

BY E-MAIL

July 22, 2025

Ritchie Murray
Acting Registrar
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto ON M4P 1E4

Dear Ritchie Murray:

**Re: Hydro Ottawa Limited (Hydro Ottawa)
2026-2030 Custom Rate Application for Electricity Distribution Rates and
Charges
Ontario Energy Board (OEB) File Number: EB-2024-0115**

In accordance with Procedural Order No. 1, please find attached the Ontario Energy Board (OEB) staff interrogatories in the above proceeding. The applicant and intervenors have been copied on this filing.

Hydro Ottawa Limited's responses to interrogatories are due by August 12, 2025.

Any questions relating to this letter should be directed to Margaret DeFazio at margaret.defazio@oeb.ca or at 416-440-7674. The OEB's toll-free number is 1-888-632-6273.

Yours truly,

Original Signed By

Margaret DeFazio, P.Eng.
Senior Advisor, Electricity Distribution Rates

Attach.

OEB Staff Interrogatories
2026-2030 Custom Rate Application for Electricity Distribution Rates and Charges
Hydro Ottawa Limited (Hydro Ottawa)
EB-2024-0115
July 22, 2025

Please note, Hydro Ottawa is responsible for ensuring that all documents it files with the OEB, including responses to OEB staff interrogatories and any other supporting documentation, do not include personal information (as that phrase is defined in the Freedom of Information and Protection of Privacy Act), unless filed in accordance with rule 9A of the OEB's Rules of Practice and Procedure.

Exhibit 1 – Administration

1-Staff-1

Updated Revenue Requirement Work Form (RRWF) and Models

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

In addition, please file an updated set of models that reflects the interrogatory responses and 2024 Actual amounts. Please ensure the models used are the latest available models on the OEB's 2026 Electricity Distribution Rate Applications webpage.

1-Staff-2

Letters of Comment

Following publication of the Notice of Application, the OEB received more than 140 letters of comment. Section 2.1.5 of the Filing Requirements states that distributors will be expected to file with the OEB their response to the matters raised within any letters of comment sent to the OEB related to the distributor's application. If the applicant has not received a copy of the letters or comments, they may be accessed from the public record for this proceeding.

Please file a response to the matters raised in the letters of comment referenced above. Going forward, please ensure that responses to any matters raised in subsequent letters of comment are filed in this proceeding. All responses must be filed before the argument (submission) phase of this proceeding.

1-Staff-3

Ref. 1: Exhibit 1 / Tab 1 / Schedule 1 / pp. 8-11 (pdf Exhibit 1 part 1, pp. 222-225)

Ref. 2: Exhibit 1 / Tab 3 / Schedule 4 / pp. 11, 23, 26 (pdf Exhibit 1 part 1, pp. 531, 543, 546,)

Preamble:

Table 1 - Hydro Ottawa's Current vs. Proposed Custom Rate Frameworks in reference 1 states that the 2026 Operating, Maintenance and Administration (OM&A) amount is "Standard Cost of Service rebasing with embedded stretch".

Question(s):

- a) Please add a column to each of Table 2, Table 4 and Table 5 in reference 2, and show the productivity benefits specific to 2026 for each row of OM&A expenses.
- b) If the OM&A productivity benefits from question a) do not reconcile with the quote from reference 1, please explain and detail the additional items contributing to the embedded stretch.

1-Staff-4

Ref. 1: Exhibit 1 / Tab 1 / Schedule 4 / pp. 6-12 (pdf Exhibit 1 part 1, pp. 54-60)

Ref. 2: EB-2019-0261, Decision and Order, November 19, 2020

Ref. 3: [Hydro Ottawa CIR Year 2 Update](#), Exhibit 1 / Tab 1 / Schedule 6, p. 6

Ref. 4: [2023 Hydro Ottawa Rate Application](#), Exhibit 1 / Tab 1 / Schedule 6, p. 6

Ref. 5: [2024 Hydro Ottawa Rate Application](#), Exhibit 1 / Tab 1 / Schedule 6, p. 6

Ref. 6: [HOL EB-2024-0032 Application](#), Exhibit 1 / Tab 1 / Schedule 6, p. 7

Preamble:

It its Decision and Order in EB-2019-0261, dated November 19, 2020, the OEB accepted the settlement proposal as filed. Page 23 of the settlement proposal included the understanding that Hydro Ottawa would report on the MiGen project in the next rebasing application.

The MiGen reporting was not listed in section 12, *OEB Directives from Previous Decisions and/or Orders*, of Exhibit 1, although it was included in Hydro Ottawa's past four annual updates under its five-year custom incentive rate-setting plan.

Question(s):

- a) Please provide the agreed to MiGen report as described in the settlement proposal.
- b) Please confirm if the MiGen program is still underway.
 - i. If yes, has the program been renamed and referenced as another initiative in the current 2026-2030 application?
 - ii. If yes, does Hydro Ottawa anticipate the MiGen program to continue throughout the 2026-2030 period? If yes, is any funding being requested?
 - iii. If no, when and why did Hydro Ottawa decide to end the MiGen program?
- c) Were any learnings from the MiGen program leveraged in the design of the non-wires solutions (NWS) initiatives proposed in Hydro Ottawa's current application?
 - i. If yes, please identify for which NWS initiative(s) and provide more details as to how the learnings were leveraged in the NWS program design.

1-Staff-5

Ref. 1: Exhibit 1 / Tab 2 / Schedule 5 / pp. 36-37 (pdf Exhibit 1 part 1, pp. 206-207)

Ref. 2: [Technical Guidelines for the Approval of: Electrical Equipment, Design and Construction \(Ver. 2.0\)](#)

Preamble:

Hydro Ottawa states the following.

Hydro Ottawa has assumed an average annual increase in the range of 2.1% to 5.0% with respect to the future cost of equipment and materials. This range is based on an analysis of the historical cost of equipment and materials commonly used by Hydro Ottawa.

Hydro Ottawa has negotiated escalation rates between 2.0% and 3.3% for certain outside services in support of executing OM&A capital work programs in the earlier years of the Custom IR period.

Question(s):

- a) Please provide the inflation factors applied to all major equipment, as defined by section 2.1.2 in reference 2, for each year of the test period.
- b) Regarding outside services supporting execution of the OM&A programs, what is the percentage of forecast dollar amount of those services with whom Hydro Ottawa has negotiated 2.0-3.3% escalation rates, relative to the total forecast dollar amount?
 - i. For 2026, please provide the forecast amounts of outside services, excluding all burdens and overheads.
- c) Regarding outside services supporting execution of the capital programs, what is the percentage of forecast dollar amount of those services with whom Hydro

Ottawa has negotiated 2.0-3.3% escalation rates, relative to the total forecast dollar amount?

- i. For each year of the Custom IR period, please provide the forecast amounts of outside services, excluding all burdens and overheads.
- ii. Are these negotiated price escalations included in the Custom IR period forecast? If so, what values have been used for the years that are not in “the earlier years of the Custom IR period”

1-Staff-6

Ref. 1: Exhibit 1 / Tab 3 / Schedule 1 / p. 6 (pdf Exhibit 1 part 1 p. 220)

Preamble:

Hydro Ottawa states “The Price Cap IR option allows Hydro Ottawa to rebase, but limits rate increases in the outer years of the rate period to inflationary adjustments. This constraint poses a significant challenge for Hydro Ottawa given that its service territory is experiencing accelerated electrification and unprecedented levels of growth.”

Question(s):

- a) Has Hydro Ottawa considered what Price Cap IR formula parameters would need to be modified for the Company to manage under a Price Cap IR option? If so, what tweaks on the current construct would be required for Hydro Ottawa to manage over a five-year period under the Price Cap option?

1-Staff-7

Ref. 1: Exhibit 1 / Tab 3 / Schedule 1 / Table 1 / p. 8 (pdf Exhibit 1 part 1 p. 222)

Preamble:

In addition to several proposed asymmetrical variance accounts, Hydro Ottawa proposes to operate with three symmetrical capital variance accounts, as follows:

- Connection and Cost Recovery Agreement (CCRA) Variance Account
- Non-Wires Solutions (NWS) Variance Account
- Large Load Revenue Variance Account

Question(s):

- a) What is the percentage of total gross capital spending that Hydro Ottawa expects to fall within these capital variance accounts?
- b) Do these variance accounts reduce the cost efficiency incentives of Hydro Ottawa’s Custom IR framework? If not, why not?

1-Staff-8

Ref. 1: Exhibit 1 / Tab 3 / Schedule 1 / p. 8 (pdf Exhibit 1 part 1, p. 222)

Ref. 2: Exhibit 1 / Tab 3 / Schedule 1 / p. 15 (pdf Exhibit 1 part 1, p. 229)

Preamble:

In reference 1 Hydro Ottawa has stated the 2026 test year capital forecast includes a stretch of \$6.9M that is embedded through identified efficiencies. Table 3 and Table 4 in reference 2 show the total stretch over the forecast period in the capital budget is \$35M which equates to an average revenue requirement stretch of 0.65%.

Question(s):

- a) Please produce the data shown in Table 3 and Table 4, on an annual basis, in the tables below.

Table: Capital Expenditures				
Year	Required Capital Expenditures \$000	Proposed Capital Expenditures \$000	Stretch \$000	Stretch %
2026				
2027				
2028				
2029				
2030				

Table: Capital Related Revenue Requirement				
Year	Required Revenue Requirement \$000	Proposed Revenue Requirement \$000	Stretch \$000	Stretch %
2026				
2027				
2028				
2029				
2030				

1-Staff-9

Ref. 1: Exhibit 1 / Tab 3 / Schedule 1 / p. 9 (pdf Exhibit 1 part 1, p. 223)

Preamble:

As part of the proposed 2026-2030 Customer IR Rate Framework, Hydro Ottawa states that for Other Revenue, it set both rates and revenue for 5 years. Where rates are proposed to be adjusted in years 2 to 5 based on inflation, set rate of 2.1% for all four years (no adjustment based on the OEB approved inflation factor).

Question(s):

- a) Please explain Hydro Ottawa's assumptions used to derive the inflation rate of 2.1% for the 2027 to 2030 period.

1-Staff-10

Ref. 1: Exhibit 1 / Tab 3 / Schedule 1 / Table 1 / p. 9 (pdf Exhibit 1 part 1, p. 223)

Preamble:

Table 1 compares growth factor G used to adjust the OM&A Funding for years 2-5 in the 2021-2025 and proposed 2026-2030 Custom IR Rate Framework. In the 2021-2025 rate framework G is calculated using forecasted customer growth rate based on the 2021-2025 load forecast multiplied by a 0.35 scaling factor. In the proposed 2026-2030 rate framework, G is calculated using forecasted customer and system capacity growth, weighted using the assumptions in the OEB's cost allocation model for OM&A.

Question(s):

- a) Please explain why a scaling factor is not included in the proposed 2026-2030 rate framework.
- b) The growth factor of 3.23% is a cost-weighted average of forecasted customer and system capacity growth. Please provide the calculations for a growth factor that is a revenue-weighted average of these values, rather than cost-weighted.
- c) Please explain why the growth factor is based on a forecast that is static over the five-year term and does not contain a true-up to actual values each year of the plan.

1-Staff-11

Ref. 1: Exhibit 1 / Tab 3 / Schedule 1 / Attachment A / p. 11-12 (pdf Exhibit 1 part 1, p. 330-331)

Ref. 2: Exhibit 1 / Tab 3 / Schedule 1 / Attachment A / Table 5 / p.13 (pdf Exhibit 1 part 1, p. 332)

Preamble:

With regard to the lost kilowatt-hour demand due to conservation and demand management (CDM), Hydro Ottawa states the following.

The practical effect is that Hydro Ottawa's kWh deliveries and annual peak demand (capacity) have been offset by CDM from 2010 to the present, affecting the utility's cost structure. However, an explanatory variable for CDM is missing from the PEG Model. Consequently, a program that has significantly impacted customer demand and utility costs is not captured in the PEG Model, resulting in underreported predicted costs...

Although Hydro Ottawa's load has been relatively flat for over ten years, its electrified service territory has expanded. The PEG Model, however, does not accurately reflect the reasonable costs associated with this growth in the predicted model.

Question(s):

- a) Please explain how CDM has impacted the utility's cost structure.
- b) Please provide supporting calculations and documentation to compute deliveries (kWh) and peak load (kW) adjusted for CDM in reference 2.
- c) Please explain how the growth of electrified service territory can be accommodated in the model by adding in CDM program energy savings as shown in reference 2.

1-Staff-12

Ref. 1: Exhibit 1 / Tab 3 / Schedule 1 / pp. 19-20 (pdf Exhibit 1 part 1, pp. 233-234)

Preamble:

With regard to its proposed inflation factor, Hydro Ottawa states the following:

For the purposes of rate modelling provided in this Application, Hydro Ottawa used a forecasted inflation factor of 2.10%. However, consistent with standard OEB policy, in years two to five of the custom rate period (i.e. 2027-2030) Hydro Ottawa intends to update the inflation factor included in the proposed CROF through the annual rate application process. This update will be based on the OEB-inflation factor, which is derived from the weighted sum of two distinct sub-indices:

- Non-Labour Index: 70% of the annual percentage change in Canada's Gross Domestic Product Implicit Price Index (GDP-IPI) Final Domestic Demand (FDD), as officially reported by Statistics Canada; and
- Labour Index: 30% of the annual percentage change in the Average Weekly Earnings ("AWE") for workers in Ontario, as officially reported by Statistics Canada.

Question(s):

- a) What is the weight of labour and non-labour costs related only to OM&A at Hydro Ottawa?

1-Staff-13

Ref. 1: Exhibit 1 / Tab 3 / Schedule 1 / p. 20 (pdf Exhibit 1 part 1, p. 234)

Preamble:

With regard to its proposed productivity factor, Hydro Ottawa states the following:

Consistent with the OEB's Rate Setting Parameters and Benchmarking under the RRF, Hydro Ottawa proposes to adopt the OEB's TFP factor of 0% in its CROF,

but notes that the effect of increasing the productivity factor to zero creates an additional stretch factor during the term of this application.

Question(s):

- a) Did Hydro Ottawa calculate a partial productivity factor (PPF) for the purposes of setting the revenue cap on OM&A-related revenue?
- b) If so, what was the calculated value of industry PPF growth?

1-Staff-14

Ref. 1: Exhibit 1 / Tab 3 / Schedule 1 / p. 21 (pdf Exhibit 1 part 1, p. 235)

Preamble:

Hydro Ottawa has identified three data elements that had a substantive adverse impact of its efficiency performance assessment due to the omission from the PEG Model.

These elements are as follows:

1. Secondary Circuit kilometers not being included in the Circuit Kilometers metric;
2. To capture impacts of CDM on a utility's cost drivers; and
3. The exclusion of Other Revenue with the PEG Model while certain costs associated with Other Revenue are included in OM&A and capital.

Question(s):

- a) Is Hydro Ottawa aware of any other Ontario electricity distributors that also have adjusted the PEG model to
 - i. omit circuit kilometers that should be reflected in the total circuit kilometers model variable?
 - ii. omit lost kWh and demand due to CDM?
 - iii. omit costs associated with other revenues that should not be interpreted as inefficiency, like move-in and move-out costs or property rentals?

Please explain responses above.

1-Staff-15

Ref. 1: Exhibit 1 / Tab 3 / Schedule 1 / p. 23 (pdf Exhibit 1 part 1, p. 237)

Ref. 1: Exhibit 1 / Tab 3 / Schedule 1 / Attachment A / Table 2 / p. 3 (pdf Exhibit 1 part 1, p. 322)

Preamble:

Hydro Ottawa states:

Hydro Ottawa has already embedded productivity into the 2026 OM&A Test Year forecast. As an example, Hydro Ottawa set an ambitious stretch target of 80% for online billing adoption by the end of 2025, and built the associated savings into its 2026 base OM&A as a direct benefit to customers. As a result, the utility assumes a significant financial risk of managing the incremental printing, postage

and other related costs should this ambitious target not be met or sustained over the rate term. This is only one of the examples of 2026 base rate stretch already built into Hydro Ottawa's 2026 base OM&A. Based on only the quantifiable productivity savings estimated for 2026 in Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement, Hydro Ottawa has calculated that the base year OM&A has been reduced by 2.3% which results in a 2027 to 2030 additional annual stretch already embedded in OM&A of 0.61%.

Recognizing the significant savings that have already been embedded in Hydro Ottawa's proposed OM&A while recognizing the principle of the RRF, Hydro Ottawa proposes to cap the reduction of the adjusted PEG Model Stretch of 0.30% by 0.15% resulting in an X factor of 0.15% in the CROF formula. However, in total Hydro Ottawa will have an actual stretch factor in the 2027 to 2030 years of 0.76% (0.15% plus 0.61% embedded in the 2026-2030 OM&A forecast).

Question(s):

- a) Hydro Ottawa states that its embedded stretch factor arises from efficiencies like its target for online billing adoption. Please list the other known cost efficiencies behind this proposed 2.3% reduction in base year OM&A, and how much savings Hydro Ottawa has assumed for each relative to what would otherwise be required.
- b) Please provide the calculation for the annual embedded stretch of 0.61%, based on the OM&A base year reduction of 2.3%.
- c) The Adjusted PEG Model produces a stretch factor of 0.30%, but Hydro Ottawa proposes a stretch factor different from this value: a value of 0.15%. Please provide the calculations used to determine this stretch factor of 0.15%.
- d) Please confirm that according to the projected results of the Adjusted PEG model, Hydro Ottawa is expected to be in Group 4 in 2029 and 2030.
- e) Please confirm that Hydro Ottawa does not plan to adjust its stretch factor during the rate term even if the benchmarking results indicate that the Company's cost efficiency group changes.

1-Staff-16

Ref. 1: Exhibit 1 / Tab 3 / Schedule 1 / pp. 24-25 (pdf Exhibit 1 part 1, pp. 238-239)

Preamble:

Hydro Ottawa is proposing a growth factor based on customer growth and system capacity growth. The system capacity growth is based on the addition of 594.9 MVA of continuous rating capacity, which is the difference between the 2030 continuous rating capacity of 2,723 MVA and the 2025 capacity of 2,128 MVA as shown in Table 8 – 2025-2030 Forecast System Capacity (MVA).

