - Field Staff (RLM)	\$79.43	2.02	1.40	\$224.63	\$120.40	\$345.03	Meter Seal	\$0.17	1.00	\$0.17			
			Payroll Burden	53.60%						Meter Ring	\$4.95	0.10	\$0.50			
									<b>\$397.93</b>	Sleeves	\$0.07	2.00	\$0.14	<b>\$21.01</b>	<b>\$418.93</b>	<b>\$430.00</b>
2019	20& 21	Collection - Disconnect/Reconnect at Meter & Install/Remove Load Control Device - After Regular Hours	Direct Labour - Clerical	\$81.00	0.43		\$34.83	\$18.91	\$53.74	Small Vehicle Time	\$10.00	2.02	\$20.20			
			Direct Labour - Field Staff (RLM)	\$80.35	2.02	1.40	\$227.23	\$123.39	\$350.62	Meter Seal	\$0.17	1.00	\$0.17			
			Payroll Burden	54.30%						Meter Ring	\$4.95	0.10	\$0.50			
									<b>\$404.36</b>	Sleeves	\$0.07	2.00	\$0.14	<b>\$21.01</b>	<b>\$425.36</b>	<b>\$430.00</b>
2020	20& 21	Collection - Disconnect/Reconnect at Meter & Install/Remove Load Control Device - After Regular Hours	Direct Labour - Clerical	\$81.96	0.43		\$35.24	\$19.35	\$54.59	Small Vehicle Time	\$10.00	2.02	\$20.20			
			Direct Labour - Field Staff (RLM)	\$81.32	2.02	1.40	\$229.97	\$126.26	\$356.23	Meter Seal	\$0.17	1.00	\$0.17			
			Payroll Burden	54.90%						Meter Ring	\$4.95	0.10	\$0.50			
									<b>\$410.82</b>	Sleeves	\$0.07	2.00	\$0.14	<b>\$21.01</b>	<b>\$431.82</b>	<b>\$430.00</b>
2021	20&21	Collection - Disconnect/Reconnect at Meter & Install/Remove Load Control Device - After Regular Hours	Direct Labour - Clerical	\$82.92	0.43		\$35.66	\$19.82	\$55.48	Small Vehicle Time	\$10.00	2.02	\$20.20			
			Direct Labour - Field Staff (RLM)	\$82.28	2.02	1.40	\$232.69	\$129.37	\$362.06	Meter Seal	\$0.17	1.00	\$0.17			
			Payroll Burden	55.60%						Meter Ring	\$4.95	0.10	\$0.50			

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
									<b>\$417.54</b>	Sleeves	\$0.07	2.00	\$0.14	<b>\$21.01</b>	<b>\$438.55</b>	<b>\$430.00</b>
2022	20&21	Collection - Disconnect/Reconnect at Meter & Install/Remove Load Control Device - After Regular Hours	Direct Labour - Clerical	\$84.20	0.43		\$36.21	\$20.13	\$56.34	Small Vehicle Time	\$10.00	2.02	\$20.20			
			Direct Labour - Field Staff (RLM)	\$83.56	2.02	1.40	\$236.31	\$131.39	\$367.69	Meter Seal	\$0.17	1.00	\$0.17			
			Payroll Burden	55.60%						Meter Ring	\$4.95	0.10	\$0.50			
									<b>\$424.03</b>	Sleeves	\$0.07	2.00	\$0.14	<b>\$21.01</b>	<b>\$445.04</b>	<b>\$430.00</b>

1           **1.1.12.4       COLLECTION OF ACCOUNT CHARGE –**  
2                           **DISCONNECT/RECONNECT AT POLE – DURING**  
3                           **REGULAR HOURS (RATE CODE 22)**  
4

5       When a customer has not paid their electricity bill for an extensive period (45 days)  
6       of time, an Electricity Disconnection Notice is issued. If payment is still not received  
7       a disconnection is performed. At times, a disconnection cannot be performed at the  
8       meter due to type of the meter or the meter is not accessible (e.g. located inside a  
9       locked building), therefore disconnection must be performed at the pole. These  
10      activities are performed in accordance with Subsection 31(1) of the *Electricity Act*,  
11      1998 which provides that:

12  
13      *A distributor may shut off the distribution of electricity to a property if any*  
14      *amount payable by a person for the distribution or retail of electricity to*  
15      *the property pursuant to Section 29 is overdue.*

1

**Table 14 - Collection of Account Charge – Disconnect/Reconnect at Pole – During Regular Hours**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	22	Collection - Disconnect/Reconnect at Pole - During Regular Hours	Direct Labour - Clerical	\$80.08	0.43		\$34.43	\$18.46	\$52.89	Large Vehicle Time	\$57.00	0.86	\$49.02			
			Direct Labour - Field Staff (RLM)	\$79.43	1.72		\$136.62	\$73.23	\$209.85							
			Payroll Burden	53.60%					<b>\$262.74</b>					<b>\$49.02</b>	<b>\$311.76</b>	<b>\$320.00</b>
2019	22	Collection - Disconnect/Reconnect at Pole - During Regular Hours	Direct Labour - Clerical	\$81.00	0.43		\$34.83	\$18.91	\$53.74	Large Vehicle Time	\$57.00	0.86	\$49.02			
			Direct Labour - Field Staff (RLM)	\$80.35	1.72		\$138.20	\$75.04	\$213.25							
			Payroll Burden	54.30%					<b>\$266.99</b>					<b>\$49.02</b>	<b>\$316.01</b>	<b>\$320.00</b>
2020	22	Collection - Disconnect/Reconnect at Pole - During Regular Hours	Direct Labour - Clerical	\$81.96	0.43		\$35.24	\$19.35	\$54.59	Large Vehicle Time	\$57.00	0.86	\$49.02			
			Direct Labour - Field Staff (RLM)	\$81.32	1.72		\$139.87	\$76.79	\$216.66							
			Payroll Burden	54.90%					<b>\$271.25</b>					<b>\$49.02</b>	<b>\$320.27</b>	<b>\$320.00</b>
2021	22	Collection - Disconnect/Reconnect at Pole - During Regular Hours	Direct Labour - Clerical	\$82.92	0.43		\$35.66	\$19.82	\$55.48	Large Vehicle Time	\$57.00	0.86	\$49.02			
			Direct Labour - Field Staff (RLM)	\$82.28	1.72		\$141.52	\$78.69	\$220.21							
			Payroll Burden	55.60%					<b>\$275.69</b>					<b>\$49.02</b>	<b>\$324.71</b>	<b>\$320.00</b>
2022	22	Collection - Disconnect/Reconnect at Pole - During Regular Hours	Direct Labour - Clerical	\$84.20	0.43		\$36.21	\$20.13	\$56.34	Large Vehicle Time	\$57.00	0.86	\$49.02			
			Direct Labour - Field Staff (RLM)	\$83.56	1.72		\$143.72	\$79.91	\$223.63							
			Payroll Burden	55.60%					<b>\$279.97</b>					<b>\$49.02</b>	<b>\$328.99</b>	<b>\$320.00</b>

1           **1.1.12.5       COLLECTION OF ACCOUNT CHARGE –**  
2                           **DISCONNECT/RECONNECT AT POLE – AFTER**  
3                           **REGULAR HOURS (RATE CODE 23)**  
4

5           When a customer has been disconnected at the pole, and they later make payment on  
6           their current bill and agree to pay the after hours fee to have their service  
7           reconnected, the charges in Table 15 below are incurred.



**Table 15: Collection of Account Charge – Disconnect/Reconnect at Pole – After Regular Hours**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	23	Collection - Disconnect/Reconnect at Pole - After Regular Hours	Direct Labour - Clerical	\$80.08	0.43		\$34.43	\$18.46	\$52.89	Large Vehicle Time	\$57.00	1.56	\$88.92			
			Direct Labour - Field Staff (RLM)	\$79.43	4.00	1.40	\$444.82	\$238.42	\$683.24							
			Payroll Burden	53.60%					<b>\$736.13</b>					<b>\$88.92</b>	<b>\$825.05</b>	<b>\$850.00</b>
2019	23	Collection - Disconnect/Reconnect at Pole - After Regular Hours	Direct Labour - Clerical	\$81.00	0.43		\$34.83	\$18.91	\$53.74	Large Vehicle Time	\$57.00	1.56	\$88.92			
			Direct Labour - Field Staff (RLM)	\$80.35	4.00	1.40	\$449.96	\$244.33	\$694.29							
			Payroll Burden	54.30%					<b>\$748.03</b>					<b>\$88.92</b>	<b>\$836.95</b>	<b>\$850.00</b>
2020	23	Collection - Disconnect/Reconnect at Pole - After Regular Hours	Direct Labour - Clerical	\$81.96	0.43		\$35.24	\$19.35	\$54.59	Large Vehicle Time	\$57.00	1.56	\$88.92			
			Direct Labour - Field Staff (RLM)	\$81.32	4.00	1.40	\$455.39	\$250.01	\$705.40							
			Payroll Burden	54.90%					<b>\$759.99</b>					<b>\$88.92</b>	<b>\$848.91</b>	<b>\$850.00</b>
2021	23	Collection - Disconnect/Reconnect at Pole - After Regular Hours	Direct Labour - Clerical	\$82.92	0.43		\$35.66	\$19.82	\$55.48	Large Vehicle Time	\$57.00	1.56	\$88.92			
			Direct Labour - Field Staff (RLM)	\$82.28	4.00	1.40	\$460.77	\$256.19	\$716.96							
			Payroll Burden	55.60%					<b>\$772.44</b>					<b>\$88.92</b>	<b>\$861.36</b>	<b>\$850.00</b>
2022	23	Collection - Disconnect/Reconnect at Pole - After Regular Hours	Direct Labour - Clerical	\$84.20	0.43		\$36.21	\$20.13	\$56.34	Large Vehicle Time	\$57.00	1.56	\$88.92			
			Direct Labour - Field Staff (RLM)	\$83.56	4.00	1.40	\$467.94	\$260.17	\$728.11							
			Payroll Burden	55.60%					<b>\$784.44</b>					<b>\$88.92</b>	<b>\$873.36</b>	<b>\$850.00</b>

**1.1.13 METER DISPUTE CHARGE – MEASUREMENT CANADA  
(RATE CODE 24)**

Meter dispute testing is typically the last step in a multi-stage escalation process between the customer and Hydro One. The process typically begins with a customer high bill inquiry, the object of which is to validate that the bill calculations, charges and bill determinants are accurate.

If Hydro One is satisfied with meter operation and accuracy of billing, and the customer is not satisfied, the customer will be referred to Measurement Canada. If the services of Measurement Canada are requested by the customer or retailer to resolve the issue, Hydro One may charge the customer for the costs of processing the application to Measurement Canada and removing and transporting the meter to a testing location. If the dispute is substantiated by Measurement Canada and the resolution is in the favour of the customer, Hydro One shall bear such costs.

The charges in Table 16 below only recover the work performed by Hydro One. Measurement Canada may charge an additional fee.

1 **Table 16: Meter Dispute Charge – Measurement Canada**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	24	Meter Dispute Charge - Measurement Canada	Direct Labour - Clerical	\$80.08	0.68		\$54.45	\$29.19	\$83.64	Small Vehicle Time	\$10.00	1.42	\$14.20			
			Direct Labour - Field Staff (MDET)	\$84.64	1.42		\$120.19	\$64.42	\$184.61							
			Payroll Burden	53.60%					<b>\$268.25</b>					<b>\$14.20</b>	<b>\$282.45</b>	<b>\$290.00</b>
2019	24	Meter Dispute Charge - Measurement Canada	Direct Labour - Clerical	\$81.00	0.68		\$55.08	\$29.91	\$84.99	Small Vehicle Time	\$10.00	1.42	\$14.20			
			Direct Labour - Field Staff (MDET)	\$85.54	1.42		\$121.46	\$65.96	\$187.42							
			Payroll Burden	54.30%					<b>\$272.41</b>					<b>\$14.20</b>	<b>\$286.61</b>	<b>\$290.00</b>
2020	24	Meter Dispute Charge - Measurement Canada	Direct Labour - Clerical	\$81.96	0.68		\$55.73	\$30.60	\$86.33	Small Vehicle Time	\$10.00	1.42	\$14.20			
			Direct Labour - Field Staff (MDET)	\$86.48	1.42		\$122.80	\$67.42	\$190.22							
			Payroll Burden	54.90%					<b>\$276.55</b>					<b>\$14.20</b>	<b>\$290.75</b>	<b>\$290.00</b>
2021	24	Meter Dispute Charge - Measurement Canada	Direct Labour - Clerical	\$82.92	0.68		\$56.39	\$31.35	\$87.74	Small Vehicle Time	\$10.00	1.42	\$14.20			
			Direct Labour - Field Staff (MDET)	\$87.42	1.42		\$124.14	\$69.02	\$193.16							
			Payroll Burden	55.60%					<b>\$280.89</b>					<b>\$14.20</b>	<b>\$295.09</b>	<b>\$290.00</b>
2022	24	Meter Dispute Charge - Measurement Canada	Direct Labour - Clerical	\$84.20	0.68		\$57.26	\$31.83	\$89.09	Small Vehicle Time	\$10.00	1.42	\$14.20			
			Direct Labour - Field Staff (MDET)	\$88.70	1.42		\$125.95	\$70.03	\$195.98							
			Payroll Burden	55.60%					<b>\$285.07</b>					<b>\$14.20</b>	<b>\$299.27</b>	<b>\$290.00</b>

**1.1.14 SERVICE CALL - CUSTOMER OWNED EQUIPMENT –  
DURING/AFTER REGULAR HOURS (RATE CODE 25 & 26)**

If Hydro One determines that the cause of a power issue is related to the customer-owned equipment, Hydro One crews may perform corrective service at the customer's request. The Specific Service Charge for Rate Code 25 covers only the administration and travel costs of this service. It does not cover any work associated with work on the customer-owned equipment, as it applies whether Hydro One crews work on the customer-owned equipment or not. Hydro One will charge the customer additional amounts, at actual costs, for performing any work on their equipment.

1

**Table 17: Service Call - Customer Owned Equipment - During Regular Hours**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	25	Service Call - Customer Owned Equipment - During Regular Hours	Direct Labour - Clerical	\$80.08	0.08		\$6.41	\$3.43	\$9.84	Large Vehicle Time	\$57.00	0.65	\$37.05			
			Direct Labour - Field Staff (RLM)	\$79.43	1.31		\$104.06	\$55.77	\$159.83							
			Payroll Burden	53.60%					<b>\$169.67</b>					<b>\$37.05</b>	<b>\$206.72</b>	<b>\$210.00</b>
2019	25	Service Call - Customer Owned Equipment - During Regular Hours	Direct Labour - Clerical	\$81.00	0.08		\$6.48	\$3.52	\$10.00	Large Vehicle Time	\$57.00	0.65	\$37.05			
			Direct Labour - Field Staff (RLM)	\$80.35	1.31		\$105.26	\$57.16	\$162.41							
			Payroll Burden	54.30%					<b>\$172.41</b>					<b>\$37.05</b>	<b>\$209.46</b>	<b>\$210.00</b>
2020	25	Service Call - Customer Owned Equipment - During Regular Hours	Direct Labour - Clerical	\$81.96	0.08		\$6.56	\$3.60	\$10.16	Large Vehicle Time	\$57.00	0.65	\$37.05			
			Direct Labour - Field Staff (RLM)	\$81.32	1.31		\$106.53	\$58.48	\$165.01							
			Payroll Burden	54.90%					<b>\$175.17</b>					<b>\$37.05</b>	<b>\$212.22</b>	<b>\$210.00</b>
2021	25	Service Call - Customer Owned Equipment - During Regular Hours	Direct Labour - Clerical	\$82.92	0.08		\$6.63	\$3.69	\$10.32	Large Vehicle Time	\$57.00	0.65	\$37.05			
			Direct Labour - Field Staff (RLM)	\$82.28	1.31		\$107.79	\$59.93	\$167.72							
			Payroll Burden	55.60%					<b>\$178.04</b>					<b>\$37.05</b>	<b>\$215.09</b>	<b>\$210.00</b>
2022	25	Service Call - Customer Owned Equipment - During Regular Hours	Direct Labour - Clerical	\$84.20	0.08		\$6.74	\$3.75	\$10.48	Large Vehicle Time	\$57.00	0.65	\$37.05			
			Direct Labour - Field Staff (RLM)	\$83.56	1.31		\$109.46	\$60.86	\$170.33							
			Payroll Burden	55.60%					<b>\$180.81</b>					<b>\$37.05</b>	<b>\$217.86</b>	<b>\$210.00</b>

2

1 **Table 18: Service Call - Customer Owned Equipment - After Regular Hours**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	26	Service Call - Customer Owned Equipment - After Regular Hours	Direct Labour - Clerical	\$80.08	0.08		\$6.41	\$3.43	\$9.84	Large Vehicle Time	\$57.00	1.31	\$74.67			
			Direct Labour - Field Staff (RLM)	\$79.43	4.00	1.40	\$444.82	\$238.42	\$683.24							
			Payroll Burden	53.60%					<b>\$693.08</b>					<b>\$74.67</b>	<b>\$767.75</b>	<b>\$775.00</b>
2019	26	Service Call - Customer Owned Equipment - After Regular Hours	Direct Labour - Clerical	\$81.00	0.08		\$6.48	\$3.52	\$10.00	Large Vehicle Time	\$57.00	1.31	\$74.67			
			Direct Labour - Field Staff (RLM)	\$80.35	4.00	1.40	\$449.96	\$244.33	\$694.29							
			Payroll Burden	54.30%					<b>\$704.29</b>					<b>\$74.67</b>	<b>\$778.96</b>	<b>\$775.00</b>
2020	26	Service Call - Customer Owned Equipment - After Regular Hours	Direct Labour - Clerical	\$81.96	0.08		\$6.56	\$3.60	\$10.16	Large Vehicle Time	\$57.00	1.31	\$74.67			
			Direct Labour - Field Staff (RLM)	\$81.32	4.00	1.40	\$455.39	\$250.01	\$705.40							
			Payroll Burden	54.90%					<b>\$715.56</b>					<b>\$74.67</b>	<b>\$790.23</b>	<b>\$775.00</b>
2021	26	Service Call - Customer Owned Equipment - After Regular Hours	Direct Labour - Clerical	\$82.92	0.08		\$6.63	\$3.69	\$10.32	Large Vehicle Time	\$57.00	1.31	\$74.67			
			Direct Labour - Field Staff (RLM)	\$82.28	4.00	1.40	\$460.77	\$256.19	\$716.96							
			Payroll Burden	55.60%					<b>\$727.28</b>					<b>\$74.67</b>	<b>\$801.95</b>	<b>\$775.00</b>
2022	26	Service Call - Customer Owned Equipment - After Regular Hours	Direct Labour - Clerical	\$84.20	0.08		\$6.74	\$3.75	\$10.48	Large Vehicle Time	\$57.00	1.31	\$74.67			
			Direct Labour - Field Staff (RLM)	\$83.56	4.00	1.40	\$467.94	\$260.17	\$728.11							
			Payroll Burden	55.60%					<b>\$738.59</b>					<b>\$74.67</b>	<b>\$813.26</b>	<b>\$775.00</b>

1           **1.1.15           INSTALL/REMOVE TEMPORARY SERVICES (RATE**  
2                           **CODES 27-29)**

3  
4   Customer requests for the installation and removal of a temporary service can vary  
5   greatly in the amount of work required. Each job will have its own unique working  
6   conditions. At the customer's request, a temporary service is connected. When the  
7   customer is ready to: (a) cancel the temporary service; or (b) transfer to the conductor  
8   and meter to the new permanent service, Hydro One will return to perform the relocation.

9  
10   To avoid cross-subsidization or over collection, Hydro One proposes that the fee for these  
11   specific services be derived on the actual costs of each individual job.

12  
13           **1.1.16    SPECIFIC CHARGE FOR ACCESS TO POWER POLES -**  
14                           **\$/POLE/YEAR (RATE CODE 30)**

15  
16   This charge is described and calculated in Appendix C.

## **APPENDIX B**

The charges described in this Appendix are Hydro One specific charges, calculated based on the labour hours and material used to perform the work. The required labour hours were studied as part of the Time Study. The proposed charges recover the cost of performing the work.

### **1. HYDRO ONE SPECIFIC SERVICE CHARGES: STANDARD FORMULA, UPDATED AMOUNTS**

#### **1.1 HYDRO ONE SPECIFIC CHARGES DESCRIPTION**

Hydro One has determined that customers should be charged the following fees for services that are beyond a distributor's normal business, and are not covered by rates. The labour hours and attributes were investigated as part of the Time Study, and the proposed charges recover the cost of performing the work and the associated material.

The following charges have previously been charged by Hydro One, but have been deemed to no longer apply.

1. Tingle/Stray Voltage Test – excess of 4 hours, if customer equipment is defective (Rate Code 43) - From the normal delivery and use of electricity, a small voltage may exist between two conductive surfaces that can be simultaneously contacted by an animal. Examples of the conductive surfaces include concrete floors, metal stabling, milk pipelines, and water bowls. This voltage is commonly referred to as, “animal contact voltage”, “stray voltage”, or “tingle voltage”. This voltage usually presents no harm. However, if the voltage level is high enough, it may affect livestock behaviour and health. Since 2009, the Distribution System Code (“DSC”) (Section 4.7 & Appendix H)



1 requires all Ontario Distribution Utilities to complete Stray Voltage Investigations on  
2 livestock farm customers by a competent person. Hydro One considers this service as part  
3 of the standard level of service in accordance with the DSC. Therefore, it is  
4 recommended that the current approved charge for Tingle/Stray Voltage Investigation be  
5 removed from the list of Hydro One Specific Services Charges.

- 6  
7 2. A Stand-By Administration Charge (Rate Code 44) only covers the administration-related  
8 costs and not the costs of having distribution facilities in place to deliver stand-by power.  
9 Hydro One has no record of this charge ever being applied to Hydro One customers.

10  
11 **1.1.2 VACANT PREMISE – MOVE IN WITH RECONNECT OF**  
12 **ELECTRICAL SERVICE – AT METER OR AT POLE (RATE CODE 31A**  
13 **& 31B)**

14  
15 A Vacant Premise occurs when an existing customer cancels their account with Hydro One  
16 and the meter is left active when the existing customer's contract ends. When this occurs, if  
17 the new home owner, or landlord, does not call Hydro One to have the account for that  
18 premise moved into their name, Hydro One attempts to contact the premise owner by mail or  
19 letter delivered to the premise. If the owner of the premise does not contact Hydro One after  
20 the notices are given, Hydro One disconnects the service at the meter or pole, as the service  
21 is no longer associated with a customer.

22  
23 When the new premise address owner or landlord contacts Hydro One to have an account set  
24 up in their name for the now disconnected service, Hydro One goes to the premise to perform  
25 a reconnect at the meter or pole. The reconnect service fee is recovered from the new  
26 premise address owner.

