



PUBLIC INTEREST ADVOCACY CENTRE  
LE CENTRE POUR LA DÉFENSE DE L'INTÉRÊT PUBLIC

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May 11, 2020

VIA E-MAIL

Christine E. Long  
Registrar and Board Secretary  
Ontario Energy Board  
Toronto, ON

Dear Ms. Long:

**Re: EB-2019-0261 – Hydro Ottawa Limited 2021 CIR Rate Application  
Interrogatories of the Vulnerable Energy Consumers Coalition (VECC)**

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Please find attached the interrogatories of VECC to the HVAC Coalition in the above-noted proceeding. We have also directed a copy of the same to the Applicant.

Yours truly,

A handwritten signature in black ink, appearing to read 'M. Garner', is written in a cursive style.

Mark Garner  
Consultants for VECC/PIAC

Copy:  
Gregory Van Dusen, Director, Regulatory Affairs, Hydro Ottawa  
<mailto:RegulatoryAffairs@hydroottawa.com>

**REQUESTOR NAME**            **VECC**  
**TO:**                            **Hydro Ottawa Limited (HOL)**  
**DATE:**                        **May 11, 2020**  
**CASE NO:**                    **EB-2019-0261**  
**APPLICATION NAME**        **2021 CIR Rate Application**

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## **1.0 ADMINISTRATION (EXHIBIT 1)**

### **1.0-VECC-1**

Reference: Exhibit 1, Tab 1, Schedule 4, page 10

- a) Please explain what changes were made with respect to methods of payment in (section 2.4.6.1) of the Conditions of service
- b) Please explain what changes were made to section 2.6.1 of the Conditions of Service - customer rate classification.

### **1.0-VECC-2**

Reference: Exhibit 1, Tab 1, Schedule 8, page 29

- a) Please update Table 11 – Summary of Bill Impacts for any changes made as a result of the interrogatory responses.

### **1.0-VECC-3**

Reference: Exhibit 1, Tab 1, Schedule 9

- a) HOL commissioned a formal distribution system climate risk and vulnerability assessment. What is the incremental cost (operating and capital separately) that the Utility estimates that storm hardening has added to the cost of service?

### **1.0-VECC-4**

Reference: Exhibit 1, Tab 1, Schedule 10, page 15-16

- a) Please explain (show) how the column marked “Adjusted GDP-IPI” is calculated.

### **1.0-VECC-5**

Reference: Exhibit 1, Tab 1, Schedule 10, page 15-16

- a) Please calculate the inflation factor based on the Board’s recommended 0.7 GDP and 0.3 AWE weightings.
- b) Please provide the same as (a) but using the historical period 2013 through 2019.

1.0-VECC-6

Reference: Exhibit 1, Tab 1, Schedule 10, page 15-16

- a) What evidence has HOL provided which shows the accuracy of prior Conference Board of Canada inflation forecasts?
- b) What was the date of the Conference Board forecast? Was it pre or post the recent large decline in oil prices and economic downturn caused by the Covid-19 pandemic?
- c) Given the economic uncertainties due to ongoing pandemic why would it not be preferable to annually update the inflation factor, as for example, was recently approved for Hydro One Networks (EB-2019-0082, Decision April 23, 2020)?

1.0-VECC-7

Reference: Exhibit 1, Tab 1, Schedule 10, page 19

- a) Other than removing capital projects in order to improve the results of the benchmarking and lower the resulting stretch factor, what analysis did HOL undertake to “normalize” its capital spending for the purpose of calculating a stretch factor for the CPEF formula. Please provide any such report.

1.0-VECC-8

Reference: Exhibit 1, Tab 3, Schedule 12 – ClearSpring

- a) With respect to Appendix 1 – the removal of large projects. Does Mr. Fenrick agree that it is methodologically sound to remove the programs as requested by HOL?
- b) If yes, can Mr. Fenrick provide references to other cases, before the Ontario Energy Board, where he has made similar adjustments?
- c) As pointed out in HOL’s evidence of its new facilities a number of Ontario Utilities have similar “once in a generation” large building or transmission station investments. Presumably U.S. utilities would have similar unusually large investments from time to time. In determining the appropriate data for its model were these types of investments removed from the data base for all utilities?

1.0-VECC-9

Reference: Exhibit 1, Tab 1, Schedule 10, page 20-21

- a) Re the CPEF, please explain why HOL choose the period 2012 to 2020 for customer growth (whereas for example, the load growth forecast is 2013 to 2020) as per Exhibit 3, Tab 1, Schedule 1, Attachment C.
- b) Please recalculate the growth rate using the period 2013 to 2025 - i.e.

consistent with the evidence in Exhibit 3.

- c) Please recalculate the growth rate using the period 2017-2025 – i.e. consistent with the inflation rate period adjustment calculation

#### 1.0-VECC-10

Reference: Exhibit 1, Tab 1, Schedule 10, pages 20-23

- a) What analysis has HOL undertaken to understand the relationship between Ottawa region population growth and the Utility's growth in customers? For does HOL have an understanding of the changing portion of high density dwelling as compared to single home growth?
- b) What evidence has HOL provided that substantiates a 35% scaling factor for customer growth?

#### 1.0-VECC-11

Reference: Exhibit 1, Tab 1, Schedule 10, pages 20-23

- a) HOL proposes to use a constant adjusted customer growth rate of .40% in its CPEF. Why would it not be preferable to adjust the growth rate in each year of the plan for the proceeding year's actual customer attachments?

#### 1.0-VECC-12

Reference: Exhibit 1, Tab 1, Schedule 10, pages 27-28

- a) What is the basis for choosing 150 basis points before earning sharing. Why is it not better to provide all the benefits of overearning to ratepayers?
- b) In this rate plan is HOL committing to not adjust rates if earnings fall below 150 basis points?
- c) Is the proposed 50/50 sharing above 150 basis points symmetrical? That is if HOL were to apply for a rate adjustment, including and Z-Factor application would 50% of any such proposal be borne by the shareholder? If not and customers are at risk for unforeseen costs that might otherwise causes low equity returns please explain how the current proposal with a Z-Factor is symmetrical and reasonable.

#### 1.0-VECC-13

Reference: Exhibit 1, Tab 1, Schedule 10, pages 28-29

- a) HOL proposes a capital variance account with a sub-account for system access investments. Please confirm that variances in all accounts (i.e. including the system access sub-account) will be tracked on an annual basis, disposed of on a cumulative basis at the end of the rate plan period and on an asymmetrical basis (i.e. only capital variances resulting in credit to customers will be disposed of).
- b) Is any special disposition or tracking attached to the sub-account for system access?

1.0-VECC-14

Reference: Exhibit 1, Tab 1, Schedule 10, pages 28-29

- a) Would HOL agree that in relative order of management's ability to control costs (least controllable to most) the investment categories would be in order:
1. System access (least able to control timing and costs);
  2. System Service;
  3. System Renewal;
  4. General Plant (most able to control timing and costs).
- If HOL disagrees with that order please correct and explain.

1.0-VECC-15

Reference: Exhibit 1, Tab 1, Schedule 10, page 30/ Schedule 11

- a) How does meeting or failing to meet any KPI impact the Custom Price Escalation Factor (CPEF) for adjusting rates?
- b) If the answer to (a) is "none" then please explain what financial penalties or benefits are associated with meeting or failing to meet any aspect of the proposed scorecard.
- c) Do any prospective benchmarking results or metrics impact or alter the CPEF. If not please explain why such incentives (or disincentives) were not incorporated into the ratemaking formula.

1.0-VECC-16

Reference: Exhibit 1, Tab 1, Schedule 10, Attachment A / Schedule 13, page 10-

- a) What customer survey did HOL do to understand the value added to consumers of the Bidgely Home Energy Reporting Software?
- b) Please show a sample (residential class) of the most recent and last generation bill used by HOL

1.0-VECC-17

Reference: Exhibit 1, Tab 1, Schedule 10, Attachment A / Schedule 13, pages 7-

- a) What is HOL default billing option – paper or ebill?
- b) Please explain/describe the online (MyAccount) enrollment process and how a customer may select its billing and payment option.
- c) For customers who enroll over the telephone please explain how the billing and payment options are explained to the customer. Specifically are customers told they will be paper billed unless they choose ebill?

1.0-VECC-18

Reference: Exhibit 1, Tab 1, Schedule 10, Attachment A, page 26/  
Attachment B, page 18.

- a) How many residential customers have a remote disconnect meters attached to their premise? Under what circumstances are such meters installed?
- b) Hydro Ottawa implemented an automated outbound calling system to replace its previous hand delivery of Disconnect Notices. Please confirm this is only for the 48 hour notice as per section 4.2.2.4 of the Distribution System Code (DSC).
- c) If the response to (b) is not confirmed and the disconnection notice by telephone is the initial notice as per Section 4.2 of the Distribution System Code then please explain how this change in policy meets the provisions of sections 4.2.1.1, 4.2.2 and 4.2.3 of the Code.
- d) Please provide a copy of the telephone script use for disconnection notice call.
- e) Was this change in policy preceded by any questions as part of HOL's customer surveys? If so what were the survey results.