Question(s):

- a) What criteria has Hydro Ottawa used to determine when capacity has been added to the system per Table 8? For example, is the capacity considered added when a new station is energized, when the substation is energized and all feeders are constructed and energized, or some other measure? Will the same criteria be used for each new station? Please describe in detail.
- b) How has the addition of non-wires solutions been included in the Forecast System Capacity? Please describe in detail as in the previous question.

1-Staff-17

Ref. 1: Exhibit 1 / Tab 3 / Schedule 1 / pp. 26-28 (pdf Exhibit 1 part 1, pp. 240-242)

Ref. 2: [Framework for Energy Innovation 2.0: Non-Wires Solution Incentives \(Margin on Payments\)](#)

Preamble:

Hydro Ottawa is proposing an Earnings Sharing Mechanism (ESM) as outlined in reference 1. On May 16, the OEB has issued a [Notice of Proposal](#) to amend the Distribution System Code to establish a methodology for the setting of rates to include a margin on payments incentive to use third-party distributed energy resources (DERs) as non-wires solutions to meet an electricity distribution system need.

Question(s):

- a) Under Hydro Ottawa's proposal, would any margin on payments incentive received pursuant to the Distribution System Code be included as earnings eligible for sharing under the ESM. If not confirmed, please provide rationale.

1-Staff-18

Ref. 1: Exhibit 1 / Tab 3 / Schedule 1 / pp. 31-33 (pdf Exhibit 1 part 1, pp. 245-247)

Question(s):

- a) Why is Hydro Ottawa proposing a symmetrical NWS variance account, versus an asymmetrical variance account, if it plans to submit an application for any incremental solutions that fall outside of its approved funding?
- b) How does Hydro Ottawa propose to handle changes in its capital budget if a non-wires solution is implemented which negates the need for a capital project contained in the application?

1-Staff-19

Ref. 1: Exhibit 1 / Tab 3 / Schedule 1 / pp. 33-34 (pdf Exhibit 1 part 1, pp. 247-248)

Question(s):

- a) Hydro Ottawa is proposing a Large Load Variance Account to address “revenue uncertainty for load forecasting purposes”. Has Hydro Ottawa identified any precedence of use of load variance accounts by electricity distributors in Ontario?

1-Staff-20

Ref. 1: Exhibit 1 / Tab 3 / Schedule 1 / Table 1 / p. 35 (pdf Exhibit 1 part 1, p. 249)

Preamble:

Per the OEB’s Decision on Ontario Power Generation’s Application for a variance account to capture the impact of the overturning of Bill 124, where a reasonable risk exists or should have been foreseeable the utility should address it as part of their rate application. As such Hydro Ottawa requests a deferral account to address the risk of tariffs from supply chain disruptions and tariffs on imported components essential for Hydro Ottawa’s distribution infrastructure.

Question(s):

- a) How will “supply chain disruptions” be quantified in terms of dollars (CAD)?
b) Does Hydro Ottawa currently have an accounting system, or other mechanism, in place for quantifying supply chain disruptions in terms of dollars?

1-Staff-21

Ref. 1: Exhibit 1 / Tab 3 / Schedule 3 / pp. 4- 6 (pdf Exhibit 1 part 1, pp. 301-303)

Ref. 2: Exhibit 1 / Tab 3 / Schedule 3 / Attachment C / pp.12-16 (pdf Exhibit 1 part 1, pp. 386-390)

Question(s):

- a) Please reproduce Figure 6 and Figure 7 from reference 2, including data from Hydro Ottawa, peer group 1, and peer group 3, for 2013 through 2023.

1-Staff-22

Ref. 1: Exhibit 1 / Tab 3 / Schedule 1 / Attachment A / Table 5 / pp.14-15 (pdf Exhibit 1 part 1, pp. 333-334)

Preamble:

With regard to the removal of costs associated with other revenues, Hydro Ottawa states the following:

Hydro Ottawa therefore proposes to remove Other Revenues from the PEG Model's OM&A. Hydro Ottawa is using Other Revenues as a proxy for the costs associated with these auxiliary services.

Hydro Ottawa gives examples of move-ins and move-outs and its property rentals as part of the utility’s auxiliary services.

Question(s):

- a) Please confirm if Hydro Ottawa is proposing to remove all items listed as Other Revenue included in Chapter 2 Appendices tab 2-H or specify which specific items it is proposing to remove.
- b) Please provide an explanation to support the removal of each proposed item from OM&A.

1-Staff-23

Benchmarking Results for Salary and Compensation

Ref. 1: Exhibit 1 / Tab 3 / Schedule 3 / Attachment F / pp. 5, 8-11 (pdf Exhibit 1 part 1, pp. 503, 506-509)

Preamble:

Reference 1 states that Mercer generally considers compensation to be competitive if it falls within +/-10% of the market median.

Mercer Canada's benchmarking results in reference 1 shows that some of the positions' base salary and target total cash compensation are notably higher than the market median (between 125% to 150%, which means 25% to 50% higher than the market median). These positions are System Designer, Warehouse Attendant, IT Service Desk Technician, Customer Contact Agent, Billing Service Associate, and Collection Agent.

Question(s):

- a) For the positions noted above, please provide the following information:
 - i. An explanation why the total salary and compensation for each of these positions are much higher than the market median.
 - ii. Please provide the number of employees per job title from 2021 to 2026.
 - iii. Does Hydro Ottawa have any plans to re-align these positions to within 10% of the market median? Please explain.

1-Staff-24

Ref. 1: Exhibit 1 / Tab 4 / Schedule 2 / Attachment A / p.17 (pdf Exhibit 1 part 2, p. 365)

Question(s):

- a) A table is provided that shows Social Permission by Residential Rate Class. Please provide the number of customers that were surveyed in each column, i.e., Residential Overall, LEAP Qualified, Income <\$71k Not LEAP Qualified, Income>\$71k Not LEAP Qualified and Prefer not to say.

1-Staff-25

**Ref. 1: Exhibit 1 / HOL_Attachment 1-3-3(G) - OEB Benchmarking Spreadsheet
Forecast Model_20250604.xlsx**

Question(s):

- a) Sheet "Model Inputs" in reference 1 shows the inputs for the total cost benchmarking model used by Hydro Ottawa. For years 2024 to 2030, please explain how Delivery Volume (Required Item 4) and Annual Peak Demand (Required Item 5) are adjusted for the effects of CDM. Please provide supporting calculations and documentation.

Exhibit 2 – Rate Base

2-Staff-26

Ref. 1: Exhibit 1 / Tab 5 / Schedule 4 / Attachment A (pdf Exhibit 1 part 2, pp. 854-891)

Ref. 2: Attachment 9-3-1(A) / OEB Workform Deferral and Variance Account, April 28, 2025

Question(s):

- a) Please provide a reconciliation of the DVA balances in the DVA Continuity Schedule with the regulatory balances provided in Note 5 of Reference 1.

2-Staff-27

Ref. 1: Attachment 2-2-1(A)/ OEB Appendix 2-BA 2021-2025 Fixed Asset Continuity Schedule, June 6, 2025

Ref. 2: Attachment 2-2-1(B)/ 2030 Fixed Asset Continuity Schedule, April 15, 2025

Ref. 3: OEB Accounting Procedures Handbook for Electricity Distributors, January 1, 2012

Ref. 4: Attachment 6-3-1(A)/ OEB Appendix 2-H Other Revenue, April 15, 2025

Preamble:

Page 102 of Reference 3 states that amounts recognized in Account 2440, Deferred Revenue, should be amortized to income over the useful life of the related property, plant and equipment by debiting this account and crediting Account 4245.

In Reference 4, OEB staff notes that there are no amounts reported in Account 4245, Government and Other Assistance Directly Credited to Income for the historic years or the test years.

Question(s):

- a) Please update References 1 and 2 to ensure that the depreciation for the deferred revenue is excluded from the net depreciation amount.

- b) Please update Reference 4 to ensure the depreciation for the deferred revenue is captured in Account 4245 for the historic years and the test years.
- c) Please update the revenue requirement workforms for test years 2026-2030 accordingly to reflect the changes made in a) and b).

2-Staff-28

Ref. 1: Exhibit 2 / HOL_Attachment 2-5-5(A) - OEB Appendix 2-AA -Capital Programs Table_20250604.xlsx

Ref. 2: Exhibit 2 / HOL_Attachment 2-5-5(B) - OEB Appendix 2-AB - Capital Expenditure Summary_20250415.xlsx

Ref. 3: Exhibit 2 / Tab 5 / Schedule 5 / p. 105 (pdf Exhibit 2 part 4, p. 105)

Ref. 4: Exhibit 2 / Tab 5 / Schedule 9 / pp. 81, 102, 117 (pdf Exhibit 2 part 4, pp. 659, 680, 695)

Preamble:

Capital contributions in the general plant budget category are shown as a row in Appendix 2-AA. Exhibit 2-5-5, Table 35, contains general plant contribution values for the historic and forecast period that reconcile with the amounts within Appendix 2-AA.

OEB staff have identified three general plant programs that contain capital contributions, but the total of these programs does not reconcile with the amounts shown in *Appendix 2-AA*, particularly for 2026 and 2027. OEB staff are not interested in the immaterial differences in other years that may be the result of rounding.

Table: General Plant Capital Contributions by Program (\$M)

		Historical Years			Bridge Years		Test Years				
Table		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
26	Infrastructure and Cyber Security	0.50	0.20	0.40	1.10	1.00	0.60	0.80	0.90	0.70	0.50
33	Facilities Programs	0	0	0.20	0.10	0	0	0	0	0	0
40	Fleet Replacement Program	0	0	0.10	0	0	0	0	0	0	0
	Total	0.50	0.20	0.70	1.20	1.00	0.60	0.80	0.90	0.70	0.50
	Total From 2-AA	0.46	0.18	0.74	1.24	0.96	5.64	4.94	0.86	0.70	0.50
	Difference	0.04	0.02	0.04	0.04	0.04	5.04	4.14	0.04	0.01	0.00

Question(s):

- a) Please validate or correct the information in the table above constructed by OEB staff from Exhibit 2.

- b) What is the source of the contributions in the Infrastructure and Cyber Security Program?
- c) Please identify all general plant programs that contain contributions, quantify the contributions, and explain the source of the contributions.

2-Staff-29

Ref. 1: Exhibit 2 / Tab 1 / Schedule 1 / pp. 6-8 (pdf Exhibit 2 part 1, pp. 6-8)

Preamble:

When discussing the major drivers of the higher in-service additions, Increased Emergency Renewal Work due to Major Storm Equipment Failure was listed. This point highlights the 2022 Derecho which left significant damage to equipment including poles.

Question(s):

- a) Were pole failures significantly correlated with the condition of the poles that failed prior to onset of the Derecho?
- b) If pole condition prior to onset of the Derecho was a material factor in the pole failures, does this mean that the 500 poles replaced following the Derecho augmented the 2022 pole replacement program by triggering the replacement of poor condition poles? Please discuss.
- c) If pole condition prior to the onset of the Derecho was not a material factor in the pole failures, does this indicate that pole condition is not a critical risk factor, since even poles in poor condition survived the Derecho, while poles that were in good condition did not survive. Please discuss.

2-Staff-30

Ref. 1: Exhibit 2 / Tab 1 / Schedule 1 / p. 10 (pdf Exhibit 2 part 1, p. 10)

Preamble:

Table 5 – Variances in Net In-Service Capital Additions - System Access (\$'000s) provides a breakdown of the OEB Approved spending, the Historical/Bridge spending and the variance for the Capital Programs.

Question(s):

- a) Please confirm if the Plant Relocation is primarily driven by road moves and widening requested by the road authority. If not, please discuss.
- b) Please provide more details on what is included in the Customer Connection and what drove the 73% variance.

2-Staff-31

Ref. 1: Exhibit 2 / Tab 1 / Schedule 1 / p. 12 (pdf Exhibit 2 part 1, p. 12)

Preamble:

Table 7 highlights the capital additions related to System Renewal over the 2021-2025 Test period.

Question(s):

- a) What percentage of the assets replaced under the corrective renewal line item were already scheduled for replacement during the 2021-2025 test period?
- b) What percentage of assets replaced during 2021-2025 would have been scheduled for replacement during the upcoming test period?

2-Staff-32

Ref. 1: Exhibit 2 / Tab 1 / Schedule 1 / pp. 12-14 (pdf Exhibit 2 part 1, pp. 12-14)

Ref. 2: Exhibit 2 / Tab 5 / Schedule 3 / p. 56 (pdf Exhibit 2 part 2, p. 218)

Preamble:

Table 26 from reference 2 shows the trend in pole failure from 2019-2023, with a maximum shown in 2022 with 8 poles.

Hydro Ottawa provides a detailed analysis of the remaining \$11.2 million overage in System Renewal in-service capital additions for the 2021-2025 test period below.

- Overhead Distribution Asset Renewal: Despite overages in Planned Pole Renewal and System Renewal overall, active deferrals in Insulator Replacement and Overhead Switch programs are projected to keep capital additions \$2.0M below the approved amount.
- Corrective Renewal (excluding the \$16.1M storm costs discussed above): The Emergency Renewal program experienced higher than OEB-Approved capital additions of approximately \$12.5M related to distribution transformers. Hydro Ottawa observed a general trend/issue with leaking transformers related to a specific manufacturer and certain localized regions [...]
- Metering Renewal: Bridge and Test Year capital additions for the Metering Renewal program are expected to be below OEB-Approved amounts by \$1.4M; driven by persistent delays in acquiring Gatekeeper meters that were part of the Self-Contained Meter Phone Line Elimination project. Consequently, in 2024 the Gatekeeper solution was deemed unsuccessful, which resulted in the reduction of the Metering Renewal program in 2024 and 2025 [...]

Question(s):

- a) Please confirm that more poles were replaced than was planned under this program during the historical/bridge period, and that an additional 500 poles were replaced as a result of the 2022 Derecho.
 - i. If confirmed, discuss whether this means that Hydro Ottawa can moderate

its pole replacement program during the upcoming test period, given that significantly more poles were replaced than was planned during the prior test period.

- ii. If not confirmed, please explain why not.
- b) Please break down the \$12.5M in unapproved incremental distribution transformer emergency replacements into separate line items for each significant trigger factor, e.g., rapid onset leaks due to transformer manufacturer deficiency, lightning strikes or surges, foreign contact (trees, vehicles, etc.) and all other individually significant trigger factors.
- c) Does the trend/issue identified with transformers indicate a type of fault with the affected transformers, or are the leaks due to inappropriate installation, maintenance or operational practices?
 - i. If these are a type of fault, does Hydro Ottawa have recourse against the faulty transformer manufacturer? Please discuss.
- d) Please explain why the Gatekeeper solution was deemed unsuccessful.
- e) Quantify the total spend on the attempted Gatekeeper solution implementation, by year.
 - i. What was the amount capitalized for the Gatekeeper meter project per year? Will the installed Gatekeeper meters be used or replaced? If replaced, what will be the accounting treatment of the assets?

2-Staff-33

Ref. 1: Exhibit 2 / Tab 1 / Schedule 1 / p. 15 (pdf Exhibit 2 part 1, p. 15)

Ref. 2: Exhibit 2 / Tab 5 / Schedule 5 / p. 87 (pdf Exhibit 2 part 4, p. 87)

Preamble:

Hydro Ottawa states that for the:

- Capital Upgrades: “The Riverdale Switchgear Upgrade was delayed due to necessary scope adjustments required to adhere to capacity planning requirements identified through area planning.”
- Grid Technologies: “Once the [Advanced Distribution Management System] ADMS initiative commenced, detailed planning revealed significant gaps in the original requirements.”... “Hydro Ottawa notes that the ADMS program is currently undergoing a comprehensive review, and therefore specific details of the Grid Technology budget program, including the capital budget and timing of in-service additions, are subject to significant change.”

Hydro Ottawa also notes “that the ADMS program is currently undergoing a comprehensive review, and therefore, specific details of the Grid Technology budget program, including the capital budget, are subject to significant change.”

Question(s):

- a) Should the significant gaps in the original Advanced Distribution Management System (ADMS) requirements have been identified and addressed during the project planning phase? Please discuss.
- b) What portion of the 135% overspend was attributable to these gaps, and what portions were attributable to other factors? Please list all key factors and quantify the amount of overspend attributable to each factor.
- c) By what date does Hydro Ottawa anticipate the scope and budget of the ADMS program will be finalized?
- d) Given the ADMS program scope uncertainty, what is the expected range of capital expenditures on this program over the upcoming test period?
- e) What is the expected range of spending beyond the test period?
- f) Please provide the net present value over the expected service lives of the ADMS assets of:
 - i. The expected operational savings that will be delivered.
 - ii. The customer interruptions that will be avoided.
 - iii. Any other quantifiable value produced by these investments.
- g) Please provide the supporting business case or benefit/cost analysis that supported the original ADMS investment decision, and a revised business case or benefit/cost analysis using the best currently available information.
- h) Is the 135% ADMS overspend a gross value, or net of this \$4M redistribution? Please discuss.
- i) Will any of the investments made to date in this program be stranded following the comprehensive review? Please explain.

2-Staff-34

Ref. 1: Exhibit 2 / Tab 1 / Schedule 1 / pp. 17-18 (pdf Exhibit 2 part 1, pp. 17-18)

Preamble:

Hydro Ottawa states, regarding fleet replacement, that “Capital additions are expected to exceed approved amounts by \$1.2M, due largely to unforeseen increases in vehicle costs well beyond historical annual inflationary increases as a result of COVID-19 supply chain disruptions. Nine vehicles were also deferred to offset the inflationary pressures.”

Hydro Ottawa states the main driver of the Buildings – Facilities increased expenditures was construction of a shared access roadway at the East entrance to the Hunt Club Road facility, which was driven by a 3rd party.

For the General Plant category, capital additions are projected to be \$13.0 million below approved amounts. Further details regarding these variances by capital program are presented in Table 10.