1

**Table 1: Vacant Premise – Move In with Reconnect of Electrical Service at Meter**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	31a	Vacant Premise - Move In with Reconnect of Electrical Service at Meter	Direct Labour - Clerical	\$80.08	0.29		\$23.22	\$12.45	\$35.67	Small Vehicle Time	\$10.00	0.57	\$5.70			
			Direct Labour - Field Staff (MRDC)	\$60.55	0.57		\$34.51	\$18.50	\$53.01	Meter Seal	\$0.17	1.00	\$0.17			
			Payroll Burden	\$0.54					\$88.68	Meter Ring	\$4.95	0.10	\$0.50	<b>\$6.37</b>	<b>\$95.05</b>	<b>\$95.00</b>
2019	31a	Vacant Premise - Move In with Reconnect of Electrical Service at Meter	Direct Labour - Clerical	\$81.00	0.29		\$23.49	\$12.76	\$36.25	Small Vehicle Time	\$10.00	0.57	\$5.70			
			Direct Labour - Field Staff (MRDC)	\$60.91	0.57		\$34.72	\$18.85	\$53.57	Meter Seal	\$0.17	1.00	\$0.17			
			Payroll Burden	\$0.54					\$89.82	Meter Ring	\$4.95	0.10	\$0.50	<b>\$6.37</b>	<b>\$96.18</b>	<b>\$95.00</b>
2020	31a	Vacant Premise - Move In with Reconnect of Electrical Service at Meter	Direct Labour - Clerical	\$81.96	0.29		\$23.77	\$13.05	\$36.82	Small Vehicle Time	\$10.00	0.57	\$5.70			
			Direct Labour - Field Staff (MRDC)	\$61.31	0.57		\$34.95	\$19.19	\$54.13	Meter Seal	\$0.17	1.00	\$0.17			
			Payroll Burden	\$0.55					\$90.95	Meter Ring	\$4.95	0.10	\$0.50	<b>\$6.37</b>	<b>\$97.31</b>	<b>\$95.00</b>
2021	31a	Vacant Premise - Move In with Reconnect of Electrical Service at Meter	Direct Labour - Clerical	\$82.92	0.29		\$24.05	\$13.37	\$37.42	Small Vehicle Time	\$10.00	0.57	\$5.70			
			Direct Labour - Field Staff (MRDC)	\$61.71	0.57		\$35.17	\$19.56	\$54.73	Meter Seal	\$0.17	1.00	\$0.17			
			Payroll Burden	\$0.56					\$92.15	Meter Ring	\$4.95	0.10	\$0.50	<b>\$6.37</b>	<b>\$98.51</b>	<b>\$95.00</b>
2022	31a	Vacant Premise - Move In with Reconnect of Electrical Service at Meter	Direct Labour - Clerical	\$84.20	0.29		\$24.42	\$13.58	\$37.99	Small Vehicle Time	\$10.00	0.57	\$5.70			
			Direct Labour - Field Staff (MRDC)	\$62.35	0.57		\$35.54	\$19.76	\$55.30	Meter Seal	\$0.17	1.00	\$0.17			
			Payroll Burden	\$0.56					\$93.29	Meter Ring	\$4.95	0.10	\$0.50	<b>\$6.37</b>	<b>\$99.66</b>	<b>\$95.00</b>

2

1

**Table 2: Vacant Premise – Move In with Reconnect of Electrical Service at Pole**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/ Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/ Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	31b	Vacant Premise - Move In with Reconnect of Electrical Service at Pole	Direct Labour - Clerical	\$80.08	0.29		\$23.22	\$12.45	\$35.67	Large Vehicle Time	\$57.00	0.86	\$49.02			
			Direct Labour - Field Staff (RLM)	\$79.43	1.72		\$136.62	\$73.23	\$209.85							
			Payroll Burden	53.60%					<b>\$245.52</b>					<b>\$49.02</b>	<b>\$294.54</b>	<b>\$300.00</b>
2019	31b	Vacant Premise - Move In with Reconnect of Electrical Service at Pole	Direct Labour - Clerical	\$81.00	0.29		\$23.49	\$12.76	\$36.25	Large Vehicle Time	\$57.00	0.86	\$49.02			
			Direct Labour - Field Staff (RLM)	\$80.35	1.72		\$138.20	\$75.04	\$213.25							
			Payroll Burden	54.30%					<b>\$249.49</b>					<b>\$49.02</b>	<b>\$298.51</b>	<b>\$300.00</b>
2020	31b	Vacant Premise - Move In with Reconnect of Electrical Service at Pole	Direct Labour - Clerical	\$81.96	0.29		\$23.77	\$13.05	\$36.82	Large Vehicle Time	\$57.00	0.86	\$49.02			
			Direct Labour - Field Staff (RLM)	\$81.32	1.72		\$139.87	\$76.79	\$216.66							
			Payroll Burden	54.90%					<b>\$253.48</b>					<b>\$49.02</b>	<b>\$302.50</b>	<b>\$300.00</b>

2

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/ Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/ Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2021	31b	Vacant Premise - Move In with Reconnect of Electrical Service at Pole	Direct Labour - Clerical	\$82.92	0.29		\$24.05	\$13.37	\$37.42	Large Vehicle Time	\$57.00	0.86	\$49.02			
			Direct Labour - Field Staff (RLM)	\$82.28	1.72		\$141.52	\$78.69	\$220.21							
			Payroll Burden	55.60%					<b>\$257.62</b>					<b>\$49.02</b>	<b>\$306.64</b>	<b>\$300.00</b>
2022	31b	Vacant Premise - Move In with Reconnect of Electrical Service at Pole	Direct Labour - Clerical	\$84.20	0.29		\$24.42	\$13.58	\$37.99	Large Vehicle Time	\$57.00	0.86	\$49.02			
			Direct Labour - Field Staff (RLM)	\$83.56	1.72		\$143.72	\$79.91	\$223.63							
			Payroll Burden	55.60%					<b>\$261.63</b>					<b>\$49.02</b>	<b>\$310.65</b>	<b>\$300.00</b>

1       **1.1.3   RECONNECT COMPLETED AFTER HOURS (CUSTOMER/CONTRACT**  
2               **DRIVEN) – AT METER OR AT POLE (RATE CODE 32 & 33)**

3  
4   All customers are responsible for maintaining their own equipment; therefore, Hydro One  
5   provides one yearly (calendar year January to December) Service Disconnection and Re-  
6   Connection (isolation and restoration) during regular business hours for customer  
7   maintenance purposes. There is a charge for a reconnection at the meter or pole performed  
8   after hours when the service is not ready to reconnect during regular hours due to the  
9   customer or contractor. The charge is only the difference between the charge for the service  
10   performed during regular hours and the charge for the service performed after regular hours.

**Table 3: Reconnect Completed After Hours (Customer/Contract Driven) – At Meter**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	32	Reconnect Completed After Hours (Customer/Contract Driven) - At Meter	Direct Labour - Clerical	\$80.08	0.58		\$46.45	\$24.90	\$71.34	Small Vehicle Time	\$10.00	1.83	\$18.30			
			Direct Labour - Field Staff (RLM)	\$79.43	1.83	1.20	\$174.43	\$93.50	\$267.93	Credit (Rate Code 18&19)			-\$117.56			
			Payroll Burden	53.60%					<b>\$339.27</b>					<b>-\$99.26</b>	<b>\$240.01</b>	<b>\$245.00</b>
2019	32	Reconnect Completed After Hours (Customer/Contract Driven) - At Meter	Direct Labour - Clerical	\$81.00	0.58		\$46.98	\$25.51	\$72.49	Small Vehicle Time	\$10.00	1.83	\$18.30			
			Direct Labour - Field Staff (RLM)	\$80.35	1.83	1.20	\$176.45	\$95.81	\$272.26	Credit (Rate Code 18&19)			-\$119.02			
			Payroll Burden	54.30%					<b>\$344.75</b>					<b>-\$100.72</b>	<b>\$244.03</b>	<b>\$245.00</b>
2020	32	Reconnect Completed After Hours (Customer/Contract Driven) - At Meter	Direct Labour - Clerical	\$81.96	0.58		\$47.54	\$26.10	\$73.63	Small Vehicle Time	\$10.00	1.83	\$18.30			
			Direct Labour - Field Staff (RLM)	\$81.32	1.83	1.20	\$178.58	\$98.04	\$276.62	Credit (Rate Code 18&19)			-\$120.48			
			Payroll Burden	54.90%					<b>\$350.25</b>					<b>-\$102.18</b>	<b>\$248.08</b>	<b>\$245.00</b>
2021	32	Reconnect Completed After Hours (Customer/Contract Driven) - At Meter	Direct Labour - Clerical	\$82.92	0.58		\$48.09	\$26.74	\$74.83	Small Vehicle Time	\$10.00	1.83	\$18.30			
			Direct Labour - Field Staff (RLM)	\$82.28	1.83	1.20	\$180.69	\$100.46	\$281.15	Credit (Rate Code 18&19)			-\$122.02			
			Payroll Burden	55.60%					<b>\$355.98</b>					<b>-\$103.72</b>	<b>\$252.26</b>	<b>\$245.00</b>
2022	32	Reconnect Completed After Hours (Customer/Contract Driven) - At Meter	Direct Labour - Clerical	\$84.20	0.58		\$48.84	\$27.15	\$75.99	Small Vehicle Time	\$10.00	1.83	\$18.30			
			Direct Labour - Field Staff (RLM)	\$83.56	1.83	1.20	\$183.50	\$102.02	\$285.52	Credit (Rate Code 18&19)			-\$123.49			
			Payroll Burden	55.60%					<b>\$361.51</b>					<b>-\$105.19</b>	<b>\$256.32</b>	<b>\$245.00</b>

1

**Table 4: Reconnect Completed After Hours (Customer/Contract Driven) – At Pole**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	33	Reconnect Completed After Hours (Customer/Contract Driven) - At Pole	Direct Labour - Clerical	\$80.08	0.58		\$46.45	\$24.90	\$71.34	Large Vehicle Time	\$57.00	2.02	\$115.14			
			Direct Labour - Field Staff (RLM)	\$79.43	4.04	1.20	\$385.08	\$206.40	\$591.49	Credit (Rate Code 22)			-\$311.76			
			Payroll Burden	53.60%					<b>\$662.83</b>					<b>-\$196.62</b>	<b>\$466.21</b>	<b>\$475.00</b>
2019	33	Reconnect Completed After Hours (Customer/Contract Driven) - At Pole	Direct Labour - Clerical	\$81.00	0.58		\$46.98	\$25.51	\$72.49	Large Vehicle Time	\$57.00	2.02	\$115.14			
			Direct Labour - Field Staff (RLM)	\$80.35	4.04	1.20	\$389.54	\$211.52	\$601.06	Credit (Rate Code 22)			-\$316.01			
			Payroll Burden	54.30%					<b>\$673.55</b>					<b>-\$200.87</b>	<b>\$472.68</b>	<b>\$475.00</b>
2020	33	Reconnect Completed After Hours (Customer/Contract Driven) - At Pole	Direct Labour - Clerical	\$81.96	0.58		\$47.54	\$26.10	\$73.63	Large Vehicle Time	\$57.00	2.02	\$115.14			
			Direct Labour - Field Staff (RLM)	\$81.32	4.04	1.20	\$394.24	\$216.44	\$610.68	Credit (Rate Code 22)			-\$320.27			
			Payroll Burden	54.90%					<b>\$684.31</b>					<b>-\$205.13</b>	<b>\$479.18</b>	<b>\$475.00</b>
2021	33	Reconnect Completed After Hours (Customer/Contract Driven) - At Pole	Direct Labour - Clerical	\$82.92	0.58		\$48.09	\$26.74	\$74.83	Large Vehicle Time	\$57.00	2.02	\$115.14			
			Direct Labour - Field Staff (RLM)	\$82.28	4.04	1.20	\$398.89	\$221.78	\$620.68	Credit (Rate Code 22)			-\$324.71			
			Payroll Burden	55.60%					<b>\$695.51</b>					<b>-\$209.57</b>	<b>\$485.94</b>	<b>\$475.00</b>
2022	33	Reconnect Completed After Hours (Customer/Contract Driven) - At Pole	Direct Labour - Clerical	\$84.20	0.58		\$48.84	\$27.15	\$75.99	Large Vehicle Time	\$57.00	2.02	\$115.14			
			Direct Labour - Field Staff (RLM)	\$83.56	4.04	1.20	\$405.10	\$225.23	\$630.33	Credit (Rate Code 22)			-\$328.99			
			Payroll Burden	55.60%					<b>\$706.32</b>					<b>-\$213.85</b>	<b>\$492.47</b>	<b>\$475.00</b>

**1.1.4 ADDITIONAL SERVICE LAYOUT FEE – BASIC/COMPLEX – MORE  
THAN ONE HOUR (RATE CODE 34 & 35)**

When a customer determines that their distribution service requirement has changed from what was originally submitted and planned, Hydro One will determine the work required to modify the existing service layout to meet the customer's new needs. If work is required in excess of one hour, the fee in Table 5 below will be charged. In previous definitions, a basic service layout has involved a new single-phase service, while a complex additional service layout was for a three-phase service. The Study demonstrated that there was not a substantial difference between the work required to make changes to a three-phase service compared to a single-phase service. Hydro One is therefore proposing to charge the same rate, regardless of whether the changes required to the layout are basic or complex.



1

**Table 5: Additional Service Layout Fee – Basic/Complex – More Than One Hour**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	34&35	Additional Service Layout Fee - Basic/Complex (more than one hour)	Direct Labour - Clerical	\$80.08	0.64		\$51.25	\$27.47	\$78.72	Small Vehicle Time	\$10.00	1.73	\$11.73			
			Direct Labour - ADET	\$84.64	3.62		\$306.40	\$164.23	\$470.63							
			Payroll Burden	53.60%					<b>\$549.35</b>					<b>\$11.73</b>	<b>\$561.08</b>	<b>\$561.08</b>
2019	34&35	Additional Service Layout Fee - Basic/Complex (more than one hour)	Direct Labour - Clerical	\$81.00	0.64		\$51.84	\$28.15	\$79.99	Small Vehicle Time	\$10.00	1.73	\$11.73			
			Direct Labour - ADET	\$85.54	3.62		\$309.65	\$168.14	\$477.79							
			Payroll Burden	54.30%					<b>\$557.78</b>					<b>\$11.73</b>	<b>\$569.51</b>	<b>\$569.51</b>
2020	34&35	Additional Service Layout Fee - Basic/Complex (more than one hour)	Direct Labour - Clerical	\$81.96	0.64		\$52.45	\$28.80	\$81.25	Small Vehicle Time	\$10.00	1.73	\$11.73			
			Direct Labour - ADET	\$86.48	3.62		\$313.06	\$171.87	\$484.93							
			Payroll Burden	54.90%					<b>\$566.18</b>					<b>\$11.73</b>	<b>\$577.91</b>	<b>\$577.91</b>
2021	34&35	Additional Service Layout Fee - Basic/Complex (more than one hour)	Direct Labour - Clerical	\$82.92	0.64		\$53.07	\$29.51	\$82.58	Small Vehicle Time	\$10.00	1.73	\$11.73			
			Direct Labour - ADET	\$87.42	3.62		\$316.46	\$175.95	\$492.41							
			Payroll Burden	55.60%					<b>\$574.99</b>					<b>\$11.73</b>	<b>\$586.72</b>	<b>\$586.72</b>
2022	34&35	Additional Service Layout Fee - Basic/Complex (more than one hour)	Direct Labour - Clerical	\$84.20	0.64		\$53.89	\$29.96	\$83.85	Small Vehicle Time	\$10.00	1.73	\$11.73			
			Direct Labour - ADET	\$88.70	3.62		\$321.09	\$178.53	\$499.62							
			Payroll Burden	55.60%					<b>\$583.47</b>					<b>\$11.73</b>	<b>\$595.20</b>	<b>\$595.20</b>

1        **1.1.5                      PIPELINE CROSSINGS (RATE CODE 36)**

2        Permission is required from the pipeline company before installing new wires (overhead  
3        or underground) crossing a pipeline Right of Way (“ROW”), or installing poles, anchors,  
4        or other equipment on a pipeline ROW. To generate the drawings, a great deal of  
5        information such as pipe depth, diameter, ROW width, and position of the line within the  
6        ROW must be collected at the site with a pipeline representative. The pipeline  
7        representative will determine what steps need to be taken and make suggestions for the  
8        best possible design. Hydro One charges the customer a fee that includes creation of the  
9        drawing, signing of the agreement, review of standards, obligations and conditions.

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**Table 6: Pipeline Crossings**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/ Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/ Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	36	Pipeline Crossings	Direct Labour - Clerical	\$80.08	1.00		\$80.08	\$42.92	\$123.00	Small Vehicle Time	\$10.00	16.00	\$160.00			
			Direct Labour - ADET	\$84.64	16.00		\$1,354.24	\$725.87	\$2,080.11							
			Payroll Burden	53.60%					<b>\$2,203.12</b>					<b>\$160.00</b>	<b>\$2,363.12</b>	<b>\$2,363.12</b>
2019	36	Pipeline Crossings	Direct Labour - Clerical	\$81.00	1.00		\$81.00	\$43.98	\$124.98	Small Vehicle Time	\$10.00	16.00	\$160.00			
			Direct Labour - ADET	\$85.54	16.00		\$1,368.61	\$743.16	\$2,111.77							
			Payroll Burden	54.30%					<b>\$2,236.75</b>					<b>\$160.00</b>	<b>\$2,396.75</b>	<b>\$2,396.75</b>
2020	36	Pipeline Crossings	Direct Labour - Clerical	\$81.96	1.00		\$81.96	\$45.00	\$126.96	Small Vehicle Time	\$10.00	16.00	\$160.00			
			Direct Labour - ADET	\$86.48	16.00		\$1,383.68	\$759.64	\$2,143.32							
			Payroll Burden	54.90%					<b>\$2,270.28</b>					<b>\$160.00</b>	<b>\$2,430.28</b>	<b>\$2,430.28</b>
2021	36	Pipeline Crossings	Direct Labour - Clerical	\$82.92	1.00		\$82.92	\$46.10	\$129.02	Small Vehicle Time	\$10.00	16.00	\$160.00			
			Direct Labour - ADET	\$87.42	16.00		\$1,398.72	\$777.69	\$2,176.41							
			Payroll Burden	55.60%					<b>\$2,305.43</b>					<b>\$160.00</b>	<b>\$2,465.43</b>	<b>\$2,465.43</b>
2022	36	Pipeline Crossings	Direct Labour - Clerical	\$84.20	1.00		\$84.20	\$46.82	\$131.02	Small Vehicle Time	\$10.00	16.00	\$160.00			
			Direct Labour - ADET	\$88.70	16.00		\$1,419.20	\$789.08	\$2,208.28							
			Payroll Burden	55.60%					<b>\$2,339.29</b>					<b>\$160.00</b>	<b>\$2,499.29</b>	<b>\$2,499.29</b>

**1.1.6 WATER CROSSINGS (RATE CODE 37)**

Water Crossing fees are only charged when approval is being requested to cross the Rideau Canal and Trent Severn Waterway. Under emergency conditions, work may proceed but due diligence is required to prevent damage to fish habitats resulting in fines. Under normal circumstances, Hydro One staff will perform a self-assessment for Transport Canada (“TC”) and the Department of Fisheries and Oceans (“DFO”). The results of the self-assessment will dictate further interactions between Hydro One, the DFO, and TC in regards to new applications, special permits and guidance to prevent damage to fish habitat. The results of the self-assessment will also outline any concerns with the proposed work and if any timing restrictions apply (e.g., fish spawning season).

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**Table 7: Water Crossings**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	37	Water Crossings	Direct Labour - Clerical	\$80.08	1.55		\$124.12	\$66.53	\$190.65	Small Vehicle Time	\$10.00	22.75	\$227.50			
			Direct Labour - ADET	\$84.64	22.75		\$1,925.56	\$1,032.10	\$2,957.66	Utility Boat	\$25.00	5.87	\$146.75			
			Payroll Burden	53.60%					<b>\$3,148.31</b>					<b>\$374.25</b>	<b>\$3,522.56</b>	<b>\$3,522.56</b>
2019	37	Water Crossings	Direct Labour - Clerical	\$81.00	1.55		\$125.55	\$68.17	\$193.72	Small Vehicle Time	\$10.00	22.75	\$227.50			
			Direct Labour - ADET	\$85.54	22.75		\$1,946.00	\$1,056.68	\$3,002.67	Utility Boat	\$25.00	5.87	\$146.75			
			Payroll Burden	54.30%					<b>\$3,196.40</b>					<b>\$374.25</b>	<b>\$3,570.65</b>	<b>\$3,570.65</b>
2020	37	Water Crossings	Direct Labour - Clerical	\$81.96	1.55		\$127.04	\$69.74	\$196.78	Small Vehicle Time	\$10.00	22.75	\$227.50			
			Direct Labour - ADET	\$86.48	22.75		\$1,967.42	\$1,080.11	\$3,047.53	Utility Boat	\$25.00	5.87	\$146.75			
			Payroll Burden	54.90%					<b>\$3,244.32</b>					<b>\$374.25</b>	<b>\$3,618.57</b>	<b>\$3,618.57</b>
2021	37	Water Crossings	Direct Labour - Clerical	\$82.92	1.55		\$128.53	\$71.46	\$199.99	Small Vehicle Time	\$10.00	22.75	\$227.50			
			Direct Labour - ADET	\$87.42	22.75		\$1,988.81	\$1,105.78	\$3,094.58	Utility Boat	\$25.00	5.87	\$146.75			
			Payroll Burden	55.60%					<b>\$3,294.57</b>					<b>\$374.25</b>	<b>\$3,668.82</b>	<b>\$3,668.82</b>
2022	37	Water Crossings	Direct Labour - Clerical	\$84.20	1.55		\$130.51	\$72.56	\$203.07	Small Vehicle Time	\$10.00	22.75	\$227.50			
			Direct Labour - ADET	\$88.70	22.75		\$2,017.93	\$1,121.97	\$3,139.89	Utility Boat	\$25.00	5.87	\$146.75			
			Payroll Burden	55.60%					<b>\$3,342.96</b>					<b>\$374.25</b>	<b>\$3,717.21</b>	<b>\$3,717.21</b>

**1.1.7 RAILWAY CROSSINGS (RATE CODE 38)**

A new agreement is required from a railway authority before installing new wire across railway tracks or rights-of-way, or reconfiguring or modifying existing crossings of railway tracks or rights-of-way. Additional fees incurred from the railway authority application, the actual railway agreement, and flagging fees will be collected from the customer.

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**Table 8: Railway Crossings**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	38	Railway Crossings (Plus Feed Through Charges from Railway Company)	Direct Labour - Clerical	\$80.08	1.55		\$124.12	\$66.53	\$190.65	Small Vehicle Time	\$10.00	15.77	\$157.70			
			Direct Labour - ADET	\$84.64	15.77		\$1,334.77	\$715.44	\$2,050.21							
			Direct Labour - MP2	\$105.47	4.00		\$421.88	\$226.13	\$648.01							
			Direct Labour - CADD (GR64)	\$89.20	12.00		\$1,070.40	\$573.73	\$1,644.13							
			Payroll Burden	53.60%					<b>\$4,533.01</b>					<b>\$157.70</b>	<b>\$4,690.71</b>	<b>\$4,690.71</b>
2019	38	Railway Crossings (Plus Feed Through Charges from Railway Company)	Direct Labour - Clerical	\$81.00	1.55		\$125.55	\$68.17	\$193.72	Small Vehicle Time	\$10.00	15.77	\$157.70			
			Direct Labour - ADET	\$85.54	15.77		\$1,348.94	\$732.47	\$2,081.41							
			Direct Labour - MP2	\$106.92	4.00		\$427.68	\$232.23	\$659.91							
			Direct Labour - CADD (GR64)	\$90.07	12.00		\$1,080.84	\$586.90	\$1,667.74							
			Payroll Burden	54.30%					<b>\$4,602.78</b>					<b>\$157.70</b>	<b>\$4,760.48</b>	<b>\$4,760.48</b>
2020	38	Railway Crossings (Plus Feed Through Charges from Railway Company)	Direct Labour - Clerical	\$81.96	1.55		\$127.04	\$69.74	\$196.78	Small Vehicle Time	\$10.00	15.77	\$157.70			
			Direct Labour - ADET	\$86.48	15.77		\$1,363.79	\$748.72	\$2,112.51							
			Direct Labour - MP2	\$108.43	4.00		\$433.72	\$238.11	\$671.83							
			Direct Labour - CADD (GR64)	\$91.00	12.00		\$1,092.00	\$599.51	\$1,691.51							
			Payroll Burden	54.90%					<b>\$4,672.63</b>					<b>\$157.70</b>	<b>\$4,830.33</b>	<b>\$4,830.33</b>

2

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2021	38	Railway Crossings (Plus Feed Through Charges from Railway Company)	Direct Labour - Clerical	\$82.92	1.55		\$128.53	\$71.46	\$199.99	Small Vehicle Time	\$10.00	15.77	\$157.70			
			Direct Labour - ADET	\$87.42	15.77		\$1,378.61	\$766.51	\$2,145.12							
			Direct Labour - MP2	\$109.27	4.00		\$437.08	\$243.02	\$680.10							
			Direct Labour - CADD (GR64)	\$91.92	12.00		\$1,103.04	\$613.29	\$1,716.33							
			Payroll Burden	55.60%					<b>\$4,741.54</b>					<b>\$157.70</b>	<b>\$4,899.24</b>	<b>\$4,899.24</b>
2022	38	Railway Crossings (Plus Feed Through Charges from Railway Company)	Direct Labour - Clerical	\$84.20	1.55		\$130.51	\$72.56	\$203.07	Small Vehicle Time	\$10.00	15.77	\$157.70			
			Direct Labour - ADET	\$88.70	15.77		\$1,398.80	\$777.73	\$2,176.53							
			Direct Labour - MP2	\$110.56	4.00		\$442.24	\$245.89	\$688.13							
			Direct Labour - CADD (GR64)	\$93.20	12.00		\$1,118.40	\$621.83	\$1,740.23							
			Payroll Burden	55.60%					<b>\$4,807.96</b>					<b>\$157.70</b>	<b>\$4,965.66</b>	<b>\$4,965.66</b>



1       **1.1.8    LINE STAKING PER METER (RATE CODE 39A, B, C)**

2

3   For Hydro One to bring electrical service to a customer's property, an expansion from the

4   existing distribution line to the customer's property may have to be designed and built.