1.0-VECC-19

Reference: Exhibit 1, Tab 1, Schedule 10, Attachment C

- a) What are the annual savings expected from the automated net metering billing solution?
- b) What is the annual (amortized) cost of this program?

1.0-VECC-20

Reference: Exhibit 1, Tab 1, Schedule 11 pages 5-

- a) Please provide a copy of the most recent edition of the low-income support brochure distributed by HOL.

1.0-VECC-21

Reference: Exhibit 1, Tab 1, Schedule 10, Attachment C, page 36 /  
Schedule 12, Attachment C

- a) Did HOL undertake a survey of performance scorecards used by Ontario LDCs? If yes, please provide the results of that analysis.
- b) Is the scorecard shown in Table 1 at Schedule 12 (page 2) to be used in addition to that shown at Schedule 10, Attachment C?

1.0-VECC-22

Reference: Exhibit 1, Tab 1, Schedule 10, Attachment C, page 36

- a) Why are scheduled appointments or telephone calls answered on time (as defined by the Board) not part of the Utility's scorecard?

- b) Why is billing accuracy (as measured by customer complaints or some similar measure) not included in the customer satisfaction metric?
- c) Why are the numbers of customer complaints received annually not included as a metric?
- d) Please provide a list of the customer call and on-line categories used by HOL to analyze customer interactions.
- e) Please provide HOL's 2019 customer call centre and on-line interaction reports provided to management in 2019.

#### 1.0-VECC-23

Reference: Exhibit 1, Tab 1, Schedule 11 pages 5-

- a) With respect to outages by cause code monitored by HOL does the Utility agree that the two most controllable by management are scheduled outages and outages due to defective equipment? If not please provide in order of most controllable to least, the outage types (code) HOL believes it has the best ability to control.
- b) Why does the scorecard not track outages due to defective equipment (frequency and duration) and the duration of scheduled outages? Does HOL agree that these metrics might be useful in customers understanding how effective is the Utility's capital program? If not please explain why not?
- c) Why has HOL not included the industry standard SAIDI and SAIFI metrics OEB in its scorecard?

#### 1.0-VECC-24

Reference: Exhibit 1, Tab 1, Schedule 11 page 5 / Attachment C, pages 33-

- a) Why does the scorecard have no metrics which measures the efficiency of implementation of the capital budget.
- b) What management controls are used to monitor the budget to actuals for capital projects?
- c) HOL discusses DSP implementation progress at Attachment C (pages 33 - 40). Do the achieved results discussed represent monies spent as compared to annual total capital budget? However it is not clear whether HOL tracks the accuracy of its capital program (whether what was planned was done) or the accuracy of the programs planned and done (budget versus actual by project)? Please describe if and how both types of variances are addressed in the capital programs.

#### 1.0-VECC-25

Reference: Exhibit 1, Tab 1, Schedule 8, page 13/ Schedule 11 pages 5-

- a) Why do none of the new performance measures shown in Table 2 have quantitative objectives?

1.0-VECC-26

Reference: Exhibit 1, Tab 1, Schedule 12 page 17

- a) What are the costs categories that are included in the “Technology Infrastructure Cost per Employee”?

1.0-VECC-27

Reference: Exhibit 1, Tab 1, Schedule 12, Attachment C, page 21

- a) What scorecard metric is being proposed to monitor the level of public safety awareness which HOL notes as being behind in performance as compared to its peer group?
- b) Why is level of compliance with Ontario Regulation 22/04 not part of the proposed scorecard?

1.0-VECC-28

Reference: Exhibit 1, Tab 1, Schedule 12, Attachment E

- a) What evidence, other than statistical correlation, does Clearspring have that elevation is a cause of incremental distribution costs?
- b) What evidence does Clearspring have that forestry costs are a significant portion of a utility’s cost of service?

1.0-VECC-29

Reference: Exhibit 1, Tab 1, Schedule 12, Attachment E, page 8

- a) Please confirm (or comment otherwise) that the summary of benchmarking results shows a worsening of performance over the term of the rate plan as measured by the predicated to actual total costs of the model.

1.0-VECC-30

Reference: Exhibit 1, Tab 1, Schedule 13

- a) Please provide a table listing all the productivity initiatives introduced since 2016 to 2019 and the annualized savings (net of implementation costs of the initiative) for each of those initiatives.
- b) Please provide a similar table which lists all the productivity initiatives expected to be implemented in 2020 to 2025 and showing the expected year of implementation and the annualized savings of the initiative.

1.0-VECC-31

Reference: Exhibit 1, Tab 2, Schedule 2

- a) What was the cost of all the Innovative Research survey and related work completed in support of this application?
- b) How many UtilityPulse surveys have been completed since 2016? What were the costs of each of these surveys between 2016 and 2020?



1.0-VECC-32

Reference: Exhibit 1, Tab 3, Schedule 8

- a) Where the solar arrays included in rate-regulated activities approved by the Board. If yes please provide the reference docket.

## 2.0 RATE BASE (EXHIBIT 2)

2.0-VECC-33

Reference: Exhibit 2, Tab 1, Schedule 1, Updated / EB-2015-0004

**Table 4 – 2016-2020 Settled Rate Base EB-2015-0004, page 15**

	2016	2017	2018	2019	2020
<b>Average Net Asset Balance</b>	\$756,003,164	\$791,132,479	\$830,966,710	\$859,363,826	\$895,981,450
<b>Working Capital Allowance</b>	\$77,116,154	\$78,616,537	\$81,882,448	\$76,760,294	\$77,819,785
<b>Rate Base</b>	\$833,119,318	\$869,749,016	\$912,849,158	\$936,124,120	\$973,801,235

- a) Please reconcile the \$833,119,318 2016 Rate Base approved in the EB-2015-0004 Settlement with the 852,612,000 shown in Table 3 (Updated).

2.0-VECC -34

Reference: Exhibit 2, Tab 1, Schedule 1, Updated, page 13

- a) Please provide a reference for the Board working capital proportions from 7.5% to 7.52%.

2.0-VECC-35

Reference: Exhibit 2, Tab 1, Schedule 1, Attachment A, Updated

**Table 8 – Summary of Project Costs**

	EB-2015-0004 Submitted	SIOC Approved Budget	EB-2015-0004 Approved	Updated Estimate	SIOC Re-Confirmed	EB-2019-0261 Final Cost
<b>Total Project</b>						
- Land	\$19,514	\$19,514	\$15,000	\$19,514	\$19,514	\$19,495
- Construction	\$68,903	\$76,986	\$51,000	\$105,186	\$76,986	\$76,522
	<b>\$88,417</b>	<b>\$96,500</b>	<b>\$66,000</b>	<b>\$124,700</b>	<b>\$96,500</b>	<b>\$96,022</b>
- Interest & O/H	\$3,930					\$3,522
<b>TOTAL</b>	<b>\$92,347</b>					<b>\$99,544</b>
	April 29, 2015	Sept. 22, 2015	Dec. 20, 2015	Jan. 20, 2016	Feb. 3, 2016	Sept. 30, 2019

**Table 9 – Final Building(s) Cost Compared to Quantity Survey Estimate**

(\$)	Quantity Survey May 18, 2016	Final Actual Cost	Variance	Variance %
<b>East Campus</b>				
EC-1	\$29,087,871	\$32,629,279	\$3,541,408	12.2%
EC-2	\$9,355,861	\$7,686,656	\$(1,669,205)	-17.8%
EC-3	\$1,828,092	\$1,989,609	\$161,517	8.8%
	\$11,183,953	\$9,676,265	\$(1,507,688)	-13.5%
<b>Sub-Total EC</b>	<b>\$40,271,824</b>	<b>\$42,305,544</b>	<b>\$2,033,720</b>	<b>5.0%</b>
<b>South Campus</b>				
SC-1	\$18,122,397			
SC-2	\$348,605			
<b>Sub-Total SC</b>	<b>\$18,471,002</b>	<b>\$15,210,734</b>	<b>\$(3,260,268)</b>	<b>-17.7%</b>
<b>TOTAL</b>	<b>\$58,742,826</b>	<b>\$57,516,278</b>	<b>\$(1,226,548)</b>	<b>-2.1%</b>

- a) Please explain the variance as between the \$88.417M estimate from EB-2015-0004 and the final cost of \$96.022M and by reference to the Facilities Project Update of November 2014.

2.0-VECC-36

Reference: Exhibit 2, Tab 1, Schedule 1, Attachment A, Updated

- a) Please explain why the training and fleet facilities discussed at page 42 could not be accommodated at either of the two new facilities.
- b) Please explain what fleet facilities are being discussed at this reference.
- c) What was the original plan for the training and fleet facilities that are now planned for the Bank Street location?

2.0-VECC -37

Reference: Exhibit 2, Tab 1, Schedule 1, Attachment A, page 46-, Updated

- a) Please provide the floor plans for the office space EC-1/2/3 and SC-1.