Question(s):

- a) What is Hydro Ottawa's estimation of the annual percentage inflationary increase in vehicle costs in each year of the historical/bridge period on a unit basis?
- b) What part of the overrun was driven by this requirement?
- c) Why was this requirement not identified in the initial estimate?
- d) Was the third party required to make any CIAC payment in support of this scope addition? Please discuss.

2-Staff-35

Ref. 1: Exhibit 2 / Tab 1 / Schedule 1 / pp. 23-24 (pdf Exhibit 2 part 1, pp. 23-24)

Preamble:

Hydro Ottawa states the following regarding variance analysis: "approximately \$8M is attributable to unforeseen cost overruns for the LRT Phase II System Expansion works, due to changes in the project's timeline and scope". Additionally, regarding variance analysis, "System Access capital additions are expected to be \$10.5M (68%) higher than OEB-Approved amounts, the main drivers continue to be persistent higher than budgeted volumes and unit costs in Customer Connections, and overages in System Expansion resulting from the Department of National Defence Dwyer Hill Training Center Upgrade and the OC Transpo's Zero Emission Buses."

Question(s):

- a) Were the changes in the LRT Phase II System Expansion project's timeline and scope driven primarily by Hydro Ottawa or by OC Transpo?
 - i. If primarily by OC Transpo, was the CIAC amount increased to cover part of the increased scope?
 - ii. If primarily by Hydro Ottawa, please explain why the scope and timeline had to be changed.
- b) What system expansion changes were driven by the OC Transpo ZEBs?
 - i. Did OC Transpo make a CIAC payment to offset the associated expansion costs? Please discuss.
- c) Was DND required to make a CIAC payment for the Dwyer Hill Training Center Upgrade upgrade? Please discuss.

2-Staff-36

Ref. 1: Exhibit 2 / Tab 5 / Schedule 1 / p. 37 (pdf Exhibit 2 part 2, p. 37)

Preamble:

Hydro Ottawa defines its investment priority Enhancing Grid Resilience as “Focusing on enhancing grid resilience by proactively upgrading infrastructure and implementing measures to protect against increasingly frequent and intense severe weather events and cyber threats.”

Question(s):

- a) Is Hydro Ottawa increasing, or has Hydro Ottawa recently increased, its design standards to withstand stronger winds, and greater ice or snow buildup? If yes:
 - i. Please provide the old standards, the new standards and the analysis used to determine the revised structure strength parameters that will be used in line design going forward.
 - ii. Will existing line assets that do not satisfy the new design standards be proactively upgraded to achieve those standards prior to reaching their expected service lives?
 - iii. Provide any analysis showing the correlation between pole failures and pole condition for the poles that failed during the extreme weather events noted over the historical period.

2-Staff-37

Ref. 1: Exhibit 2 / Tab 5 / Schedule 1 / p. 40 (pdf Exhibit 2 part 2, p. 40)

Question(s):

- a) Please explain the key drivers behind the increase in capital expenditures for System Renewal.
- b) To what extent is the variance attributable to new technologies or specifications, higher unit costs for comparable work, or an increase in project volumes? Please provide a detailed breakdown.
- c) In light of the good SAIFI/SAIDI figures, please explain why System Services costs are anticipated to nearly triple between the Historical/Bridge period and the test period.

2-Staff-38

Ref. 1: Exhibit 2 / Tab 5 / Schedule 1 / p. 41 (pdf Exhibit 2 part 2, p. 41)

Preamble:

Hydro Ottawa states regarding the asset management process, that “By leveraging PA, Hydro Ottawa aims to make higher-value investment decisions, ultimately improving the management of its assets.”

Question(s):

- a) Are Hydro Ottawa's renewal investments solely or primarily intended to reduce risk?

- i. If no, please identify and discuss the other main drivers of renewal investments and for each renewal program or project for which risk reduction is not the primary goal, quantify the value created by addressing the other drivers.
 - ii. If yes, how does Hydro Ottawa evaluate the cost effectiveness with which its proposed renewal investment programs and projects will mitigate risk costs?
- b) Does Hydro Ottawa's enhanced Asset Management process enable it to quantify the efficiency of its proposed project and program spending in reducing risk costs?
 - i. If yes, have the project and program capital expenditures proposed in this Distribution System Plan (DSP) been ranked on a dollar spent per risk dollar reduced basis?
 - ii. If yes, please provide the list of all project and program spending proposed in this DSP ranked by dollar spent per risk dollar reduced.
 - iii. If no, how does Hydro Ottawa know that the project and program spending proposed in this DSP will achieve the desired risk mitigation results?
 - iv. If no, how soon will Hydro Ottawa's Asset Management process be capable of producing such a risk-reduction ranked project and program list?

2-Staff-39

Ref. 1: Exhibit 2 / Tab 5 / Schedule 1 / p. 42 (pdf Exhibit 2 part 2, p. 42)

Preamble:

Hydro Ottawa states it has "significantly refined its testing, inspection, and maintenance programs [...] For overhead assets, the reliance on age was substantially reduced due to improvements to the condition assessment framework for poles, alongside moderate improvements to condition data quality from Overhead (OH) switches and transformers through ground-based inspections."

Question(s):

- a) How does Hydro Ottawa regularly test that the investments and results of the Asset Management pass Cost-Benefit analysis?
- b) Since the change to condition-based assessments, what are the quantified benefits (i.e., extension of asset lives)?
 - i. How are the benefits quantified and verified?

2-Staff-40

Ref. 1: Exhibit 2 / Tab 5 / Schedule 1 / p. 44 (pdf Exhibit 2 part 2, p. 44)

Preamble:

Hydro Ottawa states, regarding the Grid Modernization Strategy Roadmap Creation, “This initiative prioritized enhancing grid reliability, flexibility, resilience, and sustainability through a methodical, two-phased approach. The first phase began with establishing a baseline maturity level by completing an assessment of Hydro Ottawa's existing grid infrastructure and operational capabilities. This evaluation was then compared against a desired future state vision across various time horizons, which revealed key areas for improvement.”

Question(s):

- a) Is Hydro Ottawa's position that its current reliability meets customer expectations?
- b) Are Hydro Ottawa's customers demanding improved reliability performance?
Please discuss.
 - i. If yes, please demonstrate that Hydro Ottawa's planned improvements will address the reliability concerns being raised by customers. For example, if customers are concerned about the long duration outages associated with extreme events such as the 2022 Derecho, show how Hydro Ottawa's planned grid enhancements would directly mitigate the duration of outages caused by such events.
- c) How is the desired future state assessed and validated? What assurances are in place to ensure that the proposed build-out is driven by need rather than preference (i.e. customer projections may reflect upper-bound requirements)?

2-Staff-41

Ref. 1: Exhibit 2 / Tab 5 / Schedule 1 / pp. 47-48 (pdf Exhibit 2 part 2, pp. 47-48)

Ref. 2: Exhibit 2 / Tab 5 / Schedule 3 / p. 40 (pdf Exhibit 2 part 2, p. 202)

Preamble:

In reference 1 Hydro Ottawa states “Despite the increased risk scores associated with severe wind events, the overall risk level for the majority of Hydro Ottawa's infrastructure remains unchanged [...] the primary areas of vulnerability within Hydro Ottawa's system, namely overhead assets, remain consistent with previous assessments.” Additionally, Hydro Ottawa highlights “the increasing frequency of severe weather events and the community's dependence on reliable service.”

Reference 2 contains *Figure 8 – Major Event Day Threshold*, which provides data from 2019-2023.

Question(s):

- a) What is the probability that Hydro Ottawa will experience another wind storm

event similar to the 2022 Derecho within the next 20 years? Please show how the probability was calculated.

- b) Please provide the data underlying the claim that the frequency of severe weather events is materially increasing. Please provide results for a 40-year historical period, showing total percentage of customers interrupted due to each event, and cumulatively in each year of the 40-year historical period.
- c) Please provide Hydro Ottawa's definition of severe weather events and explain if the definition of "severe weather events" is the same as or different from the definition Hydro Ottawa uses for events responsible for triggering "Major Event Days".

2-Staff-42

Ref. 1: Exhibit 2 / Tab 5 / Schedule 1 / pp. 56-57 (pdf Exhibit 2 part 2, pp. 56-57)

Ref. 2: Exhibit 2 / Tab 5 / Schedule 4 / p. 136 (pdf Exhibit 2 part 3, p. 136)

Preamble:

Hydro Ottawa states that there are significant increase in demand in regard to “growing adoption of electric space heating”, forecasted large loads (“Hydro Ottawa anticipates an unprecedented 312 MVA increase in its total load demand over the 6 year span of 2024-2030”), significant population growth (“Ottawa population Compound Annual Growth Rate (CAGR) of 1.3% and dwelling CAGR of 1.5% between 2026 and 2031 as per the City of Ottawa Official Plan.”) and transportation electrification (“60% of all light duty vehicles sold in Canada to be electric vehicles by 2030 and 100% by 2035”).

Question(s):

- a) Considering the slowdown of electric vehicle (EV) sales in Q1 2025 vs Q4 2024, how has Hydro Ottawa revised forecasts for electrification segments (electric space heating, EVs, etc.) for 2050?
 - i. Please provide details on the calculation.
- b) How does the forecast increase of Large Loads compare with the previous decade in terms of requests vs actual amount that is constructed?
- c) Please discuss if the housing projection is being reconsidered given the soft housing starts in Ontario in 2025Q1.¹
- d) Please discuss any adjustments being implemented to the Transportation Electrification Factor given the most recent EV sales figures.
- e) Is the City continuing with the target of 354 electric bus procurement by 2027 and a full transition to electric buses by 2036 or have the targets been modified? Please discuss.

¹ Yahoo Finance Canada. (2025, June 17). *Ontario housing starts fall to lowest level since 2009*. Yahoo Finance. [Link](#).

2-Staff-43

Ref. 1: Exhibit 2 / Tab 5 / Schedule 1 / pp. 62, 63, 70 (pdf Exhibit 2 part 2, pp. 62, 63, 70)

Preamble:

Hydro Ottawa shows in *Figure 5 - 2024 Overall Asset Age Demographics (Current State)*, that 67% of Metering, 23% of Overhead, 59% of Stations, 26% of Underground and 54% of Overall components have reached or exceeded Typical Useful Life (TUL),

Figure 6 - 2024 Overall Asset Condition Profile (Current State) shows that 12% of the Overhead, 13% of Stations, 3% of Underground and 6% of Overall are currently in poor/very poor condition.

Hydro Ottawa states the “asset renewal strategy does not prioritize replacing assets that have reached or exceeded their TUL. As such, an increase in the frequency of inspections of assets that have reached TUL is also proposed for certain assets.”

Question(s):

- a) Explain the disparity between Hydro Ottawa's Asset Age demographics grouped by TUL thresholds shown in Figure 5 and the assessed asset condition profile shown in Figure 6.
 - i. Considering the non-correlation between TUL and assessed asset condition for many asset classes, please explain actions being taken by Hydro Ottawa to re-evaluate or re-calibrate TULs to better align its asset age and condition demographics.
- b) On page 70 Hydro Ottawa states the “asset renewal strategy does not prioritize replacing assets that have reached or exceeded their TUL.” Is Hydro Ottawa prioritizing replacing assets based upon condition assessment rather than TUL, or is Hydro Ottawa avoiding investing in assets that have reached or exceeded TUL regardless of their condition assessment?
 - i. If the latter, has Hydro Ottawa undertaken Cost-Benefit analysis to demonstrate that this is prudent?
- c) What is the cost benefit basis for Hydro Ottawa concluding that more frequent inspections are better use of ratepayer money than investing in rehabilitation or maintenance of assets at or beyond TUL that are assessed as being adequate condition?
- d) Considering the continued investment in Asset Management, please discuss if the asset renewal strategy is going to be revisited.

2-Staff-44

Ref. 1: Exhibit 2 / Tab 5 / Schedule 1 / pp. 68-69 (pdf Exhibit 2 part 2, pp. 68-69)

Preamble:

Hydro Ottawa states “the investment required to replace all assets that are projected to be in degraded condition by 2030 is estimated at \$862M”. Table 3 provides more detail on the asset renewal needs by condition listing \$199M for overhead, \$205M for stations, \$458M for underground.

Question(s):

- a) What is the cost of replacing only the "very poor" condition assets, rather than both "very poor" and "poor"?
- b) What were the comparable "very poor" and "poor" percentages represented in Asset System column of Table 3 (i.e., overhead, stations, underground) in the previous application?

2-Staff-45

Ref. 1: Exhibit 2 / Tab 5 / Schedule 1 / pp. 72-73, 76 (pdf Exhibit 2 part 2, pp. 72-73, 76)

Preamble:

Hydro Ottawa states that the 2021 national Behind the Meter Survey illustrated that 14% of participants had or would actively take steps to acquire solar panels. Figure 12 - Total System Generator Count 2019-2023 shows that DERs increased ~2% between 2019-2020, ~4% between 2020-2021, 9% between 2021-2022, 8% between 2022-2023, and the total percent increase between 2019 and 2023 is 25.4%. Additionally, Hydro Ottawa states they are “enabling the widespread adoption and utilization of DERs by connecting customers to available financial incentives fostering collaborative partnerships, and implementing strategic programs.”

Question(s):

- a) Did the Behind the Meter Survey quantify the time horizon of the individuals interested in acquiring solar panels versus those that had solar panels currently installed?
- b) Please explain how Hydro Ottawa has incorporated the Behind the Meter Survey into projections of its customers' expected behaviour.
- c) What is defined as a BESS in Figure 12 (e.g., Residential scale - tens of kWh, Commercial scale - hundreds of kWh, Utility scale - thousands of kWh)?
- d) Does the enablement of DER adoption accompany also include revisions to Hydro Ottawa's technical requirements about DER performance in order to be connected?

2-Staff-46

Ref. 1: Exhibit 2 / Tab 5 / Schedule 1 / p. 94 (pdf Exhibit 2 part 4, p. 94)

Ref. 2: Exhibit 4 / Tab 1 / Schedule 3 / Attachment C / p. 2 (pdf p. 188)

Question(s):

- a) Gross Capital Expenditures in 2026 and 2027 are approximately \$50M more than those forecast for 2028 through 2030, resulting in forecast Net Capital Expenditures being higher in 2026 and 2027 compared to 2028 through 2030.
 - i. What projects or programs account for the higher expenditures in 2026 and 2027?
 - ii. Logistically, how will Hydro Ottawa execute the larger budget, particularly with respect to the current level of employees, as a large portion of the additions to Hydro Ottawa's workforce will not be on board and trained in time to participate in planning or executing the work? (i.e. 131 additional headcount who will be hired by the end of 2026 and 46 more through to end of 2030)
 - iii. Please explain why Hydro Ottawa has not levelized the capital expenditures over the forecast period of 2026 through 2030.

2-Staff-47

Ref. 1: Exhibit 2 / Tab 5 / Schedule 3 / p. 29 (pdf Exhibit 2 part 2, p. 191)

Question(s):

- a) How did Hydro Ottawa establish the target of 0% for this FARC% KPI?
- b) In regard to Table 17 – System Losses, how does Hydro Ottawa differentiate between technical and non-technical losses?
- c) What is Hydro Ottawa's estimate of non-technical losses as a percentage of total losses?
- d) Please provide a revised Table 17 showing technical and non-technical losses on separate lines.

2-Staff-48

Ref. 1: Exhibit 2 / Tab 5 / Schedule 3 / p. 34 (pdf Exhibit 2 part 2, p. 196)

Question(s):

- a) Given that Hydro Ottawa's SAIFI performance trend excluding Loss of Supply and Major Event Days (MED) has improved from 2014 to 2023, please explain how the proposed significant increase in capital spending to improve reliability can be justified.
- b) Please provide a revised Figure 5 showing the SAIFI results for 2013 and 2024 excluding Loss of Supply and Major Event Days.

2-Staff-49

Ref. 1: Exhibit 2 / Tab 5 / Schedule 3 / pp. 36-37 (pdf Exhibit 2 part 2, pp. 198-199)

Preamble:

Hydro Ottawa states that “in 2022 and 2023, SAIDI exceeded the five-year average target by 0.14 and 0.17, with 3% of outages being responsible for 48% of SAIDI. This was due to several factors, including delays in making areas safe, increased adverse weather events, need for additional fault locating equipment and resources, tree contact, and foreign interference.”

Question(s):

- a) Please show the contribution of tree contact and foreign interference to the 2022 and 2023 SAIDI results, both including and excluding Loss of Supply and Major Event Days.
- b) Confirm that the SAIDI trend has been stable or improving since 2014.
- c) Please explain why, in Figure 7 – SAIDI Loss of Supply and Major Event Days, the 5-year average increased from 2014 to 2018 despite generally improving annual results over this period.
- d) If the reason is that much better results were experienced in 2010 and 2011, please provide the annual results for 2010-2013.

2-Staff-50

Ref. 1: Exhibit 2 / Tab 5 / Schedule 3 / pp. 38-39 (pdf Exhibit 2 part 2, pp. 200-201)

Preamble:

Hydro Ottawa states that “Hydro Ottawa uses a Feeder Performance Index (FPI) to assess the condition of its electricity distribution feeders.” Table 21 – Worst Feeder Analysis shows that there were 5 feeders in 2019, 8 feeders in 2020, 6 feeders in 2021, 7 feeders in 2022 and 6 feeders in 2023 that were considered the worst performing.

Question(s):

- a) Please provide the formula used to calculate FPI.
- b) Please list all feeders that were identified as Worst Feeders in three or more years from 2019 to 2023 and explain the primary causes of poor performance for each of these chronically worst performing feeders.

2-Staff-51

Ref. 1: Exhibit 2 / Tab 5 / Schedule 3 / pp. 44-45 (pdf Exhibit 2 part 2, pp. 206-207)

Preamble:

Table 24 - OEB Definition of Cause Codes lists 3 – Tree Contacts as the following: “Interruption caused by faults resulting from tree contact with energized circuits except

for the interruptions under the conditions described under cause code 6.” Hydro Ottawa also provides Table 25 - Five-Year SAIFI and SAIDI Contribution by Outage Type (Excluding MED’s).