5   Hydro One will perform the staking of the line route according to the type of line to be built:

6   overhead, underground or submarine cable. Based on the 2006 Rate Handbook, all line

7   staking was charged at a common fee. The results of the Time Study have identified that

8   the underlying cost varies by the the type of line needing to be built. Hydro One therefore

9   proposes that the line staking per meter service be divided into three categories: overhead

10   line, underground line and submarine cable.

1

**Table 9: Overhead Line Staking Per Meter**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	39a	Overhead Line Staking per Meter	Direct Labour - Clerical	\$80.08	0.0010		\$0.08	\$0.04	\$0.12	Small Vehicle Time	\$10.00	0.0108	\$0.11			
			Direct Labour - ADET	\$84.64	0.0301		\$2.55	\$1.37	\$3.91	Material - Stake	\$0.03	1.0000	\$0.03			
			Payroll Burden	53.60%					<b>\$4.04</b>					<b>\$0.14</b>	<b>\$4.17</b>	<b>\$4.17</b>
2019	39a	Overhead Line Staking per Meter	Direct Labour - Clerical	\$81.00	0.0010		\$0.08	\$0.04	\$0.12	Small Vehicle Time	\$10.00	0.0108	\$0.11			
			Direct Labour - ADET	\$85.54	0.0301		\$2.57	\$1.40	\$3.97	Material - Stake	\$0.03	1.0000	\$0.03			
			Payroll Burden	54.30%					<b>\$4.10</b>					<b>\$0.14</b>	<b>\$4.24</b>	<b>\$4.24</b>
2020	39a	Overhead Line Staking per Meter	Direct Labour - Clerical	\$81.96	0.0010		\$0.08	\$0.04	\$0.13	Small Vehicle Time	\$10.00	0.0108	\$0.11			
			Direct Labour - ADET	\$86.48	0.0301		\$2.60	\$1.43	\$4.03	Material - Stake	\$0.03	1.0000	\$0.03			
			Payroll Burden	54.90%					<b>\$4.16</b>					<b>\$0.14</b>	<b>\$4.30</b>	<b>\$4.30</b>
2021	39a	Overhead Line Staking per Meter	Direct Labour - Clerical	\$82.92	0.0010		\$0.08	\$0.05	\$0.13	Small Vehicle Time	\$10.00	0.0108	\$0.11			
			Direct Labour - ADET	\$87.42	0.0301		\$2.63	\$1.46	\$4.09	Material - Stake	\$0.03	1.0000	\$0.03			
			Payroll Burden	55.60%					<b>\$4.22</b>					<b>\$0.14</b>	<b>\$4.36</b>	<b>\$4.36</b>
2022	39a	Overhead Line Staking per Meter	Direct Labour - Clerical	\$84.20	0.0010		\$0.08	\$0.05	\$0.13	Small Vehicle Time	\$10.00	0.0108	\$0.11			
			Direct Labour - ADET	\$88.70	0.0301		\$2.67	\$1.48	\$4.15	Material - Stake	\$0.03	1.0000	\$0.03			
			Payroll Burden	55.60%					<b>\$4.29</b>					<b>\$0.14</b>	<b>\$4.42</b>	<b>\$4.42</b>

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**Table 10: Underground Line Staking Per Meter**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	39b	Underground Line Staking per Meter	Direct Labour - Clerical	\$80.08	0.0012		\$0.10	\$0.05	\$0.15	Small Vehicle Time	\$10.00	0.0100	\$0.10			
			Direct Labour - ADET	\$84.64	0.0212		\$1.79	\$0.96	\$2.76							
			Payroll Burden	53.60%					<b>\$2.90</b>					<b>\$0.10</b>	<b>\$3.00</b>	<b>\$3.00</b>
2019	39b	Underground Line Staking per Meter	Direct Labour - Clerical	\$81.00	0.0012		\$0.10	\$0.05	\$0.15	Small Vehicle Time	\$10.00	0.0100	\$0.10			
			Direct Labour - ADET	\$85.54	0.0212		\$1.81	\$0.98	\$2.80							
			Payroll Burden	54.30%					<b>\$2.95</b>					<b>\$0.10</b>	<b>\$3.05</b>	<b>\$3.05</b>
2020	39b	Underground Line Staking per Meter	Direct Labour - Clerical	\$81.96	0.0012		\$0.10	\$0.05	\$0.15	Small Vehicle Time	\$10.00	0.0100	\$0.10			
			Direct Labour - ADET	\$86.48	0.0212		\$1.83	\$1.01	\$2.84							
			Payroll Burden	54.90%					<b>\$2.99</b>					<b>\$0.10</b>	<b>\$3.09</b>	<b>\$3.09</b>
2021	39b	Underground Line Staking per Meter	Direct Labour - Clerical	\$82.92	0.0012		\$0.10	\$0.06	\$0.15	Small Vehicle Time	\$10.00	0.0100	\$0.10			
			Direct Labour - ADET	\$87.42	0.0212		\$1.85	\$1.03	\$2.88							
			Payroll Burden	55.60%					<b>\$3.04</b>					<b>\$0.10</b>	<b>\$3.14</b>	<b>\$3.14</b>
2022	39b	Underground Line Staking per Meter	Direct Labour - Clerical	\$84.20	0.0012		\$0.10	\$0.06	\$0.16	Small Vehicle Time	\$10.00	0.0100	\$0.10			
			Direct Labour - ADET	\$88.70	0.0212		\$1.88	\$1.05	\$2.93							
			Payroll Burden	55.60%					<b>\$3.08</b>					<b>\$0.10</b>	<b>\$3.18</b>	<b>\$3.18</b>

2

1 **Table 11: Submarine Cable Line Staking Per Meter**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	39c	Submarine Cable Line Staking per Meter	Direct Labour - Clerical	\$80.08	0.0007		\$0.06	\$0.03	\$0.09	Small Vehicle Time	\$10.00	0.0042	\$0.04			
			Direct Labour - ADET	\$84.64	0.0192		\$1.63	\$0.87	\$2.50							
			Payroll Burden	53.60%					<b>\$2.58</b>					<b>\$0.04</b>	<b>\$2.62</b>	<b>\$2.62</b>
2019	39c	Submarine Cable Line Staking per Meter	Direct Labour - Clerical	\$81.00	0.0007		\$0.06	\$0.03	\$0.09	Small Vehicle Time	\$10.00	0.0042	\$0.04			
			Direct Labour - ADET	\$85.54	0.0192		\$1.64	\$0.89	\$2.53							
			Payroll Burden	54.30%					<b>\$2.62</b>					<b>\$0.04</b>	<b>\$2.66</b>	<b>\$2.66</b>
2020	39c	Submarine Cable Line Staking per Meter	Direct Labour - Clerical	\$81.96	0.0007		\$0.06	\$0.03	\$0.09	Small Vehicle Time	\$10.00	0.0042	\$0.04			
			Direct Labour - ADET	\$86.48	0.0192		\$1.66	\$0.91	\$2.57							
			Payroll Burden	54.90%					<b>\$2.66</b>					<b>\$0.04</b>	<b>\$2.70</b>	<b>\$2.70</b>
2021	39c	Submarine Cable Line Staking per Meter	Direct Labour - Clerical	\$82.92	0.0007		\$0.06	\$0.03	\$0.09	Small Vehicle Time	\$10.00	0.0042	\$0.04			
			Direct Labour - ADET	\$87.42	0.0192		\$1.68	\$0.93	\$2.61							
			Payroll Burden	55.60%					<b>\$2.70</b>					<b>\$0.04</b>	<b>\$2.74</b>	<b>\$2.74</b>
2022	39c	Submarine Cable Line Staking per Meter	Direct Labour - Clerical	\$84.20	0.0007		\$0.06	\$0.03	\$0.09	Small Vehicle Time	\$10.00	0.0042	\$0.04			
			Direct Labour - ADET	\$88.70	0.0192		\$1.70	\$0.95	\$2.65							
			Payroll Burden	55.60%					<b>\$2.74</b>					<b>\$0.04</b>	<b>\$2.78</b>	<b>\$2.78</b>

1       **1.1.9    CENTRAL METERING**

2  
3       Customers may opt for central metering (“CM”) to avoid having to pay for a large and expensive  
4       service located in one building to supply several separate buildings on one property, or to reduce  
5       having a meter on each building. If the customer requests, Hydro One Networks will install a  
6       CM service on a customer-owned pole. A maximum of four service connections can be  
7       connected at the CM location. If this is for a new service, where the load is greater than or equal  
8       to 45 kW, the CM service will be installed free of charge.

9  
10               **1.1.9.1    CENTRAL METERING – NEW SERVICE < 45 KW (RATE CODE**  
11               **40)**

12  
13       When the load supplied by the central metering service is less than 45 kW, the load does not  
14       justify the higher metering costs resulting from the use of instrument transformers, therefore the  
15       customer must pay to cover the instrument transformer costs.

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**Table 12: Central Metering – New Service < 45 kW**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	40	Central Metering - New Service < 45 kW							\$0.00	Material	\$100.00	1.00	\$100.00	\$100.00	\$100.00	\$100.00
2019	40	Central Metering - New Service < 45 kW							\$0.00	Material	\$100.00	1.00	\$100.00	\$100.00	\$100.00	\$100.00
2020	40	Central Metering - New Service < 45 kW							\$0.00	Material	\$100.00	1.00	\$100.00	\$100.00	\$100.00	\$100.00
Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total ther	Calculated Total Charge	Proposed Charge
2021	40	Central Metering - New Service < 45 kW							\$0.00	Material	\$100.00	1.00	\$100.00	\$100.00	\$100.00	\$100.00
2022	40	Central Metering - New Service < 45 kW							\$0.00	Material	\$100.00	1.00	\$100.00	\$100.00	\$100.00	\$100.00

**1.1.9.2            CONVERSION TO CENTRAL METERING < 45 KW (RATE  
CODE 41)**

Customers who request a conversion from conventional metering to CM require a new service layout, a change in their account, the removal of existing meters and equipment and installation of new equipment. This involves site visits for the layout, equipment modifications and administrative work. If the installation is to supply a load of less than 45 kW, the customer is charged for the associated labour plus the incremental cost of the instrument transformers.

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**Table 13: Conversion to Central Metering < 45 kW**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	41	Conversion to Central Metering < 45 kW	Direct Labour - Clerical	\$80.08	0.26		\$20.82	\$11.16	\$31.98	Small Vehicle Time	\$10.00	3.50	\$35.00			
			Direct Labour - Field Staff (RLM)	\$79.43	6.06		\$481.35	\$258.01	\$739.36	Large Vehicle Time	\$57.00	3.03	\$172.71			
			Direct Labour - Field Staff (ADET)	\$84.64	3.50		\$296.24	\$158.78	\$455.02	Material	\$100.00	1.00	\$100.00			
			Payroll Burden	53.60%					<b>\$1,226.36</b>					<b>\$307.71</b>	<b>\$1,534.07</b>	<b>\$1,534.07</b>
2019	41	Conversion to Central Metering < 45 kW	Direct Labour - Clerical	\$81.00	0.26		\$21.06	\$11.44	\$32.50	Small Vehicle Time	\$10.00	3.50	\$35.00			
			Direct Labour - Field Staff (RLM)	\$80.35	6.06		\$486.92	\$264.40	\$751.32	Large Vehicle Time	\$57.00	3.03	\$172.71			
			Direct Labour - Field Staff (ADET)	\$85.54	3.50		\$299.38	\$162.57	\$461.95	Material	\$100.00	1.00	\$100.00			
			Payroll Burden	54.30%					<b>\$1,245.76</b>					<b>\$307.71</b>	<b>\$1,553.47</b>	<b>\$1,553.47</b>
2020	41	Conversion to Central Metering < 45 kW	Direct Labour - Clerical	\$81.96	0.26		\$21.31	\$11.70	\$33.01	Small Vehicle Time	\$10.00	3.50	\$35.00			
			Direct Labour - Field Staff (RLM)	\$81.32	6.06		\$492.80	\$270.55	\$763.35	Large Vehicle Time	\$57.00	3.03	\$172.71			
			Direct Labour - Field Staff (ADET)	\$86.48	3.50		\$302.68	\$166.17	\$468.85	Material	\$100.00	1.00	\$100.00			
			Payroll Burden	54.90%					<b>\$1,265.21</b>					<b>\$307.71</b>	<b>\$1,572.92</b>	<b>\$1,572.92</b>
2021	41	Conversion to Central Metering < 45	Direct Labour - Clerical	\$82.92	0.26		\$21.56	\$11.99	\$33.55	Small Vehicle Time	\$10.00	3.50	\$35.00			



Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
		kW	Direct Labour - Field Staff (RLM)	\$82.28	6.06		\$498.62	\$277.23	\$775.85	Large Vehicle Time	\$57.00	3.03	\$172.71			
			Direct Labour - Field Staff (ADET)	\$87.42	3.50		\$305.97	\$170.12	\$476.09	Material	\$100.00	1.00	\$100.00			
			Payroll Burden	55.60%					\$1,285.48					\$307.71	\$1,593.19	\$1,593.19
2022	41	Conversion to Central Metering < 45 kW	Direct Labour - Clerical	\$84.20	0.26		\$21.89	\$12.17	\$34.06	Small Vehicle Time	\$10.00	3.50	\$35.00			
			Direct Labour - Field Staff (RLM)	\$83.56	6.06		\$506.37	\$281.54	\$787.92	Large Vehicle Time	\$57.00	3.03	\$172.71			
			Direct Labour - Field Staff (ADET)	\$88.70	3.50		\$310.45	\$172.61	\$483.06	Material	\$100.00	1.00	\$100.00			
			Payroll Burden	55.60%					\$1,305.04					\$307.71	\$1,612.75	\$1,612.75

**1.1.9.3            CONVERSION TO CENTRAL METERING  $\geq$  45  
KW (RATE CODE 42)**

Customers who request a conversion from conventional metering to central metering require a new service layout, a change in their account, the removal of existing meters and equipment, and installation of new equipment. This involves site visits for the layout, equipment modifications, and administrative work. Loads greater than or equal to 45 kW justify the costs for the required instrument transformer. Therefore, only the labour costs associated with performing this service are charged to the customer.

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**Table 14: Conversion to Central Metering > 45 kW**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	42	Conversion to Central Metering >= 45 kW	Direct Labour - Clerical	\$80.08	0.26		\$20.82	\$11.16	\$31.98	Small Vehicle Time	\$10.00	3.50	\$35.00			
			Direct Labour - Field Staff (RLM)	\$79.43	6.06		\$481.35	\$258.01	\$739.36	Large Vehicle Time	\$57.00	3.03	\$172.71			
			Direct Labour - Field Staff (ADET)	\$84.64	3.50		\$296.24	\$158.78	\$455.02							
			Payroll Burden	53.60%			\$427.95		<b>\$1,226.36</b>					<b>\$207.71</b>	<b>\$1,434.07</b>	<b>\$1,434.07</b>
2019	42	Conversion to Central Metering >= 45 kW	Direct Labour - Clerical	\$81.00	0.26		\$21.06	\$11.44	\$32.50	Small Vehicle Time	\$10.00	3.50	\$35.00			
			Direct Labour - Field Staff (RLM)	\$80.35	6.06		\$486.92	\$264.40	\$751.32	Large Vehicle Time	\$57.00	3.03	\$172.71			
			Direct Labour - Field Staff (ADET)	\$85.54	3.50		\$299.38	\$162.57	\$461.95							
			Payroll Burden	54.30%			\$438.40		<b>\$1,245.76</b>					<b>\$207.71</b>	<b>\$1,453.47</b>	<b>\$1,453.47</b>
2020	42	Conversion to Central Metering >= 45 kW	Direct Labour - Clerical	\$81.96	0.26		\$21.31	\$11.70	\$33.01	Small Vehicle Time	\$10.00	3.50	\$35.00			
			Direct Labour - Field Staff (RLM)	\$81.32	6.06		\$492.80	\$270.55	\$763.35	Large Vehicle Time	\$57.00	3.03	\$172.71			
			Direct Labour - Field Staff (ADET)	\$86.48	3.50		\$302.68	\$166.17	\$468.85							
			Payroll Burden	54.90%			\$448.42		<b>\$1,265.21</b>					<b>\$207.71</b>	<b>\$1,472.92</b>	<b>\$1,472.92</b>
2021	42	Conversion to Central	Direct Labour - Clerical	\$82.92	0.26		\$21.56	\$11.99	\$33.55	Small Vehicle	\$10.00	3.50	\$35.00			

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
		Metering >= 45 kW								Time						
			Direct Labour - Field Staff (RLM)	\$82.28	6.06		\$498.62	\$277.23	\$775.85	Large Vehicle Time	\$57.00	3.03	\$172.71			
			Direct Labour - Field Staff (ADET)	\$87.42	3.50		\$305.97	\$170.12	\$476.09							
			Payroll Burden	55.60%			\$459.34		<b>\$1,285.48</b>					<b>\$207.71</b>	<b>\$1,493.19</b>	<b>\$1,493.19</b>
2022	42	Conversion to Central Metering >= 45 kW	Direct Labour - Clerical	\$84.20	0.26		\$21.89	\$12.17	\$34.06	Small Vehicle Time	\$10.00	3.50	\$35.00			
			Direct Labour - Field Staff (RLM)	\$83.56	6.06		\$506.37	\$281.54	\$787.92	Large Vehicle Time	\$57.00	3.03	\$172.71			
			Direct Labour - Field Staff (ADET)	\$88.70	3.50		\$310.45	\$172.61	\$483.06							
			Payroll Burden	55.60%			\$466.33		<b>\$1,305.04</b>					<b>\$207.71</b>	<b>\$1,512.75</b>	<b>\$1,512.75</b>

1                   **1.1.10      CONNECTION IMPACT ASSESSMENTS**

2  
3   Renewable generation development and the subsequent connection process involve a number of  
4   stages, including technical assessments. Hydro One assesses the technical impact of the  
5   renewable generation connection to its distribution system through a Connection Impact  
6   Assessment (“CIA”). A CIA is a more detailed assessment of a project's impact on the  
7   distribution system. The results include a technical report outlining project feasibility, technical  
8   specifications needed for the project and the impact the project would have on the distribution  
9   grid and any of its customers, in accordance with Section 6.2.14 of the DSC.

10  
11                   **1.1.10.1          CONNECTION      IMPACT      ASSESSMENTS      –      NET**  
12                   **METERING (RATE CODE 45A)**

13  
14   A net metering generator, as defined in section 7(1) of the Net Metering Regulation (O. Reg. 541  
15   / 05), generates electricity primarily for its own use from a renewable generation facility. Net  
16   metering involves the measurement of the quantity of electricity a generator uses against the  
17   quantity of electricity it generates resulting in a net total. Net metering projects include those  
18   which have a capacity greater than 10 kW but less than or equal to 500 kW that wish to connect  
19   to Hydro One’s distribution system.

**Table 15: Connection Impact Assessments – Net Metering**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	45a	Connection Impact Assessments - Net Metering	Direct Labour - Clerical	\$80.08	0.87		\$69.67	\$37.34	\$107.01	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$117.84	2.83		\$333.49	\$178.75	\$512.24							
			Direct Labour - Technician (GR64)	\$89.20	14.25		\$1,271.10	\$681.31	\$1,952.41							
			Direct Labour - Field Staff (ADET)	\$84.64	4.08		\$345.33	\$185.10	\$530.43							
			Direct Labour - MP2	\$105.47	0.16		\$16.88	\$9.05	\$25.92							
			Payroll Burden	53.60%					<b>\$3,128.01</b>					<b>\$18.10</b>	<b>\$3,146.11</b>	<b>\$3,146.11</b>

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2019	45a	Connection Impact Assessments - Net Metering	Direct Labour - Clerical	\$81.00	0.87		\$70.47	\$38.27	\$108.74	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$119.24	2.83		\$337.45	\$183.23	\$520.68							
			Direct Labour - Technician (GR64)	\$90.07	14.25		\$1,283.50	\$696.94	\$1,980.44							
			Direct Labour - Field Staff (ADET)	\$85.54	4.08		\$349.00	\$189.51	\$538.50							
			Direct Labour - MP2	\$106.92	0.16		\$17.11	\$9.29	\$26.40							
			Payroll Burden	54.30%					<b>\$3,174.75</b>					<b>\$18.10</b>	<b>\$3,192.85</b>	<b>\$3,192.85</b>

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2020	45a	Connection Impact Assessments - Net Metering	Direct Labour - Clerical	\$81.96	0.87		\$71.31	\$39.15	\$110.45	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$120.69	2.83		\$341.55	\$187.51	\$529.07							
			Direct Labour - Technician (GR64)	\$91.00	14.25		\$1,296.75	\$711.92	\$2,008.67							
			Direct Labour - Field Staff (ADET)	\$86.48	4.08		\$352.84	\$193.71	\$546.55							
			Direct Labour - MP2	\$108.43	0.16		\$17.35	\$9.52	\$26.87							
			Payroll Burden	54.90%					<b>\$3,221.60</b>					<b>\$18.10</b>	<b>\$3,239.70</b>	<b>\$3,239.70</b>
2021	45a	Connection Impact Assessments - Net Metering	Direct Labour - Clerical	\$82.92	0.87		\$72.14	\$40.11	\$112.25	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$121.49	2.83		\$343.82	\$191.16	\$534.98							
			Direct Labour - Technician (GR64)	\$91.92	14.25		\$1,309.86	\$728.28	\$2,038.14							
			Direct Labour - Field Staff (ADET)	\$87.42	4.08		\$356.67	\$198.31	\$554.98							
			Direct Labour - MP2	\$109.27	0.16		\$17.48	\$9.72	\$27.20							
			Payroll Burden	55.60%					<b>\$3,267.56</b>					<b>\$18.10</b>	<b>\$3,285.66</b>	<b>\$3,285.66</b>
2022	45a	Connection Impact Assessments - Net Metering	Direct Labour - Clerical	\$84.20	0.87		\$73.25	\$40.73	\$113.98	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$122.77	2.83		\$347.44	\$193.18	\$540.62							
			Direct Labour - Technician (GR64)	\$93.20	14.25		\$1,328.10	\$738.42	\$2,066.52							
			Direct Labour - Field Staff (ADET)	\$88.70	4.08		\$361.90	\$201.21	\$563.11							
			Direct Labour - MP2	\$110.56	0.16		\$17.69	\$9.84	\$27.53							
			Payroll Burden	55.60%					<b>\$3,311.76</b>					<b>\$18.10</b>	<b>\$3,329.86</b>	<b>\$3,329.86</b>

**1.1.10.2 CONNECTION IMPACT ASSESSMENTS – EMBEDDED  
LDC GENERATORS (RATE CODE 45B)**

This category covers CIAs for Capacity Allocation Exempt (“CAE”) sized Distributed Generation (“DG”) projects, including load displacement and energy storage facilities, proposed for connection to the distribution system of an embedded LDC. This type of CIA is completed by Hydro One at the request of a downstream LDC for the connection of a CAE-sized project to a Hydro One shared feeder.