2.0-VECC -38

Reference: Exhibit 2, Tab 1, Schedule 1, Attachment A, page 51 - Updated

- a) Who owns the facilities and land for the solar field at the Hunt Club Rd. (east campus) and Dibblee Rd. (south campus) sites?
- b) Please provide the total acreage of each campus and the amount of acreage used for the solar farm. Is the entire property of both campuses proposed to be in rate base?
- c) Does the pond at the Dibblee Rd. site have a purpose? What is the acreage associated with the pond?
- d) When were each of the Dibblee Road and Hunt Club Road properties acquired?
- e) Please provide the business case which demonstrates the economic value of the solar farm providing power to the Utility buildings. *Exhibit 2-4-3: Distribution System Plan - Section 8.5.1- General Plant.*

2.0-VECC -39

Reference: Exhibit 2, Tab 1, Schedule 1, Attachment A, Updated

- a) What the estimated market value of the Bank Street property?
- b) What is the square footage of the office space at Bank Street?
- c) Please provide photo of the Bank Street facility showing the street access (Bank and Arena Pl) and (aerial) yard.
- d) How many people worked out of the Bank Street building prior to the completion of the two new campuses? How many will work out this building in 2021?
- e) How many parking spots are at the Bank Street site (Arena Pl. entrance)?
- f) What is the vintage of the Bank Street Building?
- g) Why was Bank Street chosen to remain in the facilities portfolio rather than Albion or Merivale Road?

#### 2.0-VECC -40

Reference: Exhibit 2, Tab 1, Schedule 1, Attachment A, Updated

- a) Please provide photos of the Albion Road (A& C) properties and the Merivale Road properties (including aerial footage).
- b) What are the vintages of the main buildings on each of these sites?
- c) What is the square footage of the main office buildings on each of these sites?

#### 2.0-VECC-41

Reference: Exhibit 2, Tab 4, Schedule 1, Updated

- a) Please amend Table 1 (updated) to show the capital contributions by investment categories.
- b) Please explain how capital contributions are forecast for the 2020 to 2025 period.

#### 2.0-VECC-42

Reference: Exhibit 2, Tab 4, Schedule 1, page 5, Updated

- a) Please recast Figure 1 (Summary of 2016-2025 Annual Capital Expenditures) removing all capital expenditures related to the new facilities (both campuses).

#### 2.0-VECC-43

Reference: Exhibit 2, Tab 4, Schedule 6, page 10, Attachment A,

- a) Please update Tables 7, 8 and 9 (outages by cause code) to include 2019 results.
- b) Please update Appendix 2-G to show 2019 service reliability results.

#### 2.0-VECC-44

Reference: Exhibit 2, Tab 4, Schedule 3, page 58,

- a) Please update Figure 4.3 to include 2019 results.

#### 2.0-VECC-45

Reference: Exhibit 2, Tab 4, Schedule 3, page 67/79/81

- a) Please update Table 4.11 – Defective Equipment SAIFI per 100 Customers – to include 2019 results.
- b) Please update Table 4.23 – Reliability Performance by Cause Code – to include 2019 results.
- c) Please update Table 4.12 – Defective Equipment Historical Trends – to include 2019 results.

2.0-VECC-46

Reference: Exhibit 2, Tab 4, Schedule 3

- a) Please provide a table showing for each year 2019 through 2025 the actual or forecast payments to Hydro One broken down by station/project in each year. Please provide for each project an indication of whether an agreement has been signed with Hydro One with respect to each project and if not when an agreement is expected.
- b) Please provide separately a column showing any actual or expected true-ups to the CCRA agreements for each year.

2.0-VECC-47

Reference: Exhibit 2, Tab 4, Schedule 3, page 64

- a) Please provide a table showing the projected Fleet spending comparing the following table (Exhibit B Part 2 EB-2015-0004, page 366) with the actual fleet costs replacement subsequently incurred.

Historical (\$M)				Future (\$M)				
2011	2012	2013	2014	2015	2016	2017	2018	2019
2.02	2.54	3.06	1.44	1.54	1.45	1.21	1.45	1.48

Table 123 - Project Expenditures

- b) Please explain why the 2020 expenditures on fleet are significantly greater than that spent in 2019.
- c) Please also explain why HOL underspent (by about 400k) on fleet purchases as compared to its forecast estimate in the last cost of service rate case.

2.0-VECC-48

Reference: Exhibit 2, Tab 4, Schedule 3, Attachment D

At Attachment D HOL provides a letter of opinion from a Mr. Eugene Shlitz from Navigant Consulting purporting to confirm that the DSP of HOL is compliant with the requirement of the Ontario Energy Board.

- a) Please confirm (or correct) that Mr. Shlitz is based out of Burlington Massachusetts.
- b) Please provide Mr. Shlitz's CV.
- c) Please confirm (or correct) that Mr. Shlitz has never appeared before the Ontario.
- d) Please describe Mr. Shlitz's experience in the energy sector in Ontario.
- e) Why does HOL consider Mr. Shlitz an expert in the matters of the Ontario Energy Board?

### 3.0 OPERATING REVENUE (EXHIBIT 3)

#### 3.0-VECC-49

Reference: Updated Exhibit 3, Tab 1, Schedule 1, page 1 and Attachment C (Original) Exhibit 3, Tab 1, Schedule 1, page 1

Preamble: The Original Application states (page 1): “*The sale and energy forecast utilized actual data on sales, customer numbers and connections, and actual purchases through December 2019*”.

The Updated Application states (page 1): “*The sale and energy forecast utilized actual data on sales, customer numbers and connections, and actual purchases through December 2019*”.

- a) If both Applications were based on models using actual data through to December 2019, please explain what changed in the Update that led to revised load forecast.
- b) Contrary to the May 5, 2020 cover letter, Attachment C in the Update does not indicate (by way of highlighting and strikethroughs) was changed from the original Application. Please provide a revised version of Attachment C indicating the changes per the update.

#### 3.0-VECC-50

Reference: Updated Exhibit 3, Tab 1, Schedule 1, page 1

Preamble: The Application states: “*Hydro Ottawa has adjusted Itron’s load forecast to include Sentinel Lights and Standby Power, as these were not forecasted separately by Itron*”.

- a) Please explain how the Standby Power class’ forecast customer count and demand sales for the years 2021-2025 were derived and provide all supporting models/input data.
- b) Why are there no kWh sales attributed to Standby Power?
- c) Please explain how the Sentinel Lights class’ forecast connection count, energy sales and demand sales for the years 2021-2025 were derived and provide all supporting models/input data.

#### 3.0-VECC-51

Reference: Updated Exhibit 3, Tab 1, Schedule 1, page 4 (Tables 3 & 4)

Preamble: Tables 3 and 4 provide the average number of customers/connection by customer class for each of the test years.

- a) Please explain how the “averages” were derived (e.g., are they the average of the 12 monthly values).

### 3.0-VECC-52

Reference: Updated Exhibit 3, Tab 1, Schedule 1, page 4  
Updated Exhibit 8, Tab 1, Schedule 1, page 9

Preamble: In Updated Exhibit 3, the Application states: “As of November 1, 2025, the TOC will be discontinued for all customers”.

In Updated Exhibit 8, the Application states:

*Effective April 1, 2015, customers with customer-owned transformers installed after November 1, 2000 were no longer eligible to receive the credit. The TOC will be discontinued for customers who own transformers that were installed prior to November 1, 2000 either when the customer-owned transformer has been replaced, or after November 1, 2025 – whichever occurs first.*

- a) Please explain how the 2021-2025 demand sales forecast for the transformer ownership credit provided in Table 5 (Updated) were derived and provide all supporting models/input data.
- b) Does the 2021-2024 demand sales forecast for the transformer ownership credit provided in Table 5 represent: i) the forecast demand attributable to all customers with customer-owned transformers or ii) the forecast demand attributable to customers with customer owned transformers installed prior to November 1, 2000? If neither, what do the values represent?
- c) If not provided in Table 5 (Updated), for each of the years 2020-2024 please provide the demand sales forecast for all customers with customer-owned transformers.
- d) If not provided in Table 5 (Updated), for each of the years 2020-2024 please provide the forecast demand attributable to customers with customer owned transformers installed prior to November 1, 2000.
- e) Does the 2025 demand sales forecast for the transformer ownership credit provided in Table 5 (Updated) represent i) the forecast demand attributable to all customers with customer-owned transformers for the first 10 months of the year or ii) the forecast demand attributable to customers with customer owned transformers installed prior to November 1, 2000 for the first 10 months of 2025? If neither, what do the values represent?
- f) If not provided in Table 5 (Updated), please provide for 2025 the demand sales forecast for all customers with customer-owned transformers.

### 3.0-VECC-53

Reference: Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, pages 2 and 4-5

Preamble: At page 2 the Application states: *“system purchases are derived by applying an average loss factor to rate-class sales forecast”*.

- a) Please provide the derivation of the system purchase forecast values for 2020-2025 as set out in Table 2 and include all supporting models and input data.
- b) At page 4 the Application states that the rate class regression models were estimated using data for the period January 2013 to December 2019. However, on page 5, the Application states that average monthly loss factors were based on the relationship between purchases and retail sales over the four year period 2015-2018. Please explain why the 2015-2018 period was used.
- c) If not provided in the response to part (a), please provide the loss factors used and their derivation.
- d) How would the loss factors and the resulting forecast of system purchases for 2021-2025 change if the period 2013-2019 was used to estimate the loss factors?