Question(s):

- a) Regarding Table 24 – OEB Definition of Cause Codes, please confirm that interruptions caused by trees falling on lines or structures during events classified under cause code 6 are not recorded by Hydro Ottawa as tree contacts.
 - i. If confirmed, please indicate whether Hydro Ottawa attempts to determine and track the proportion of cause code 6 interruptions that are caused by tree contacts rather than direct pole failures absent tree contacts.
 - ii. If Hydro Ottawa does not track the proportion of interruptions caused by tree contacts during cause code 6 events, please explain how Hydro Ottawa is able to determine whether the most effective strategy to mitigate future cause code 6 interruptions would be more aggressive vegetation management or replacing wood poles assessed as being in poor condition.
- b) Regarding Table 25 - Five-Year SAIFI and SAIDI Contribution by Outage Type (Excluding MED’s), please provide a revised Table that includes Major Event Days.

2-Staff-52

Ref. 1: Exhibit 2 / Tab 5 / Schedule 3 / p. 53 (pdf Exhibit 2 part 2, p. 215)

Question:

- a) Hydro Ottawa provides Figure 15 which “shows equipment failure trends over the last five years with respect to the number of interruptions, number of customers interrupted and customer interruption hours.” Please explain the reasons for the increasing trend in Customer Hours illustrated in Figure 15.

2-Staff-53

Ref. 1: Exhibit 2 / Tab 5 / Schedule 3 / pp. 58-59 (pdf Exhibit 2 part 2, pp. 220-221)

Preamble:

Hydro Ottawa states that *Figure 17 – Adverse Weather Historical Trend* “provides a visual representation of the trend in outages caused by adverse weather over the past five years.” Hydro Ottawa also states that “Outages attributed to adverse weather have been on the rise over the past five years.”

Question(s):

- a) Please update Figure 17 to include 2024 values.
- b) The increased outage trend appears to primarily derive from the performance in

2023, prior to which these trends were relatively flat. Discuss if one bad year creates a trend that justifies significant capital spending increases.

- c) Please explain how the trends depicted in Figure 17 relate to the data that appears in Figure 8.
- d) Has Hydro Ottawa used data from Figure 17 to replicate figures it has presented in other parts of the filing, including Figure 17?
 - a. If yes, please provide the materials.
 - b. If no, please discuss why not.

2-Staff-54

Ref. 1: Exhibit 2 / Tab 5 / Schedule 3 / p. 68 (pdf Exhibit 2 part 2, p. 230)

Preamble:

When analyzing the factors impacting SAIDI, Hydro Ottawa stats it observed:

- Delays in making the outage area safe;
- Increase in adverse weather events requiring increased patrolling and safety measures prior to restoration;
- Need for more fault locating equipment and SCADA switches;
- Tree contact due to deteriorating vegetation outside of the regular trim zones;
- Foreign interference due to motor vehicle accidents and failure of customer owned equipment causing delays in restoration due to the coordination involved.

Question(s):

- a) Please identify which of the listed factors can be most effectively mitigated by additional capital spending and explain how additional spending will mitigate each factor.

2-Staff-55

Ref. 1: Exhibit 2 / Tab 5 / Schedule 4 / p. 1-3 (pdf Exhibit 2 Part 2, pp. 1-3)

Ref. 2: Exhibit 2 / Tab 5 / Schedule 4 / p. 38 (pdf Exhibit 2 Part 2, p. 38)

Ref. 3: Exhibit 4 / Tab 1 / Schedule 1 / p. 2 (pdf p. 2)

Preamble:

The application's Asset Management Process mentions Hydro Ottawa's Asset Management System, which ensures methodical asset management, aligning expenditures with four Investment Priorities: growth and electrification, renewing deteriorating infrastructure, grid modernization, and enhancing resilience. The Asset Management Process section describes the construction of new stations, targeted upgrades and the implementation of Non-Wires Solutions to address immediate capacity constraints.

Hydro Ottawa also mentions creating a comprehensive distribution asset model within the Copperleaf Asset Predictive Analytics (PA) module. It is mentioned that Copperleaf is an asset investment planning and management software solution that supports strategic asset planning and budgeting decisions.

Hydro Ottawa is seeking approval for \$140M in OM&A funding in the 2026 test year and expects this level of funding to enable it to meet a variety of needs, including addressing maintenance needs, accommodating customer growth, and additional workforce to execute the capital program in the DSP and ongoing maintenance.

Question:

- a) Please categorize and rank all planned system investments by priority, considering system needs, reliability, avoiding/deferring costs, and/or any other factors. This ranking should list all individual investments and specify which factors were emphasized. Please provide rankings within each Investment Category (e.g., System Access, System Service) as well as for the overall DSP.
- b) Of the NWSs proposed, please categorize and rank all planned NWS initiatives by priority. This ranking should list all individual NWS programs (e.g. NWSCP – Save on Energy Retrofit Adder Program, NWSCP – Residential Demand Response, BESS in West 28 kV system, BESS in Bells Corners/ Bayshore 8 kV system), including those proposed as Capital Expenditures as well as OM&A expenses.
- c) Please categorize and rank all planned OM&A spending/programs by priority.
- d) Please file the output of the Copperleaf Asset Predictive Analytics for Hydro Ottawa's 2026-2030 strategic asset planning and budgeting decision.
- e) Please provide all limits used in Copperleaf for the overall budget, budget categories, or other types of limits.
- f) What percentage of investments were forced (i.e. deemed mandatory) investments? What percentage of expenditures is due to forced projects?

2-Staff-56

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / p. 4 (pdf Exhibit 2 part 4, p. 4)

Preamble:

Hydro Ottawa states that "system renewal investments prioritize replacing high-risk assets to mitigate immediate failures, they also require increased O&M spending on testing, inspection, and maintenance for remaining high-risks assets [...] System Service investments, which support grid expansion and the integration of new technologies, will inherently increase O&M costs due to the greater number of assets and specialized maintenance needs associated with advanced technologies"

Question(s):

- a) The premise of this claim appears to be contradictory: replacing more poor condition assets requires spending more on the remaining reduced set of poor condition assets. Please explain why "substantial system renewal investments", which presumably involves replacing a greater than historical volume of high-risk assets that would otherwise absorb a disproportionate level of annual maintenance spending compared with lower risk assets, "require increased O&M spending on testing, inspection and maintenance for remaining high-risks assets".
- b) Historically, system service capital investments to modernize the grid have at least partly been justified by claims of the O&M cost savings expected to accrue to the investments, because, for example:
- The associated operating flexibility enables remote sectionalizing and switching, allowing a larger proportion of interrupted load to be restored prior to rolling a truck
 - Improved fault sensing rapidly & accurately locates faults, enabling more efficient dispatch and restoration efforts
 - installing modern condition monitoring sensors on high-value equipment such as transformers and breakers enables real-time warnings of emerging operational risks, permitting extended manual inspection cycles and helping the utility to focus its attention on problem assets.

Please discuss why the proposed tripling of historical levels of system service investment (which already exceeded OEB approved amounts) are now counter-intuitively expected to increase rather than reduce O&M costs.

2-Staff-57

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / p. 10 (pdf Exhibit 2 part 4, pp. 10)

Question(s):

- a) Hydro Ottawa states "These two programs [Distribution System Observability and Distribution System Resilience] underscore a dedication to leveraging real-time data for optimized grid management and fortifying infrastructure against increasing climate vulnerabilities." Please explain the definition of "optimized grid management" as per Hydro Ottawa's usage (economics, efficiency, reliability, etc.).

2-Staff-58

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / p. 26 (pdf Exhibit 2 part 4, p. 26)

Question(s):

- a) Hydro Ottawa stated that "An updated planning analysis demonstrated that 4kV

to 13kV voltage conversion would better address immediate capacity needs while also effectively eliminating the original rebuild requirement arising from asset conditions.” Please explain if the voltage conversion eliminates the original asset condition driven rebuild of Dagmar station because the deteriorated assets will instead be removed from service, or for some other reason.

2-Staff-59

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / p. 41, 73 (pdf Exhibit 2 part 4, pp. 41, 73)

Preamble:

Hydro Ottawa states, regarding Inflationary Pressures, that transformer costs have increased 124.0% since 2024 and 182.4% since 2020, and wood pole costs have increased 53.5% since 2024 and 120.2% since 2020. Hydro Ottawa also notes that its pole replacement program budget increased “by \$17M and supports the replacement of 395 poles annually, which is in line with the proposed replacement rate of 400 poles in the historical period. \$8M of the budget increase is associated with the increased cost per pole experienced in the historical period. The remaining \$9M of the budget increase is attributed to incremental budget allocation to allow for resilience improvements to be incorporated into the renewed design. Productivity improvements have maintained cost efficiency, even with increased volume and inflation. Overhead transformer replacement costs are integrated within this program.”

Question(s):

- a) Please provide documentation of any re-evaluation by Hydro Ottawa of the economic life of transformers and the value of life extension investments, considering that the significant increase in new transformer costs effectively increases the value to ratepayers of keeping existing transformers in service as long as possible.
 - i. If no documentation is available, please discuss.
- b) Given the significant recent increase in wood pole costs:
 - i. Please provide documentation of any investigation done by Hydro Ottawa into alternative pole rehabilitation and strengthening techniques, such as stubbing and applying carbon fiber wraps. If no documentation is available, please discuss.
 - ii. Please provide documentation of any analysis done to re-evaluate the benefit/cost of wood pole replacement. If no documentation is available, please discuss.
- c) If the benefits of wood pole replacement are attributable to anything other than the reduced probability of condition-based pole failure, please describe the other benefits and show how their value is calculated, with examples.
- d) What percentage of Hydro Ottawa pole failures are caused by assessed pole

condition? If the answer is different during Major Event Days and non-Major Event Days, please show both percentages.

2-Staff-60

Ref. 1: Exhibit 2 / Tab 5 / Schedule 4 / pp. 127-128 (pdf Exhibit 2 part 3, pp. 127-128)

Preamble:

Hydro Ottawa states “From 1993 to 2023, Hydro Ottawa monitored the number of days when wind gusts exceeded 70 km/h, as illustrated in Figure 24.”

Question(s):

- a) Are the wind speed data sources consistent in all years of Figure 24? Please explain.
- b) Please provide a revised version of Figure 24 that separately shows the Environment Canada data at the airport for each year.
- c) Please provide documentation of any analysis or investigations conducted by Hydro Ottawa into the causes of the step change in number of days with winds above 70 km/h that occurred in 2011.
- d) What are the average wind speeds for the years 1993 to 2023?

2-Staff-61

Ref. 1: Exhibit 2 / Tab 5 / Schedule 4 / p. 135 (pdf Exhibit 2 part 3, p. 135)

Ref. 2: Exhibit 2 / Tab 5 / Schedule 5 / p. 5 (pdf Exhibit 2 part 4, p. 5)

Preamble:

Figure 25 illustrates “both the summer and winter peak demands from 2013 to 2023.” Hydro Ottawa states “To ensure continued delivery of reliable and resilient electricity services to its expanding customer base, Hydro Ottawa must strategically expand its grid capacity to accommodate unprecedented demand growth.”

Question(s):

- a) Please explain the inter-annual variability in the normalized summer and winter peak values shown in Figure 25.
- b) Does the inter-annual variability indicate that Hydro Ottawa’s normalization calculations should be revised? Please discuss.
- c) Figure 25 appears to indicate flat or decreasing trends in both actual and normalized winter and summer peaks. Please explain when the “*unprecedented demand growth*” is expected to occur.
- d) Please reconcile the claim that there is a growing demand for electricity due to a “combination of residential intensifications” described in reference 2, with the apparent flat or decreasing peak demand trends shown in Figure 25.

2-Staff-62

Ref. 1: Exhibit 2 / Tab 5 / Schedule 4 / p. 185 (pdf Exhibit 2 part 3, p. 185)

Preamble:

Figure 66 highlights a significant reliability risk value for poles.

Question(s):

- a) For Toronto Hydro, the annual probability of failure for “Wood Poles” that are assessed to be in the worst health index condition (HI5) is 0.18% to 0.33%. What is the estimated annual probability of failure for poor condition wood poles in Hydro Ottawa’s system? Please explain how that probability was determined?²
- b) How does Hydro Ottawa determine when a wood pole should be replaced? Please describe whether this is based on age, condition, or other factors.
 - i. What distribution wood pole TUL changes have resulted from recent data collection efforts and inspection results?
 - ii. Please explain if these TUL changes have resulted in changes in distribution wood pole replacement practices or pacing.
- c) Please explain how Hydro Ottawa calculates the probability of failure for wooden poles, including whether this is based on empirical data (e.g., historical failure rates by condition, age, or type).
 - i. If failure rates are not empirically derived, please explain the basis for any assumed failure probabilities used in asset management decision-making.
 - ii. If no such estimate is available, please explain why this information is not available and indicate what plans Hydro Ottawa has to develop such failure modeling in the future.

2-Staff-63

Ref. 1: Exhibit 2 / Tab 5 / Schedule 4 / p. 186 (pdf Exhibit 2 part 3, p. 186)

Preamble:

Hydro Ottawa states that “eight stations [are] already operating beyond planned capacity limits”.

Question(s):

- a) Please explain how Hydro Ottawa defines 100% station capacity. What are the contingency assumptions (i.e., N-0 or N-1,), and what are the station loading assumptions (i.e., coincident/non-coincident, summer peak/winter peak, etc.).
- b) Does Hydro Ottawa utilize transformer nameplate ratings when determining station capacity or does Hydro Ottawa allow for short term thermal overload

² EB-2023-0195, [THESL IRR Exhibit 2B Part1of3 20240311](#), 2B-Staff-134, Table 1, p. 3 of 4

(within industry standard allowances) for short term peak loads?

- c) Please provide a list of any stations for which capacity is limited by equipment other than power transformers, indicating for each such station the limiting equipment and the reason for the limitation.

2-Staff-64

Ref. 1: Exhibit 2 / Tab 5 / Schedule 4 / p. 187 (pdf Exhibit 2 part 3, p. 187)

Preamble:

Hydro Ottawa states the operating stations above their planning rating capacity “significantly reduces the system’s flexibility to effectively manage both planned maintenance and operational activities, as well as respond to unforeseen disruptions or abnormal system states, such as equipment failures, power surges, or extreme weather events. This lack of flexibility can lead to cascading failures, [... which] can result in widespread power outages, service disruptions, and potential damage to equipment.”

Question(s):

- a) Please provide any analysis carried out by Hydro Ottawa to determine the probability of station equipment failures occurring during station peak non-coincident load periods and provide examples of when this has occurred in the past.
- b) Does Hydro Ottawa plan maintenance outages during peak loading periods? If yes, please explain and provide examples of when and why this would occur.
- c) Please explain how operating below 100% capacity enables Hydro Ottawa to better respond to power surges and provide examples of when this flexibility has been used in the past.
- d) Please provide examples of when cascading failures have been triggered as a result of stations exceeding their planning limits. When citing examples, please differentiate between cascading outages that occurred during extreme weather events such as tornadoes, derechos or ice storms, those that occurred during winter or summer peak conditions, and those that occurred during calm weather conditions.

2-Staff-65

Ref. 1: Exhibit 2 / Tab 5 / Schedule 4 / p. 192 (pdf Exhibit 2 part 4, p. 192)

Question(s):

- a) Table 25 provides a summary of TUL values for various asset types. For poles towers and fixtures the TUL is 53 years. Are these Typical Useful Life values based solely on condition-related failures, or do they incorporate all-cause failures, such as third party (i.e., vehicle or equipment) contacts, failures caused

by trees or branches falling on lines or against structures, or above design structure loads caused by ice build-up or extreme wind events such as tornadoes or derechos? Please discuss.

2-Staff-66

Ref. 1: Exhibit 2 / Tab 5 / Schedule 4 / p. 210 (pdf Exhibit 2 part 3, p. 210)

Preamble:

Hydro Ottawa states it “monitors the percentage of feeders with a load index of 4 and 5 to plan for feeder capacity upgrades and reliability improvement investments. In 2023, 12 Hydro Ottawa feeders had a FLI of 4 and 19 feeders at a FLI of 5, as shown in Figure 70. Feeders must be maintained within the planning capacity to allow for efficient load transfer during N-1 contingency situations while respecting equipment ratings.”

Question(s):

- a) What is the typical duration of the peak loading levels used to calculate the feeder load indices? Please express in hours and as a percentage of total annual hours.
- b) Using the annual load duration curve for Hydro Ottawa's system, for how many hours each year and for what percentage of the total hours in each year could the load on the average feeder be expected to exceed 90% of its non-coincident peak value for that year.
- c) What percentage of Hydro Ottawa contingencies occur when feeder loading is above 90% of non-coincident annual peak?

2-Staff-67

Ref. 1: Exhibit 2 / Tab 5 / Schedule 4 / pp. 280-283 (pdf Exhibit 2 Part 3, pp. 280-283)

Ref. 2: Exhibit 1 / Tab 3 / Schedule 1 / p. 31 (pdf Exhibit 1 Part 2, p. 245)

Ref. 3: Exhibit 2 / Tab 5 / Schedule 8 / p. 49 (Table 2) (pdf Exhibit 2 Part 4, p. 413)

Preamble:

Hydro Ottawa notes that the initial portfolio of the Non-Wires Customer Solutions Program (NWCSP) consists of 4 individual programs that are under evaluation:

1. Save on Energy Retrofit Adder Program
2. Residential Demand Response (DR)
3. Commercial Demand Response
4. Solar PV and Energy Storage Program

In total, Hydro Ottawa expects the NWCSP to provide an additional 20-30 MW of capacity to address existing capacity constraints from large load requests and to

provide immediate risk mitigation in the Kanata North (West 28 kV North), Core 13kV, and West 13kV regions. Hydro Ottawa anticipates costs of \$2M per year for a total of \$10M from 2026-2030 for the NWCSP.

Hydro Ottawa also notes it is exploring collaborative opportunities with the IESO where there is overlap between local distribution system and bulk system benefits and building upon province-wide incentive offers available through IESO's eDSM framework. Hydro Ottawa also mentions that IESO's Local Achievable Potential Study (L-APS) in Q2 2025 will be used to validate the programs.