As per the DSC, a “CAE small embedded generation facility” is an embedded generation facility that has a name-plate rated capacity of 250 kW or less in the case of a facility connected to a less than 15 kV line, or 500 kW or less in the case of a facility connected to a 15 kV or greater line, and is not a micro-embedded generation facility.



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**Table 16: Connection Impact Assessments – Embedded LDC Generators**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	45b	Connection Impact Assessments - Embedded LDC Generators	Direct Labour - Clerical	\$80.08	0.87		\$69.67	\$37.34	\$107.01	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$117.84	1.25		\$147.30	\$78.95	\$226.25							
			Direct Labour - Technician (GR64)	\$89.20	1.58		\$140.94	\$75.54	\$216.48							
			Direct Labour - Field Staff (ADET)	\$84.64	4.08		\$345.33	\$185.10	\$530.43							
			Direct Labour - MP2	\$105.47	10.66		\$1,124.31	\$602.63	\$1,726.94							
			Payroll Burden	53.60%					<b>\$2,807.11</b>					<b>\$18.10</b>	<b>\$2,825.21</b>	<b>\$2,825.21</b>
2019	45b	Connection Impact Assessments - Embedded LDC Generators	Direct Labour - Clerical	\$81.00	0.87		\$70.47	\$38.27	\$108.74	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$119.24	1.25		\$149.05	\$80.93	\$229.98							
			Direct Labour - Technician (GR64)	\$90.07	1.58		\$142.31	\$77.27	\$219.59							
			Direct Labour - Field Staff (ADET)	\$85.54	4.08		\$349.00	\$189.51	\$538.50							
			Direct Labour - MP2	\$106.92	10.66		\$1,139.77	\$618.89	\$1,758.66							
			Payroll Burden	54.30%					<b>\$2,855.47</b>					<b>\$18.10</b>	<b>\$2,873.57</b>	<b>\$2,873.57</b>

2

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2020	45b	Connection Impact Assessments - Embedded LDC Generators	Direct Labour - Clerical	\$81.96	0.87		\$71.31	\$39.15	\$110.45	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$120.69	1.25		\$150.86	\$82.82	\$233.69							
			Direct Labour - Technician (GR64)	\$91.00	1.58		\$143.78	\$78.94	\$222.72							
			Direct Labour - Field Staff (ADET)	\$86.48	4.08		\$352.84	\$193.71	\$546.55							
			Direct Labour - MP2	\$108.43	10.66		\$1,155.86	\$634.57	\$1,790.43							
			Payroll Burden	54.90%					<b>\$2,903.83</b>					<b>\$18.10</b>	<b>\$2,921.93</b>	<b>\$2,921.93</b>

1

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2021	45b	Connection Impact Assessment s - Embedded LDC Generators	Direct Labour - Clerical	\$82.92	0.87		\$72.14	\$40.11	\$112.25	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$121.49	1.25		\$151.86	\$84.44	\$236.30							
			Direct Labour - Technician (GR64)	\$91.92	1.58		\$145.23	\$80.75	\$225.98							
			Direct Labour - Field Staff (ADET)	\$87.42	4.08		\$356.67	\$198.31	\$554.98							
			Direct Labour - MP2	\$109.27	10.66		\$1,164.82	\$647.64	\$1,812.46							
			Payroll Burden	55.60%					<b>\$2,941.97</b>					<b>\$18.10</b>	<b>\$2,960.07</b>	<b>\$2,960.07</b>
2022	45b	Connection Impact Assessment s - Embedded LDC Generators	Direct Labour - Clerical	\$84.20	0.87		\$73.25	\$40.73	\$113.98	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$122.77	1.25		\$153.46	\$85.33	\$238.79							
			Direct Labour - Technician (GR64)	\$93.20	1.58		\$147.26	\$81.87	\$229.13							
			Direct Labour - Field Staff (ADET)	\$88.70	4.08		\$361.90	\$201.21	\$563.11							
			Direct Labour - MP2	\$110.56	10.66		\$1,178.57	\$655.28	\$1,833.85							
			Payroll Burden	55.60%					<b>\$2,978.87</b>					<b>\$18.10</b>	<b>\$2,996.97</b>	<b>\$2,996.97</b>

**1.1.10.3 CONNECTION IMPACT ASSESSMENTS – SMALL  
PROJECTS < =500 KW (RATE CODE 45C)**

This category covers CIA completed for CAE-sized DG projects, including load displacement and energy storage facilities, proposed for connection to Hydro One distribution system. When no LDC is involved, this type of CIA is completed by Hydro One at the request of an applicant.

1 **Table 17: Connection Impact Assessments – Small Projects <=500 kW**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	45c	Connection Impact Assessments - Small Projects <=500 kW	Direct Labour - Clerical	\$80.08	0.87		\$69.67	\$37.34	\$107.01	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$117.84	3.42		\$403.01	\$216.01	\$619.03							
			Direct Labour - Technician (GR64)	\$89.20	10.85		\$967.82	\$518.75	\$1,486.57							
			Direct Labour - Field Staff (ADET)	\$84.64	4.08		\$345.33	\$185.10	\$530.43							
			Direct Labour - MP2	\$105.47	2.81		\$296.37	\$158.85	\$455.23							
			Payroll Burden	53.60%					<b>\$3,198.27</b>					<b>\$18.10</b>	<b>\$3,216.37</b>	<b>\$3,216.37</b>

2

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2019	45c	Connection Impact Assessments - Small Projects <=500 kW	Direct Labour - Clerical	\$81.00	0.87		\$70.47	\$38.27	\$108.74	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$119.24	3.42		\$407.80	\$221.44	\$629.24							
			Direct Labour - Technician (GR64)	\$90.07	10.85		\$977.26	\$530.65	\$1,507.91							
			Direct Labour - Field Staff (ADET)	\$85.54	4.08		\$349.00	\$189.51	\$538.50							
			Direct Labour - MP2	\$106.92	2.81		\$300.45	\$163.14	\$463.59							
			Payroll Burden	54.30%					<b>\$3,247.97</b>					<b>\$18.10</b>	<b>\$3,266.07</b>	<b>\$3,266.07</b>

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2020	45c	Connection Impact Assessments - Small Projects <=500 kW	Direct Labour - Clerical	\$81.96	0.87		\$71.31	\$39.15	\$110.45	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$120.69	3.42		\$412.76	\$226.61	\$639.36							
			Direct Labour - Technician (GR64)	\$91.00	10.85		\$987.35	\$542.06	\$1,529.41							
			Direct Labour - Field Staff (ADET)	\$86.48	4.08		\$352.84	\$193.71	\$546.55							
			Direct Labour - MP2	\$108.43	2.81		\$304.69	\$167.27	\$471.96							
			Payroll Burden	54.90%					<b>\$3,297.73</b>					<b>\$18.10</b>	<b>\$3,315.83</b>	<b>\$3,315.83</b>
2021	45c	Connection Impact Assessments - Small Projects <=500 kW	Direct Labour - Clerical	\$82.92	0.87		\$72.14	\$40.11	\$112.25	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$121.49	3.42		\$415.50	\$231.02	\$646.51							
			Direct Labour - Technician (GR64)	\$91.92	10.85		\$997.33	\$554.52	\$1,551.85							
			Direct Labour - Field Staff (ADET)	\$87.42	4.08		\$356.67	\$198.31	\$554.98							
			Direct Labour - MP2	\$109.27	2.81		\$307.05	\$170.72	\$477.77							
			Payroll Burden	55.60%					<b>\$3,343.36</b>					<b>\$18.10</b>	<b>\$3,361.46</b>	<b>\$3,361.46</b>

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2022	45c	Connection Impact Assessments - Small Projects <=500 kW	Direct Labour - Clerical	\$84.20	0.87		\$73.25	\$40.73	\$113.98	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$122.77	3.42		\$419.87	\$233.45	\$653.32							
			Direct Labour - Technician (GR64)	\$93.20	10.85		\$1,011.22	\$562.24	\$1,573.46							
			Direct Labour - Field Staff (ADET)	\$88.70	4.08		\$361.90	\$201.21	\$563.11							
			Direct Labour - MP2	\$110.56	2.81		\$310.67	\$172.73	\$483.41							
			Payroll Burden	55.60%					<b>\$3,387.28</b>					<b>\$18.10</b>	<b>\$3,405.38</b>	<b>\$3,405.38</b>

**1.1.10.4 CONNECTION IMPACT ASSESSMENTS – SMALL  
PROJECTS <= 500 KW, SIMPLIFIED (RATE CODE 45D)**

The following CAE-sized, three-phase projects are eligible for a simplified CIA based on size of the generator and its connecting voltage:

- 10 kW < DG project  $\leq$  30 kW if connecting to < 15 kV
- 10 kW < DG project  $\leq$  100 kW if connecting to  $\geq$  15 kV

The size of the three-phase project under each category is small enough that the impact on the system is not significant. Hence, the DG applicant receives a simplified CIA along with the class-C estimate. Single-phase projects are not eligible for the simplified CIA.



1

**Table 18: Connection Impact Assessments – Small Projects <500 kW, Simplified**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	45d	Connection Impact Assessments - Small Projects <=500 kW, Simplified	Direct Labour - Clerical	\$80.08	0.87		\$69.67	\$37.34	\$107.01	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$117.84	3.54		\$417.15	\$223.59	\$640.75							
			Direct Labour - Technician (GR64)	\$89.20	3.63		\$323.80	\$173.55	\$497.35							
			Direct Labour - Field Staff (ADET)	\$84.64	4.08		\$345.33	\$185.10	\$530.43							
			Direct Labour - MP2	\$105.47	0.91		\$95.98	\$51.44	\$147.42							
			Payroll Burden	53.60%					<b>\$1,922.96</b>					<b>\$18.10</b>	<b>\$1,941.06</b>	<b>\$1,941.06</b>
2019	45d	Connection Impact Assessments - Small Projects <=500 kW, Simplified	Direct Labour - Clerical	\$81.00	0.87		\$70.47	\$38.27	\$108.74	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$119.24	3.54		\$422.11	\$229.21	\$651.32							
			Direct Labour - Technician (GR64)	\$90.07	3.63		\$326.95	\$177.54	\$504.49							
			Direct Labour - Field Staff (ADET)	\$85.54	4.08		\$349.00	\$189.51	\$538.50							
			Direct Labour - MP2	\$106.92	0.91		\$97.30	\$52.83	\$150.13							
			Payroll Burden	54.30%					<b>\$1,953.17</b>					<b>\$18.10</b>	<b>\$1,971.27</b>	<b>\$1,971.27</b>

2

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2020	45d	Connection Impact Assessments - Small Projects <=500 kW, Simplified	Direct Labour - Clerical	\$81.96	0.87		\$71.31	\$39.15	\$110.45	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$120.69	3.54		\$427.24	\$234.56	\$661.80							
			Direct Labour - Technician (GR64)	\$91.00	3.63		\$330.33	\$181.35	\$511.68							
			Direct Labour - Field Staff (ADET)	\$86.48	4.08		\$352.84	\$193.71	\$546.55							
			Direct Labour - MP2	\$108.43	0.91		\$98.67	\$54.17	\$152.84							
			Payroll Burden	54.90%					<b>\$1,983.32</b>					<b>\$18.10</b>	<b>\$2,001.42</b>	<b>\$2,001.42</b>
2021	45d	Connection Impact Assessments - Small Projects <=500 kW, Simplified	Direct Labour - Clerical	\$82.92	0.87		\$72.14	\$40.11	\$112.25	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$121.49	3.54		\$430.07	\$239.12	\$669.20							
			Direct Labour - Technician (GR64)	\$91.92	3.63		\$333.67	\$185.52	\$519.19							
			Direct Labour - Field Staff (ADET)	\$87.42	4.08		\$356.67	\$198.31	\$554.98							
			Direct Labour - MP2	\$109.27	0.91		\$99.44	\$55.29	\$154.72							
			Payroll Burden	55.60%					<b>\$2,010.34</b>					<b>\$18.10</b>	<b>\$2,028.44</b>	<b>\$2,028.44</b>
2022	45d	Connection Impact Assessments - Small Projects <=500 kW, Simplified	Direct Labour - Clerical	\$84.20	0.87		\$73.25	\$40.73	\$113.98	Small Vehicle Time	\$10.00	1.81	\$18.10			
			Direct Labour - MP4	\$122.77	3.54		\$434.61	\$241.64	\$676.25							
			Direct Labour - Technician (GR64)	\$93.20	3.63		\$338.32	\$188.10	\$526.42							
			Direct Labour - Field Staff (ADET)	\$88.70	4.08		\$361.90	\$201.21	\$563.11							
			Direct Labour - MP2	\$110.56	0.91		\$100.61	\$55.94	\$156.55							
			Payroll Burden	55.60%					<b>\$2,036.31</b>					<b>\$18.10</b>	<b>\$2,054.41</b>	<b>\$2,054.41</b>

**1.1.10.5 CONNECTION IMPACT ASSESSMENTS – GREATER THAN  
CAPACITY ALLOCATION EXEMPT PROJECTS –  
CAPACITY ALLOCATION REQUIRED PROJECTS (RATE  
CODE 45E)**

The category covers the Capacity Allocation Required (“CAR”) CIAs for all DG projects, including net metering, load displacement and energy storage facilities, greater than Capacity Allocation Exempt (“CAE”) size. CAR projects have a capacity greater than 250 kW if connecting to less than 15 kV line, and greater than 500 kW if connecting to a line greater than or equal to 15 kV.

**Table 19: Connection Impact Assessments – Greater than Capacity Allocation Exempt Projects**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	45e	Connection Impact Assessments - Greater than Capacity Allocation Exempt Projects - Capacity Allocation Required Projects	Direct Labour - Clerical	\$80.08	0.62		\$49.65	\$26.61	\$76.26							
			Direct Labour - MP2	\$105.47	11.10		\$1,170.72	\$627.50	\$1,798.22							
			Direct Labour - Intern	\$67.06	28.71		\$1,925.29	\$1,031.96	\$2,957.25							
			Direct Labour - MP4	\$117.84	20.37		\$2,400.40	\$1,286.61	\$3,687.02							
			Payroll Burden	53.60%					<b>\$8,518.75</b>					<b>\$0.00</b>	<b>\$8,518.75</b>	<b>\$8,518.75</b>
2019	45e	Connection Impact Assessments - Greater than Capacity Allocation Exempt Projects - Capacity Allocation Required Projects	Direct Labour - Clerical	\$81.00	0.62		\$50.22	\$27.27	\$77.49							
			Direct Labour - MP2	\$106.92	11.10		\$1,186.81	\$644.44	\$1,831.25							
			Direct Labour - Intern	\$67.39	28.71		\$1,934.77	\$1,050.58	\$2,985.35							
			Direct Labour - MP4	\$119.24	20.37		\$2,428.92	\$1,318.90	\$3,747.82							
			Payroll Burden	54.30%					<b>\$8,641.91</b>					<b>\$0.00</b>	<b>\$8,641.91</b>	<b>\$8,641.91</b>

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2020	45e	Connection Impact Assessments - Greater than Capacity Allocation Exempt Projects - Capacity Allocation Required Projects	Direct Labour - Clerical	\$81.96	0.62		\$50.82	\$27.90	\$78.71							
			Direct Labour - MP2	\$108.43	11.10		\$1,203.57	\$660.76	\$1,864.33							
			Direct Labour - Intern	\$67.77	28.71		\$1,945.68	\$1,068.18	\$3,013.85							
			Direct Labour - MP4	\$120.69	20.37		\$2,458.46	\$1,349.69	\$3,808.15							
			Payroll Burden	54.90%					<b>\$8,765.05</b>					<b>\$0.00</b>	<b>\$8,765.05</b>	<b>\$8,765.05</b>
2021	45e	Connection Impact Assessments - Greater than Capacity Allocation Exempt Projects - Capacity Allocation Required Projects	Direct Labour - Clerical	\$82.92	0.62		\$51.41	\$28.58	\$79.99							
			Direct Labour - MP2	\$109.27	11.10		\$1,212.90	\$674.37	\$1,887.27							
			Direct Labour - Intern	\$68.78	28.71		\$1,974.67	\$1,097.92	\$3,072.59							
			Direct Labour - MP4	\$121.49	20.37		\$2,474.75	\$1,375.96	\$3,850.71							
			Payroll Burden	55.60%					<b>\$8,890.57</b>					<b>\$0.00</b>	<b>\$8,890.57</b>	<b>\$8,890.57</b>
2022	45e	Connection Impact Assessments - Greater than Capacity Allocation Exempt Projects - Capacity Allocation Required Projects	Direct Labour - Clerical	\$84.20	0.62		\$52.20	\$29.03	\$81.23							
			Direct Labour - MP2	\$110.56	11.10		\$1,227.22	\$682.33	\$1,909.55							
			Direct Labour - Intern	\$70.06	28.71		\$2,011.42	\$1,118.35	\$3,129.77							
			Direct Labour - MP4	\$122.77	20.37		\$2,500.82	\$1,390.46	\$3,891.28							
			Payroll Burden	55.60%					<b>\$9,011.83</b>					<b>\$0.00</b>	<b>\$9,011.83</b>	<b>\$9,011.83</b>

**1.1.10.6 CONNECTION IMPACT ASSESSMENTS –  
GREATER THAN CAPACITY ALLOCATION  
EXEMPT PROJECTS – TS REVIEW FOR LDC  
CAPACITY ALLOCATION REQUIRED PROJECTS  
(RATE CODE 45F)**

The Transformer Station (“TS”) review CIAs are completed for all DG projects greater than 500 kW, including load displacement and energy storage facilities, connecting to LDC dedicated feeders. TS review CIAs are performed to determine if any upgrades are required at an upstream TS in order to facilitate connection of the DG projects to the distribution system. Changes in the feeder protection schemes such as transfer trip, low set block signal, and distributed generator end open signal are evaluated to ensure adequate protection of the equipment in the event of a contingency on the system.

**Table 20: Connection Impact Assessments - Greater than Capacity Allocation Exempt Projects - TS Review for LDC**  
**Capacity Allocation Required Projects**

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2018	45f	Connection Impact Assessments - Greater than Capacity Allocation Exempt Projects - TS Review for LDC Capacity Allocation Required Projects	Direct Labour - Clerical	\$80.08	0.62		\$49.65	\$26.61	\$76.26							
			Direct Labour - MP2	\$105.47	14.90		\$1,571.50	\$842.33	\$2,413.83							
			Direct Labour - Intern	\$67.06	10.44		\$700.11	\$375.26	\$1,075.36							
			Direct Labour - MP4	\$117.84	11.45		\$1,349.27	\$723.21	\$2,072.48							
			Payroll Burden	53.60%					<b>\$5,637.93</b>					<b>\$0.00</b>	<b>\$5,637.93</b>	<b>\$5,637.93</b>

Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2019	45f	Connection Impact Assessments - Greater than Capacity Allocation Exempt Projects - TS Review for LDC Capacity Allocation Required Projects	Direct Labour - Clerical	\$81.00	0.62		\$50.22	\$27.27	\$77.49							
			Direct Labour - MP2	\$106.92	14.90		\$1,593.11	\$865.06	\$2,458.17							
			Direct Labour - Intern	\$67.39	10.44		\$703.55	\$382.03	\$1,085.58							
			Direct Labour - MP4	\$119.24	11.45		\$1,365.30	\$741.36	\$2,106.65							
			Payroll Burden	54.30%					<b>\$5,727.89</b>					<b>\$0.00</b>	<b>\$5,727.89</b>	<b>\$5,727.89</b>
2020	45f	Connection Impact Assessments - Greater than Capacity Allocation Exempt Projects - TS Review for LDC Capacity Allocation Required Projects	Direct Labour - Clerical	\$81.96	0.62		\$50.82	\$27.90	\$78.71							
			Direct Labour - MP2	\$108.43	14.90		\$1,615.61	\$886.97	\$2,502.58							
			Direct Labour - Intern	\$67.77	10.44		\$707.52	\$388.43	\$1,095.95							
			Direct Labour - MP4	\$120.69	11.45		\$1,381.90	\$758.66	\$2,140.56							
			Payroll Burden	54.90%					<b>\$5,817.80</b>					<b>\$0.00</b>	<b>\$5,817.80</b>	<b>\$5,817.80</b>

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Exhibit H1

Tab 2

Schedule 3

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Year	Rate Code	Specific Service Charge Description	Labour Description	Rate Amount	Hours/Units	Overtime Factor	Calculated Total	Payroll Burdens	Total Labour	Other Description	Rate Amount	Hours/Units	Calculated Total	Total Other	Calculated Total Charge	Proposed Charge
2021	45f	Connection Impact Assessments - Greater than Capacity Allocation Exempt Projects - TS Review for LDC Capacity Allocation Required Projects	Direct Labour - Clerical	\$82.92	0.62		\$51.41	\$28.58	\$79.99							
			Direct Labour - MP2	\$109.27	14.90		\$1,628.12	\$905.24	\$2,533.36							
			Direct Labour - Intern	\$68.78	10.44		\$718.06	\$399.24	\$1,117.31							
			Direct Labour - MP4	\$121.49	11.45		\$1,391.06	\$773.43	\$2,164.49							
			Payroll Burden	55.60%					<b>\$5,895.15</b>					<b>\$0.00</b>	<b>\$5,895.15</b>	<b>\$5,895.15</b>
2022	45f	Connection Impact Assessments - Greater than Capacity Allocation Exempt Projects - TS Review for LDC Capacity Allocation Required Projects	Direct Labour - Clerical	\$84.20	0.62		\$52.20	\$29.03	\$81.23							
			Direct Labour - MP2	\$110.56	14.90		\$1,647.34	\$915.92	\$2,563.27							
			Direct Labour - Intern	\$70.06	10.44		\$731.43	\$406.67	\$1,138.10							
			Direct Labour - MP4	\$122.77	11.45		\$1,405.72	\$781.58	\$2,187.29							
			Payroll Burden	55.60%					<b>\$5,969.89</b>					<b>\$0.00</b>	<b>\$5,969.89</b>	<b>\$5,969.89</b>



**APPENDIX C**

**1. SPECIFIC SERVICE CHARGES: OTHER FORMULAE, AMOUNTS**

**1.1 SPECIFIC CHARGES DESCRIPTION**

The charges in this section are determined by formulae that have been previously approved by the OEB.

**1.1.1 SENTINEL LIGHTS & POLES**

**1.1.1.1 SENTINEL LIGHTS (RATE CODE 50)**

The sentinel light rental program is designed to provide rural customers with low-cost security lighting. The service is provided primarily to rural residential, farm, and cottage customers, for whom street lighting is not available.

Based on Hydro One's recent Time Study, the customer charge is expected to increase slightly on an annual basis. Hydro One is proposing to charge a flat fee for these services over the entire planning period in order to avoid customer confusion and costly updates to its Customer Information System ("CIS"), customer correspondence, and internal work instructions.