### 3.0-VECC-54

Reference: Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, pages 4-5  
EB-2015-0004, Exhibit C, Attachment C1 (A), page 32

- a) In HOL’s last Application (EB-2015-0004), a separate forecast for total system purchases and sales was developed and the results of the individual class sales forecasts were used to allocate the total sales forecast to customer classes. Why wasn’t a similar approach used in the current Application?

### 3.0-VECC-55

Reference: Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, page 5

Preamble: The Application states: *“Normal monthly degree-days are calculated as an average of monthly degree-days over the past twenty years – 1999 through 2018”*.

The Application also states:  
*“Monthly peak-day HDD and TDD (temperature-humidity based degree-days) are used in forecasting peak demand. Peak-day*



*degree-days are based on the average daily temperature and dew point that occurs on the day of the monthly peak. TDD is a two-day weighted temperature as we found prior-day temperature has a significant impact on demand. The weights are 55% for the day of the peak and 45% for the day prior to the peak.”*

The Board’s Chapter 2 Filing Requirements (section 2.3.1.1) require that Applicants provide:

- *Explanation of the weather-normalization methodology proposed including:*

- If monthly Heating Degree Days (HDD) and/or Cooling Degree Days (CDD) are used to determine normal weather, the monthly HDD and CDD based on: a) 10-year average and b) a trend based on 20-years. If the applicant proposes an alternative approach, it must be supported.*

- Definitions of HDD and CDD, including:*

- *Climatological measurement point(s) (i.e. identification of Environment Canada weather station(s)) and why these are appropriate for the distributor’s service territory*
- *Identification of base degrees from which HDDs and CDDs are measured (e.g. 18° C or other)*

- In addition to the proposed test year load forecast, the load forecasts based on 10-year average and 20-year trends in HDD and CDD*

- Rationale to support the weather-normalization methodology chosen*

- a) Why was a 20 year time frame used to determine “normal monthly degree days”?
- b) With respect to the third bullet, please provide load forecasts for the test year based on 10 year average and 20-year trends HDD and CDD as required or indicate where in the Application this information is already filed.
- c) With respect to the peak day forecast methodology, for the 20 year period used in the analysis, in how many months did the actual peak demand for the month occur on the day with the highest HDD/weighted TDD value?

### 3.0-VECC-56

Reference: Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, page 7

- a) With respect to Table 3, for which years are the values provided actual versus forecast?
- b) If not provided in Table 3, are the actual values for 2019 now available and, if so, please provide.

### 3.0-VECC-57

Reference: Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, pages 11 and 18  
Updated Exhibit 8, Tab 1, Schedule 1, page 2 and Tab 10

Preamble: At Attachment C, page 18 the Application states:

*“Since 2013, GS1000 customers have been migrating to interval metering; interval metered customers (GS1000I) are priced with a different billing structure than non-interval customers (GS1000NI)”.*

- a) Please explain why in Exhibit 3 (page 11) separate sales forecasts are developed for the GS50-1000 customers and the GS1000-1500 customers when both sets of customers are charged the same tariffs (per Exhibit 8, Tab 10).
- b) Please reconcile the statement of page 18 that a different billing structure is applied to GS1000I customers as opposed to GS1000NI customers when in both the 2020 and 2021 tariff schedules set out in Exhibit 8 there appears to be no distinction made as between interval and non-interval metered customers.

### 3.0-VECC-58

Reference: Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, pages 11-15  
EB-2015-0004, Exhibit C, Attachment C1 (A), pages 16-19

- a) It is noted the Residential model used in the current Application differs from that used in EB-2015-0004. Please explain why a different model formulation was used in the current Application.

### 3.0-VECC-59

Reference: Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, pages 2; 7-9; and 11-16

Preamble: The Application states:

*“Residential average use is modeled as a function of heating requirements (XHeat), cooling requirements (XCool), and other use (XOther)”.* (Page 11)

*“ $XHeat_m = HDDI dx_m \times Incdx_m^{0.15} \times HeatIntensity_a$   
Where*

- $HDDIDX_m$  = an index of monthly actual and normal HDD
- $Incldx_m$  = indexed per capita income (a 0.15 elasticity is applied to capture small impact on heating use)
- $HeatIntensity_a$  = annual end-use heating intensity trend (kWh per household)” (Pages 11-12)

“XCool is derived in a similar manner” (Page 12)

“EIA develops end-use forecasts for nine census division. The end-use intensity forecasts are based on the Mid-Atlantic Census Division which includes New York. Intensities are modified to reflect Ontario end-use saturation trends; historical and forecasted end-use saturations are calibrated to reported saturation data from Natural Resources Canada for Ontario (NRCan)”.(Page 8)

The Board’s Chapter 2 Filing Requirements (section 2.3.1.1) require that Applicants provide: “Sources of data used for both the endogenous and exogenous variables. Where a variable has been constructed, a complete explanation of the variable, data used and source of the data must be provided”.

- a) With respect to the Residential Model and the XHeat variable, please provide the monthly historical and forecast values for HDDIdx and Incldx along with the annual historical and forecast values for HeatIntensity and the resulting monthly values for XHeat.
- b) Please provide the derivation of the historical monthly values (2013-2019) used for HeatIntensity, including (but not limited to) i) the energy intensity values per the EIA and ii) the modifications made to reflect Ontario end-use saturation trends. Please the supporting working models, input data and specific data sources.
- c) Please provide the derivation of the forecast (2020-2025) monthly values used for HeatIntensity, including (but not limited to) i) the energy intensity values per the EIA and ii) the modification made to reflect Ontario end-use saturation trends. Please the supporting working models, input data and specific data sources.
- d) With respect to the Residential Model and the XCool variable, please provide the monthly historical and forecast values for CDDIdx and Incldx along with the annual historical and forecast values for CoolIntensity and the resulting monthly values for XCool.
- e) Please provide the derivation of the historical monthly values (2013-2019) used for CoolIntensity, including (but not limited to) i) the energy intensity

values per the EIA and ii) the modification made to reflect Ontario end-use saturation trends. Please the supporting working models, input data and specific data sources.

- f) Please provide the derivation of the forecast (2020-2025) monthly values used for CoolIntensity, including (but not limited to) i) the energy intensity values per the EIA and ii) the modification made to reflect Ontario end-use saturation trends. Please the supporting working models, input data and specific data sources.
- g) With respect to the Residential Model and the XOther variable, please provide the monthly historical and forecast values for DaysIdx, InclIdx and Monthly Multiplier along with the annual historical and forecast values for OtherIntensity and the resulting monthly values for XOther.
- h) Please provide the derivation of the historical monthly values (2013-2019) used for OtherIntensity, including (but not limited to) i) the energy intensity values per the EIA and ii) the modification made to reflect Ontario end-use saturation trends. Please the supporting working models, input data and specific data sources.
- i) Please provide the derivation of the forecast (2020-2025) monthly values used for OtherIntensity, including (but not limited to) i) the energy intensity values per the EIA and ii) the modification made to reflect Ontario end-use saturation trends. Please the supporting working models, input data and specific data sources.

### 3.0-VECC-60

Reference: Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, pages 10 and 26-27

Preamble: At page 10 the Application states:

*“End-use intensity projections also reflect regional conservation activity. EIA models efficiency program impacts by reducing the costs (through “rebates”) of the more efficient technology options. For Ottawa, sales and average use decline even faster than that reflected in the end-use intensity projections. Differences is likely due to more CDM activity than that embedded in the estimated model and end-use intensity trends. To capture additional CDM savings, cumulative CDM savings are included as a model variable. Historical and forecasted CDM are estimated for each rate class.”*

At pages 26-27 the Application states:

*“In the residential model the CDM coefficient is -0.696. This implies that 30% of the CDM savings is already accounted for in the end-use intensity trends and estimated coefficients on the heating, cooling, and base-use variables. For the forecast period, 70 percent of future DSM savings will flow into the model-based forecast”.*

- a) Exhibit 4, Tab 5, Schedule 1 (page 2) describes the major change that took place in March 2019 with respect to CDM programs in Ontario. Given this change, why is it reasonable to assume that during the test period the end-use intensity trends and estimated coefficients on the heating, cooling, and base-use variables will continue to only account for 70% of the efficiency improvements that will occur?

### 3.0-VECC-61

Reference: Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, pages 4, 15 and 34

- a) Please confirm that similar to the current Application, HOL’s EB-2015-0004 Application forecast Residential customer count was based on a regression that related number of customers to population projections.
- b) Please provide a schedule that compares the actual monthly customer count for 2016-2019 with results of applying the EB-2015-0004 model along with actual historical population values.
- c) Please provide a Residential customer count forecast for 2020-2025 using the population forecast in the current Application and the EB-2015-0004 model.
- d) Page 4 explains why data prior to 2013 was not used to develop the monthly sales model. Please explain why data prior 2013 was not used to develop the customer count model.