Question(s):

- a) Please clarify the following related to each of the 4 individual programs:
 - i. The specific system need being addressed by each program.
 - ii. The specific region(s) where each program will be offered.
 - iii. The anticipated cost (in total and annually from 2026-2030) and the type of cost (capital expenditure or OM&A) for each program. See Table 1 below for guidance.
 - iv. The major activities and their associated timelines for each program.
- b) Please provide the following details for each of the 4 individual programs and their corresponding traditional infrastructure solution. Please see Table 2 below, specifying the following for each individual program:
 - i. Quantitative and qualitative benefits (including avoided/deferred costs).
 - ii. Quantitative and qualitative costs.
 - iii. Any calculations Hydro Ottawa has completed to evaluate the cost-effectiveness of each of the 4 individual programs over traditional wire solutions, if any.
- c) Please clarify the following related to the 4 individual programs:
 - i. Which of the 4 programs is Hydro Ottawa investigating for possible IESO collaborative funding?
 - ii. Does the \$2M/year funding request exclude potential IESO funding for each of the 4 programs?
 - iii. How much IESO funding does Hydro Ottawa expect to receive from IESO for each program outside of the \$2M/year?
 - iv. If IESO funding cannot be obtained, does Hydro Ottawa plan on modifying the program design and scope of any of the 4 individual programs? If so, how will each program change?
- d) Please clarify whether and how the L-APS results might affect program design or spending for each of the 4 individual programs.

Table 1: Breakdown of Costs (NWCSP)

NWS Program	Cost Category	Cost (\$)					
		2026	2027	2028	2029	2030	Total
Save on Energy Retrofit Adder	Capital						
	OM&A						
Residential DR	Capital						
	OM&A						
Commercial DR	Capital						
	OM&A						
Solar PV and Energy Storage	Capital						
	OM&A						
Total Capital							
Total OM&A							
Total Annual Spend							

Table 2: Benefits and Costs of NWCSP

Category	Save on Energy Retrofit Adder	Residential DR	Commercial DR	Solar PV and Energy Storage
Benefits				
A. Quantitative (\$)				
A. Explanation				
B. Qualitative				
B. Explanation				
Costs				
C. Quantitative (\$)				
C. Explanation				
D. Qualitative				
D. Explanation				

2-Staff-68

Ref. 1: Exhibit 2 / Tab 5 / Schedule 4 / pp. 287-288 (pdf Exhibit 2 Part 3, pp. 287-288)

Preamble:

In its application, Hydro Ottawa mentions the EV Everywhere project as an innovation pilot led by BlueWave-ai and funded in part by IESO's Grid Innovation Fund. Hydro Ottawa notes that the pilot is underway with learnings that will be leveraged in other initiatives like the Ottawa Distributed Energy Resources Accelerator (ODERA) project.

Hydro Ottawa also mentions installing two BESS solutions in early 2025 to provide a proxy of the impact of a future state with wider adoption of EVs with bi-directional energy flow.

Question(s):

- a) Please clarify if Hydro Ottawa is requesting any rate funding related to the EV Everywhere project from 2026 to 2030. If so, please provide the following details:
 - i. The funding requested from rates for the EV Everywhere project per year
 - ii. A detailed description of what the project entails, specifically including:
 - a. The specific distribution system need that is being addressed
 - b. The investment category the project costs falls under
 - c. The qualitative and quantitative benefits (including avoided/deferred costs) and costs associated with the project as opposed to a corresponding traditional wires solution, if any
 - d. Any calculation support that Hydro Ottawa has carried out in assessing the cost-effectiveness of the project.
- b) Please clarify the amount of funding that was provided by IESO's Grid Innovation Fund for the EV Everywhere Pilot and how the rest of the pilot was funded (e.g., source and amount of funding).
 - a. Please confirm the status and validity of the funding (e.g., is the Grid Innovation Fund support assured for the life of the project?).
- c) If no rate funding is being requested for the EV Everywhere project, please clarify whether the EV Everywhere pilot is still underway.
 - a. If so, what does the project entail from 2026 to 2030, and what are the long-term distribution system cost implications of the project?
- d) Please clarify if there is any connection between the 2 EV Everywhere BESS solutions to be installed in early 2025 and the 4 utility-owned BESS proposed as part of the 2026-2030 Custom IR application.
- e) Please clarify if ODERA is a separate initiative or a continuation (e.g., Phase 2) of the EV Everywhere project.

2-Staff-69

Ref. 1: Exhibit 2 / Tab 5 / Schedule 4 / pp. 288-289 (pdf Exhibit 2 Part 3, pp. 288-289)

Ref. 2: Exhibit 2 / Tab 5 / Schedule 8 / pp. 98-99 (pdf Exhibit 2 Part 4, pp. 462-463)

Preamble:

In its application, Hydro Ottawa has identified ODERA as an NWS initiative. This was described as an innovative pilot in the Kanata North region, partially federally funded by Natural Resources Canada (NRCan) in March 2025. Hydro Ottawa notes this is a DER

enablement initiative that is the “logical next step” following learnings from the EV Everywhere pilot.

Question(s):

- a) Please clarify if Hydro Ottawa is requesting any rate funding related to the ODERA project from 2026 to 2030. If so, please provide the following details:
 - i. The funding requested from rates for the ODERA project
 - ii. A detailed description of what the project entails, specifically including:
 - i. The specific distribution system need that is being addressed
 - ii. The qualitative and quantitative benefits (including avoided/deferred costs) and costs associated with the project as opposed to a corresponding traditional wires solution (if any),
 - iii. Any calculation support that Hydro Ottawa has carried out in assessing the cost-effectiveness of the project.
- b) Please clarify the amount of funding that was provided by NRCan for the ODERA project, and if NRCan was aware that additional funding would be requested from another source when funding was originally granted.
- c) Outside of NRCan funding, how is/will the rest of the ODERA pilot be funded (e.g., source and amount of funding)?
- d) Will the scope of the ODERA project change if additional funding from rates or external sources is not granted? If so, please describe how the pilot will change.
- e) Please clarify which learnings from the EV Everywhere pilot were leveraged in the design of the ODERA project to justify why Hydro Ottawa believes it is the “logical next step.”
 - i. Does Hydro Ottawa envision another pilot/project to come out of the ODERA project? If so, what does that project entail?
- f) Please file the contract between Hydro Ottawa and NRCan for the funding of the ODERA pilot project

2-Staff-70

Ref. 1: Exhibit 2 / Tab 5 / Schedule 4 / pp. 289-290 (pdf Exhibit 2 Part 3, pp. 289-290)

Preamble:

In its application, Hydro Ottawa identifies 4 distinct NWS initiatives/broader programs: NWCSP, BESS, EV Everywhere, and ODERA. Hydro Ottawa also mentions alternative energy models such as local flexibility markets, distributed system operator capabilities, and total grid orchestration capabilities.

Question(s):

- a) Please confirm if there are any other NWS initiatives, programs and/or projects beyond NWCSP, BESS, EV Everywhere, and ODERA for which Hydro Ottawa is requesting rate funding in this application. If there are any other proposed NWSs, please provide:
- i. The program name, activity description, funding being requested from rates (in total and annualized from 2026-2030), and total cost (including the amount and source of any external funding);
 - ii. The corresponding system need, and the quantitative and qualitative benefits (including avoided/deferred costs) and costs associated with each NWS initiative and its corresponding traditional wires solutions, if any.
- b) Please confirm the amount and where (e.g., under which program or investment category) the costs associated with local flexibility markets, distributed system operator capabilities, and total grid orchestration capabilities are being captured in this application, if applicable.

2-Staff-71

Ref. 1: Exhibit 2 / Tab 5 / Schedule 4 / p. 300 (Exhibit 2 part 3, pdf p. 300)

Ref. 2: Exhibit 2 / Tab 5 / Schedule 4 / Attachment F / pp. 40-11 (pdf Exhibit 2 part 3, pp. 533-534)

Question(s):

- a) Hydro Ottawa states it the system coincident peak occurs in the summer. Given the identification of non-emitting heat sources is a key element of Canada's *2030 Emissions Reduction Plan*, does Hydro Ottawa expect to become a winter peaking system at some point in the future? Please discuss.

2-Staff-72

Ref. 1: Exhibit 2 / Tab 5 / Schedule 4 / p. 305 (pdf Exhibit 2 part 3, p. 305)

Question(s):

- a) Figure 114 - Decarbonization Scenario Peak by Year depicts five scenarios for electrical impact of decarbonization from 2022 to 2050. Please revise Figure 114 to provide historical actual values for 2000 to 2025.

2-Staff-73

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / p. 12 (pdf Exhibit 2 part 4, p. 12)

Preamble:

Hydro Ottawa states that the four investment priorities include, Growth & Electrification - Powering the Growing Community, Renewing Deteriorating Infrastructure, Grid Modernization - Enabling the Energy Transition, and Enhancing Grid Resilience. These

priorities are paired with 2 foundational focuses: Managing Rising Costs and Investing in Workforce.

Question(s):

- a) Please explain how these investment priorities correlate to the OEB's four capital investment categories: Access, Renewal, Service and General Plant.
- b) Please provide any high level capital and O&M spending targets applied by Hydro Ottawa in pursuit of the "foundational focus" of "Managing Rising Costs".
- c) Does "Managing", as used here, mean passively reporting on expected cost increases or actively controlling costs?
 - i. If actively, please provide examples of meaningful cost reductions Hydro Ottawa intends to implement over the 2026-2030 test period.

2-Staff-74

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / p. 36 (pdf Exhibit 2 part 4, p. 36)

Preamble:

Table 6 - System Access Capital Programs, presents system expansion as the following "This program ensures reliable electrical service to new and upgraded customer connections by strategically upgrading infrastructure like feeders, transformers, and substations to accommodate increased demand from new developments and large loads and support future growth."

Question(s):

- a) Hydro Ottawa classifies some system expansion investments as System Access and others as System Service. Please explain how such classification decisions are determined.

2-Staff-75

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / pp. 79-80 (pdf Exhibit 2 part 4, pp. 79-80)

Preamble:

Table 26 – System Service Expenditure Categories, provides insight as to how the Capital Programs, Budget Programs and Primary Drivers align and gives a description of the Budget Program.

Question(s):

- a) For all line items with the driver "Observability", please describe and quantify the resulting ratepayer benefit.
- b) For all line items with the driver "Reliability", please explain if the associated investments will either maintain or improve SAIDI, SAIFI or some other reliability parameter.

- i. For each investment expected to improve reliability, please provide the cost-effectiveness of the investment in terms of risk points reduced per dollar spent.
- c) For all line items with the driver "System Efficiency", please explain if the investment will reduce O&M costs, reduce losses or provide some other efficiency benefit that is meaningful to ratepayers.
 - i. For each investment expected to reduce O&M costs or losses, please provide the cost-effectiveness of the investment in terms of O&M cost reduced per dollar spent or kWh of losses reduced per dollar spent, respectively.
- d) How many poles will be replaced under the Capacity Voltage Conversion program during the 2026-2030 test period?
 - i. Please provide the condition demographic breakdown of the poles that will be replaced under this program.
- e) Please explain the apparent misalignment between the primary driver and the description.
- f) If this program is not expected to reduce O&M costs, please explain why it is being undertaken.

2-Staff-76

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / p. 91 (pdf Exhibit 2 part 4, p. 91)

Ref. 2: Exhibit 2 / Tab 5 / Schedule 8 / p. 77 (pdf Exhibit 2 part 4, p. 441)

Preamble:

Hydro Ottawa states that 30% of the budget is allocated to Reliability (feeder reconfiguration and phase balancing) and Enhancement (DER integration through infrastructure upgrades and pilot projects).

Hydro Ottawa also states the following for Feeder Phase Balancing: "This program will optimize the distribution of electrical load across the system through feeder phase balancing. This will ensure that each phase of a three-phase feeder carries a similar amount of current, minimizing power losses due to imbalances. This optimization will also reduce stress on equipment, prolonging the lifespan of grid assets and reducing the need for premature replacements."

Question(s):

- a) Is phase balancing an O&M or capital activity? Please explain.
- b) Please explain why Feeder Phase Balancing is not typically done as an ongoing O&M activity as new single-phase loads are added to feeders.

2-Staff-77

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / p. 36 (pdf Exhibit 2 part 4, p. 36)

Question(s):

- a) With regards to bulk metered buildings that contain multiple residential residences that were upgraded to suite metering, in the historic period.
 - i. How many bulk metered buildings were retrofit with suite metering by Hydro Ottawa, per year?
 - ii. How many residential customers were connected to suite metering due to the retrofit of a bulk metered building to include suite metering by Hydro Ottawa, per year?
- b) How many additional individually suite metered customers has Hydro Ottawa forecast for the forecast period, through the retrofitting of existing bulk metered buildings that contain multiple residential residences, per year.

2-Staff-78

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / pp. 50, 51 (pdf Exhibit 2 part 4, pp. 50, 51)

Ref. 2: [Final Notice of Amendments to the Distribution System Code](#), June 16, 2025

Preamble:

Hydro Ottawa states the that the “updates to capital contributions as a result of OEB’s recent policy changes in System Expansion for Housing Developments (EB-2024-0092) have not incorporated” in the forecast capital contributions in Table 11 or Table 12 of reference 1.

Appendix C of reference 2 outlines changes to the Distribution System Code to extend the customer revenue horizon to 40 years for residential customers (as defined in Appendix C).

Question(s):

- a) Please update Table 11 and Table 12 with revised amounts due to the change in the customer revenue horizon to 40 years.
 - i. Please provide supporting calculations detailing how Hydro Ottawa arrived at the revised values.
 - ii. Please include in the supporting calculations an example of at least one specific development request, which can be an actual request with identifying information removed, or an illustrative development request that would be similar to those typically received by Hydro Ottawa.

2-Staff-79

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / p. 70-71 (pdf Exhibit 2 part 4, pp. 70-71)

Preamble:

Hydro Ottawa stated that the five year budget reflects a shift towards targeted, efficient upgrades, particularly in response to increasing obsolescence and technological advancements. Some of the programs include End of Life (EOL) Voltage Conversion Program, Station Transformer Renewal, and Station Switchgear Renewal.

Question(s):

- a) These three programs would all appear to support reduced O&M since they will presumably replace deteriorated high-maintenance assets with new low-maintenance assets, and in the case of voltage conversions, should reduce the total asset count by eliminating urban stations. Please confirm if this is true and discuss.
- b) Please indicate what O&M reductions are forecast.

2-Staff-80

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / p. 93 (pdf Exhibit 2 part 4, p. 93)

Preamble:

Table 30 – General Plant Capital Programs, provides the following information concerning Grid Technology:

This program addresses the maintenance and upgrade of tools and software that supports modernization of grid operations, integrates new technologies like DERs and supports grid planning. The program focuses on network visualization and management, data collection and archiving, and network modelling and simulation.

Question(s):

- a) Please explain why these investments would not be categorized as System Service.

2-Staff-81

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / p. 38 (pdf Exhibit 2 part 4, p. 38)

Preamble:

Table 8 - System Access Historical & Bridge Spending versus OEB Approved (\$'000s), shows Generation Connections has an OEB-Approved capital expenditure of \$1,578 over 2021-2025 and a Historical/Bridge capital expenditure of \$525 over 2021-2025.

Question(s):

- a) What drove generation connection expenditures to fall to 1/3 of forecast?
- b) Could the same or similar factors cause forecast spending on generation connections to fall similarly below forecast for the 2026-2030 test period? Please

discuss.

2-Staff-82

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / p. 73 (pdf Exhibit 2 part 4, p. 73)

Preamble:

Table 22 - OH Unit Asset Renewal Comparison per OH Asset Class, shows an increase in asset replacements from the historic/bridge period to the forecast period; OH transformer renewals are planned to increase from 309 to 400 and OH switch / recloser renewals are planned to increase from 56 to 340.

Question(s):

- a) Please describe the typical triggers for OH transformer replacement and the percentage of renewals driven by each trigger.
- b) Please provide a table comparing the age and condition demographics of OH Switches & Reclosers as of 2020 and the latest available.
- c) If the count of OH Switches & Reclosers in poor or very poor condition is not six times higher than was the case in 2020, please explain the proposed step change in proactive replacements.

2-Staff-83

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / p. 75 (pdf Exhibit 2 part 4, p. 75)

Preamble:

Table 23 - UG Unit Asset Renewal Comparison per UG Asset Class, shows that Vault Transformer Renewals are expected to increase from a total of 18 in the historical/bridge period to a total of 90 in the forecast period.

Question(s):

- a) Please provide a table comparing the age and condition demographics of Vault Transformers as of 2020 and the latest available data.
- b) If the count of Vault Transformers in poor or very poor condition is not five times higher than was the case in 2020, please explain the proposed step change in proactive replacements.

2-Staff-84

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / pp. 78-78 (pdf Exhibit 2 part 4, pp. 77-78)

Preamble:

“Hydro Ottawa’s System Service Investments are broken out into six capital programs”, Capacity Upgrades, Distribution Enhancements, Station Enhancements, Grid Technologies, Control and Optimization and Field Area Network.

Question(s):

- a) Please sort planned System Service spending initiatives into the following primary justification bins:
- Improves system reliability
 - Maintains system reliability
 - Expanding system capacity
 - Reduces O&M costs
 - Other (please identify justification for all "Other" spending initiatives above the \$1M materiality threshold.

2-Staff-85

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / p. 88 (pdf Exhibit 2 part 4, p. 88)

Preamble:

Table 29 – System Service Forecast Expenditures by Capital Program (\$'000s), shows that the Capacity Upgrades program is forecast to increase from \$108,244 in the historical/bridge period to \$346,890 in the forecast period, and Field Area Network is forecast to increase from \$1,947 in the historical/bridge period to \$20,750 in the forecast period.

Question(s):

- a) Please quantify the risk that some portion of the planned capacity upgrade investments will be stranded or redundant if the aggressive load growth trajectory does not materialize as forecast.
- b) Please provide the total program expenditures that would have occurred from 2021 - 2025 had the program proceeded as initially planned.
- c) Would the need for capacity upgrades spending be significantly impacted by higher or lower rates of load growth?
- i. If yes, please provide the sensitivity analysis Hydro Ottawa performed to evaluate the risk of stranding upgrade capital should the forecast load growth not occur.