The proposed rate for sentinel lights has been developed as follows:

1

**Table 1: Specific Service Charges: Sentinel Lights**

Specific Service Charges - Sentinel Lights							
Line No.	Particulars	Calculation of Revenue Requirement for Sentinel Lights					
		2017 (Current Rate)	2018	2019	2020	2021	2022
1	Mid-Year Rate Base	\$6.46	\$6.03	\$5.61	\$5.19	\$4.76	\$4.34
	Cost of Service						
2	Operating, maintenance & administrative	\$1.33	\$1.24	\$1.26	\$1.28	\$1.30	\$1.32
3	Depreciation & amortization	\$1.45	\$1.46	\$1.48	\$1.50	\$1.52	\$1.55
4	Income taxes	\$0.20	\$0.19	\$0.19	\$0.19	\$0.19	\$0.19
5	Cost of service excluding return	\$2.98	\$2.89	\$2.94	\$2.98	\$3.02	\$3.06
6	Return on capital	\$0.46	\$0.36	\$0.34	\$0.31	\$0.29	\$0.26
7	Total revenue requirement (\$M)	\$3.44	\$3.25	\$3.27	\$3.29	\$3.31	\$3.32
8	Mid- Year Number of Sentinel Lights	30,100	27,169	26,866	26,550	26,274	26,035
9	Annual Revenue Requirement per Light,\$	\$114.17	\$119.62	\$121.78	\$123.86	\$125.80	\$127.61
10	Calculated Monthly Charge Per Light	<b>\$9.51</b>	<b>\$9.97</b>	<b>\$10.15</b>	<b>\$10.32</b>	<b>\$10.48</b>	<b>\$10.63</b>
11	Proposed Monthly Charge Per Light		<b>\$10.00</b>	<b>\$10.00</b>	<b>\$10.00</b>	<b>\$10.00</b>	<b>\$10.00</b>

**1.1.1.2 SENTINEL LIGHT POLES (RATE CODE 51)**

The sentinel light pole rental program is designed to provide rural customers with a pole to attach a light. The service is provided primarily to rural residential, farm, and cottage customers.

The proposed rate for sentinel light poles has been developed as follows:

**Table 2: Specific Service Charges: Sentinel Light Poles**

Specific Service Charges - Sentinel Light Poles							
Line No.	Particulars	Calculation of Revenue Requirement for Sentinel Light Poles					
		2017 (Current Rate)	2018	2019	2020	2021	2022
1	Mid-Year Rate Base		\$1.20	\$1.16	\$1.13	\$1.09	\$1.06
	Cost of Service						
2	Operating, maintenance & administrative						
3	Depreciation & amortization		\$0.04	\$0.04	\$0.04	\$0.04	\$0.04
4	Income taxes		\$0.02	\$0.01	\$0.01	\$0.01	\$0.01
5	Cost of service excluding return		\$0.05	\$0.05	\$0.05	\$0.05	\$0.05
6	Return on capital		\$0.07	\$0.07	\$0.07	\$0.07	\$0.06
7	Total revenue requirement		\$0.12	\$0.12	\$0.12	\$0.12	\$0.11
8	Mid- Year Number of Sentinel Light Poles		1,428	1,418	1,407	1,399	1,392
9	Annual Revenue Requirement per Pole,\$		\$86.06	\$84.83	\$83.65	\$82.28	\$80.82
10	Calculated Monthly Charge Per Pole	<b>\$4.15</b>	<b>\$7.17</b>	<b>\$7.07</b>	<b>\$6.97</b>	<b>\$6.86</b>	<b>\$6.74</b>
11	Proposed Monthly Charge Per Pole		<b>\$7.00</b>	<b>\$7.00</b>	<b>\$7.00</b>	<b>\$7.00</b>	<b>\$7.00</b>

1       **1.1.2       JOINT USE CHARGES**

2  
3       **1.1.2.1 JOINT USE – TELECOMMUNICATIONS (RATE CODE 30)**

4  
5       In EB-2015-0141, the OEB accepted the methodology and determined a per attacher, per  
6       pole rate of \$41.28 for telecommunication companies that attach wireline attachments to  
7       Hydro One's poles. In November 2015, the OEB initiated a comprehensive policy  
8       review of miscellaneous rates and charges applied by electricity distributors, prioritizing  
9       the review of wireline pole attachments (EB-2015-0304). As a result of the consultation  
10      process, Hydro One expects the OEB will decide on an updated methodology for  
11      determining wireline charges for pole attachments.

12  
13     For this Application, as seen in Table 3 below, Hydro One has calculated Joint Use  
14     Telecom charges from 2018 to 2022, using the methodology approved in EB-2015-0141.  
15     Hydro One proposes adopting these charges until the OEB issues its decision in EB-  
16     2015-0304. Once the Decision is issued, Hydro One will revise its charges to comply  
17     with it prospectively.

18  
19     Using the methodology approved in EB-2015-0141, Table 3 shows how Hydro One  
20     updated the calculation using 2016 audited actual numbers as a basis to determine the  
21     2017 rate. Hydro One proposes that the 2017 rate is escalated at a rate of CPI, less the  
22     currently applicable Hydro One productivity factor, to determine the rates from 2018 to  
23     2022. Hydro One used the OEB inflation rates for 2017 and used projected CPI for the  
24     test years because the OEB inflation rates are not available during the test years period.

**Table 3: Specific Service Charges - Joint Use Telecom**

Calculation of Telecom Joint Use Costs	Rate based on EB-2015-0141		2017 (Based on Actual 2016 Data)	2018	2019	2020	2021	2022
Net Embedded Cost	\$944.49		\$1,178.33					
Depreciation per Pole	\$23.83		\$28.47					
Capital Carrying Cost	\$80.19		\$91.79					
Maintenance (Lines Only)	\$4.69		\$4.08					
Total Capital Related Costs	\$108.71		\$124.34					
Allocated Capital Cost	\$37.29		\$42.65					
Loss of Productivity	\$3.09		\$3.18					
Administration	\$0.90		\$0.93					
Vegetation Mgmt	\$0.00		\$0.00					
<b>Total Licensee Cost</b>	<b>\$41.28</b>		<b>\$46.75</b>	<b>\$47.43</b>	<b>\$48.16</b>	<b>\$48.90</b>	<b>\$49.65</b>	<b>\$50.40</b>

**Explanation of Underlying Pole Attachment Rate Calculations as seen in Table 3 above**

- 2016 Net Embedded Cost (NEC) of \$1,178.33** = {[2016 Year End Acquisition Value (\$3,079,485,436) - 2016 Accumulated Depreciation (\$912,770,751) = \$2,166,714,685]/Qty. of Poles on December 31, 2016 (1,562,984)}\*85%  
\*Note: For clarity, the pole number above does not include poles from the Acquired Utilities. **2016 Depreciation Cost of \$28.47** = [2016 Year End Acquisition Value (\$3,079,485,436) \* HONI Depreciation Rate (1.7%) \* 85% allocation factor to remove any pole-associated assets] / Qty. of Poles (1,562,984)

2. **2016 Capital Carrying Cost of \$91.79** = 2016 NEC of \$1,178.33 \* 2016 Pre-Tax  
Weighted Average Cost of Capital (7.79%)

3. **2016 Pole Maintenance Costs of \$4.08** =

**Lines Maintenance**

- USofA 5120: Maintenance of Poles, Towers and Fixtures
  - Sub Account 1464 - Trouble Calls (\$14.14M) + Subaccount 1467 -  
OM&A Cost Storm Response (\$1.56M) + Subaccount 1469 -  
Defect Corrections (\$1.34M) = \$17.04M
  - \$17.04M x 5% (5% of the time work is pole related) = \$0.85M
- USofA 5125: Maintenance of Overhead Conductors and Devices
  - Subaccount 1464 - Trouble Calls (\$36.43M) + Subaccount 1467 -  
OM&A Cost Storm Response (\$4.03M) + Subaccount 1469 -  
Defect Corrections (\$6.81M) = \$47.27M
  - \$47.27M x 5% (5% of the time work is primary neutral conductor  
related) = \$2.36M
- USofA 5020: Maintenance Line Patrols
  - (\$8.16M)\*77.5% (77.5% of the time, work is attributable to  
Overhead Distribution Lines and Feeders) = \$6.32M
  - \$6.32M x 50% (50% of the time, work is related to the pole) =  
\$3.16M
- **Total Lines Maintenance** = \$0.85M + \$2.36M + \$6.32M
  - = \$6.37M
  - = \$6.37M / 1,562,984 poles
  - = **\$4.08/pole**

4. **Loss of Productivity of \$3.18** = Loss of Productivity approved in EB-2015-0141,  
escalated for two years by OEB-approved Inflation Rate (1.9%), minus Hydro One  
Productivity Factor (0.45%):  $3.09 * [1 + (0.019 - 0.0045)]^2 = \$3.18$

1 5. **Administration Costs of \$0.93** = Admin. Costs approved in EB-2015-0141,  
2 escalated for two years by OEB-approved Inflation Rate (1.9%), minus Hydro One  
3 Productivity Factor (0.45%):  $\$0.90 * [1 + (0.019 - 0.0045)]^2 = \$0.93$

4  
5 **1.1.2.2 JOINT USE – LOCAL DISTRIBUTION COMPANIES (LDCS)**  
6 **AND GENERATORS (RATE CODE 47 & 48)**  
7

8 As referenced in EB-2013-0416, LDCs and generators both use power space, and require  
9 the same space allocation. Using the OEB-approved methodology, as shown in Tables 4  
10 and 5, Hydro One calculated the proposed charges using 2016 audited actual numbers as  
11 a basis to determine the 2017 rate, with the modification of the space allocation factor  
12 from 28.1% to 38.6% on a 50-foot pole, as seen in Figure 1 below. Hydro One proposes  
13 escalating the 2017 rate at a rate of CPI, less the currently applicable Hydro One  
14 productivity factor, to determine the rates from 2018 to 2022. Hydro One used the OEB  
15 inflation rates for 2017 and used projected CPI for the test years as the OEB inflation  
16 rates are not available during the forecast period.

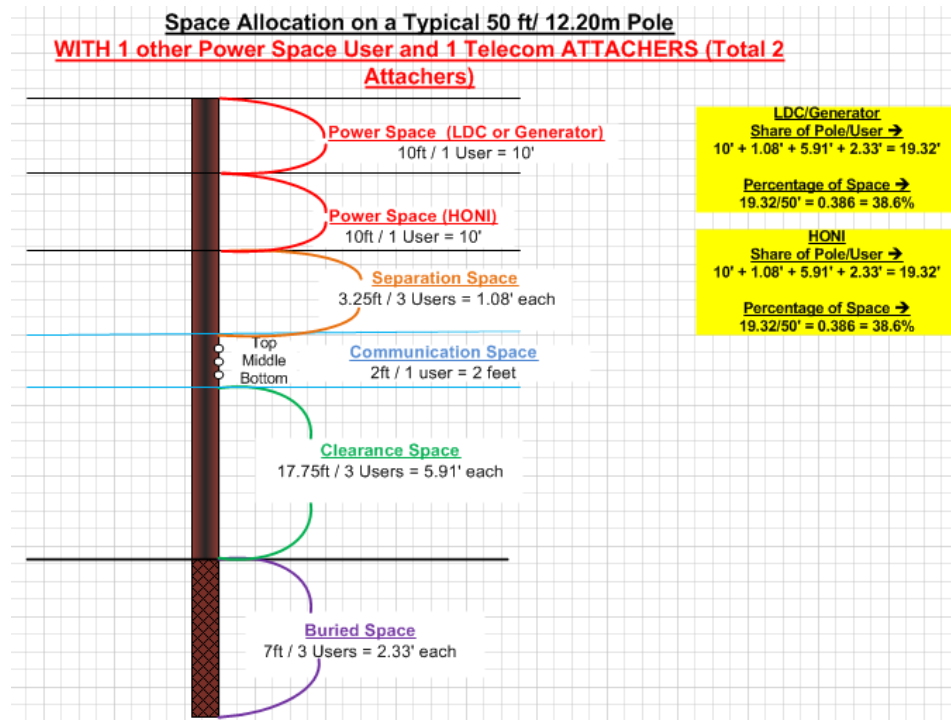


Figure 1

Table 4: Specific Service Charge: LDC Joint Use

Calculation of LDC Joint Use Costs	2015 (from EB-2013-0416)	2017 (from EB-2013-0416)		2017	2018	2019	2020	2021	2022
Net Embedded Cost	\$745.86	\$760.85		\$1,178.33	-	-	-	-	-
Depreciation per Pole	\$12.68	\$12.93		\$28.47	-	-	-	-	-
Capital Carrying Cost	\$63.32	\$64.60		\$91.79	-	-	-	-	-
Maintenance (L&F)	\$82.41	\$84.07		\$86.81	-	-	-	-	-
Total Capital Related Costs	\$158.41	\$161.60		\$207.07	-	-	-	-	-
Allocated Capital Cost	\$44.51	\$45.41		\$79.93	-	-	-	-	-
Loss of Productivity	\$1.51	\$1.54		\$3.18	-	-	-	-	-
Administration	\$0.85	\$0.87		\$0.93	-	-	-	-	-



<b>Calculation of LDC Joint Use Costs</b>	<b>2015 (from EB-2013-0416)</b>	<b>2017 (from EB-2013-0416)</b>		<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Vegetation Mgmt	\$0.00	\$0.00		\$0.00	-	-	-	-	-
<b>Licensee Cost (10' of power space)</b>	<b>\$46.88</b>	<b>\$47.82</b>		<b>\$84.03</b>	<b>\$85.25</b>	<b>\$86.56</b>	<b>\$87.90</b>	<b>\$89.24</b>	<b>\$90.60</b>
Licensee Cost (15' of power space)	\$56.25	\$57.38		\$100.84	\$102.30	\$103.88	\$105.48	\$107.09	\$108.72
Licensee Cost (20' of power space)	\$62.81	\$64.08		\$112.04	\$113.67	\$115.42	\$117.20	\$118.99	\$120.80
Licensee Cost (25' of power space)	\$66.56	\$67.90		\$120.05	\$121.79	\$123.66	\$125.57	\$127.49	\$129.43
Licensee Cost (30' of power space)	\$70.31	\$71.73		\$126.05	\$127.88	\$129.85	\$131.85	\$133.86	\$135.90
Licensee Cost (35' of power space)	\$73.13	\$74.60		\$130.72	\$132.61	\$134.66	\$136.73	\$138.82	\$140.93
Licensee Cost (40' of power space)	\$75.00	\$76.51		\$134.45	\$136.40	\$138.50	\$140.64	\$142.79	\$144.96
Licensee Cost (45' of power space)	\$76.88	\$78.42		\$137.51	\$139.50	\$141.65	\$143.83	\$146.03	\$148.25
Licensee Cost (50' of power space)	\$77.81	\$79.38		\$140.05	\$142.09	\$144.27	\$146.50	\$148.74	\$151.00
Licensee Cost (55' of power space)	\$79.69	\$81.29		\$142.21	\$144.27	\$146.49	\$148.75	\$151.03	\$153.32
Licensee Cost (60' of power space)	\$80.63	\$82.25		\$144.06	\$146.15	\$148.40	\$150.68	\$152.99	\$155.31

**Explanation of Underlying Pole Attachment Rate Calculations as seen in Table 4 above**

1. **2016 Net Embedded Cost (NEC) of \$1,178.33** = {[2016 Year End Acquisition Value (\$3,079,485,436) - 2016 Accumulated Depreciation (\$912,770,751) = [\$2,166,714,685]/Qty. of Poles on December 31, 2016 (1,562,984)}\*85%
2. **2016 Depreciation Cost of \$28.47** = [2016 Year End Acquisition Value (\$3,079,485,436) \* HONI Depreciation Rate (1.7%) \* 85% allocation factor to remove any pole-associated assets] / Qty. of Poles (1,562,984)
3. **2016 Capital Carrying Cost of \$91.79** = 2016 NEC of \$1,178.33 \* 2016 Pre-Tax Weighted Average Cost of Capital (7.79%)
4. **2016 Pole Maintenance Costs of \$86.81** =

**Lines Maintenance**

- USofA 5120: Maintenance of Poles, Towers and Fixtures
  - Sub Account 1464 - Trouble Calls (\$14.14M) + Subaccount 1467 - OM&A Cost Storm Response (\$1.56M) + Subaccount 1469 - Defect Corrections (\$1.34M) = \$17.04M
  - \$17.04M x 5% (5% of the time work is pole related) = \$0.85M
- USofA 5125: Maintenance of Overhead Conductors and Devices
  - Subaccount 1464 - Trouble Calls (\$36.43M) + Subaccount 1467 - OM&A Cost Storm Response (\$4.03M) + Subaccount 1469 - Defect Corrections (\$6.81M) = \$47.27M
  - \$47.27M x 5% (5% of the time work is primary neutral conductor related) = \$2.36M
- USofA 5020: Maintenance Line Patrols
  - (\$8.16M)\*77.5% (77.5% of the time, work is attributable to Overhead Distribution Lines and Feeders) = \$6.32M

- \$6.32M x 50% (50% of the time, work is related to the pole) = \$3.16M

- **Total Lines Maintenance** = \$0.85M + \$2.36M + \$3.16M
  - = \$6.37M
  - = \$6.37M / 1,562,984 poles
  - = **\$4.08/pole**

**Forestry Maintenance**

- Line Clearing = \$87.4M
- Brush Control = \$35M
- Customer Notification = \$6.9M
- **Total Forestry Maintenance** = \$87.4M + \$35M + \$6.9M
  - = \$129.3M / 1,562,984 poles
  - = **\$82.73/pole**

**Total Lines & Forestry Maintenance** = \$4.08/pole + \$82.73/pole

- **\$86.81 per pole**

5. **Loss of Productivity of \$3.18** = In determining the Loss of Productivity for this current filing, HONI accepted the Loss of Productivity approved in EB-2015-0141, and it was escalated for two years by OEB-approved Inflation Rate (1.9%), minus Hydro One Productivity Factor (0.45%):  $\$3.09 * [1 + (0.019 - 0.0045)]^2 = \$3.18$
6. **Administration Costs of \$0.93** = In determining the Administration Costs for this current filing, HONI accepted the Administration Costs approved in EB-2015-0141, and it was escalated for two years by OEB-approved Inflation Rate (1.9%), minus Hydro One Productivity Factor (0.45%):  $\$0.90 * [1 + (0.019 - 0.0045)] = \$0.93$

1 **Table 5: Specific Service Charge: Generator Joint Use**

Calculation of Generator Joint Use Costs	2015 (from EB-2013-0416)	2017 (from EB-2013-0416)	2017 rate (based on 2016 Year-End Actual Data)	2018	2019	2020	2021	2022
Net Embedded Cost	\$745.86	\$760.85	\$1,178.33	-	-	-	-	-
Depreciation per Pole	\$12.68	\$12.93	\$28.47	-	-	-	-	-
Capital Carrying Cost	\$63.32	\$64.60	\$91.79	-	-	-	-	-
Maintenance (L&F)	\$82.41	\$84.07	\$86.81	-	-	-	-	-
Total Capital Related Costs	\$158.41	\$161.60	\$207.07	-	-	-	-	-
Allocated Capital Cost	\$44.51	\$45.41	\$79.93	-	-	-	-	-
Loss of Productivity	\$1.51	\$1.54	\$3.18	-	-	-	-	-
Administration	\$0.85	\$0.87	\$0.93	-	-	-	-	-
Vegetation Mgmt	\$0.00	\$0.00	\$0.00	-	-	-	-	-
<b>Licensee Cost (10' of power space)</b>	<b>\$46.88</b>	<b>\$47.82</b>	<b>\$84.03</b>	<b>\$85.25</b>	<b>\$86.56</b>	<b>\$87.90</b>	<b>\$89.24</b>	<b>\$90.60</b>
Licensee Cost (15' of power space)	\$56.25	\$57.38	\$100.84	\$102.30	\$103.88	\$105.48	\$107.09	\$108.72
Licensee Cost (20' of power space)	\$62.81	\$64.08	\$112.04	\$113.67	\$115.42	\$117.20	\$118.99	\$120.80
Licensee Cost (25' of power space)	\$66.56	\$67.90	\$120.05	\$121.79	\$123.66	\$125.57	\$127.49	\$129.43
Licensee Cost (30' of power space)	\$70.31	\$71.73	\$126.05	\$127.88	\$129.85	\$131.85	\$133.86	\$135.90
Licensee Cost (35' of power space)	\$73.13	\$74.60	\$130.72	\$132.61	\$134.66	\$136.73	\$138.82	\$140.93
Licensee Cost (40' of power space)	\$75.00	\$76.51	\$134.45	\$136.40	\$138.50	\$140.64	\$142.79	\$144.96
Licensee Cost (45' of power space)	\$76.88	\$78.42	\$137.51	\$139.50	\$141.65	\$143.83	\$146.03	\$148.25
Licensee Cost (50' of power space)	\$77.81	\$79.38	\$140.05	\$142.09	\$144.27	\$146.50	\$148.74	\$151.00
Licensee Cost (55' of power space)	\$79.69	\$81.29	\$142.21	\$144.27	\$146.49	\$148.75	\$151.03	\$153.32
Licensee Cost (60' of power space)	\$80.63	\$82.25	\$144.06	\$146.15	\$148.40	\$150.68	\$152.99	\$155.31

2

3

**Explanation of Underlying Pole Attachment Rate Calculations as seen in Table 5 above**

1. **2016 Net Embedded Cost (NEC) of \$1,178.33** = {[2016 Year End Acquisition Value (\$3,079,485,436) - 2016 Accumulated Depreciation (\$912,770,751) = \$2,166,714,685]/Qty. of Poles on December 31, 2016 (1,562,984)}\*85%
2. **2016 Depreciation Cost of \$28.47** = [2016 Year End Acquisition Value (\$3,079,485,436) \* HONI Depreciation Rate (1.7%) \* 85% allocation factor to remove any pole-associated assets] / Qty. of Poles (1,562,984)
3. **2016 Capital Carrying Cost of \$91.79** = 2016 NEC of \$1,178.33 \* 2016 Pre-Tax Weighted Average Cost of Capital (7.79%)
4. **2016 Pole Maintenance Costs of \$86.81** =

**Lines Maintenance**

- USofA 5120: Maintenance of Poles, Towers and Fixtures
  - Sub Account 1464 - Trouble Calls (\$14.14M) + Subaccount 1467 - OM&A Cost Storm Response (\$1.56M) + Subaccount 1469 - Defect Corrections (\$1.34M) = \$17.04M
  - \$17.04M x 5% (5% of the time work is pole related) = \$0.85M
- USofA 5125: Maintenance of Overhead Conductors and Devices
  - Subaccount 1464 - Trouble Calls (\$36.43M) + Subaccount 1467 - OM&A Cost Storm Response (\$4.03M) + Subaccount 1469 - Defect Corrections (\$6.81M) = \$47.27M
  - \$47.27M x 5% (5% of the time work is primary neutral conductor related) = \$2.36M

- USofA 5020: Maintenance Line Patrols
  - $(\$8.16M) \times 77.5\%$  (77.5% of the time, work is attributable to Overhead Distribution Lines and Feeders) = \$6.32M
  - $\$6.32M \times 50\%$  (50% of the time, work is related to the pole) = \$3.16M
- **Total Lines Maintenance** =  $\$0.85M + \$2.36M + \$3.16M$ 
  - = \$6.37M
  - =  $\$6.37M / 1,562,984$  poles
  - = **\$4.08/pole**

**Forestry Maintenance**

- Line Clearing = \$87.4M
- Brush Control = \$35M
- Customer Notification = \$6.9M
- **Total Forestry Maintenance** =  $\$87.4M + \$35M + \$6.9M$ 
  - =  $\$129.3M / 1,562,984$  poles
  - = **\$82.73/pole**

**Total Lines & Forestry Maintenance** =  $\$4.08/\text{pole} + \$82.73/\text{pole}$

- **\$86.81 per pole**

5. **Loss of Productivity of \$3.18** = In determining the Loss of Productivity for this current filing, HONI accepted the Loss of Productivity approved in EB-2015-0141, and it was escalated for two years by OEB-approved Inflation Rate (1.9%), minus Hydro One Productivity Factor (0.45%):  $\$3.09 \times [1 + (0.019 - 0.0045)]^2 = \$3.18$
6. **Administration Costs of \$0.93** = In determining the Administration Costs for this current filing, HONI accepted the Administration Costs approved in EB-2015-0141, and it was escalated for two years by OEB-approved Inflation Rate (1.9%), minus Hydro One Productivity Factor (0.45%):  $\$0.90 \times [1 + (0.019 - 0.0045)]^2 = \$0.93$

**Canadian Manufacturers & Exporters Interrogatory # 67**

**Issue:**

Issue 45: Are the proposed other revenues for 2018 – 2022 appropriate?