### 3.0-VECC-62

Reference: Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, page 17 (Original) Attachment 3-1-1(D): Parts 1, 2 and 3

- a) The updated excel models posted on the Board’s web-site do not include an updated versions of the Load Forecast Models. Please provide revised versions of any updated models (e.g. Attachment 3-1-1(D): Part 2).
- b) Please provide a working excel file that sets out the derivation of the forecast monthly Residential average use values for 2020-2025 based on the Residential model and the forecast values for the explanatory variables.

### 3.0-VECC-63

Reference: Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, page 17  
Attachment 3-1-1(D): Part 1 - Load Forecast Data - Customers

- a) Please provide a working excel file that sets out the derivation of the forecast monthly Residential customer count values for 2020-2025 based on the Residential model and the forecast values for the explanatory variables.

### 3.0-VECC-64

Reference: Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, pages 17-18  
and 22  
Attachment 3-1-1(D): Part 2 - Load Forecast Data – kWh

Preamble: The Board's Chapter 2 Filing Requirements (section 2.3.1.1) require that Applicants provide: *"Sources of data used for both the endogenous and exogenous variables. Where a variable has been constructed, a complete explanation of the variable, data used and source of the data must be provided"*.

- a) For each of the four GS class models (i.e., the classes set out in Table 6) please provide the following:
  - i. For the XHeat variable, the monthly historical (2013-2019) and forecast (2020-2025) values for  $EconVar_m$  and  $HDD_m$  and the annual historic and forecast values for  $EI_{heat}$ .
  - ii. The derivation of the historical monthly values (2013-2019) used for  $EI_{heat}$ , including (but not limited to) i) the energy intensity values per the EIA and ii) any modification made to reflect Ontario end-use trends. Please the supporting working models, input data and specific data sources.
  - iii. The derivation of the forecast (2020-2025) monthly values used for  $EI_{heat}$ , including (but not limited to) i) the energy intensity values per the EIA and ii) any modifications made to reflect Ontario end-use trends. Please the supporting working models, input data and specific data sources.
  - iv. For the XCool variable, the monthly historical (2013-2019) and forecast (2020-2025) values for  $EconVar_m$  and  $CDD_m$  and the annual historic and forecast values for  $EI_{cool}$ .
  - v. The derivation of the historical monthly values (2013-2019) used for  $EI_{cool}$ , including (but not limited to) i) the energy intensity values per the EIA and ii) any modification made to reflect Ontario end-use trends.

Please the supporting working models, input data and specific data sources.

- vi. The derivation of the forecast (2020-2025) monthly values used for  $EI_{cool}$ , including (but not limited to) i) the energy intensity values per the EIA and ii) any modifications made to reflect Ontario end-use trends. Please the supporting working models, input data and specific data sources.
- vii. For the XOther variable, the monthly historical (2013-2019) and forecast (2020-2025) values for  $EconVar_m$  and  $HDD_m$  and the annual historic and forecast values for  $EI_{other}$ .
- viii. The derivation of the historical monthly values (2013-2019) used for  $EI_{other}$ , including (but not limited to) i) the energy intensity values per the EIA and ii) any modification made to reflect Ontario end-use trends. Please the supporting working models, input data and specific data sources.
- ix. The derivation of the forecast (2020-2025) monthly values used for  $EI_{other}$ , including (but not limited to) i) the energy intensity values per the EIA and ii) any modifications made to reflect Ontario end-use trends. Please the supporting working models, input data and specific data sources.
- x. Provide a working excel file that sets out the derivation of the monthly forecast sales for 2020-2025 based on the model coefficients and the forecast values for the explanatory variables. Note: In those cases where a separate adjustment is made for CDM (outside that predicted by the model), please show this adjustment separately.

### 3.0-VECC-65

Reference: Updated Exhibit 3, Tab 1, Schedule 1, pages 2-3 and Attachment C, pages 3, 10, 19, 23 and 24  
Attachment 3-1-1(D): Part 2 - Load Forecast Data – kWh

Preamble: At page 19 the Application states:

*“For GS1500, GS5000, Large Users, MU and Street Lighting CDM adjustments are made by subtracting future CDM savings from the model predicted results”.*

At page 23 the Application states:

*“Large User sales have been relatively constant since 2016. We assume that sales continue at this level over the next five years”.*

At page 24 the Application states:

*“The forecast is derived by holding current street lighting sales constant and then adjusting for expected savings from further CDM street lighting activity.”*

- a) For the GS1500, GS5000, Large User, MU and Street Lighting classes please provide a schedule that sets out the 2020-2025 sales predictions produced by the model/analysis prior to any CDM adjustment, the CDM adjustment and the resulting proposed sales forecasts (both MWhs and kW) as set out in Updated Exhibit 3, revised Tables 1 and 2.
- b) Please demonstrate that the Large User sales forecast (prior to CDM adjustments) is consistent with historic sales since 2016.
- c) Please explain the basis for the expected future savings from CDM street lighting activity

### 3.0-VECC-66

Reference: Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, page 22  
Attachment 3-1-1(D): Part 1 - Load Forecast Data - Customers

- a) For the GS50 customer count model, the historical residential customer counts used (per the GS50-Data Tab of the excel model) do not appear to match the actual historic residential customer counts (per the Residential-Data Tab). Please explain why.
- b) Please re-estimate the GS50 customer count model using the actual historic residential customer counts and provide the resulting GS50 customer count forecast for 2020-2025.

### 3.0-VECC-67

Reference: Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, page 22  
Attachment 3-1-1(D): Part 1 - Load Forecast Data – Customers

Preamble: At page 22 the Application states: *“A simple linear trend model is used to forecast customers for the GS1000 rate classes (non-interval and interval-meter classes) as customers have been migrating from non-interval rate class to the interval rate class”.*



- a) While the Application states that a simple trend model was used for the GS1000 rate class, the GS1000 model in the excel file uses the residential customer count to predict GS1000 customers. Please reconcile.
- b) If a trend model is used for the GS1000 rate class, please indicate the historic years used to determine the trend, why these years were chosen and provide the supporting details.
- c) If a model based on Residential customer counts is used, please confirm that the model is developed using actual historic residential customer counts.

### 3.0-VECC-68

Reference: Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, page 26  
Attachment 3-1-1(D): Part 3 - Load Forecast Data – kW

Preamble: At page 26 the Application states: *“Billing demand is a measure of a customer’s highest hourly demand over the billing period. Monthly billing demand regression models are estimated for each rate class. Demands are modeled as a function of monthly sales and monthly binary variables”.*

- a) Appendix A of Attachment C does not contain any of the models used to forecast customer class billing demand. The excel file only contains the model for the GS1000I class. Please provide the model details for the other customer classes that are demand billed.

### 3.0-VECC-69

Reference: Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, pages 10 and 26-27  
Updated Exhibit 3, Tab 1, Schedule 1, page 5  
Attachment 3-1-1(D): Part 2 - Load Forecast Data – kWh  
IESO Final 2015, 2016 and 2017 CDM Reports  
IESO 2018 Participation and Cost Report

- a) Please provide a revised version of Table 4 (page 10) with the forecast CDM broken out according to HOL’s rate classes and that shows the total cumulative CDM for each year.
- b) What is the base year from which the cumulative savings set out in Table 4 are calculated (i.e., in what year are the first savings assumed to occur)?
- c) The 2020-2025 CDM forecast on page 10 (Table 4) is titled “Cumulative CDM savings”. Please provide the historical values (up to the year 2019) for each

customer class (per the response to part (a)) starting from the base year per the response to part (b).

- d) Please provide a schedule/excel file for each customer class and for HOL in total that sets out the following:

Impact of Historical and Forecast CDM					
Calendar Year/ CDM Program Year	Base Year	Columns for Each Subsequent Year up to 2024			2025
Base Year CDM Impact					
Actual CDM impacts for each year to 2019 – one row per year					
Forecast 2020 CDM Impacts					
Forecast CDM impacts for each year to 2025 – one row per year					
Total (Matching Response to parts a) & c)					

If the totals do not reconcile with the responses to parts a) & c), please explain why.

- e) Please explain and provide a working excel file that sets out the derivation of the monthly residential CDM values per customer used in Attachment 3-1-1(D) – Part 2 (Res-Data Tab) based on the response to parts (a) – (c).
- f) Please provide (if not already on the record) the IESO reports used to determine the annual CDM savings by customer class set out in the response to part (d) for the years up to (and including) 2019.
- g) Please explain how the values for each year (per part (d)) were derived from the IESO Reports for the program years up to and including 2019.
- h) Please reconcile the annual cumulative savings provided in the response to part (d) with the CDM savings for GS50 as set out in Attachment 3-1-1(D) – Part 2 (GS50 - Data Tab).
- i) Please reconcile the annual cumulative savings provided in the response to part (d) with the CDM savings for GS1000 as set out in Attachment 3-1-1(D) – Part 2 (GS1000 - Data Tab).