2-Staff-86

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / p. 90 (pdf Exhibit 2 part 4, p. 90)

Question(s):

- a) Hydro Ottawa states "These improvements also support grid modernization, creating improved observability at stations and building the foundation for future grid modernization initiatives." Is improved observability at stations expected to produce a net increase or decrease in O&M costs? Please explain.

2-Staff-87

Ref. 1: Exhibit 2 / Tab 5 / Schedule 5 / pp. 98-99 (pdf Exhibit 2 part 4, pp. 98-99)

Preamble:

Hydro Ottawa states the “CCRA program is expected to be \$9.7M below the total OEB Approved amount for 2021-2025” and provides a listing of all payments and credits from 2021 through 2025 in Table 34.

Question(s):

- a) For each cost owing or credited to Hydro One over 2021-2025:
 - i. Please categorize the costs as construction costs or load true-up.
 - ii. Please provide the agreements between Hydro Ottawa and Hydro One.
 - i. Please provide any invoices and calculations from Hydro One (i.e. output of the Hydro One DCF model). In the absence of estimates from Hydro One, please provide Hydro Ottawa’s detailed calculations of the true-up amount.
 - iii. In cases where Hydro Ottawa was required to make a payment during 2021-2023 due to reduced or unrealized load, please explain why the load forecast at the time of the agreement with Hydro One was not realized.

2-Staff-88

Ref. 1: Exhibit 2 / Tab 5 / Schedule 6 / pp. 39-40 (pdf Exhibit 2 part 4, pp. 158-159)

Preamble:

Hydro Ottawa states that the Capital program costs will increase from \$41.5M (2021-2025) to \$59.2M (2026-2030) in the Program Summary for System Expansion.

Question(s):

- a) How many poles will be replaced under this program from 2026-2030?
- b) Classify the poles that will be replaced by their present assessed condition.

2-Staff-89

Ref. 1: Exhibit 2 / Tab 5 / Schedule 6 / pp. 52-53 (pdf Exhibit 2 part 4, p. 171-172)

Preamble:

Hydro Ottawa states the forecast capital contributions for System Expansion in the forecast period (2026-2030) are “64% of gross cost in line with the average contribution capital proportion for the 2018 to 2022 period.”

Using the values in Table 11 on page 52, OEB staff have calculated the contributed capital as a percentage of the gross to be 53% in the historic period (2021-2025), and 45% in the forecast period (2026-2030)

Question(s):

- a) Please explain the discrepancy between Table 11 on page 52 and the statement on page 53.
- b) Please confirm how Hydro Ottawa has forecast the contributed capital amounts for System Expansion for the forecast period.
- c) Please explain why Hydro Ottawa proposed to use the 2018 to 2022 period as a basis to forecast System Expansion contributions, rather than more recent data.

2-Staff-90

Ref. 1: Exhibit 2 / Tab 5 / Schedule 7 / p. 5 (pdf Exhibit 2 part 4, p. 203)

Question(s):

- a) Hydro Ottawa states that the budget program for Stations and Switchgears “covers the cost of replacing end-of-life breakers, in deteriorated condition at four stations: Rideau Heights DS, Parkwood Hills DS, Hinchey TH, and Russell TB.” Please provide the full scope and cost of the switchgear (and associated equipment) renewal projects at each of the four listed stations.

2-Staff-91

Ref. 1: Exhibit 2 / Tab 5 / Schedule 7 / pp. 5-6, 10, 54 (pdf Exhibit 2 part 4, pp. 203-204, 208, 252)

Preamble:

Hydro Ottawa’s EOL Voltage Conversion program is focused on decommissioning 4 kV stations that have reached EOL, based on transformer risk assessments conducted in Copperleaf PA. The 4 kV system is also noted to be insufficient to meet future load demands. Five stations are included in the program: Fisher AK, Dagmar AC, Henderson UN, Church AA, and Vaughan UG. At the same time, Hydro Ottawa notes that without intervention, the proportion of station transformers reaching EOL could exceed 51% by 2030, with degraded condition levels increasing by 7% every 5 years. Hydro Ottawa also targets replacing 42% of OH distribution assets that have reached EOL by 2040, as noted in Table 8 - OH Distribution Asset Renewal Program Performance Outcomes.

Question(s):

- a) What is the detailed project scope and cost for each of the five cited station voltage conversion projects (Fisher AK, Dagmar AC, Henderson UN, Church AA, and Vaughan UG)?
- b) What are the existing primary and secondary voltages at each of these five

stations, and what will they be post-conversion?

- c) Does the EOL Voltage Conversion program include associated line upgrade costs? If not, please specify the line upgrade scope and cost for each station.
- d) How does Hydro Ottawa define “end-of-life” in this context? Does it refer to assets that have reached their TUL, or assets that are in unacceptable condition?
- e) Aside from assessed condition, what other primary factors are driving transformer retirements (e.g., system capacity limitations, voltage standardization, risk mitigation)? For each factor, please indicate the proportion of transformer replacements over the test period attributable to that factor.

2-Staff-92

Ref. 1: Exhibit 2 / Tab 5 / Schedule 7 / pp. 20-21 (pdf Exhibit 2 part 4, pp. 218-219)

Question(s):

- a) Hydro Ottawa states, “Approximately 69% of Hydro Ottawa’s 2,000 service relays (across all types) have reached the end of their TUL (refer to Figure 13).” Please provide condition demographics for this asset class.
 - i. If a condition profile has not been developed or documented for this asset class, please explain why such an assessment was not undertaken.

2-Staff-93

Ref. 1: Exhibit 2 / Tab 5 / Schedule 7 / pp. 40-42 (pdf Exhibit 2 part 4, pp. 238-240)

Question(s):

- a) Please revise Figure 21 to use the same scale as is used in Figure 20.
- b) Please revise Figure 23 to use the same scale as is used in Figure 22.
- c) Please revise Figure 25 to use the same scale as is used in Figure 24.

2-Staff-94

Ref. 1: Exhibit 2 / Tab 5 / Schedule 7 / p. 53 (pdf Exhibit 2 part 4, p. 251)

Question:

- a) Hydro Ottawa states, “Based on the assessment and the outcomes of the Resilience Investment Business Case report detailed in Attachment 2-5-4(E) - Resilience Investment Business Case Report, it is recommended that at least one lateral line per year (approximately 30 poles) slated for replacement are amenable to undergrounding or other hardening measures.” Please provide the cost of each proposed annual lateral hardening project, and the risk cost reduction attributable to each project.

2-Staff-95

Ref. 1: Exhibit 2 / Tab 5 / Schedule 7 / p. 59 (pdf Exhibit 2 part 4, p. 257)

Ref. 2: Exhibit 2 / Tab 5 / Schedule 3 / p. 56 (pdf Exhibit 2 part 2, p. 218)

Preamble:

Hydro Ottawa states, "Poles in a degraded condition pose significant risk to Hydro Ottawa's system highlighted by the steady trend of outages due to poles and pole attachments (an average of 18 outages per year between 2019 and 2023) as detailed in Section 4.5.6.2 of Schedule 2-5-3 - Performance Measurement for Continuous Improvement."

Question(s):

- a) Please break out the cited average of 18 outages per year by failure mechanisms, i.e., trees or branches falling against lines or structures, third party interference such as vehicle or equipment contacts, pole fires, wind loading, ice loading, snow loading, direct lightning strikes, spontaneous condition-related failure, etc.
- b) Which of the listed failure mechanisms are pole condition-dependent and which are not. Please discuss.
- c) Table 26 in Section 4.5.6.2 of Schedule 2-5-3 shows equipment failures for *Pole* and *Pole Attachment*.
 - i. Is this the 18 outages on average being discussed?
 - ii. What is the steady trend that is being referenced here?
- b) Please classify failures in *OH Conductor* in Table 26 by the conductor system component that failed, e.g., wire, splice/sleeve, dead-end/tension clamp, other.
 - i. Are insulator, insulator clamp or damper failures included in overhead conductor failures?

2-Staff-96

Ref. 1: Exhibit 2 / Tab 5 / Schedule 7 / p. 60 (pdf Exhibit 2 part 4, p. 258)

Preamble:

Hydro Ottawa states there has been "an average of 25 outages per year between 2019 and 2023".

Question(s):

- a) Please provide annual OH transformer failures as a percentage of the total OH transformer fleet.
- b) How many customers are interrupted on average following an OH transformer failure?
- c) What is the average duration of an OH transformer failure outage?
- d) What is the average age of an OH transformer when it fails due to condition? (Please exclude failures due to causes other than condition).

2-Staff-97

Ref. 1: Exhibit 2 / Tab 5 / Schedule 7 / pp. 60-62 (pdf Exhibit 2 part 4, pp. 258-260)

Preamble:

Hydro Ottawa states, "The data on the condition of OH transformers is improving and is primarily based on the translation of age to condition through Copperleaf PA."

Question:

- a) How does Hydro Ottawa validate the results of the Copperleaf PA translations of age to condition?
- b) Confirm that the data used to create Figure 33 is based on the Copperleaf PA translation of equipment age to condition.
 - i. If not confirmed, please explain the data provenance.
- b) Does Hydro Ottawa use this condition translation data to trigger pre-emptive replacement of OH Transformers without physically validating equipment condition with an onsite inspection?

2-Staff-98

Ref. 1: Exhibit 2 / Tab 5 / Schedule 7 / pp. 62-63 (pdf Exhibit 2 part 4, pp. 260-262)

Preamble:

Hydro Ottawa states, "there is a sharp increase in the number of OH switches reaching their TUL by 2035 (at 12%), and further increasing to more than half (54%) of the OH switches reaching their TUL by 2040. This shows the need for intervention now, to avoid a backlog in the future."

Question(s):

- a) Given the apparent disconnect between the age and condition demographics shown in Figures 34 & 35, please explain why 12% of OH switches reaching TUL by 2035 is of major concern, considering that the total percentage of units in poor or very poor condition remains unchanged from 2024 to 2035 with no investment.

2-Staff-99

Ref. 1: Exhibit 2 / Tab 5 / Schedule 7 / p. 67 (pdf Exhibit 2 part 4, pp. 265)

Question(s):

- a) Table 10 - Detailed Unit Replacements per OH Distribution Asset Class, provides information on replacements in Historical Years, Bridge Years and Test Years. Are OH transformers always replaced when the pole is replaced, regardless of condition or vintage of the transformer? Please explain.

2-Staff-100

Ref. 1: Exhibit 2 / Tab 5 / Schedule 7 / p. 60 (pdf Exhibit 2 part 4, p. 258)

Question:

- a) Please explain if the pole damage shown in Figure 31 was attributable to the pole condition prior to the extreme weather event.
- b) Would the damage have been avoided had the pole been replaced with a new pole prior to the extreme weather event?

2-Staff-101

Ref. 1: Exhibit 2 / Tab 5 / Schedule 7 / p. 73 (pdf Exhibit 2 part 4, p. 271)

Question:

- a) Figure 38 - Number of Poles Projected to Reach a Deteriorated Condition by 2030, shows 2024 (10%), Pole alternative 1 (10%), 2 (9%), and 3 (8%) and 2030 no investment (12%). What is the "deteriorated condition" threshold: very poor, poor, fair or other criteria?

2-Staff-102

Ref. 1: Exhibit 2 / Tab 5 / Schedule 7 / p. 91 (pdf Exhibit 2 part 4, p. 289)

Preamble:

Figure 49 - Condition Profile of UG Transformers, shows the Condition Profile for 2024, 2030, 2035, and 2040 for underground (UG) distribution transformers.

Question(s):

- a) Please confirm that with no investment, 1% of UG transformers are projected to be in very poor condition by 2040.
- b) What is the annual failure probability of UG transformers assessed to be in poor condition?
- c) What is the annual failure probability of UG transformers assessed to be in very poor condition?

2-Staff-103

Ref. 1: Exhibit 2 / Tab 5 / Schedule 7 / p. 98 (pdf Exhibit 2 part 4, pp. 296)

Question(s):

- a) Figure 56 - Condition Profile of Vault Switchgear (excl. customer-owned), shows the Condition Profile for 2024, 2030, 2035, and 2040 for vault switchgear. Please explain why the percentage of vault switchgear in very poor condition will remain steady at 5% until 2040 with no investment.

2-Staff-104

Ref. 1: Exhibit 2 / Tab 5 / Schedule 7 / p. 105 (pdf Exhibit 2 part 4, p. 303)

Preamble:

Hydro Ottawa states that the Cable Renewal Program budget will increase from \$54.3M (2021–2025) to \$88.2M (2026–2030) due to higher unit costs driven by inflation and project complexity, with a new rate of \$1.4M/km. Between 2026 and 2030, cable replacements will be prioritized across 12 key feeder areas based on results from underground cable testing.

Question(s):

- a) Does Hydro Ottawa’s cable renewal program include cable injections?
 - i. If not, please explain what technical, economic, or reliability factors led to the exclusion of this approach.
 - ii. If so, please describe the scope of work planned and the annual costs for the forecast period.

2-Staff-105

Ref. 1: Exhibit 2 / Tab 5 / Schedule 7 / p. 125 (pdf Exhibit 2 part 4, p. 323)

Preamble:

Hydro Ottawa states that its metering fleet is vital for accurate billing, regulatory compliance, and effective grid management, with smart meter deployment beginning in 2006 and completing replacement of over 277,000 meters by 2011.

Question(s):

- a) What are the TULs for electromechanical meters and electronic smart meters?
- b) Please provide evidence to support the TUL of the electronic smart meters.
- c) Has Hydro Ottawa investigated any meter technology alternatives that will provide the AMI 2.0 functionality with a longer TUL?
- d) What options has Hydro Ottawa investigated to extend the service lives of the existing smart meter fleet?
- e) Do the AMI 2.0 meters have onboard self-diagnostic capability?

2-Staff-106

Ref. 1: Exhibit 2 / Tab 5 / Schedule 8 / p. 1 (pdf Exhibit 2 part 4, p. 365)

Preamble:

Hydro Ottawa states “The Enhancements program supports DER integration through infrastructure upgrades and pilot projects, leveraging federal funding for innovation.”

Question(s):

- a) What is the forecast test period spending for the Distribution Enhancements

program?

- b) Will any of this spending be stranded if DER additions are lower than forecast?

2-Staff-107

Ref. 1: Exhibit 2 / Tab 5 / Schedule 8 / p. 3 (pdf Exhibit 2 part 4, p. 367)

Question(s):

- a) Hydro Ottawa states “Driven by system efficiency, the FAN enables real-time data access for grid modernization and DER integration, strengthens cyber security, and improves outage response by providing grid visibility and control.” Please identify and quantify any future O&M cost savings attributable to the system efficiency improvements that will be delivered by FAN.

2-Staff-108

Ref. 1: Exhibit 2 / Tab 5 / Schedule 8 / p. 5 (pdf Exhibit 2 part 4, p. 369)

Preamble:

Hydro Ottawa presents, in the System Service Program Summary under Capacity Upgrade, a program cost increase from \$108.2M (2021-2025) to \$365.9M (2026-2030), “\$342.6 Net Capex, \$13.3M (OM&A) \$10.0M (Costs included in Other Income and Deductions)”, for the Station Capacity Upgrades, Distribution Capacity Upgrades, Non-Wire Upgrades Budget Program.

Question(s):

- a) Proposed spending on this program is more than triple historical levels. Did the Historical/Bridge period spending levels fail to deliver necessary capacity expansion? Please discuss.
- b) What proportion of the proposed Capacity Upgrade spending will be stranded or unnecessary if compounding load growth over the test period turns out to be similar to the Historical/Bridge period levels?
- c) Please identify each event over the Historical/Bridge period during which Hydro Ottawa had inadequate capacity to serve loads after implementing available sectionalizing and backup options and quantify the load that could not be served and the duration of the inability to serve it for each event.

2-Staff-109

Ref. 1: Exhibit 2 / Tab 5 / Schedule 8 / p. 7 (pdf Exhibit 2 Part 4, p. 371)

Preamble:

In the application, Hydro Ottawa proposes two major investments under the Distribution System Upgrade program, including the following:

- The feeder integration will support the reduction of load on some of the highly loaded stations, such as Kanata MTS, Marchwood MTS, and Lietrim DS
- Introduction of 28kV in the capacity constrained Nepean 8kV system

Question(s):

- a) For these two major investments, please describe if Hydro Ottawa considered non-wires solutions to address these system needs.
 - i. If yes, please clarify the system need and the results of Hydro Ottawa's NWS consideration.
 - ii. If not, please explain why NWSs were not considered.

2-Staff-110

Ref. 1: Exhibit 2 / Tab 5 / Schedule 8 / p. 7 (pdf Exhibit 2 part 4, p. 371)

Question(s):

- a) Hydro Ottawa mentions "transit development and large infrastructure projects such as the new Ottawa Hospital campus" contributed to load growth. Please explain why expansions for transit and large infrastructure projects are not categorized as System Access spending.

2-Staff-111

Ref. 1: Exhibit 2 / Tab 5 / Schedule 8 / p. 8 (pdf Exhibit 2 part 4, p. 372)

Ref. 2: Exhibit 2 / Tab 5 / Schedule 4 / pp. 283-287 (pdf Exhibit 2 Part 3, pp. 283-287)

Ref. 3: Exhibit 2 / Tab 5 / Schedule 8 / pp. 33-34 (pdf Exhibit 2 Part 4, pp. 397-398)

Preamble:

Hydro Ottawa presents 4 BESS projects: 2.5MW BESS in the West 28 kV system, 7MW BESS in the Bells Corners/Bayshore 8 kV system, 5MW BESS at Casselman DS, 10MW BESS in the Core 13 kV/West 13kV system.