**Reference:**

E1-01-02 Updated

**Interrogatory:**

- a) Please update the 2017 bridge year column in Table 3 to reflect actual year-to-date information for the latest period available in 2017 and the forecast for the remainder of the year.
- b) Based on the year-to-date information provided for 2017 in part (a) above, please provide the year-to-date figures in the same level of detail as shown in Table 3 for the corresponding period in 2016.

**Response:**

- a) Table 3 has been updated with 2017 actual revenue.

**Table 3: Regulated Revenues (\$ Millions)**

Description	Historical capital years			Bridge Year	Test Years				
	2014	2015	2016		2018	2019	2020	2021	2022
Retail Service capital revenues*	9.5	22.3	24.5	17.7	21.2	21.3	21.4	21.6	21.7
Sentinel Lights	2.8	3.0	3.2	3.1	2.9	2.7	2.5	2.3	2.0
Joint Use	8.0	8.2	19.5	13.0	14.9	16.1	16.4	17.3	17.6
er External Work*	4.1	2.8	3.1	2.0	2.3	2.3	2.4	2.4	2.4
Generator Studies	1.0	1.4	1.3	1.7	1.7	1.5	1.6	1.6	1.7
<b>Total</b>	<b>25.4</b>	<b>37.7</b>	<b>51.6</b>	<b>37.5</b>	<b>42.9</b>	<b>43.9</b>	<b>44.2</b>	<b>45.1</b>	<b>45.4</b>

- b) The 2017 data in part a) shows the full year's revenue, as does the 2016 data in the table.

**OEB Staff Interrogatory # 219**

**Issue:**

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

**Reference:**

E1-02-01 Page: 7

**Interrogatory:**

The load forecast was last updated June 7, 2017 using data available in January 2017. Since then, Hydro One prepared a partial update of the application in December 2017.

Please file an update of the load forecast using 2017 actual consumption information, or as much of 2017 as possible. Please also update for updates to explanatory variables including actual and normal weather, as well as historic and forecast economic data.

**Response:**

The following material is provided based on an update to the load forecast using 2017 actual information:

- Updated Forecast and CDM Tables 3, 4, 7, and 8 originally provided in Exhibit E1, Tab 2, Schedule 1;
- Updated Tables E2, E3, E4, E5, E6, E7, E8a, E8b, and E9 originally provided in Appendix E to that Exhibit; and
- Updated regression results for models in Appendix A and Appendix B to that Exhibit.

Updated explanatory variables including actual and normal weather, as well as historic and forecast economic data are provided in the MS Excel attachment to this response.



**Table 3 (Updated) - Hydro One Distribution Load and Number of Customers**

Year	GWh Delivery Forecast	Distribution Customer Count
2018	35,055	1,297,878
2019	34,619	1,305,398
2020	34,543	1,312,936
2021	35,381	1,380,394
2022	35,357	1,388,694

**Table 4 (Updated) - CDM Impact on Hydro One Distribution Load (GWh)**

Year	Retail Customers	ST Customers		Total
		Direct	LDC	
2015	1,619	169	856	2,644
2016	1,810	195	929	2,935
2017	1,982	209	957	3,149
2018	2,171	229	1,056	3,456
2019	2,377	252	1,153	3,782
2020	2,504	267	1,219	3,990
2021*	2,639	283	1,208	4,130
2022*	2,695	289	1,225	4,210

Note. All figures are weather-normal.

\* Includes the impact of integrating Acquired Utilities into Hydro One Distribution.

**Table 7 (Updated) - Hydro One Distribution Load Forecast Before and After  
Deducting CDM Impact (GWh)**

Year	Retail Customers	Embedded Customers	Total
<b><u>Load Forecast Before Deducting Impact of CDM</u></b>			
2015	21,822	17,241	39,063
2016	21,896	17,178	39,074
2017	21,646	16,928	38,574
2018	21,552	16,959	38,511
2019	21,483	16,918	38,401
2020	21,510	17,023	38,533
2021*	22,573	16,937	39,511
2022*	22,646	16,921	39,567
<b><u>Load Impact of CDM</u></b>			
2015	1,619	1,025	2,644
2016	1,810	1,124	2,935
2017	1,982	1,166	3,149
2018	2,171	1,286	3,456
2019	2,377	1,406	3,782
2020	2,504	1,486	3,990
2021*	2,639	1,491	4,130
2022*	2,695	1,514	4,210
<b><u>Load Forecast After Deducting Impact of CDM</u></b>			
2015	20,203	16,216	36,419
2016	20,085	16,054	36,139
2017	19,664	15,761	35,426
2018	19,382	15,673	35,055
2019	19,106	15,513	34,619
2020	19,006	15,537	34,543
2021*	19,934	15,446	35,381
2022*	19,951	15,406	35,357

Note. All figures are weather-normal.

\* Includes Acquired Utilities.

**Table 8 (Updated) - One Standard Deviation Uncertainty Bands for  
Hydro One Distribution Load (GWh)**

Year	Lower Bound	Forecast	Upper Bound
2016	36,139	36,139	36,139
2017	35,426	35,426	35,426
2018	34,447	35,055	35,646
2019	33,801	34,619	35,450
2020	33,578	34,543	35,512
2021*	34,149	35,381	36,600
2022*	33,892	35,357	36,874

\* Includes the impact of integrating Acquired Utilities into Hydro One Distribution.

## APPENDIX E

**Table E.2 (Updated) - Consensus Forecast for Ontario GDP and Housing Starts**

### **Survey of Ontario GDP Forecast (annual growth rate in %)**

	2017	2018	2019	2020	2021	2022
Global Insight (Nov 2017)	3.0	2.3	2.3	2.1	2.0	2.0
Conference Board (Nov 2017)	3.0	1.9	1.7	1.9	1.9	1.9
U of T (Oct 2017)	2.8	2.2	2.2	2.3	2.3	2.3
C4SE (Aug 2017)	2.8	2.0	2.5	2.2	1.7	2.0
CIBC (Dec 2017)	3.0	2.3	1.7			
BMO (Jan 2018)	2.8	2.4	2.0			
RBC (Sep 2017)	2.9	2.1	1.8			
Scotia (Jan 2018)	2.9	2.3	1.8			
TD (Dec 2017)	2.9	2.3	1.9			
Desjardins (Dec 2017)	3.0	2.3	1.8			
Central 1 (Dec 2017)	2.8	2.5	2.3			
National Bank (Jan 2018)	3.0	2.6	1.5			
Laurentian Bank (Aug 2017)	2.2	2.0				
<b>Average</b>	<b>2.9</b>	<b>2.2</b>	<b>2.0</b>	<b>2.1</b>	<b>2.0</b>	<b>2.1</b>

### **Survey of Ontario Housing Starts Forecast (in 000's)**

	2017	2018	2019	2020	2021	2022
Global Insight (Nov 2017)	81.0	71.2	63.5	62.9	61.3	59.8
Conference Board (Nov 2017)	81.7	74.7	69.3	70.4	71.3	70.8
U of T (Aug 2017)	80.6	68.1	69.3	71.2	72.4	73.3
C4SE (Jan 2017)	72.8	81.0	79.8	78.9	78.7	75.8
CIBC (Dec 2017)	78.0	70.0	63.0			
BMO (Jan 2018)	80.2	76.0	70.0			
RBC (Sep 2017)	80.1	68.8	70.0			
Scotia (Jan 2018)	79.0	75.0	71.0			
TD (Dec 2017)	81.1	73.1	69.4			
Desjardins (Dec 2017)	82.6	68.9	67.7			
Central 1 (Dec 2017)	80.7	76.6	78.4			
National Bank (Jan 2018)	80.4	69.0	65.0			
Laurentian Bank (Aug 2017)	72.0	71.0				
<b>Average</b>	<b>79.2</b>	<b>72.6</b>	<b>69.7</b>	<b>70.9</b>	<b>70.9</b>	<b>69.9</b>

**Forecast updated on January 20, 2018**

**Table E.3 (Updated) - Economic Variables for Ontario**

Year	GDP (2007 M\$)	% change	Population (1,000's)	% change	Housing (1,000's)	% change
2005	586,000	3.2	12,528	1.1	77.8	-7.9
2006	596,942	1.9	12,662	1.1	74.4	-4.4
2007	601,735	0.8	12,764	0.8	68.0	-8.6
2008	601,717	0.0	12,883	0.9	75.6	11.2
2009	582,941	-3.1	12,998	0.9	49.5	-34.5
2010	600,135	2.9	13,135	1.1	61.2	23.7
2011	614,590	2.4	13,264	1.0	68.5	11.9
2012	622,725	1.3	13,414	1.1	63.2	-7.8
2013	631,882	1.5	13,556	1.1	59.3	-6.3
2014	648,763	2.7	13,680	0.9	58.3	-1.7
2015	667,659	2.9	13,790	0.8	69.9	20.0
2016	685,008	2.6	13,976	1.4	75.3	7.7
2017	704,570	2.9	14,193	1.6	79.2	5.2
2018	720,361	2.2	14,375	1.3	72.6	-8.4
2019	734,437	2.0	14,553	1.2	69.7	-4.0
2020	750,103	2.1	14,720	1.1	70.9	1.6
2021	764,857	2.0	14,879	1.1	70.9	0.1
2022	780,618	2.1	15,034	1.0	69.9	-1.4

**Table E.4 (Updated) - Number of Customers History and Forecast**

Rate Class	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Generator	106	248	477	633	893	907	1,004	1,119	1,236	1,356	1,465	1,562
General Service - Demand Billed	7,183	6,550	6,669	6,504	6,098	5,323	5,231	5,239	5,276	5,320	5,365	5,412
General Service - Energy Billed	98,095	98,513	98,568	95,503	87,686	88,878	88,523	87,902	87,625	87,464	87,424	87,505
Residential - Medium Density	402,173	403,304	409,901	416,493	432,519	441,836	447,647	447,029	450,545	454,013	457,450	460,812
Residential - Low Density	368,479	370,995	373,980	373,551	328,170	328,766	330,514	328,159	329,568	330,939	332,412	333,941
Seasonal	157,017	153,653	153,253	153,957	153,498	148,991	147,253	147,537	147,748	147,946	148,130	148,287
Sub-transmission *	794	795	800	882	838	804	805	807	810	813	824	827
Urban General Service - Demand Billed	1,272	1,185	1,184	1,167	1,893	1,715	1,711	1,735	1,739	1,746	1,755	1,766
Urban General Service - Energy Billed	11,650	12,308	12,307	10,807	17,703	17,780	17,747	18,000	18,050	18,123	18,220	18,342
Urban Residential	159,086	167,672	169,795	170,796	208,639	213,199	215,844	226,816	229,377	231,914	234,449	236,957
Street Light *	4,771	4,724	4,804	5,104	5,118	5,251	5,428	5,462	5,495	5,528	5,568	5,602
Sentinel Light *	31,447	30,504	30,380	26,670	25,689	24,364	22,761	22,582	22,407	22,220	22,270	22,150
Unmetered Scattered Load *	5,504	5,512	5,562	5,104	5,624	5,537	5,455	5,490	5,522	5,555	5,799	5,830
Acquired Residential	35,434	35,562	35,892	36,212	36,382	36,487	36,664	37,000	37,257	37,509	37,763	38,015
Acquired General Service - Energy Billed	4,361	4,357	4,340	4,349	4,350	4,348	4,282	4,280	4,278	4,276	4,274	4,272
Acquired General Service - Demand Billed	307	309	322	321	330	336	292	298	303	309	315	321
Acquired Urban Residential	13,709	13,862	14,020	14,175	14,353	14,515	14,703	14,887	15,058	15,227	15,397	15,565
Acquired Urban General Service - Energy Billed	1,180	1,207	1,222	1,243	1,246	1,263	1,257	1,271	1,284	1,297	1,310	1,323
Acquired Urban General Service - Demand Billed	193	185	182	189	193	193	201	205	205	205	205	205
Sum: Includes Newly Acquired for 2021-2022 only	1,247,577	1,255,963	1,267,680	1,267,171	1,274,369	1,283,351	1,289,922	1,297,878	1,305,398	1,312,936	1,380,394	1,388,694

\* Includes Acquired Utilities corresponding figures in 2021 and 2022 only.

**Table E.5 (Updated) - Hydro One Distribution Load History and Forecast in GWh**

Year	Actual/Forecast GWh	Growth	Normalized Weather GWh	Growth
2011	37,641	-0.8	38,062	3.2
2012	37,627	0.0	37,419	-1.7
2013	37,621	0.0	37,418	0.0
2014	37,798	0.5	37,091	-0.9
2015	36,686	-2.9	36,419	-1.8
2016	35,856	-2.3	36,139	-0.8
2017	35,101	-2.1	35,426	-2.0
2018	35,055	-0.1	35,055	-1.0
2019	34,619	-1.2	34,619	-1.2
2020	34,543	-0.2	34,543	-0.2
2021*	35,381	2.4	35,381	2.4
2022*	35,357	-0.1	35,357	-0.1

**Table E.6 (Updated) - Actual Sales and Forecast in GWh**

Rate Class	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Generator	8	11	14	16	16	17	26	27	28	29	30	31
General Service - Demand Billed	3,100	2,888	2,825	2,928	2,394	2,343	2,482	2,458	2,418	2,401	2,392	2,391
General Service - Energy Billed	2,306	2,518	2,398	2,358	2,189	2,132	2,239	2,207	2,154	2,120	2,096	2,081
Residential - Medium Density	4,402	4,396	4,553	4,499	4,930	4,851	4,596	4,592	4,560	4,569	4,589	4,620
Residential - Low Density	5,491	5,515	5,563	5,541	4,767	4,614	4,418	4,331	4,249	4,207	4,181	4,171
Seasonal	701	666	699	682	671	641	594	585	571	562	555	551
Sub-transmission *	16,787	17,082	16,395	16,599	15,806	15,468	15,143	15,158	15,003	15,026	14,918	14,878
Urban General Service - Demand Billed	686	677	607	628	1,064	1,036	1,020	1,037	1,022	1,016	1,014	1,016
Urban General Service - Energy Billed	397	415	400	382	600	589	597	604	595	591	589	589
Urban Residential	1,541	1,563	1,564	1,528	1,983	1,947	1,833	1,910	1,900	1,908	1,920	1,937
Street Light *	125	127	125	122	122	122	100	99	99	99	109	109
Sentinel Light *	19	19	20	20	21	21	14	14	13	13	14	14
Unmetered Scattered Load *	23	23	23	23	24	24	29	29	29	30	31	31
Acquired Residential	308	302	305	303	301	300	297	298	295	293	290	287
Acquired General Service - Energy Billed	114	111	110	111	110	109	111	111	109	108	107	106
Acquired General Service - Demand Billed	270	233	232	241	235	237	237	239	237	236	236	236
Acquired Urban Residential	105	106	107	106	102	100	100	99	98	97	95	94
Acquired Urban General Service - Energy Billed	41	43	44	43	43	43	41	42	41	41	41	42
Acquired Urban General Service - Demand Billed	164	128	129	136	136	138	143	147	145	145	146	146
Sum: Includes Acquired Utilities for 2021-2022 only	35,587	35,901	35,186	35,327	34,586	33,804	33,093	33,051	32,641	32,572	33,354	33,330

\* Includes Acquired Utilities corresponding figures in 2021 and 2022 only.

**Table E.7 (Updated) - Weather Corrected Sales and Forecast in GWh**

Rate Class	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Generator	8	11	14	16	16	17	26	27	28	29	30	31
General Service - Demand Billed	3,150	2,959	2,803	2,769	2,373	2,368	2,515	2,458	2,418	2,401	2,392	2,391
General Service - Energy Billed	2,343	2,580	2,380	2,229	2,169	2,155	2,269	2,207	2,154	2,120	2,096	2,081
Residential - Medium Density	4,466	4,495	4,528	4,453	4,901	4,907	4,645	4,592	4,560	4,569	4,589	4,620
Residential - Low Density	5,571	5,640	5,532	5,485	4,738	4,668	4,464	4,331	4,249	4,207	4,181	4,171
Seasonal	711	681	695	675	667	648	600	585	571	562	555	551
Sub-transmission *	16,901	16,427	16,421	16,271	15,683	15,526	15,243	15,158	15,003	15,026	14,918	14,878
Urban General Service - Demand Billed	697	694	602	594	1,054	1,047	1,034	1,037	1,022	1,016	1,014	1,016
Urban General Service - Energy Billed	404	425	397	362	595	595	605	604	595	591	589	589
Urban Residential	1,563	1,599	1,555	1,513	1,971	1,969	1,852	1,910	1,900	1,908	1,920	1,937
Street Light *	125	127	125	122	122	122	100	99	99	99	109	109
Sentinel Light *	19	19	20	20	21	21	14	14	13	13	14	14
Unmetered Scattered Load *	23	23	23	23	24	24	29	29	29	30	31	31
Acquired Residential	312	309	303	300	299	300	300	298	295	293	290	287
Acquired General Service - Energy Billed	115	114	109	105	109	109	112	111	109	108	107	106
Acquired General Service - Demand Billed	274	239	230	228	233	237	240	239	237	236	236	236
Acquired Urban Residential	107	108	107	105	101	100	101	99	98	97	95	94
Acquired Urban General Service - Energy Billed	42	44	43	40	42	43	42	42	41	41	41	42
Acquired Urban General Service - Demand Billed	167	132	128	128	135	138	145	147	145	145	146	146
Sum: Includes Acquired Utilities for 2021-2022 only	35,982	35,680	35,094	34,531	34,334	34,068	33,397	33,051	32,641	32,572	33,354	33,330

\* Includes Acquired Utilities corresponding figures in 2021 and 2022 only.

**Table E.8a (Updated) - Actual and Forecast for Billing Peak in kW**

Rate Class	DGEN	GSd	UGd	ST *	Acquired GSd	Acquired UGD	Total *
2011	66,297	10,331,311	1,964,583	35,730,299	671,097	458,532	48,092,490
2012	80,371	10,060,780	1,914,575	36,409,471	587,036	374,718	48,465,197
2013	127,613	9,893,511	1,878,538	35,537,470	669,854	390,595	47,437,132
2014	161,733	9,883,885	1,872,751	35,781,683	675,645	395,502	47,700,052
2015	165,405	8,536,187	3,076,837	35,473,518	662,107	393,100	47,251,947
2016	171,973	8,118,010	2,846,792	33,699,203	665,454	397,953	44,835,978
2017	188,672	7,848,256	2,745,769	30,285,554	663,744	403,987	41,068,251
2018	197,039	7,860,142	2,698,633	30,587,100	670,226	415,528	41,342,914
2019	202,720	7,748,892	2,639,651	30,273,707	664,657	411,015	40,864,970
2020	209,833	7,709,334	2,605,735	30,321,166	662,985	410,313	40,846,068
2021	216,001	7,694,461	2,581,634	30,540,679	662,217	412,725	42,107,717
2022	222,751	7,704,261	2,567,244	30,461,169	662,705	414,543	42,032,673

\* The total and ST include corresponding Acquired Utilities figures and for only 2021 and 2022.

**Table E.8b (Updated) - Weather Corrected Actual and Forecast for Billing Peak in kW**

Rate Class	DGEN	GSd	UGd	ST *	Acquired GSd	Acquired UGD	Total *
2011	66,297	10,030,850	1,907,448	34,691,170	651,580	445,197	46,695,764
2012	80,371	9,909,510	1,885,788	35,862,030	578,209	369,084	47,737,698
2013	127,613	9,807,861	1,862,275	35,229,815	664,055	387,214	47,027,563
2014	161,733	9,849,440	1,866,224	35,656,983	673,290	394,123	47,534,380
2015	165,405	8,484,670	3,058,267	35,259,430	658,111	390,728	46,967,772
2016	171,973	8,116,669	2,846,321	33,693,637	665,344	397,887	44,828,600
2017	191,621	7,970,925	2,788,685	30,758,917	674,118	410,301	41,710,148
2018	197,039	7,860,142	2,698,633	30,587,100	670,226	415,528	41,342,914
2019	202,720	7,748,892	2,639,651	30,273,707	664,657	411,015	40,864,970
2020	209,833	7,709,334	2,605,735	30,321,166	662,985	410,313	40,846,068
2021	216,001	7,694,461	2,581,634	30,540,679	662,217	412,725	42,107,717
2022	222,751	7,704,261	2,567,244	30,461,169	662,705	414,543	42,032,673

\* The total and ST include corresponding Acquired Utilities figures and for only 2021 and 2022.



**Table E.9 (Updated): Hydro One Distribution CDM Impacts (GWh) by Rate Class**

Rate Class	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
General Service - Demand Billed	191.0	225.3	271.8	329.5	295.3	328.5	368.1	405.4	445.9	472.0	479.3	491.1
General Service - Energy Billed	193.8	270.1	317.3	367.1	373.6	418.1	461.6	503.4	549.0	575.9	582.3	592.1
Residential - Medium Density	116.6	115.2	114.2	176.6	238.6	269.9	294.3	324.6	358.1	380.0	388.2	398.3
Residential - Low Density	145.4	144.5	139.6	217.5	230.7	256.7	282.9	307.8	334.9	350.6	353.9	359.2
Seasonal	18.6	17.5	17.5	26.8	32.5	35.7	38.0	41.1	44.5	46.3	46.5	46.9
Sub-transmission *	551.2	667.1	731.7	922.0	991.8	1,087.5	1,128.1	1,243.5	1,359.4	1,436.9	1,442.0	1,464.6
Urban General Service - Demand Billed	42.2	52.8	58.3	70.6	131.2	145.2	151.3	165.9	181.6	191.2	193.3	197.3
Urban General Service - Energy Billed	33.4	44.5	52.9	59.5	102.4	115.5	123.1	134.7	147.4	155.1	157.4	160.4
Urban Residential	40.8	41.0	39.2	60.0	96.0	108.3	117.4	128.9	141.6	149.6	152.2	155.7
Acquired Residential	0.9	1.6	2.5	4.2	5.7	6.5	9.1	12.0	14.2	16.6	19.5	20.4
Acquired General Service - Energy Billed	0.7	1.7	2.6	3.9	4.8	5.9	8.5	11.2	13.2	15.6	18.2	19.2
Acquired General Service - Demand Billed	1.0	2.1	3.7	4.8	5.6	7.6	10.6	13.9	16.5	19.3	22.7	23.8
Acquired Urban Residential	0.4	0.7	1.0	1.6	2.1	1.8	2.3	2.8	3.3	3.7	4.2	4.4
Acquired Urban General Service - Energy Billed	0.5	1.0	1.4	2.3	2.9	2.5	3.0	3.6	4.2	4.7	5.4	5.6
Acquired Urban General Service - Demand Billed	4.0	4.3	5.8	7.6	10.9	10.8	10.7	17.0	19.4	22.1	25.2	26.2
Sum: Includes Acquired Utilities for 2021-2022 only	1,333	1,578	1,743	2,230	2,492	2,765	2,965	3,255	3,562	3,758	3,890	3,965

\* Includes Acquired Utilities corresponding figure in 2021 and 2022 only.