### 3.0-VECC-70

Reference: Updated Exhibit 3, Tab 1, Schedule 1, pages 5-6  
Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, page 10  
Exhibit 4, Tab 1, Schedule 6, pages 7-9  
Attachment 3-1-1(D): Part 2 - Load Forecast Data – kWh  
Updated Exhibit 1, Tab 1, Schedule 1, pages 3-4

Preamble: In Updated Exhibit 3 (page 5) the Application states:

*Tables 6 and 7 below summarize Hydro Ottawa's CDM adjustments to its load forecast. The CDM adjustments are comprised of assumptions related to the following:*

- *Projected CDM savings from projects that are subject to contractual agreements between the utility and customers, made on or before April 30, 2019;*
- *Estimated rate base savings, as outlined in Exhibit 4-1-6: Conservation and Demand Management; and*
- *Estimated impacts related to the continuation of CDM programs which are still being administered at the provincial level (i.e. by the Independent Electricity System Operator ["IESO"]).*

- a) Please confirm that Exhibit 4, Tab 1, Schedule 6 is still part of HOL's overall Application.
- b) For each customer class please provide a breakdown of the annual 2021-2025 CDM adjustments set out in Table 6 into the three categories referenced above from page 5.
- c) Are the "rate base savings" (per the second bullet in the Preamble) attributable to OPA contracted/administered programs? If yes, please explain how these savings differ from those noted in the first and third bullets.
- d) If the "rate base savings" are not attributable to OPA contracted/administered programs, is HOL seeking Board approval of the related utility programs per Board Report EB-2012-0003, Guidelines for Electricity Distributor Conservation and Demand Management?
  - i. If not, why not?
  - ii. If yes, please indicate where in the Application HOL has addressed the approval requirements set out in the Board's Report.
- e) Please reconcile – for each customer class - the Energy Sales CDM Adjustments by Customer Class set out in Updated Exhibit 3, Tab 1, Schedule 1 – Table 6 with those set out in Attachment C, page 10 – Table 4.

- f) Please reconcile the Residential CDM values for 2021-2025 as set out in Table 6 (Updated Exhibit 3, Tab 1, Schedule 1) with the 2021-2025 Residential CDM values used in the Res-Data Tab of Attachment 3-1-1(D): Part 2 - Load Forecast Data – kWh.
- g) Please reconcile the GS50 CDM values for 2021-2025 as set out in Table 6 (Updated Exhibit 3, Tab 1, Schedule 1) with the 2021-2025 GS50 CDM values used in the GS50-Data Tab of Attachment 3-1-1(D): Part 2 - Load Forecast Data – kWh.
- h) Please reconcile the GS1000 (Interval and Non-Interval) CDM values for 2021-2025 as set out in Table 6 (Updated Exhibit 3, Tab 1, Schedule 1) with the 2021-2025 GS1000 CDM values used in the GS1000-Data Tab of Attachment 3-1-1(D): Part 2 - Load Forecast Data – kWh.

### 3.0-VECC-71

Reference: Updated Exhibit 3, Tab 1, Schedule 1, Attachment C, page 27

Preamble: The Application states:

*“Sales impact from future CDM savings are derived by executing savings projections through the estimated model where CDM is included as a model variable and treated as in the past (subtracted from the forecast model estimate) for GS1500, GS5000, Street Lighting, and MU”.*

- a) Please provide a schedule that sets out the 2019-2025 values for the two curves portrayed in Figure 21.
- b) Please provide a schedule that provides the 2019-2025 values for each customer class: i) Based on No CDM Adjustment and ii) With CDM Adjustment consistent with part (a).

### 3.0-VECC-72

Reference: Exhibit 3, Tab 1, Schedule 1, Attachment B  
Updated Exhibit 1, Tab 1, Schedule 1, page 3

- a) Please confirm that Exhibit 3, Tab 1, Schedule 1, Attachment B is unchanged from the original Application.
- b) Is HOL proposing LRAMVA thresholds for the test years 2021-2025?
  - i. If yes, what are they for each customer class and how were they calculated?

- ii. How do the proposed threshold values relate to the LRAMVA threshold set out at page 3 of Attachment B?
- c) Is the Manual Adjustment for 2020 (Attachment B, per page 3) used at all in the development of the 2021-2025 proposed load forecast?
  - i. If yes, please explain how.

### 3.0-VECC-73

Reference: Updated Exhibit 3, Tab 2, Schedule 1, pages 1 & 6 and Attachment A

- a) With respect to Attachment A, please explain why the 2021 forecast value for Loss from Retirement of Utility and Other Property (USOA#4362) is negative whereas as the values for the preceding years are all positive.
- b) With respect to Table 1 (page 1), please break down the 2022 to 2025 forecast by USOA.
- c) With respect to Table 1 (page 1), please explain why the value for Other Income & Deductions decreases materially between 2021 and 2022.

## 4.0 OPERATING COSTS (EXHIBIT 4)

### 4.0 -VECC -74

Reference: Exhibit 4,

- a) What metrics or performance measures does HOL have to help it understand the productivity of its operation and maintenance programs?
- b) Please provide the summary results of any management tools used by HOL to help it do more maintenance with less money.

### 4.0 -VECC -75

Reference: Exhibit 4, Tab 1, Schedule 3/ Appendix 2-M Updated – Regulatory Costs

- a) Please provide a breakdown by consultant of the \$1,736,900 in consulting costs incurred for this application.
- b) Please breakdown the \$2,211,990 in one-time application costs into: Legal, consulting, intervenor, other (please specify).

4.0 -VECC -76

Reference: Exhibit 4, Tab 1, Schedule 3, Attachment D, Updated

- a) Please amend Appendix 2-D to show 2016 results.

4.0 -VECC -77

Reference: Exhibit 4, Tab 1, Schedule 4, page 51 /Tab 2, Schedule 4 Updated

- a) What was HOL's 2019 OEB assessment cost (net of any section 30 assessments)

4.0 -VECC -78

Reference: Exhibit 4, Tab 1, Schedule 4, Table 10 & pages 28-

- a) What accounts for the significant decrease in collections and account costs from 2018 to 2019 (over 35% as compared to 2017) and then a significant increase from that trend in 2021 (over 50% increase as compared to 2019).

4.0 -VECC -79

Reference: Exhibit 4, Tab 1, Schedule 4, Table 10

- a) What accounts for roughly 7% decrease in Customer and Community Relations spending in 2019 as compared to the prior 3 years?

4.0 -VECC -80

Reference: Exhibit 4, Tab 1, Schedule 4, Table 10 & pages 48-

- a) "Engineering & Design" costs are forecast to escalate in 2020 as compared to 2019 amounts by over 25%. HOL explains this increase as the increased cost of technical support for SCADA, higher IT licence and maintenance contracts and general compensation increases. Please provide the amount of the increase from 2019 by each of those categories (or any additional categories as might be required).
- b) Please clarify if the IT costs are accounted for in this line item or under the category of Information Management & Technology.

#### 4.0 -VECC -81

Reference: Exhibit 4, Tab 1, Schedule 4, Table 10 & pages 48

- a) Please provide the assessed property taxes and the property taxes paid by HOL in 2019 for each of the properties:
  - Bank Street
  - Albion Road (A&C)
  - Merivale Road
  - Hunt Club Road
  - Dibblee Road
- b) Please clarify if there is an Albion “B” property and if so whether that property has been retained by HOL.

#### 4.0 -VECC - 82

Reference: Exhibit 4, Tab 1, Schedule 4, page 52-

- a) Please confirm or clarify that the \$1.0 million in flame resistant clothing is :
  - i. not an incremental costs in 2021;
  - ii. an annual cost.
- b) Please identify in what program categories (using Table 10) these costs were formerly captured.

#### 4.0 -VECC -83

Reference: Exhibit 4, Tab 1, Schedule 5, page 3

- a) Please provide a chart which shows the correlation and relationship between the proposed Utility Regulatory Scorecard and the corporate and divisional priorities used for senior management incentive pay.

#### 4.0 -VECC -84

Reference: Exhibit 4, Tab 1, Schedule 5, pages 8-

- a) Using Table 3 please show separately the total annual premium cost for the post-retirement life insurance.

#### 4.0 -VECC -85

Reference: Exhibit 4, Tab 1, Schedule 5, pages 8-

Statistics Canada publishes “Employee wages by industry – annual” which includes a number of categories including “**Total employees, all industries**” and “**Utilities**” in current dollars.

([www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410006401](http://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410006401))

- a) For the period 2012 to 2019 please provide a graph which shows the wage trend growth for those two categories (as per Statistics Canada).
- b) Using Appendix 2-K please provide separately a graph which shows the average total compensation for each of management and non-management (i.e. Total \$/FTE) for the period 2012 to 2019. Please provide a table to accompany this chart which includes the calculated data.

#### 4.0 -VECC -86

Reference: Exhibit 4, Tab 1, Schedule 5, page 3

- a) Please amend Appendix 2-K to show the amount of compensation capitalized and expensed in each year 2016-2021.

#### 4.0 -VECC -87

Reference: Exhibit 4, Tab 3, Schedule 1, Table 3 Updated

- a) What accounts for the unusually large amount of disposals in 2019 - specifically the disposals in General Plant, Equipment and IT Assets.