Question(s):

- a) What is the all-in unit cost per MW and per MWh of each of these BESS installations?
- b) What are the forecast capacity utilizations of each of these BESS installations?
- c) Please clarify the following related to each of the 4 BESS:
 - i. The specific system need that is being addressed by each BESS
 - ii. The specific region(s) where each of the 4 BESS will be used
 - iii. The anticipated cost (in total and annually from 2026-2030) and the type of cost (capital expenditure or OM&A) for each BESS. See Table 3 below for guidance.
 - iv. The major activities and their associated timelines for each BESS

- d) Please provide the cost-benefit analyses for each of these BESS installations.
- e) Please complete Table 4 below for the 4 BESS, providing the following details for each BESS and their corresponding traditional infrastructure solution:
 - i. Quantitative and qualitative benefits (including avoided/deferred costs)
 - ii. Quantitative and qualitative costs
 - iii. Any calculations Hydro Ottawa has completed to evaluate the cost-effectiveness of each of the 4 BESS over traditional wire solutions, if any
- f) Please confirm Hydro Ottawa's expertise in setting up, connecting, operating, and maintaining a utility-owned BESS, responding to the following:
 - i. If in-house expertise is currently not present, please describe how Hydro Ottawa plans to secure this expertise and any associated costs (OM&A) to set up, connect, operate, and/or maintain a utility-owned BESS.
 - ii. What other options did Hydro Ottawa consider (if any) to support the excess demand in the near term for each of the four areas, and why was a utility-owned BESS determined to be the best option for each area?
- g) How does Hydro Ottawa plan to leverage the learnings and/or 4 BESS capital assets once each BESS has helped meet the intended system need in the 4 areas?
- h) Please provide details on when and how Hydro Ottawa intends to use each BESS assets.

Table 3: Breakdown of Costs (BESS)

NWS Program	Cost Category	Cost				
		2026	2027	2028	2029	2030
West 28 kV	Capital					
	OM&A					
Bells Corners/ Bayshore 8 kV	Capital					
	OM&A					
Casselman 8 kV	Capital					
	OM&A					
Core 13 kV, West 13 kV	Capital					
	OM&A					

Table 4: Benefits and Costs of BESS

Category	BESS in West 28 kV	BESS in Bells Corners/ Bayshore 8 kV	BESS in Casselman 8 kV	BESS in Core 13 kV, West 13 kV
Benefits				
A. Quantitative (\$)				

A. Explanation				
B. Qualitative				
B. Explanation				
Costs				
C. Quantitative (\$)				
C. Explanation				
D. Qualitative				
D. Explanation				

2-Staff-112

Ref. 1: Exhibit 2 / Tab 5 / Schedule 8 / p. 8 (pdf Exhibit 2 part 4, p. 372)

Preamble:

With respect to Station Capacity Upgrades, Distribution Capacity Upgrades and Non-Wire Upgrades, Hydro Ottawa states that it expects “to add over 577MVA¹ in station capacity to Hydro Ottawa’s distribution system as a result of these projects, as compared to 160MVA over the previous period.”

Question(s):

- What is the total weather normalized peak load growth forecast for Hydro Ottawa over the upcoming test period?
- Will the anticipated DER and BESS additions offset any of the forecast peak loads? Please discuss.

2-Staff-113

Ref. 1: Exhibit 2 / Tab 5 / Schedule 8 / p. 30 (pdf Exhibit 2 part 4, p. 394)

Preamble:

Figure 12 - Combined Forecast of stations: Carling TS, Lisgar TS, and Riverdale TS with Bronson DS Conversion and NWSs, compares the IRRP Forecast, Planning Forecast, and the customer load inquiries which are in the planning stages.

Question(s):

- Please extend this Figure 12 to a 2010 start date.

2-Staff-114

Ref. 1: Exhibit 2 / Tab 5 / Schedule 8 / p. 49 (pdf Exhibit 2 part 4, p. 413)

Preamble:

Hydro Ottawa states, “The planned net expenditure under this program [Station Capacity Upgrades] in the 2026-2030 period is \$192.2M.”

Question(s):

- a) Does Hydro Ottawa expect this rate of new capacity additions to continue beyond the upcoming test period? Please discuss.
- b) Could any of the proposed Station Capacity Upgrades be deferred without causing significant operational constraints? Please discuss.
- c) If loads fail to grow as forecast in 2025, 2026, and 2027 could the decision be made as soon as the lack of growth is identified to defer any of this proposed spending, or will it all be committed immediately upon (or prior to) approval of the present application?

2-Staff-115

Ref. 1: Exhibit 2 / Tab 5 / Schedule 8 / p. 52 (pdf Exhibit 2 part 4, p. 416)

Preamble:

Hydro Ottawa states that it is “proposing to add 24.5MW of capacity through Utility-Owned Battery Energy Storage Solutions (Beckwith, Casselman, Bayshore/QCH and Core & West 13kV regions) and 20 to 30MW additional capacity from Non-Wires Customer Solutions Program (Kanata North, Core & West 13kV regions).”

Question(s):

- a) If any of the proposed BESS developments proves to have been sub-optimally located as new DERs are added, is it economically feasible to relocate the BESS equipment to a better location?
- b) How will Hydro Ottawa evaluate the above business case?

2-Staff-116

Ref. 1: Exhibit 2 / Tab 5 / Schedule 8 / p. 72 (pdf Exhibit 2 part 4, p. 436)

Question(s):

- a) Hydro Ottawa states the following as a Grid modernization objective, “Strengthened Customer Engagement & Empowerment: Engage and empower customers by providing them with real-time data and tools to manage their energy use.” Please discuss if the customer tools that will be implemented under this program are incremental to the customer tools that will be implemented under the AMI 2.0 program?

2-Staff-117

Ref. 1: Exhibit 2 / Tab 5 / Schedule 8 / p. 73 (pdf Exhibit 2 part 4, p. 437)

Preamble:

Hydro Ottawa states that the reliability driver for the Distribution Enhancement Program focuses on Real-time Monitoring of Distribution Assets, and Enhanced Grid Resilience to Adverse Weather Events, and System Reconfiguration to Optimize Outage

Management and Load Restoration.

Question:

- a) Please discuss if, and how, the proposed investments would have reduced the impact of the 2022 Derecho by materially reducing the duration of customer outages and/or the number of customers interrupted during and following the event. In your response, please provide the specific reconfiguration options that would have been enabled by the investment.

2-Staff-118

Ref. 1: Exhibit 2 / Tab 5 / Schedule 8 / p. 73 (pdf Exhibit 2 part 4, p. 437)

Question(s):

- a) Table 6 - Distribution Enhancement Program Performance Outcomes, highlights that improved “grid control and observability through the installation of Smart FCIs and Smart Switches,” will contribute to improved productivity and system performance. Will this improved productivity result in reduced O&M costs? Please discuss.

2-Staff-119

Ref. 1: Exhibit 2 / Tab 5 / Schedule 8 / p. 99 (pdf Exhibit 2 Part 4, p. 463)

Ref. 2: Exhibit 2 / Tab 5 / Schedule 2 / p. 17 (pdf Exhibit 2 Part 2, p. 136)

Preamble:

In its application, Hydro Ottawa mentions EV Everywhere and ODERA as NWS initiatives that focus on DER integration and grid optimization while utility-owned BESS and NWCSP programs are described as addressing system constraints to support existing system needs (e.g., supporting existing capacity and strategic phasing of wire upgrades). Hydro Ottawa also refers to its “grid modernization roadmap” when describing proposed NWS investments.

Question(s):

- a) Please elaborate on Hydro Ottawa’s “grid modernization roadmap” by identifying major milestones and timelines Hydro Ottawa hopes to achieve over the next 5-10 years.
 - i. Please explain how each of the proposed NWSs, including NWCSP, BESS, ODERA, and EV Everywhere, fits into Hydro Ottawa’s grid modernization roadmap.
- b) Please clarify how Hydro Ottawa has considered the uncertainty regarding the pace of the energy transition, adoption of DERs, and the regulatory policies associated with such matters in its NWS strategy.

- c) Please elaborate as to why the proposed NWS initiatives for which rate funding is requested (including ODERA and EV Everywhere, if applicable) are reasonable and appropriate in terms of costs and timelines.

2-Staff-120

Ref. 1: Exhibit 2 / Tab 5 / Schedule 8 / Attachment A / pp. 5-6 (pdf Exhibit 2 part 4, pp. 525-526)

Question(s):

- a) Hydro Ottawa states, "The goal of this effort is to capture an option for future HOL use that will fit within an appropriate budget. It is recognized that there is a specific focus on providing a FAN [Field Area Network] solution to support HOL's 2024 rate case submission. The ultimate decision may be based on additional information obtained in future design iterations and vendor negotiations." Does the budget for FAN given in the DSP assume a specific solution based upon the "ultimate decision" noted in this statement having been made, or is the budget a placeholder, the actual costs of which will be determined after that ultimate decision has been made? Please discuss.
- b) Hydro Ottawa states, "The next step is to implement a FAN to enable reliable communications to grid devices not directly connected to HOL's fibre infrastructure to support current and future applications including but not limited to Smart Grid, Distributed Energy Resources, and next generation AMI." This statement appears to treat the development of the FAN as a foregone conclusion ("the next step"), to make full use of Hydro Ottawa's existing fiber LAN. Please provide any benefits/cost analysis that has been undertaken to demonstrate the necessity of this investment.

2-Staff-121

Ref. 1: Exhibit 2 / Tab 5 / Schedule 8 / p. 106 (pdf Exhibit 2 part 4, p. 470)

Question(s):

- a) Table 11 - Performance Targets for the Station Enhancement Program explains how online station transformer monitoring will help contribute to proactive management of station transformers and improve real-time condition information. Please explain whether the new monitoring will enable extended manual inspection cycles and reduced O&M costs.

2-Staff-122

Ref. 1: Exhibit 2 / Tab 5 / Schedule 9 / pp. 64-74 (pdf Exhibit 2 part 4, pp. 642-652)

Preamble:

Hydro Ottawa has forecast CCRA Program Expenditures for 2026 through 2030 to be \$45.9M and lists new and ongoing projects for which Hydro Ottawa will be required to make a contribution.

Question(s):

- a) For each forecast cost owing or credited to Hydro One over 2026-2030:
 - i. Please categorize the costs as construction costs or load true-up.
 - ii. Please provide the agreements between Hydro Ottawa and Hydro One.
 - iii. Please provide any estimates and calculations from Hydro One (i.e. output of the Hydro One DCF model). In the absence of estimates from Hydro One, please provide Hydro Ottawa's detailed calculations of the true-up amount.
 - iv. In cases where Hydro Ottawa forecasts a payment during 2026-2030 due to reduced or unrealized load, please explain why the load forecast at the time of the agreement with Hydro One was not realized.

2-Staff-123

Ref. 1: [Electricity Reporting & Record Keeping Requirements \(RRR\): Section 2.1.4.2.10 Major Event Response Reporting](#)

Ref. 2: [Electricity Reporting & Record Keeping Requirements \(RRR\): Section 2.1.4.2 System Reliability Indicators](#)

Preamble:

OEB staff have produced the following table based on RRR data.

Row Labels	Number of MED	Number of interruptions from MED	SAIFI from MED	SAIDI from MED
2015	1	30	0.181	0.396
2016	3	16	0.037	0.128
2017	3	78	0.092	0.401
2018	2	143	1.004	21.913
2019	1	47	0.202	0.405
2020	2	8	0.089	0.768
2021	4	10	0.049	0.1
2022	1	72	0.817	38.252
2023	1	176	0.55	5.787

Question(s):

- a) Please verify the data shown in the table above is correct, or provide a revised table as required

- b) Please expand the table by providing data from 2005 – 2014 and 2024.
 - i. If data is not available for all requested years, please explain why.
- c) Please explain what method was used to identify MED, for each year reported.

Exhibit 3 – Operating Revenue

3-Staff-124

Ref. 1: Exhibit 3 / Tab 1 / Schedule 1 / pp. 2-10 (pdf pp. 2-10)

Ref. 2: Exhibit 3 / Tab 1 / Schedule 1 / Attachment B / p. 24 (pdf p. 47)

Ref. 3: Exhibit 3 / Tab 1 / Schedule 1 / Attachment B / p. 26 (pdf p. 49)

Preamble:

Hydro Ottawa describes its load forecast methodology as a three-step data-driven process that leverages monthly regression modeling. The load forecast is described as beginning with a baseline revenue load forecast, then adjusted for the impact of past CDM programs and future eDSM programs as well as the impact of electrification and large load requests.

Per the Itron consultant's report, Hydro Ottawa's sales forecast (including CDM, eDSM, electrification, and large load requests) appears to be slightly downward trending or maintained at the same levels from 2018 to 2023. But from 2024-2030, Hydro Ottawa's sales forecasts are projected to increase.

Question(s):

- a) Please clarify if Hydro Ottawa intends to propose any Local eDSM programs (also known as Stream 2 programs). If yes, please provide details on when Hydro Ottawa expects to file an application and how the corresponding CDM/eDSM impacts are considered in the load forecast.
- b) Hydro Ottawa has identified CDM/eDSM as an impact category considered. Please confirm if Hydro Ottawa has accounted for the anticipated savings from its NWCSP and any other eDSM/CDM programs Hydro Ottawa is proposing as part of its 2026-2030 application load forecast.
- c) Please clarify the main factors that are causing the increase in sales forecast trend from 2024-2030 as compared to the years prior. Please provide the supporting rationale and data, including the source of information.
- d) Please clarify if there have been any changes in Hydro Ottawa's methodology in how to account for each of the three impact categories that are considered in its load forecast? If so, please describe the changes and the extent to which the three impact categories affect load forecast (e.g., 5% average annual growth attributed to a specific driver).

- e) Please provide Table 3-2: CDM and eDSM Savings from Exhibit 3 / Tab 1/ Schedule 1 / Attachment B in MS Excel format. Along with the forecast eDSM savings, please provide:
- i. Detailed calculations in MS Excel, with all formulas intact, for how Hydro Ottawa determined its estimated share of provincial-wide annual energy savings for the 2025-2029 period and from 2030-2035, and discuss any considerations given to the certainty of these values.
 - ii. Specific references to Hydro Ottawa's estimated portion of centrally administered programs' net energy and demand savings based on the IESO's Final Verified 2017 CDM Summary Report.
 - iii. Please discuss if more recent provincial summary totals were considered when determining Hydro Ottawa's share of future provincial savings from centrally administered programs.
- f) Please clarify how the electrification and large load energy request values in Section 7.2, Tables 7 and 8 of Exhibit 3 / Tab 1 / Schedule 1 were derived. Are the values based on known or anticipated requests? If anticipated, what is the basis on which the estimates are based?

3-Staff-125

Ref. 1: Exhibit 3 / Tab 1 / Schedule 1 / Attachment B / pp. 11, 32 (pdf pp. 34, 55)

Preamble:

The residential connections were forecasted using an economic variable that exhibited slowing growth, as well as dummy variables that do not exhibit a growth trend over the time horizon. The growth of the resulting residential customer connection forecast has slowed to 1.1% over the 2024-2030 period from 1.8% over the 2018-2023 period. The observed growth was at least 1.7% in every year from 2020-2024.

Question(s):

- a) Please explain any reasons why Hydro Ottawa expects connection growth to fall over the forecast period.
- b) Please provide the derivation of the economic variable.
- c) Please provide the customer connection count for all months known in 2024-2025.
- d) Please provide details of subdivision customer additions observed over the 2019-2025 period, and subdivision customer additions expected over the 2025-2030 period.

3-Staff-126

Ref. 1: Exhibit 3 / Tab 1 / Schedule 1 / Attachment B / pp. 34 (pdf pp. 57)

Preamble:

The GS < 50 connections were forecasted using a Yr24Plus variable, reflecting the period starting in 2024 going forward, reflecting 171 fewer customers beginning in 2024.

Question(s):

- a) Please explain what happened in January 2024 to trigger the need for this variable.
- b) Please explain why the reduction in customer connections is expected to persist through the test period.
- c) Please provide the customer connection count for all months known in 2024 and 2025.

3-Staff-127

Ref. 1: Exhibit 3 / Tab 1 / Schedule 1 / Attachment B / pp. 31-40 (pdf pp. 54-63)

Ref. 2: Exhibit 3 / Attachment 3-1-1

Preamble:

Customer Models are provided for Residential, GS < 50, GS < 1,500, and a connection model is provided for streetlights.

Question(s):

- a) Please explain the derivation of the customer / connection forecasts for all remaining rate classes.
- b) Please provide number of connections expected by year and rate class based on discussions with prospective customers.
- c) Where expert judgement was used in forecasting, please identify the information considered by the expert.
- d) Please explain how the information used extends to 2030.

3-Staff-128

Ref. 1: Exhibit 3 / Tab 1 / Schedule 1 / Attachment B / pp. 31-36 (pdf pp. 54-59)

Preamble:

XHeat, XCool, and XOther explanatory variables are used in several rate classes.

Question(s):

- a) Please provide the composition of XOther variables (XOtherRes, XOtherGS50, XOtherGS1000, XOtherGS1500)
- b) Please provide the methodology for forecasting the XOther variables.
- c) Please provide the derivation of the historic and forecast XOther variables.

3-Staff-129

Ref. 1: Exhibit 3 / Tab 1 / Schedule 1 / Attachment B / p. 31 (pdf p. 54)

Question(s):

- a) Please provide the reason for the lower load in 2015 and 2016 that necessitated the Yr15 and Yr16 variables.

3-Staff-130

Ref. 1: Exhibit 3 / Tab 1 / Schedule 1 / Attachment B / pp. 15, 33 (pdf pp. 38, 56)

Preamble:

Excluding 2020 and 2021, the GS < 50 energy forecast exhibited growth from 2019 to 2024. There is no variable which would capture growth over time.

Question(s):

- a) As a scenario, please create a forecast which uses a trend variable that takes a value of 1 in January 2013, increasing by 1 each month, and reaching a value of 216 in December 2030.
 - i. Please include all regression output and resulting forecast.

Exhibit 4 – Operating Costs

4-Staff-131

Extreme Weather

Ref. 1: Exhibit 4 / Tab 1 / schedule 1 / p. 1 (pdf p. 11)

Question(s):

- a) Reference 1 states that “Climate projections from the City of Ottawa, in partnership with the National Capital Commission and Environment and Climate Change Canada, confirm that these severe weather impacts are expected to intensify across the National Capital Region in the coming decades.” Please provide the climate projections and sources of information that support this statement.
- b) Please explain in detail how Hydro Ottawa budgeted for additional cost increases for the OM&A programs (i.e. Vegetation Management, Information Management and Technology, Engineering & Design, and System Operations and 24/7 Maintenance) involved in the efforts to prepare for and respond to projected severe weather events for the forecast period.
 - i) Please provide additional cost increases related to the extreme weather that are embedded in each OM&A program in (b).