## APPENDIX A MONTHLY ECONOMETRIC MODEL

The monthly econometric model uses the State-Space approach in the regression equation, where the left-hand side of the equation represents the energy estimates, and the right-hand side contains the explanatory variables including the dummy variables that are used to capture special events that could affect the energy estimates because these events would likely cause variations in the load. The dummy variables are used to minimize the variability of the energy estimates around the forecast.

$$\text{LRTLTL} = f(\text{LGDPONT}, \text{LBPONT}, \text{D98Jan})$$

where:

LRTLTL = logarithm of retail load,

LGDPONT = logarithm of Ontario GDP in constant 1997 dollars,

- History is based on quarterly figures in Ontario Economic Accounts published by Ontario Ministry of Finance
- Forecast is based on annual consensus forecast for Ontario GDP as presented in Appendix E

LBPONT = logarithm of Ontario residential building permits in constant dollar,

- History is based on monthly value of Ontario residential building permits from Statistics Canada
- Forecast is based on consensus forecast of housing starts as presented in Appendix E

D98Jan = dummy variable to account for the load impact of 1998 Ice Storm, equals 1 in January 1998 and zero elsewhere,

The output parameters from the model are presented below. The State-Space (SS) estimated parameters are not associated with standard error and t-ratios (statistical relevance test).

<u>Seasonal Factors</u>	<u>State-Space (SS) parameters:</u>
A[1]	-0.110997
K[1]	-0.522702

Non-Seasonal

Factors                      SS parameters:

A[1]                      0.480758

K[1]                      -0.39066

GDPONT[-4]              0.0570301

BPONT[-8]              0.0064509

D98JAN                  -0.0152325

R-squared = 0.987, R-squared corrected for mean = 0.987, Durbin-Watson Statistics = 2.24.

The goodness of fit, or the extent to which variability in the energy estimates is captured in the forecast, is measured in terms of R-squared (adjusted for mean), which in this case is close to 1. This result reflects statistical significance of the explanatory variables that are used to explain for the variations in load. In fact, the results show that in this case the fit is very good, and therefore there is confidence that the forecast will produce outcomes that are within the expected range of variability.

Using the forecast values for GDP, building permits and dummy variables, the above parameters are used in the monthly regression equation described on the previous page to generate the forecast for Hydro One Distribution load.

**APPENDIX B**  
**ANNUAL ECONOMETRIC MODELS**

Retail Load

Annual econometric model for retail load uses personal disposable income per household, relative energy price, and heating degree-days to prepare the forecast. The annual model is expressed in the following regression equation:

$$\begin{aligned} \text{LRTLTLT} = & C(1) + C(2) * \text{LYPDPHH} + C(3) * (\text{LPELRES}(-4) - \text{LPGASRES}(-4)) + C(4) \\ & * \text{LHDD} + C(5) * \text{LRTLTLT}(-1) - C(4) * C(5) * \text{LHDD}(-1) + C(6) * \text{D99A} + C(7) * \text{TR} \\ & + C(8) * \text{TR2} + C(9) * \text{D08ON} \end{aligned}$$

where:

LRTLTLT = logarithm of retail load,

LYPDPHH = logarithm of Ontario personal disposable income per household / house in constant dollar,

- History is based on disposable income in Ontario Economic Accounts published by Ontario Ministry of Finance, deflated by CPI from Statistics Canada and divided by the number of households / houses based on IHS Global Insight housing starts
- Forecast is based on forecasts of disposable income from C4SE, University of Toronto (PEAP) and Conference Board of Canada deflated by CPI from IHS Global Insight and divided by the number of household / houses based on consensus forecast of housing starts as presented in Appendix E

LPELRES = logarithm of electricity price for Ontario residential sector

- History, for different time periods, from Ontario Hydro, IHS GI, 2013 LTEP and National Energy Board (NEB) 2016
- Forecast is from NEB 2016 Outlook further adjusted for cuts to residential hydro bills introduced by the provincial government

LPGASRES = logarithm of natural gas price for Ontario residential sector,

- History, for different time periods, from Ontario Hydro, IHS GI, 2013 LTEP and NEB 2016 Outlook
- Forecast is from NEB 2016 Outlook accounting for carbon tax

LHDD = logarithm of heating degree days for Pearson International Airport,

D99A = dummy variable to account for annexation of retail customers by municipal utilities equals 1 after 1999 and zero elsewhere,

Witness: ALAGHEBAND Bijan

TR = a dummy variable to account for a shift in growth pattern of Distribution load, increases by 1 per year prior to 1989 and no increase afterwards,  
TR2 = TR to power 2,  
D08ON = a dummy variable to account for economic changes, equals zero prior to 2008 and 1 elsewhere.  
C(1) – C(9) = variable coefficients.

The estimated coefficients and associated statistics are presented below:

	Estimated	Standard	
	Coefficient	Error	t-ratio
C(1)	5.455606	1.417433	3.848934
C(2)	0.501070	0.117024	4.281767
C(3)	-0.018521	0.011507	-1.609597
C(4)	0.059849	0.039567	1.512599
C(5)	0.286743	0.125373	2.287128
C(6)	-0.024341	0.009153	-2.659188
C(7)	-0.095632	0.030017	-3.185970
C(8)	0.002488	0.000682	3.649962
C(9)	-0.013932	0.008698	-1.601852

R-squared = 0.989, Adjusted R-squared = 0.976, Durbin-Watson Statistic = 1.56.

Similar to the regression analysis in the case of the Monthly Econometric model above, the goodness of fit, measured by (Adjusted) R-square for the Annual Econometric Model for retail load, is also found to be close to 1. Therefore the assessment on an annual basis also leads to a forecast outcome which provides consistent results, thus giving confidence to the econometric method.

The t-ratios show most of the factors used to explain the variations in load are statistically significant.

Using the forecast values for personal disposable income per household / house, energy prices, and heating degree days and dummy variables, the above parameters are used in the annual regression equation described above to generate the forecast for Hydro One Distribution load.

Embedded LDC Load

Annual econometric model for embedded LDC load uses number of houses / households, relative energy price, and heating and cooling degree-days to prepare the forecast. The annual model is expressed in the following regression equation:

$$\begin{aligned} \text{LEMBLDCS} = & C(1) + C(2) * D(\text{LHHOLD}) + C(3) * (\text{LPELRES}(-1) - \text{LPGASRES}(-1)) \\ & + C(4) * \text{LCDD} + C(5) * \text{LHDD} + C(6) * \text{LEMBLDCS}(-1) - C(4) * C(6) \\ & * \text{LCDD}(-1) - C(5) * C(6) * \text{LHDD}(-1) + C(7) * \text{TR} \end{aligned}$$

where:

LEMBLDCS = logarithm of Embedded LDC load,

LHHOLD = logarithm of Ontario number of households / houses,

- History from IHS Global Insight housing starts
- Forecast is based on consensus forecast of housing starts as presented in Appendix E

LPELRES = logarithm of electricity price for Ontario residential sector

- History, for different time periods, from Ontario Hydro, IHS GI, 2013 LTEP and National Energy Board (NEB) 2016 Outlook
- Forecast is from NEB 2016 Outlook further adjusted for cuts to residential hydro bills introduced by the provincial government

LPGASRES = logarithm of natural gas price for Ontario residential sector,

- History, for different time periods, from Ontario Hydro, IHS GI, 2013 LTEP and NEB 2016
- Forecast is from NEB 2016 Outlook accounting for carbon tax

LHDD = logarithm of heating degree days for Pearson International Airport,

D99A = dummy variable to account for annexation of retail customers by municipal utilities equals 1 after 1999 and zero elsewhere,

TR = a dummy variable to account for a shift in growth pattern of distribution load, increases by 1 per year prior to 1989 and no increase afterwards,

C(1) – C(7) = variable coefficients.

The estimated coefficients and associated statistics are presented below:

	Estimated	Standard	
	Coefficient	Error	t-ratio
C(1)	1.688480	0.599547	2.816260
C(2)	1.658200	0.898035	1.846476
C(3)	-0.049467	0.016226	-3.048694

Witness: ALAGHEBAND Bijan

1	C(4)	0.008636	0.009463	0.912634
2	C(5)	0.013980	0.057537	0.242965
3	C(6)	0.790897	0.073593	10.74685
4	C(7)	0.010313	0.004125	2.499980

5

6 R-squared = 0.981, Adjusted R-squared = 0.977, Durbin-Watson Statistic = 1.85.

7

8 Similar to the regression analysis in the case of the other econometric models noted above, the  
9 goodness of fit, measured by (Adjusted) R-square for the Embedded LDC Model, is also found  
10 to be close to 1 leading to a forecast outcome which provides consistent results, thus giving  
11 confidence to the econometric method. The t-ratios show most of the factors used to explain the  
12 variations in load are statistically significant.

13

14 Using the forecast values for Ontario number of households / houses, energy prices, and cooling  
15 and heating degree days and dummy variable, the above parameters are used in the annual  
16 regression equation described above to generate the forecast for Hydro One Embedded LDC  
17 load.

		Historical Years			Bridge Year		Test Years									
		2014	2015	2016	2017		2018*		2019		2020		2021		2022	
Rate Code	Description	Volume / Revenue	Volume / Revenue	Volume / Revenue	Volume Forecast	Revenue Forecast	Volume Forecast	Revenue Forecast	Volume Forecast	Revenue Forecast	Volume Forecast	Revenue Forecast	Volume Forecast	Revenue Forecast	Volume Forecast	Revenue Forecast
32	Reconnect completed after regular hours (customer/ contract driven) - at Meter	N/A	N/A	0	90	\$0	90	\$21,601	90	\$21,963	90	\$22,327	90	\$22,703	90	\$23,069
33	Reconnect completed after regular hours (customer/contract driven) - at Pole	N/A	N/A	0	60	\$0	60	\$27,973	60	\$28,360	60	\$28,751	60	\$29,156	60	\$29,548
46a	Retailer Services – Establishing Service Agreements (rates as per the Handbook)	\$521,796	\$469,861	\$413,105		\$376,638		\$340,638		\$304,638		\$268,638		\$232,638		\$196,638
46b	Retailer Services – Other (includes Bill Ready for Retailers and Service Transaction Requests) as per the Handbook	\$260,898	\$234,930	\$206,553		\$188,319		\$170,319		\$152,319		\$134,319		\$116,319		\$98,319
52	Late Payment Charge	\$782,693	\$15,492,798	\$17,003,866		\$12,776,871		\$10,860,340		\$11,023,245		\$11,188,594		\$11,356,423		\$11,526,769
	<b>Total</b>					<b>\$18,743,372</b>		<b>\$19,110,991*</b>		<b>\$19,179,676</b>		<b>\$19,255,287</b>		<b>\$19,355,051</b>		<b>\$19,446,372</b>

- 1 \*2018 Retail Service Charges are based on forecast volumes and charges. 2018 External Revenue will be updated when the Draft Rate Order is filed to reflect the forecast External
- 2 Revenue based on applying the 2017 approved Specific Service Charges until the effective date that new charges are approved.

Witness: Imran Merali/John Boldt



**OEB STAFF QUESTION #5**

**OEB Staff - 5**

**Ref: Exhibit 2 – Rate Design**

Please explain how the 2022 miscellaneous revenue is derived or provide a reference to where the amount originates from.

**Response:**

In Exhibit 2 - 2022 Rate Design, cell J24 (also cell E32), the 2022 miscellaneous revenue is listed as \$44.9M. This is the number referenced as “approved external revenues for 2022” in section 6, page 18 of Hydro One’s 2022 Rate Application. The source of this figure is summarized in EB-2019-0043, 2020 Annual Update, page 10, table 1, filed August 30, 2019.<sup>1</sup>

---

<sup>1</sup> An updated External Revenue for 2021 and 2022 was previously also provided in the DRO Reply Submission, pages 30 and 31, filed in EB-2017-0049, May 9, 2019.

## OEB STAFF QUESTION #6

### OEB Staff - 6

#### Ref: Manager's Summary, p. 11

Regarding Hydro One's proposed disposition approach for Group 1 balances.

- a) Hydro One indicated that the 2023 Rebasing application is the first application for both Hydro One Distribution and the Acquired Utilities, which introduces the opportunity to dispose Group 1 balances on a consolidated basis and without performing an allocation to Distribution and each of the Acquired Utilities. Please provide a high level approximate comparison of the 2020 Group 1 disposition related bill impacts to Distribution and each of Acquired Utilities using the consolidated approach and using an allocation approach.
- b) Hydro One indicated that it intends to update the 2023 Rebasing application for audited 2021 Group 1 balances during the course of that proceeding. Hydro One further stated that in the event that Group 1 balances change based on 2021 audited transactions from a credit balance to a debit balance or a smaller credit balance, the combined disposition based on 2020 and 2021 audited balances would result in less volatility to rate payers.
  - i. Given that there are 9 months of data for 2021 available, please confirm that net 2021 transactions to date have been debit transactions which would reduce the 2020 credit Group 1 balances. If not confirmed, please explain the basis for Hydro One's statement above.
- c) Hydro One indicated that it receives one consolidated invoice for settlement of commodity, bulk transmission and wholesale settlements for all service territories. Please explain when Hydro One started to receive one consolidated bill for Hydro One Distribution and the Acquired Utilities.

1 **Response:**

2 a) During the course of the OEB Staff's Inspection of Compliance of the RPP Settlement Process  
3 and Assessment of the DVA Allocation Methodology to Assign Group 1 Balances to the  
4 Acquired Utilities (Inspection Report), Hydro One demonstrated and the OEB Staff accepted,  
5 that the allocation methodology results in the same rate riders whether the balances are  
6 allocated to all utilities separately or as one single entity:

7  
8 *HONI has demonstrated that after all the acquired utilities are integrated into*  
9 *HONI's financial systems, this proposed RSVA allocation methodology resulted in*  
10 *the same set of rate riders, whether the RSVA balances are allocated to HONI,*  
11 *Norfolk Power, Haldimand County Hydro and Woodstock Hydro separately, or to*  
12 *all utilities together as one single entity.*<sup>1</sup>

13  
14 Attachment 1 to this response provides the final Inspection Report issued by the OEB on  
15 March 4, 2019.

16  
17 Furthermore, as Hydro One is not proposing to dispose of any Group 1 balances in the  
18 current application, and those balances are proposed for disposition only in the 2023  
19 Rebasing Application, an allocation was not performed. In 2023, the Acquired Utilities will  
20 be integrated into Hydro One Distribution rate classes (including newly created rate classes)  
21 as further discussed in Exhibit L, Tab 1, Schedule 2 (EB-2021-0110). At that point, any  
22 balances proposed for disposition will be reviewed for prudence including any allocation of  
23 the consolidated balances to the respective rate classes.

24  
25 b) The basis for the statement made above is to indicate that Hydro One's proposal to dispose  
26 of its consolidated Group 1 balances, including the 2020 Distribution balances on a  
27 combined basis with the Acquired Utilities, in the 2023 rebasing application, is expected to  
28 mitigate volatility impacts to ratepayers since there would be two years' worth of audited  
29 balances, as opposed to just one year.

---

<sup>1</sup> "Inspection of the Compliance of the RPP Settlement Process and Assessment of the DVA Allocation Methodology for the Acquired Utilities in 2015 and 2016", March 4, 2019 page 6.

1 The 2021 audited balances are not yet available until the 2021 audited financial statements  
2 are publically released in the first half of 2022. Moreover, 9 months of data are not always  
3 representative of what full year balances would be. As such, Hydro One cannot confirm at  
4 this time that net 2021 transactions will offset 2020 transactions and result in a lower  
5 overall balance. However, as noted in Section 3.1 of the Application, a large driver of the  
6 variation in the Group 1 balances is due to the commodity balances from Retail Settlement  
7 Variance Accounts. Transactions in these accounts tend to have large fluctuations year over  
8 year, and can result in material rate changes in either debit or credit direction when the  
9 annual balances are disposed in isolation. As a result, in the event that 2020 Group 1  
10 balances change based on 2021 audited transactions from a credit balance to a debit  
11 balance or potentially a smaller credit balance, as compared to what may be originally  
12 anticipated, the combined disposition of Group 1 balances is expected to result in less  
13 volatility to ratepayers as there are two years' worth of audited balances.

14  
15 Based on the reasons noted above, along with meeting over-arching objectives to facilitate  
16 regulatory efficiency given the timing of the 2023 rebasing application relative to the  
17 current Application, it has shaped the basis for the combined disposition of 2020 and 2021  
18 audited Group 1 balances.

- 19  
20 c) Norfolk IESO invoice has been consolidated with Hydro One Distribution IESO invoice by the  
21 IESO as of September 2015. Woodstock and Haldimand IESO invoices have been  
22 consolidated with Hydro One Distribution IESO invoice by the IESO since September 2016.

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March 4, 2019

Mr. Frank D'Andrea  
Vice President, Chief Regulatory Officer, Chief Risk Officer  
Hydro One Networks Inc.  
South Tower, 8th floor  
483 Bay Street  
Toronto, ON, M5G 2P5

Dear Mr. D'Andrea:

**Re: Inspection of the Compliance of the RPP Settlement Process and Assessment of the DVA Allocation Methodology for the Acquired Utilities in 2015 and 2016**

The Ontario Energy Board's Audit & Investigations Department (OEB staff) has completed its inspection of Hydro One Networks Inc.'s (HONI) compliance with respect to regulatory requirements for the Regulated Price Plan (RPP) settlement processes and its assessment of the deferral and variance accounts (DVAs) allocation methodology to assign balances for Group 1 DVAs for all acquired utilities in 2015 and 2016. The inspection was initiated due to the magnitude of ratepayer funds involved in HONI's RPP settlement processes and relevant regulatory accounts.

The results of the inspection are now shared with HONI in the form of a written inspection report. To the extent that the inspection required the examination of documents, records or information that are not already in the OEB's possession, OEB staff acted under Part VII of the *Ontario Energy Board Act, 1998* (the Act).

The inspection report concludes that nothing has come to OEB staff's attention indicating that HONI's RPP settlement claim processes are not in compliance with current regulatory requirements. As well, the report confirms that HONI also

utilizes a reasonable allocation methodology for Group 1 DVAs for the acquired utilities in 2015 and 2016.

Notwithstanding the prior paragraph, the conclusions contained in the inspection report, as summarized above, are made without prejudice with regard to any future review by OEB staff relating to the refund of \$121.8 million received from the IESO related to Charge Type 148<sup>1</sup> for the period of April to November 2017 (as disclosed in HONI's rate application EB-2017-0049) .

The OEB issued a letter on July 20, 2018, advising electricity distributors of the OEB's initiative to standardize the accounting guidance related to commodity pass-through accounts. The OEB provided an initial set of standardized requirements for regulatory accounting and RPP settlements on February 21, 2019 titled *Accounting Guidance related to Accounts 1588 RSVA Power, and 1589 RSVA Global Adjustment*. For some distributors, the result of implementing this guidance may be that changes will be required to their current processes even though the current processes result in accurate balances. HONI is expected to comply with this accounting guidance and to continue comply with all other relevant regulatory requirements.

We thank you for your cooperation and assistance. Please do not hesitate to contact the undersigned directly should you have any questions.

Yours truly,



Tony Stanco  
Manager - Audit & Investigations

Copy:

Mr. Chris Lopez, Acting Chief Financial Officer – [Chris.Lopez@HydroOne.com](mailto:Chris.Lopez@HydroOne.com)

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<sup>1</sup> Class B – Global Adjustment Settlement Amount

# ONTARIO ENERGY BOARD



## Inspection Report

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**Inspection of the Compliance of the RPP  
Settlement Process and Assessment of the DVA  
Allocation Methodology for the Acquired Utilities**

**Hydro One Networks Inc.**

**Date: March 4, 2019**

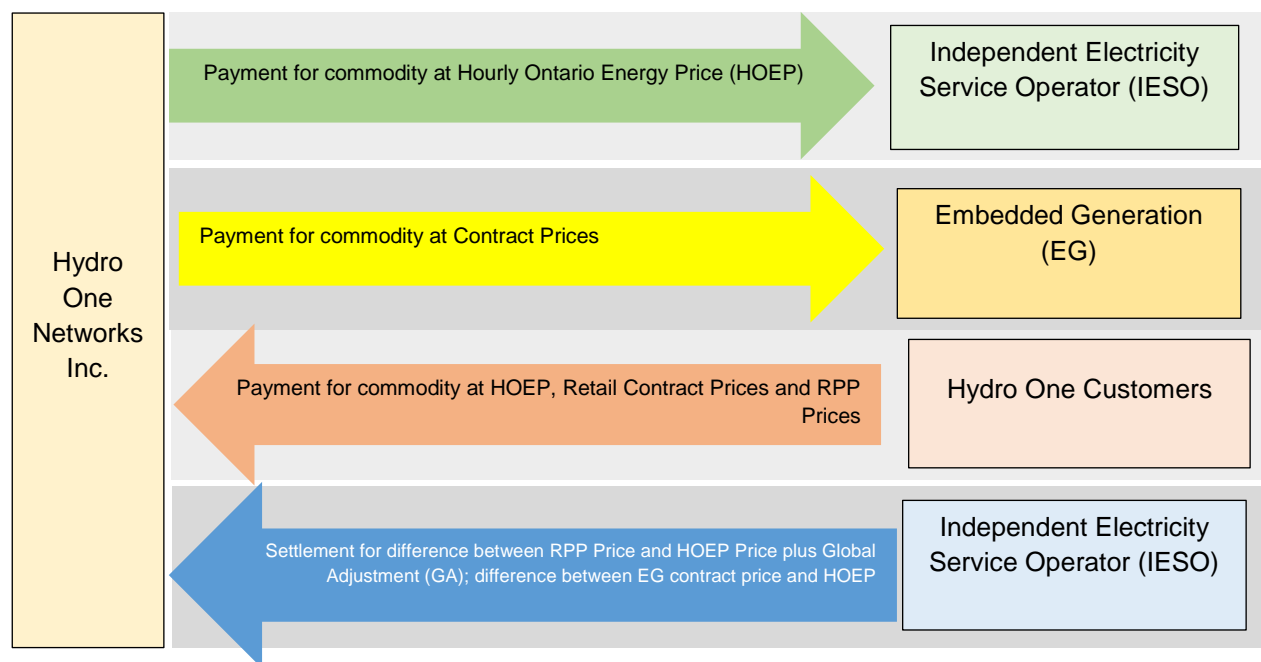
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## 1. Executive Summary

The Ontario Energy Board (OEB)'s Audit and Investigations Department (Staff) undertook an inspection of Hydro One Networks Inc.'s (HONI) Regulated Price Plan (RPP) Settlement Claim process for the period of January 1 to December 31, 2017. The RPP Settlement Claim process is summarized in the flow diagram below:



This inspection evaluated the compliance of HONI's RPP Settlement Claim process with the established IESO Market Rules and Ontario Regulations as detailed in Appendix 4. In addition, this inspection assessed the reasonability of the allocation methodology for Deferral and Variance Accounts (DVA) for the three acquired utilities by HONI in 2015 and 2016.

Based on the inspection, nothing has come to OEB staff's attention that HONI's RPP Settlement Claim with the IESO is not in compliance with the relevant IESO Market Rules and Ontario Regulations. OEB staff has also concluded on the following:

- (1) In EB-2017-0050, HONI described its allocation methodology as using historical pre-integration consumption as the allocator. Subsequently during the inspection, HONI proposed a new allocation methodology which uses post-integration sales volume as the allocator. HONI has demonstrated that after all the acquired utilities are integrated into HONI's financial systems, this proposed RSVA allocation methodology resulted in the same set of rate riders, whether the RSVA balances are allocated to HONI, Norfolk Power, Haldimand County Hydro and Woodstock Hydro separately, or to all utilities together as one single entity.