#### 4.0 -VECC -88

Reference: Exhibit 4, Tab 2, Schedule 1

- a) What HR services are provided by HOHI to HOL?
- b) How many employees are in HOL HR? How many are in HOHI HR?
- c) Please explain what communication services are provided to HOL by HOHI. How many employees are at HOL's communication division? How many are in HOHI communication division?
- d) What IT services are provided to HOL by HOHI? How many IT specialist are employed by HOHI?

#### 4.0 -VECC -89

Reference: Exhibit 4, Tab 2, Schedule 2

- a) Please provide the amounts paid for EDA membership for the years 2016 through 2021 (forecast).
- b) Please provide the amounts paid for other corporate memberships.
- c) Please provide the amount paid on behalf employees for professional or club memberships. Please indicate whether these amounts are included in the compensation benefits shown in Appendix 2-K.



#### 4.0 -VECC -90

Reference: Exhibit 4, Tab 2, Schedule 5

- a) Does HOL communicate the availability of LEAP funding in its disconnection notices (including telephone calls)?
- b) Did HOL as part of its customer engagement attempt to understand whether the availability of LEAP is widely known among its customers and if not how to address any communication problems identified?

### 5.0 COST OF CAPITAL AND RATE OF RETURN (EXHIBIT 5)

#### 5.0-VECC-91

Reference: Exhibit 5,

- a) Please provide a table showing HOL's rate of return on equity for each year 2015 through 2019.
- b) Please provide the corporate (HOHI) equity return for the same period.

#### 5.0-VECC-92

Reference: Exhibit 1, Tab 3, Schedule 4 / Exhibit 5, Tab 1, Schedule 1

The DBRS Rating Report (September 25, 2019) states:

*Hydro Ottawa's business risk profile continues to benefit from its stable regulated electricity distribution business in the City of Ottawa (the City; 100% owner of Hydro Ottawa). However, this is partly offset by the Company's growing portfolio of non-regulated electricity generation assets.*

It goes on to say:

*However, should the Company's key credit metrics deteriorate to a level no longer commensurate with the current rating category, considering the mix of the regulated and non-regulated businesses, further negative rating actions may occur.*

And further..

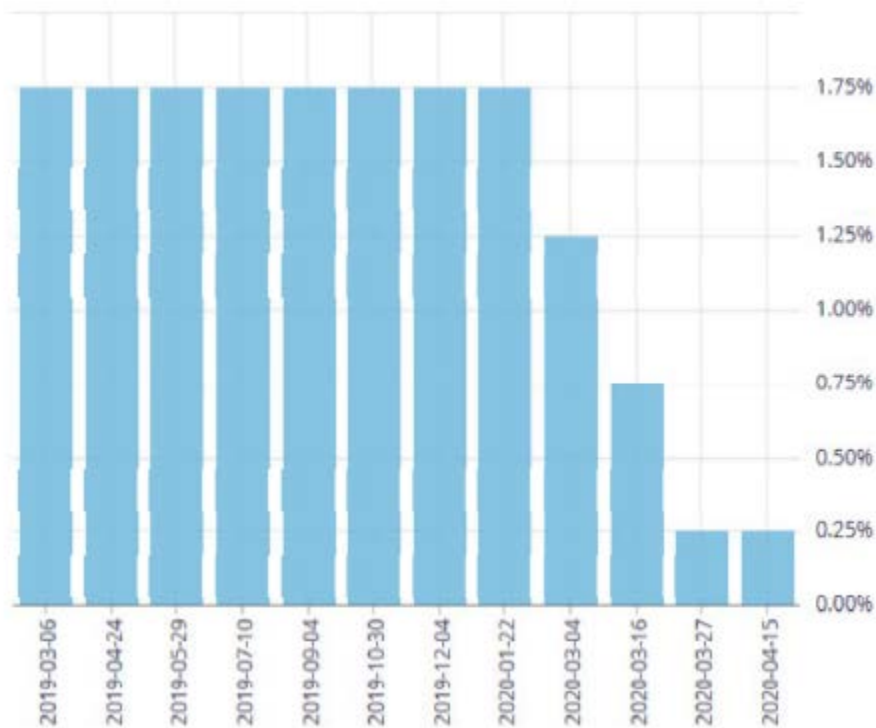
*As EBIT contributed by the non-regulated business has breached the previously noted 20% threshold (25.7% in 2018, from 7.5% in 2017), DBRS has introduced the Rating Companies in the Independent Power Producer Industry methodology in addition to the Rating Companies in the Regulated Electric, Natural Gas and Water Utilities Industry methodology in its assessment of Hydro Ottawa.*

- a) Please explain the financial relationship between the non-regulated entities and the regulated utility and what steps HOL is taking to ensure ratepayers are not funding higher than necessary costs of debt due to this relationship.
- b) What is the premium between DBRS A as compared to A/Negative rating and a Standard & Poor A as compared to B+++ ratings?

5.0-VECC-93

Reference: Exhibit 1, Tab 3, Schedule 4 / Exhibit 5, Tab 1, Schedule 1

In response to the pandemic and large drop in oil prices affecting the Canadian economy the Bank of Canada has significantly moved to ease monetary policy (as shown in the graph taken from the Bank's website - [www.bankofcanada.ca/core-functions/monetary-policy/key-interest-rate/](http://www.bankofcanada.ca/core-functions/monetary-policy/key-interest-rate/))



- Given events does HOL agree that economic forecasts completed prior to the pandemic (i.e. February 2020) are largely outdated. If not please explain why these forecasts should be considered reliable.
- What efforts has HOL made to recast the forecast yields for long-term debt (e.g. Tables 2, 3 & 4) in light of the current economic downturn?
- What is the most recent Canada Bond forecast that has been reviewed by HOL or HOHI? Please provide that forecast.

5.0-VECC-94

Reference: Exhibit 5, Tab 1, Schedule 1

- c) Given the present economic uncertainties why would it not be in the best interest of ratepayers to have an annual adjustment made to the cost capital components of the CPEF?

5.0-VECC-95

Reference: Exhibit 5, Tab 1, Schedule 1

- a) Please explain why the return to common equity shown in Appendix 2-OA for 2020 and 2021 are 8.88% rather than the 8.52% value provided in the Board's letter of October 31, 2019? Please calculate the revenue requirement adjustment using 8.52%.

5.0-VECC-96

Reference: Exhibit 5, Tab 1, Schedule 1

- a) At Appendix 2-OB HOL calculated the long-term debt for the 2021 test year at 3.35% however this amount is calculated on the over leveraged amount of long-term debt (i.e. 737.5M rather than \$689.2 M allowable). Please recalculate this debt rate removing the unallowable amount (i.e. from \$50.0M @ 4.97%).
- b) Please provide the 2021 revenue requirement adjustment of this change.

5.0-VECC-97

Reference: Exhibit 5, Tab 1, Schedule 1

- a) A number of the notes contain repayment terms which allow Hydro Ottawa Limited to "*at any time, repay in whole or in part the Principal Amount or the amount remaining unpaid.*", i.e. are a callable bond. Using Appendix 2-OB please indicate which loans contain callable provisions.
- b) The Board has determined that affiliate debt should attract the lower of the actual rate or the deemed long-term debt rate of 3.21%. All HOL's debt is from its affiliate Hydro Ottawa Holding Inc. Please explain why therefore the long-term rate used for the purpose of establishing 2021 rates is not 3.25% rather than the 3.35% proposed.
- c) Given the historical low interest rates available why is HOL not choosing to refinance its portfolio of callable bonds at lower interest rates?

## 6.0 CALCULATION OF REVENUE DEFICIENCY/SURPLUS (EXHIBIT 6)

N/A

## 7.0 COST ALLOCATION (EXHIBIT 7)

7.0 – VECC –98

Reference: Updated Exhibit 7, Tab 1, Schedule 1, page 2

Preamble: The Application states:

*“Hydro Ottawa was unable to obtain the hourly load profile data required to derive updated load profiles for this Application. As a result, demand data figures for the 2021 Cost Allocation Model have been calculated based on hourly demand figures used in previous rate applications, adjusted to the 2021 monthly load profile and customer count forecasts.”*

*“Hydro Ottawa confirms that it has a plan in place to develop updated hourly load profiles to comply with the current Filing Requirements.”*

- a) What hourly load profile data was HOL unable to obtain and why?
- b) What is HOL’s plan with respect to developing updated load profiles?

7.0 – VECC- 99

Reference: Updated Exhibit 7, Tab 1, Schedule 1, page 1

- a) Please provide the derivation of the Billing & Collecting weighting factors used in Tab I5.2 of the Cost Allocation model.
- b) Please provide the derivation of the Services weighting factors used in Tab I5.2 of the Cost Allocation model.
- c) Please confirm that each of the GS and Large User customers only has one HOL-owned meter. If not confirmed please revise the customer counts used in Tabs I7.1 and I7.2 accordingly.
- d) Do any of the GS or Large User customers have customer-owned meters that are read by HOL for billing purposes? If yes, which customer classes and how many for each?

## 7.0 – VECC –100

Reference: Updated Exhibit 7, Tab 1, Schedule 1, pages 1-2  
Updated 2021 Cost Allocation Model, Tabs I6.2 and I8

- a) It is noted that in Tab I6.2 the Residential Secondary Customer Base is less than the Primary Customer Base. Please explain why this is the case.
- b) Please explain why, in Tab I6.2, the Residential LT Customer Base is not equal to the Secondary Customer Base.
- c) It is noted that in Tab I8 the Residential Secondary NCP4 value equals the Primary NCP4 even though in Tab I6.2 the Secondary Customer Base is less than the Primary Customer Base. Please reconcile.
- d) Are any of HOL's residential customers located in multi-residential building (e.g. apartments or condominiums) where the transformer and/or the service connection to the building is not owned by HOL but rather by the building owner (e.g. the apartment building owner or the condominium corporation)?
  - i. If yes, how many such Residential customers were there in 2019?
  - ii. If yes, do the Residential Secondary and LT Customer counts in Tab I6.2 and the Residential Secondary and LT NCP4 values in Tab I8 reflect these circumstances?
- e) Are any of HOL's GS customers located in commercial/industrial malls (e.g. shopping centres) where the transformer and/or the service connection to the "mall" is not owned by HOL but rather by the building complex (e.g. the mall owner)?
  - i. If yes, for each GS class, how many such GS customers were there in 2019?
  - ii. If yes, do the respective GS class Secondary and LT Customer counts in Tab I6.2 and the GS class Secondary and LT NCP4 values in Tab I8 reflect these circumstances?
- f) It is noted that in Tab I6.2 the GS<50 Secondary Customer Base is less than the Primary Customer Base. Please explain why this is the case.
- g) Please explain why, in Tab I6.2, the GS<50 LT Customer Base is not equal to the Secondary Customer Base.
- h) It is noted that in Tab I8 the GS<50 Secondary and LT NCP4 values both equal the Primary NCP4 value even though in Tab I6.2 the LT and Secondary Customer Bases are both less than the Primary Customer Base. Please reconcile.

- i) Please explain why, in Tab I6.2, the GS1500-4999 LT Customer Base is less than the Secondary Customer Base.
- j) Please explain why, in Tab I8, there is no Secondary NCP4 value for the GS1500-4999 class when in Tab I6.2 there are 65 customers in the GS1500-4999 Secondary Customer Base.
- k) Please explain why, in Tab I6.2, the Large User LT Customer Base is less than the Secondary Customer Base.
- l) Please explain why, in Tab I8, there is no Secondary NCP4 value for the Large User class when in Tab I6.2 there are 9 customers in the Large User Secondary Customer Base.
- m) Please explain why, when there are 3 GS1500-4999 Standby customers per Tab I6.2, Tabs I7.1 and I7.2 only show 2 meters for these customers.
- n) Please explain why, for the GS1500-4999 Standby class, Tab I6.2 shows zero for LT Customer Base whereas Tab I8 shows a positive value LT NCP4 value for the class.
- o) For each of the 3 GS1500-4999 Standby customers, please explain what HOL facilities/assets are used to serve the customers.

#### 7.0 – VECC –101

Reference: Updated Exhibit 7, Tab 1, Schedule 1, page 4

- a) Please outline the methodology used to determine the proposed increases in the revenue to cost ratios for the GS50-1499, GS1500-4999, Large User and Sentinel Lighting classes.

### 8.0 RATE DESIGN (EXHIBIT 8)

#### 8.0 –VECC - 102

Reference: Updated Exhibit 8, Tab 1, Schedule1, page 9  
Updated Exhibit 8, Tab 10, Schedule 1, Attachment A

Preamble: The Application states:

*“Effective April 1, 2015, customers with customer-owned transformers installed after November 1, 2000 were no longer eligible to receive the credit. The TOC will be discontinued for customers who own transformers that were installed prior to November 1, 2000 either when the customer-owned transformer has been replaced, or after*

*November 1, 2025 – whichever occurs first.”*

- a) Are customers with customer-owned transformers installed after November 1, 2000 currently (i.e., in 2020) not receiving any transformer ownership credit?
- b) If yes, why is there no reference to this limitation on the 2020 approved tariff schedule?
- c) Please explain why it is appropriate to discontinue offering the TOC to customers with customer-owned transformers.

#### 8.0 –VECC -103

Reference: Exhibit 8, Tab 4, Schedule 1, pages 1-2

- a) Please clarify whether: i) HOL is seeking approval of retail services charges for 2021-2025 as set out in Table 1 or ii) HOL intends to adjust its current (2020) retail service charges in accordance with the Board's November 29, 2018 Decision (EB-2015-0304) using the Board's annual inflation rate.
- b) If HOL is not proposing to adjustment its retail service charges in accordance with EB-2015-0304, please explain why.

#### 8.0 –VECC -104

Reference: Updated Exhibit 8, Tab 7, Schedule 1, pages 3-7 & 9  
and Attachment A

- a) Please outline the circumstances which would lead to a customer requesting an Easement Certificate for Unregistered Easements and why this is considered a service over and above HOL's standard level of service offerings.
- b) The proposed 2021 charges for Arrears Certificate and Easement Certificate for Unregistered Easements are both materially less than the cost to provide the respective services (per Attachment A, pages 1 & 2). Please explain why.
- c) It is noted that the costing for the Account Set Up Charge is based on a 50/50 weighting of the service being provided by Internal Staff versus the Contact Centre (per Attachment A, page 6). What is the basis for the 50/50 weighting and is it expected change over time (i.e., 2021-2025)?
- d) Please explain the circumstances that would give rise to applying the Reconnect at Meter (New Account) – Regular Hours charge? In doing so please explain why, if it is a new account and the “new customer” was not

responsible for the original disconnection, the new customer should be required to pay the charge.

- e) What is the incremental cost of equipping HOL's AMI such that disconnects and reconnects can be done remotely and what proportion of HOL's meters are so equipped?
- f) With respect to the proposed Reconnection at the Pole charge, please explain why the Regular Hours Charge is less than cost while the After Regular Hours Charge is more than cost (per Attachment A, pages 9-10).
- g) With respect to the Specific Access to Power Poles – Wireline Attachments Charge please clarify whether: i) HOL is seeking approval of charges for 2021-2025 as set out in Table 1 or ii) HOL intends to adjust the approved 2020 charge in accordance with the Board's March 22, 2018 Decision (EB-2015-0304) using the Board's annual inflation rate.

#### 8.0 –VECC -105

Reference: Updated Exhibit 8, Tab 7, Schedule 1, pages 8-9

- a) Is HOL aware of any other Ontario electricity distributor that has received approval for a Standard Supply Service Administrative Charge other than \$0.25? If yes, please provide the relevant case number.
- b) Is HOL aware of any direction/decision by the Board to revise the current generic \$0.25 SSS Administrative Charge?
- c) The Board's Chapter 2 Filing Guidelines (Section 2.8.5) state that "*These rates are set by the OEB on a generic (i.e. province-wide) basis. Applicants should refer to the most recent rate order for the current approved rate. Distributors wishing to apply for a rate other than the generic rate set by the OEB must provide justification as to why their specific circumstances would warrant a different rate, in addition to a detailed derivation of their proposed rate*". Please indicate what HOL's specific circumstances are that warrant a rate different from the generic province-wide rate.

#### 8.0 –VECC -106

Reference: Exhibit 8, Tab 8, Schedule 1  
Exhibit 2, Tab 3, Schedule 1, page 8 (Table 10)

- a) Please confirm that Exhibit 8, Tab 8, Schedule 1 is unchanged from the original Application.
- b) With respect to Table 2 (Exhibit 8, Tab 8, Schedule 1), how much of the 2019 increase in LV expense was due to an increase in HONI's ST rates?



- c) Please provide the derivation of the 2021-2025 LV Expenses set out in Table 3.
- d) Please confirm that based on HOL's proposal the RTSRs in column A of Tables 5-8 would be updated annually but the charge determinants and annual LV expenses would not change.

8.0 –VECC -107

Reference: Updated Exhibit 8, Tab 9, Schedule 1

- a) With respect to Appendix 2-R please indicate the kWh pertaining to distributed generation directly connected to HOL's distribution system and confirm that they are included in A(2) for each year.

8.0 –VECC -108

Reference: Updated Exhibit 8, Tab 10, Schedule 1, Attachment A, pages 11 and 31

- a) Please explain how the monthly billing demand for Standby Power Service is determined.

**9.0 DEFERRAL AND VARIANCE ACCOUNTS (EXHIBIT 9)**

9.0 –VECC -109

Reference: Exhibit 9, Tab 1, Schedule 3

**Table 5 – UPDATED FOR 2019 ACTUALS – Gain on Sale of Existing Properties**

	2019
Merivale Facility and Land	\$375,007
Albion Facility and Land	\$18,259
Albion Parcel C Land	\$1,758,595
<b>Total to Dispose to Customers<sup>42</sup></b>	<b>\$2,151,861</b>

- a) Are the costs shown in the Table 5 net of transaction costs?
- b) If yes please provide a description of the transaction costs.

**End of document**