- (2) Due to the cumulative impact of the energy injected back to the grid (AQEI) on Global Adjustment (GA) for the period of January 2005 to August 2016, HONI received the refund of \$121.8 million from the IESO related to CT 148<sup>1</sup> for the period of April to November 2017. HONI first informed the OEB of the \$121.8 million refund in the rate application EB-2017-0049. Staff intends to follow up on this matter in the future.

## **2. Reason for Inspection**

This inspection was selected based on a risk assessment following the Global Adjustment Policies and Processes Sector Review. The objective of the GA review was to better understand and identify the underlying potential risks within the various processes associated with the quantification of GA amounts or quantum, and the allocation of those amounts for recovery from different customer classes. The result of the review informed the need for the OEB to inspect the RPP Settlement Claims that are submitted by the distributors to the IESO on a monthly basis.

The inspection also assessed the allocation methodology proposed by HONI for the three utilities acquired during 2015 and 2016 (collectively, the acquired utilities).

- Norfolk Power Distribution Inc. (Norfolk Power) – Integrated in September 2015
- Woodstock Hydro Services Inc. (Woodstock Hydro) – Integrated in September 2016
- Haldimand County Hydro Inc. (Haldimand County Hydro) – Integrated in September 2016

On April 5, 2018, the OEB issued a Decision and Rate Order for a rate application EB-2017-0050. Specifically, in relation to Group 1 DVA, the OEB had concerns with certain balances (most notably in Account 1588 – Power for Norfolk Power and Account 1589 – GA for all three of the acquired utilities), mainly resulting from HONI's proposed allocation methodology and the resulting impacts to customers of the three former utilities' rate zones. The OEB noted that while the proposed allocation methodology conceptually appeared reasonable, the OEB believed HONI did not sufficiently explain why the principal transactions in the year of integration for the acquired utilities were substantially higher than in prior years, other than noting that the balances were the result of the proposed allocation methodology. For these reasons, the OEB only approved the disposition of Group 1 DVA balances for each of the acquired utilities up to December 31 of the year prior to their acquisition. For Norfolk Power, the disposition was to the end of December 31, 2014. For Haldimand County Hydro, the disposition was to the end of December 31, 2015, and for Woodstock Hydro the disposition was to the end of December 31, 2015.

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<sup>1</sup> Class B – Global Adjustment settlement amount

### 3. Objectives and Scope

The objectives of this inspection were as follows:

1. Evaluate the processes and controls in place to ensure HONI's RPP Settlement Claim process with the IESO complies with the established IESO Market Rules and Ontario Regulations as detailed in Appendix 4.
2. Determine whether the RPP and embedded generation (EG) settlement amounts, including the RPP true-ups are accurate and complete and the settlements are recorded in the appropriate account.
3. Validate that GA charges are properly allocated between Accounts 1588 and 1589.
4. Verify the reasonability of the allocation methodology for Group 1 DVAs for the utilities acquired in 2015 and 2016.

The scope of the inspection was for the period of January 1 to December 31, 2017.

### 4. Methodology

Through the inspection, staff:

- Obtained an understanding of HONI's policies, procedures, and controls with respect to the determination and reporting of the RPP and EG settlement amounts with the IESO and allocation of the settlement amounts to Account 1588 and Account 1589.
- Assessed HONI's compliance with relevant regulations made under the *Ontario Energy Board Act, 1998* and *Electricity Act, 1998*.
  - *Ontario Energy Board Act, 1998*, Ontario Regulation 95/05 Classes of Consumers and Determination of Rates
  - *Electricity Act, 1998*, Ontario Regulation 429/04 Adjustment under Section 25.33 of the Act
  - *Electricity Act, 1998*, Ontario Regulation 430/04 Payments re Section 25.33 of the Act
- Assessed HONI's compliance with the IESO market rules on settlement.
- Assessed the methodology and underlying information (volumes and prices) for the determination of the monthly RPP settlement amounts and true-up amounts.
- Examined HONI's compliance with the relevant sections in the Accounting Procedures Handbook for Electricity Distributors (APH), effective January 1, 2012, for the purpose of Account 1588 and Account 1589.

- Verified through samples of the information submitted on RPP forms and entries to Accounts 1588 and 1589.
- Assessed the process for EG settlement and GA allocations between RPP and non-RPP customers.
- Assessed the reasonability of the allocation methodology for Group 1 DVA accounts for the acquired utilities.

Refer to Appendix 2 for the description of the RPP Settlement Claim Process

Refer to Appendix 3 for the details on the allocation methodology.

Refer to Appendix 4 for the description on the compliance assessment criteria.

## **5. Licensee Profile**

HONI is Canada's largest electricity transmission and distribution service provider transmitting and distributing electricity across Ontario. HONI distributes electricity to over 1.3 million residential and business customers covering approximately 75 per cent of the geographic area of Ontario.

## **6. Conclusion**

Based on the results of the inspection for the identified areas within the inspection scope, nothing has come to OEB staff's attention that HONI's RPP Settlement Claim with the IESO is not in compliance with the relevant Ontario Regulations. HONI's RPP Settlement Claim process with the IESO satisfies the inspection objectives and HONI has established reasonable allocation methodology for Group 1 DVAs for the acquired utilities.

As well, the findings and conclusions contained in this report are made without prejudice with regard to any future review by OEB staff relating to the refund of \$121.8 million as noted in Section 7.1.2.

## 7. Appendix 1 - Detailed Observations

### 7.1.1 RSVA Allocation Methodology

#### Summary of Observation

In EB-2017-0050, HONI described its allocation methodology as using historical pre-integration consumption as the allocator. Subsequently during the inspection, HONI proposed a new allocation methodology which uses post-integration sales volume as the allocator. HONI has demonstrated that after all the acquired utilities are integrated into HONI's financial systems, this proposed RSVA allocation methodology resulted in the same set of rate riders, whether the RSVA balances are allocated to HONI, Norfolk Power, Haldimand County Hydro and Woodstock Hydro separately, or to all utilities together as one single entity.

#### Details of Observation

In EB-2017-0050, HONI described its allocation methodology as using historical pre-integration consumption as the allocator. During the inspection, HONI identified that the existing allocation methodology had not resulted in reasonable balances for the following two reasons:

- The cost allocation is based on three-year historical data which does not factor in customer changes in the post-integration period. As such, any changes to commercial customers may cause the pre-defined allocation factors to be inaccurate; and,
- The newly connected EG is not classified to the corresponding acquired local distribution companies' (LDC) territories. Instead, the newly connected EGs are recognized as part of HONI as a consolidated entity. Therefore, the EG total for the acquired LDCs and the cost allocated to the acquired LDCs may have been understated.

HONI has proposed a new allocation methodology which uses post-integration sales volume as the allocator. Using the sales volume as the allocator is consistent with the methodology from the OEB's CoS DVA Workform Model and IRM Rate Generator Model as was used in previous HONI applications<sup>2</sup>. In addition, the new allocation methodology follows the same principle as the OEB's policy for allocating the GA and the Capacity Based Recovery (CBR) variance balances to customers who transition between Class A and Class B within a given year.

HONI has demonstrated that after all the acquired utilities are integrated into HONI's financial systems (i.e. after the transition years 2015 and 2016), HONI's proposed RSVA allocation methodology resulted in the same set of rate riders, whether the RSVA balances are allocated

---

<sup>2</sup> E.g. EB-2009-0096 and EB-2013-0416

to HONI Networks, Norfolk Power, Haldimand County Hydro and Woodstock Hydro separately or to all utilities together as one single entity.

Refer to Appendix 3 – Allocation of RSVA Balances in Post-Transition Years which provides detailed walkthroughs of calculations for single and multiple rate riders.

### Conclusion and Expectation

HONI's proposed allocation methodology of using applicable sales volume as the allocator for Group 1 Accounts 1588 and 1589 balances for Haldimand County Hydro, Norfolk Power and Woodstock Hydro is reasonable.

In its future rate applications, HONI should submit the balances for the years of integration and the post integration years for each of the three acquired utilities as follows and all the balances to be submitted for disposition must be well supported.

The Group 1 DVA balance for Norfolk Power (integrated with HONI in September 2015), for 2015 will be comprised of 8 months of pre-acquisition balances, plus 4 months of post integration allocated balances using the proposed methodology. For each year starting with 2016, until HONI's next cost of service application which will include harmonizing Norfolk Power Distribution into its rates, HONI should compute 12 months of post integration allocated balances using the proposed methodology. HONI must provide supporting calculations for 2015 and each subsequent year being sought for disposition.

The Group 1 DVA balance for Woodstock Hydro (integrated with HONI in September 2016), for 2016 will be comprised of 8 months of pre-acquisition balances, plus 4 months of post integration allocated balances using the proposed methodology. For each year starting with 2017, until HONI's next cost of service application which will include harmonizing Woodstock Hydro into its rates, HONI should compute 12 months of post integration allocated balances using the proposed methodology. HONI must provide supporting calculations for 2016 and each subsequent year being sought for disposition.

The Group 1 DVA balance for Haldimand County Hydro (integrated with HONI in September 2016), for 2016 will be comprised of 8 months of pre-acquisition balances, plus 4 months of post integration allocated balances using the proposed methodology. For each year starting with 2017, until HONI's next cost of service application which will include harmonizing Haldimand County Hydro into its rates, HONI should compute 12 months of post integration allocated balances using the proposed methodology. HONI must provide supporting calculations for 2016 and each subsequent year being sought for disposition.

## 7.1.2 \$121.8M IESO Refund

### Summary of Observation

Due to the cumulative impact of the energy injected back to the grid (AQEI) on GA for the period of January 2005 to August 2016, HONI received a refund of \$121.8 million from the IESO related to CT 148<sup>3</sup> for the period of April to November 2017. HONI first informed the OEB of the \$121.8 million refund in the rate application EB-2017-0049. Audit & Investigations staff intends to follow up on this matter in the future.

### Detailed Observation

As explained by HONI, HONI estimated a GA amount to be charged by the IESO for the month end accrual purpose for June 2016. Upon receiving the actual invoice from the IESO in July 2016, HONI noticed a greater than expected GA charge amount. HONI then investigated the GA variance and noticed a trend of deviation from expected GA. The GA variance was determined to be the volume impact of the AQEI as a result of increased number of EG connections. The impact resulted in an overcharge of CT148 for the period of January 2005 to August 2016. Subsequently, IESO refunded the overcharge of \$121.8 million through the monthly IESO invoices from April to November 2017 for the impact of the AQEI on GA for the period of January 2005 to August 2016.

### Conclusion and Expectation

HONI is expected to reassess the impact of the refund and corresponding charges have on RPP and non-RPP customers and ensure that there are appropriate processes and controls put in place to rectify the overcharges going forward. The OEB staff intends to follow up on this matter in the future.

---

<sup>3</sup> Class B – Global Adjustment Settlement Amount

## **8. Appendix 2 – RPP Settlement Claim Process**

On a monthly basis, HONI calculates an amount payable/receivable to/from the IESO to settle for the previous month RPP consumption based on invoice issued. Since HONI's customers do not all have a billing cycle that coincides with the calendar month, HONI does not declaring RPP consumption data based on the calendar month consumption. HONI accrues the RPP settlement amount for the portion of the unbilled revenue for accounting purposes at month end along with all other charge types from the IESO invoices on the cost side and unbilled revenue on the revenue side for both accounts 1588 and 1589. HONI's monthly RPP settlement claim includes two amounts:

- (1) the difference between the energy amounts billed at RPP price and Spot price for the invoices created during each fiscal month; and,
- (2) the RPP invoiced Consumption at actual GA rate.

The RPP settlement amounts, are communicated to the IESO via an online portal on or before the 4<sup>th</sup> business day of the month and appear under charge type 1142 on the IESO invoice.

The EG and Class A volumes are communicated to the IESO via the online portal on or before the 4<sup>th</sup> business day of the month and are used by the IESO to calculate the GA and appear under charge types 147 and 148 on the IESO invoice.

HONI extracts billed customer RPP commodity charges (TOU and Tiered) from the GL activity and extracts billed consumption for RPP customers from their Customer Information System (CIS). HONI also determine the WAHSP charges based on billed consumption for RPP customers from its CIS.

The monthly IESO settlements also include the EG declaration for the difference between the rate paid to regulated and contracted generators and spot price. Monthly, embedded distributors (eLDC) calculate their own RPP and generation settlement amounts and declare to the IESO through HONI Distribution. As a host distributor, HONI Distribution settles with the IESO on behalf of embedded distributors and treats it as pass through costs, in the monthly IESO settlement declaration.

HONI is charged by the IESO the actual GA rate in CT 148 on the volumes representing the power withdrawn from the grid plus the EG volume minus the Class A volume on a calendar month basis. As the GA is embedded in the RPP price, the IESO must reimburse HONI for the RPP portion of the GA and reflect it in CT 1142. HONI uses the second estimate of GA rate published by IESO to calculate RPP GA settlement associated with the RPP consumption during the fiscal month. As the actual rate is not available until 10<sup>th</sup> business day of each month for the preceding month, which is six business days after the utility submits the RPP settlement claim to the IESO on the 4<sup>th</sup> business day, the true up is calculated by using the actual GA rate and declared to the IESO in the following month.



## 9. Appendix 3 – Allocation of RSVA Balances for the Acquired Utilities

After the transition period (i.e. from September 1, 2016 onwards), HONI's current proposed RSVA allocation methodology will result in the same set of rate riders, whether the RSVA balances are allocated to HONI, Norfolk Power, Haldimand County Hydro and Woodstock Hydro separately or to all utilities together as one single entity.

Below is an illustrative example created by HONI using RSVA Power (1588) transactions and associated detailed kWh information from HONI, Norfolk Power, Haldimand County Hydro and Woodstock Hydro during the period September 1<sup>st</sup> to December 31, 2016 (post transition). The illustrative example compares two allocation scenarios:

1. Allocating the RSVA Power balance to HONI, Norfolk Power, Haldimand County Hydro and Woodstock Hydro separately first, and then to each utilities' rate classes; and,
2. Allocating the RSVA Power balance to all rate classes assuming that all four utilities are one single entity.

The illustrative example uses the total kWh for each utility over this period because detailed 2017 kWh information (i.e. grouped by WMP/non-WMP/RPP/non-RPP/ClassA/ClassB/LDC/non-LDC by rate class) could not be prepared in the given timeline and is not critical for the purpose of illustrating that the two allocation scenarios will provide the same results.

### Scenario 1: Allocating RSVA Power balance (1588) to each utility separately first, and then to each utilities' rate classes

Table 1 below shows how the RSVA Power balance over the Sep.1 to Dec. 31, 2016 period is allocated to HONI, Norfolk Power, Haldimand County Hydro and Woodstock Hydro by kWh.

**TABLE 1 - RSVA Power \$ and kWh**

	(1)	(2)	(3)	(4)	(5)	(6)=(2)+(3)+(4)+(5)
RSVA Power	Total Principle + Interest*	H1 kWh**	NF kWh**	HC kWh**	WS kWh**	Total kWh**
1588	(\$4,572,422)	7,584,123,336	108,194,087	109,303,647	135,346,369	7,936,967,439
		(7)=(2)/(6)	(8)=(3)/(6)	(9)=(4)/(6)	(10)=(5)/(6)	
		H1 % of kWh	NF % of kWh	HC % of kWh	WS % of kWh	Total
		95.6%	1.4%	1.4%	1.7%	100.0%
		(11)=(1)x(7)	(12)=(1)x(8)	(13)=(1)x(9)	(14)=(1)x(10)	
		Allocated H1 \$	Allocated NF \$	Allocated HC \$	Allocated WS \$	Total
		(\$4,369,151)	(\$62,330)	(\$62,969)	(\$77,972)	(\$4,572,422)

\* Sept 1 to Dec 31 2016

\*\* Sept 1 to Dec 31 2016 non-WMP kWh

H1: Hydro One Networks

NF: Norfolk Power

HC: Haldimand County Hydro

WS: Woodstock Hydro

The actual kWh by rate class for each utility is not readily available for this period. For comparing the scenarios, an illustrative breakdown of the kWh by rate class is used. Table 2 shows the illustrative kWh by rate class for each of the four utilities used in assessing both scenarios.

**TABLE 2 - Illustrative kWh by rate classes**

Illustrative H1 kWh and rate classes			
(15)	(16)	(17)	(18)=(15)+(16) +(17)
H1 rate class 1 kWh	H1 rate class 2 kWh	H1 rate class 3 kWh	Total H1 kWh
5,308,886,335	1,516,824,667	758,412,334	7,584,123,336
(19)=(15)/(18)	(20)=(16)/(18)	(21)=(17)/(18)	
% kWh	% kWh	% kWh	
70%	20%	10%	

Illustrative NF kWh and rate classes			
(22)	(23)		(24)=(22)+(23)
NF rate class 1 kWh	NF rate class 2 kWh		Total NF kWh
70,326,157	37,867,931		108,194,087
(25)=(22)/(24)	(26)=(23)/(24)		
% kWh	% kWh		
65%	35%		

Illustrative HC kWh and rate classes			
(27)	(28)		(29)=(27)+(28)
HC rate class 1 kWh	HC rate class 2 kWh		Total HC kWh
60,117,006	49,186,641		109,303,647
(30)=(27)/(29)	(31)=(28)/(29)		
% kWh	% kWh		
55%	45%		

Illustrative WS kWh and rate classes			
(32)	(33)		(34)=(32)+(33)
WS rate class 1 kWh	WS rate class 2 kWh		Total WS kWh
70,380,112	64,966,257		135,346,369
(35)=(32)/(34)	(36)=(33)/(34)		
% kWh	% kWh		
52%	48%		

Table 3 below shows how each utility's allocated RSVA Power balance, as calculated in Table 1, is allocated to its rate classes by kWh.

**TABLE 3 - Allocated \$ by rate classes**

(37)=(11)x(19)	(38)=(11)x(20)	(39)=(11)x(21)	
Allocated H1 rate class 1 \$	Allocated H1 rate class 2 \$	Allocated H1 rate class 3 \$	Total
(\$3,058,406)	(\$873,830)	(\$436,915)	(\$4,369,151)
(40)=(12)x(25)	(41)=(12)x(26)		
Allocated NF rate class 1 \$	Allocated NF rate class 2 \$		Total
(\$40,514)	(\$21,815)		(\$62,330)
(42)=(13)x(30)	(43)=(13)x(31)		
Allocated HC rate class 1 \$	Allocated HC rate class 2 \$		Total
(\$34,633)	(\$28,336)		(\$62,969)
(44)=(14)x(35)	(45)=(14)x(36)		
Allocated WS rate class 1 \$	Allocated WS rate class 2 \$		Total
(\$40,545)	(\$37,427)		(\$77,972)

## Scenario 2: Allocating RSVA Power balance (1588) to all rate classes by treating all four utilities as one single entity

Table 4 below shows how the total RSVA Power balance is allocated to all rate classes assuming all of the rate classes existed within one single entity. The illustrative kWh for each rate class used to allocate the RSVA balances are the same as the kWh in Table 2.

TABLE 4 - RSVA Power \$

	(1)	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)	(55)=sum(46:54)
RSVA Power	Total Principle + Interest*	H1 rate class 1 kWh**	H1 rate class 2 kWh**	H1 rate class 3 kWh**	NF rate class 1 kWh**	NF rate class 2 kWh**	HC rate class 1 kWh**	HC rate class 2 kWh**	WS rate class 1 kWh**	WS rate class 2 kWh**	Total kWh**
1588	(\$4,572,422)	5,308,886,335	1,516,824,667	758,412,334	70,326,157	37,867,931	60,117,006	49,186,641	70,380,112	64,966,257	7,936,967,439
		(56)=(46)/(55)	(57)=(47)/(55)	(58)=(48)/(55)	(59)=(49)/(55)	(60)=(50)/(55)	(61)=(51)/(55)	(62)=(52)/(55)	(63)=(53)/(55)	(64)=(54)/(55)	
		% of kWh	% of kWh	% of kWh	% of kWh	% of kWh	% of kWh	% of kWh	% of kWh	% of kWh	Total
		66.9%	19.1%	9.6%	0.9%	0.5%	0.8%	0.6%	0.9%	0.8%	100.0%
		(65)=(1)x(56)	(66)=(1)x(57)	(67)=(1)x(58)	(68)=(1)x(59)	(69)=(1)x(60)	(70)=(1)x(61)	(71)=(1)x(62)	(72)=(1)x(63)	(73)=(1)x(64)	
		Allocated H1 rate class 1 \$	Allocated H1 rate class 2 \$	Allocated H1 rate class 3 \$	Allocated NF rate class 1 \$	Allocated NF rate class 2 \$	Allocated HC rate class 1 \$	Allocated HC rate class 2 \$	Allocated WS rate class 1 \$	Allocated WS rate class 2 \$	Total
		(\$3,058,406)	(\$873,830)	(\$436,915)	(\$40,514)	(\$21,815)	(\$34,633)	(\$28,336)	(\$40,545)	(\$37,427)	(\$4,572,422)

\* Sept 1 to Dec 31 2016

H1: Hydro One Networks

\*\* Sept 1 to Dec 31 2016 non-WMP kWh

NF: Norfolk Power

HC: Haldimand County Hydro

WS: Woodstock Hydro

## Comparison of the Two Allocation Scenarios

As illustrated in Table 5, the RSVA Power balance to be collected from each rate class is identical under the two scenarios.

Table 5. Allocated RSVA Power Balances by Rate Class

	Scenario 1 (from Table 3)	Scenario 2 (from Table 4)	Difference
H1 rate class 1 \$	(\$3,058,406)	(\$3,058,406)	\$0
H1 rate class 2 \$	(\$873,830)	(\$873,830)	\$0
H1 rate class 3 \$	(\$436,915)	(\$436,915)	\$0
NF rate class 1 \$	(\$40,514)	(\$40,514)	\$0
NF rate class 2 \$	(\$21,815)	(\$21,815)	\$0
HC rate class 1 \$	(\$34,633)	(\$34,633)	\$0
HC rate class 2 \$	(\$28,336)	(\$28,336)	\$0
WS rate class 1 \$	(\$40,545)	(\$40,545)	\$0
WS rate class 2 \$	(\$37,427)	(\$37,427)	\$0

HONI has demonstrated that the allocated RSVA balances by rate class are identical under both scenarios.

Rate riders for each rate class are determined by dividing the RSVA balance by the charge determinant for the rate class. Since the allocated RSVA balances by rate class are identical in both cases and the charge determinants are identical in both cases, the resulting rate riders will also be identical.

## 10. Appendix 4 – Detailed Criteria

Below is a detailed list of criteria used to assess compliance:

### Ontario Regulations made under the *Electricity Act, 1998*.

- Ontario Regulation 429/04 Adjustment under Section 25.33 of the Act (The regulation for GA)
- Ontario Regulation 430/04 Payments re Section 25.33 of the Act (The regulation for RPP settlements)

### Ontario Regulations made under the *Ontario Energy Board Act, 1998*

- Ontario Regulation 95/05 Classes of Consumers and Determination of Rates

### IESO Market Rule & Guide:

- IESO Market Rule & Manual Library
- IESO Guide to Online Data Submission via the IESO Portal
  - Regulated Price Plan vs. Market Price - Variance for Conventional
  - Regulated Price Plan vs. Market Price - Variance for Smart Meters
  - Regulated Price Plan - Final Variance Settlement Amount
  - Feed-In Tariff Program – LDC
  - Feed-In Tariff Program – Embedded LDC

### Accounting Procedures Handbook for Electricity Distributors, effective January 1, 2012:

1. APH Article 490 – Retail Services and Settlement Variances: Power Charges
  - Retail Settlement Variance Account for Power (RSVA Power)
  - Retail Settlement Variance Account for Global Adjustment (RSVA GA)
2. July 2012 APH FAQs, October 2009 APH FAQs and December 2005 APH FAQs