4-Staff-132

OM&A Cost Drivers

Ref. 1: Exhibit 4 / HOL_Attachment 4-1-2(D) / Appendix 2-JB

Ref. 2: Exhibit 4 / Tab 1 / Schedule 2 / p. 5 (pdf p. 46)

Preamble:

Reference 1 shows that major weather events contributed to \$8.4M in OM&A cost increase (reference 2) in 2023 and the labour strike added another \$5.9M in the same year (the total cost for these categories is \$14.3M). In 2024, the table shows a cost reduction of \$6.5M in 'Other Costs' category. Hydro Ottawa states in reference 2 that the cost reduction of \$6.5M in 2024 reflects the one-time costs from the storms and labour strike in previous year not recurring.

Question(s):

- a) Please explain in detail why the cost reduction from the storms and labour strike in 2024 was only \$6.5M which is less than half of the cost increase of \$14.3M in these two categories in the previous year. Please explain whether the rest of the cost increase (\$7.8M) reflect sustained increased cost of storms or for other reasons.

4-Staff-133

Enterprise Asset Management (EAM) System

Ref. 1: Exhibit 4 / Tab 1 / Schedule 1 / Attachment A / pp. 7-16 (pdf pp. 26-35)

Ref. 2: Exhibit 4 / Tab 1 / Schedule 2 / p. 39 (pdf p. 80)

Question(s):

- a) In reference 1, Hydro Ottawa states that EAM system will replace disparate systems with a unified platform, facilitating real-time data collection and condition based monitoring, thereby extending asset longevity and reducing downtime. Please explain the current systems that Hydro Ottawa has been using prior to the implementation of the EAM system.
- b) Please provide an actual/forecast annual cost for the current systems being used for the 2021 to 2025 period.
- c) Did Hydro Ottawa consider other alternatives to replace the current systems? If so, please explain why the EAM system was chosen and whether it is the most cost-effective option.
- d) With the efficiency gains through the EAM deployment, has Hydro Ottawa estimated any cost savings associated with switching to the EAM system?
 - i. If so, please provide the estimated cost savings (per year) for the forecast period.
 - ii. Has Hydro Ottawa incorporated the cost savings into this application? If so, please identify where in the application.

- e) From reference 2, the total EAM system cost in 2026 is \$3.0M which accounts 48% of the total cost increase of \$6.3M in the Engineering & Design OM&A program in 2026. Is there an urgent need to deploy the EAM system in 2026? Please explain.
- f) Based on Table 4 in reference 1, the implementation cost of EAM is forecast at \$2M per year in 2026 and 2027 and is expected to decrease to \$1M in 2028. Please explain why the implementation costs are higher in 2026 and 2027 than in 2028.
- g) When is the EAM system expected to be implemented in 2026?

4-Staff-134

Testing, Inspection, and Maintenance OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / pp. 10-19 (pdf pp. 51-60)

Question(s):

- a) Table 5 in the reference shows a comparison of asset/activity descriptions for the Testing Inspection & Maintenance Activity (Base Program) and the 2026-2030 Program Enhancements. For each of the asset/systems category, please provide the following:
 - i. Please provide expected cost increases or decreases by implementing the program enhancements in 2026 compared to the base program.
 - ii. Please provide the main drivers of cost increases/decreases in a) i.
 - iii. The program cost is forecast to increase by \$6.1M in 2026. Please explain how Hydro Ottawa determined the cost for each asset/system category in a) i.
 - iv. Did Hydro Ottawa perform any analysis to determine whether there is any future cost saving that would be realized to offset the cost increases from the program enhancements? If so, please provide any supporting documents.
- b) Hydro Ottawa states that historical reliability data indicates a slight increase in equipment failures since 2021, particularly in overhead assets and it has experienced a relatively high number of outages each year due to overhead switches, underground transformers and cables, which do not correlate to the condition information and resulting health indices. Please explain what caused these equipment failures.

4-Staff-135

Testing, Inspection, and Maintenance OM&A Program – Drone-based Inspection

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / pp. 10-19 (pdf pp. 51-60)

Question(s):

- a) Has the inspection cycle changed for the IR Scanning of equipment from the ground to using a drone?
- b) What permits are required to operate drones for business purposes within the City of Ottawa / Municipality of Casselman (municipal, provincial, federal)?
Please provide the following information as part of this response:
 - i. Has Hydro Ottawa been through the process of obtaining these permits?
 - ii. How much of the service area is located in areas where permits will not be allowed?
- c) Will Hydro Ottawa continue with the ground scan in areas where the drone scan is not permitted?
- d) Will Hydro Ottawa personnel or its contractor(s) be performing the drone scan?
- e) What additional information will be collected with the drone scan and how it will be used?
- f) Hydro Ottawa states that it “will pilot drone inspections in 2025 to gather more accurate visual and infrared scan information on overhead distribution assets, as compared to ground-based inspections. Results from this initiative will inform the basis of the program commencing in 2026.” Please provide more detail on the results from the drone-based inspection program to date.
- g) What are the total estimated capital and OM&A costs of the drone-based inspection program per year from 2026 to 2030?
- h) Did Hydro Ottawa consider other cost-effective options for advanced inspection technologies besides drone-based inspection? If so, please explain whether the drone inspection technology is the most cost-effective option compared to other advanced inspection technologies that were considered or not. If not, please explain why Hydro Ottawa chose the drone-based inspection technology.

4-Staff-136

Ref. 1: Exhibit 2 / Tab 5 / Schedule 8 / p. 49 (Table 2) (pdf Exhibit 2 Part 4, p. 413)

Ref. 2: Exhibit 4 / Tab 1 / Schedule 2 / p. 19 (pdf p. 60)

Ref. 3: Exhibit 4 / Tab 1 / Schedule 3 / Attachment C / p.17 (pdf p. 203)

Ref. 4: Exhibit 4 / Tab 1 / Schedule 3 / p. 2 (pdf p. 113)

Ref. 5: Exhibit 1 / Tab 4 / Schedule 1 / p. 44 (pdf Exhibit 1 Part 2, p. 44)

Preamble:

The following high-level NWS cost breakdown was provided by Hydro Ottawa:

Capital	
Non-Wires Capital Upgrades	\$61.2 M
Expense	
Other Revenue Expenses – NWS	\$10.0 M

Non-Wires Maintenance	<u>\$13.4 M</u>
Total Proposed NWS Spending (excluding external funding)	\$84.6 M

Hydro Ottawa notes that CDM staffing may continue into 2026-2030, but the CDM activities proposed in this application are beyond the scope of IESO's eDSM framework. Hydro Ottawa plans on adding 177 new positions between 2024-2030.

Hydro Ottawa notes that its testing, inspection, and maintenance program will be expanded to include a new program for BESS and monitoring services of third-party NWS. This includes a \$2.8M annual program that leverages internal and external resources to monitor, control, dispatch, and predict demand.

Question(s):

- Please confirm if the total NWS funding amount requested (\$84.6M) includes staffing costs associated with each of the NWS initiatives.
- Please clarify the OM&A cost and the number of staff associated with each NWS initiative. How much is attributable to existing CDM/eDSM as opposed to new NWS initiatives? Refer to Table 5 below for guidance.
- Please clarify how many of the 177 new positions are attributable to NWS and DERs.
- Please confirm if and how the OM&A costs associated with staffing and NWS integration have been considered in Hydro Ottawa's assessment of each NWS initiatives' cost effectiveness.

Table 5: Staffing Breakdown (\$ and #) by NWS Initiative

NWS Initiative	# Staff		\$ Staffing Cost	
	Existing	New	Existing	New
NWCSP – Save on Energy Retrofit Adder				
NWCSP –Residential DR				
NWCSP – Commercial DR				
NWCSP – Solar PV and Energy Storage				
BESS (West 28 kV)				
BESS (Bells Corners/ Bayshore 8 kV)				
BESS (Casselman 8 kV)				
BESS (Core 13 kV, West 13 kV)				
Etc. – Add for each individual NWS program				

4-Staff-137

OM&A Program Costs and New Positions by Program Cost

Ref. 1: Exhibit 4 / HOL_Attachment 4-1-2(B) / Tab App.2-JC_OMA Programs and Exhibit 4 / Tab 1 / Schedule 2 / pp. 18-66 (pdf pp. 59-107)

Ref. 2: Exhibit 4 / Tab 1 / Schedule 3 / Attachment C / Table 1 / p. 3 (pdf p. 189)

Ref. 3: Exhibit 4 / Tab 1 / Schedule 3 / Attachment A / Table 10 / p. 16 (pdf p. 144)

Preamble:

In reference 1, Hydro Ottawa provides OM&A program costs and variance analysis with explanations for the cost increases which include additional costs associated with new positions.

Reference 2 shows new positions forecast for 2024 – 2030 without vacancy assumptions.

Reference 3 shows the number of FTEs (Appendix 2-K) which is derived by applying a vacancy rate to new positions.

OEB staff notes that Hydro Ottawa's explanations for the cost increases resulting in new positions being added (reference 1) are based on the forecast new positions forecast prior to the vacancy rate of 8% being applied (shown in reference 2).

Question(s):

- a) Are the OM&A costs associated with new positions in reference 1 derived based on forecast new positions shown in reference 2 or the number of FTEs in reference 3?
 - i. If the costs are derived based on new positions in reference 2, please provide a rationale for this approach.

4-Staff-138

Underground Locates OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / Tables 8 and 9 / pp. 24-25 (pdf pp. 65-66)

Question(s):

- a) Please update Tables 8 and 9 to reflect 2024 actual data.
- b) OEB staff is not able to reconcile the locate costs between Table 8 and Table 9. Please provide additional calculations and explanations to reconcile the locate costs between the two tables. Please provide the following information in the explanations:
 - i. For Table 9, does the "Average Cost per Locate" represent the total cost per locate which includes both internal and external cost?

- ii. For Table 9, please confirm that the “Total External Locate Deliver Services Costs” does not include internal locate costs.
- iii. For Table 9, is Ontario One Call cost included in the calculations?
- c) Please explain why the underground locates expenditures are forecast to increase to \$6,027 in 2026 from \$5,285 in 2025 (Table 8) when the number of locates is forecast to remain unchanged at 61,410 in 2026 (Table 9) compared to 2025, and the average cost per locate is forecast to decline to \$86.16 in 2026 from \$87.40 in 2025 (Table 9).

4-Staff-139

Vegetation Management OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / pp. 19-22 (pdf pp. 60-63)

Ref. 2: Exhibit 1 / Tab 3 / Schedule 4 / p. 23 (pdf p. 543)

Ref. 3: Exhibit 1 / Tab 3 / Schedule 4 / p. 28 (pdf p. 548)

Question(s):

- a) Hydro Ottawa states that the program includes Emergency Vegetation Management to respond to storms or imminent safety threats as well as the removal of trees infested with invasive species. Please provide the actual amounts spent and budgeted for Emergency Vegetation Management each year from 2021 to 2026.
- b) In reference 1, Hydro Ottawa states that it plans to continue to leverage the use of Overstory, a software solution for optimizing vegetation management practices and states that the implementation of the Overstory solution will facilitate precise risk assessment. Reference 3 states that in 2023 Hydro Ottawa implemented Overstory that enhances efficiency. Please provide the following.
 - i. The statements above about the timing of the implementation of Overstory appear to contradict each other. Has Overstory been implemented already? If so, when? If not, when will it be implemented?
 - ii. Table 2 in reference 2 shows no productivity benefits for the 2021-2025 period. If Overstory was implemented in 2023, please explain why there are no productivity benefits associated with this period.
 - iii. Please provide an annual subscription cost of this software from the implementation date to the end of 2026.
- c) Hydro Ottawa states that the majority of tree trimming is performed by third-party contractors whose costs continue to rise. Please also provide the following:
 - i. Please explain the procurement process by which Hydro Ottawa determined the third-party contractors.
 - ii. Please provide an annual actual/forecast tree trimming cost performed by third-party contractors from 2021 to 2026.

- d) Are there any new positions forecast under the Vegetation Management program in 2024, 2025, and 2026? If so, please indicate how many as well as provide job titles and a brief description of job responsibilities.
- e) Table 7 in reference 1 shows the program cost increased by \$2.9M (131%) from \$3.8M in 2021 to \$6.7M in 2022 due primarily to the Derecho storm. Table 7 also shows that although the costs decreased in 2023 from 2022, they still remained high, ranging from \$5.8M to \$6.3M from 2023 to 2026. Hydro Ottawa states several factors including severe weather, high tree coverage, and inflationary pressures (page 22 of reference 1) necessitate the proposed annual spending level. Please provide the Vegetation Management Program cost breakdown per year from 2021 to 2026 to demonstrate how the forementioned factors above have kept the programs cost relatively high since 2022.

4-Staff-140

Station Maintenance OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / pp. 25-31 (pdf p. 66-72)

Question(s):

- a) Table 11 in the reference shows a comparison of asset/activity descriptions for the Testing Inspection & Maintenance Activity (Base Program) and the 2026-2030 Program Enhancements. For each of the asset categories, please provide the following:
 - v. Please provide expected cost increases or decreases by implementing the program enhancements in 2026 compared to the base program.
 - vi. Please provide the main drivers of cost increases/decreases associated with each asset category in a) i.
 - vii. Hydro Ottawa states that the program will advance the use of predictive condition based maintenance to enhance efficiency and mitigate unexpected failures as well as leverage the improvements made to data collection and advanced analysis techniques. Did Hydro Ottawa perform any analysis to determine whether there is any future cost saving from efficiency gains/improvements that would be realized to offset the cost increases from the program enhancements? If so, please provide any supporting documents.
- b) OEB staff notes that although the year-over-year cost increase is less than materiality threshold, the rate of cost increase for the 2024-2026 period is higher than the 2021-2023 period. Please provide the following:
 - i. Please explain in detail any factors that contribute to the higher rate of cost increase for the 2024-2026 period.

- ii. Please provide the number of new positions hired per year, job titles, and a description of job responsibilities for each job title.
- c) Hydro Ottawa states that it has allocated additional funds for reactive maintenance from 2026-2030 to address unanticipated situations. Please provide the following:
 - i. How many unanticipated situations occurred between 2021-2024 and what were they?
 - ii. Please provide additional costs incurred per year as a result of unanticipated situations between 2021-2024 in c) i.
 - iii. What is the total annual amount of additional funds allocated to reactive maintenance from 2026-2030 to address unanticipated situations?
 - iv. Please explain how Hydro Ottawa determined the forecast cost for reactive maintenance for the 2026-2030 period.

4-Staff-141

Distribution Overhead and Underground Maintenance OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / pp. 31-33 (pdf pp. 72-74)

Ref. 2: Exhibit 1 / Tab 3 Schedule 4 / Table 4 / pp. 23-24 (pdf pp. 543-544)

Question(s):

- a) Table 12 in reference 1 shows the program cost increase of \$0.5M in 2022 and \$5.5M in 2023. Hydro Ottawa states that the cost increase in 2023 was due to reactive maintenance to respond to unexpected severe weather events. Also, several of these extreme weather events occurred during the 84-day labour strike, so contract resources were employed. Please provide the following:
 - i. Given the severe damages of the 2022 Derecho storm, please explain why the cost increase in 2023 was significantly higher than the cost increase in 2022.
 - ii. Please provide the costs of contract resources that were employed by Hydro Ottawa in 2023. Please explain how the contracted resources were chosen.
- b) In reference 1, Hydro Ottawa states that it will expand the use of its Salesforce Field Services platform. Reference 2 shows that Salesforce Field Service will result in \$0.8M productivity benefits for the 2026-2030 period. Please provide the following information:
 - i. When will the expansion of the Salesforce Field Services start in 2026 and is the timing of the expansion still as planned?
 - ii. Table 12 in reference 1 shows that the program cost is forecast to decrease by \$301k in 2026 from 2025. Please explain whether this

decrease is a result of the productivity benefits of the expansion of the Salesforce Field Service which is embedded to the program cost in 2026?

4-Staff-142

Metering OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / pp. 33-35 (pdf pp. 74-76)

Ref. 2: Exhibit 1 / Tab 3 Schedule 4 / Table 4 / pp. 23-24 (pdf pp. 543-544)

Ref. 3: Exhibit 1 / Tab 1 / Schedule 2 / p. 6 (pdf p. 47)

Question(s):

- a) Hydro Ottawa states that compensation cost is the main cost driver in this program. Please provide a number of actual and forecast positions and per year from 2021 to 2026. Please also provide job titles and a description of responsibilities for each job title.
- b) Reference 1 states that a significant initiative during the 2026-2030 period will be the deployment of AMI 2.0 which will contribute to greater operational efficiency. Please provide the following:
 - i. Please describe the operational efficiency gains from AMI 2.0.
 - ii. Is the estimated forecast OM&A cost associated with the AMI 2.0 deployment approximately \$0.7M (reference 3)? If not, please provide the estimated cost.
 - iii. Did Hydro Ottawa perform any analysis to determine whether there is any future cost saving from efficiency gains/improvements that would be realized to offset the cost increase from the deployment of AMI 2.0? If so, please provide any supporting documents.
 - iv. Table 4 in reference 2 shows that the productivity benefits resulting from the Net Metering Automation initiative are forecast at \$6.8M for the 2026-2030 period. Are there any productivity benefits associated with the AMI 2.0 initiative included in the \$6.8M amount?

4-Staff-143

System Operations & 24/7 Maintenance OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / pp. 35-37 (pdf pp. 76-78)

Question(s):

- a) Hydro Ottawa states its priorities and goals for this program (e.g. enhancing real time monitoring and control, streamlining outages response, ongoing technology upgrades and process optimization, etc.) over the rate term in section 3.7.1. Please explain in further detail what initiatives will be taken by Hydro Ottawa to meet these priorities and goals over the 2026-2030 period.

- b) Please provide a summary of reactive maintenance activities that resulted in the \$4.6M cost increase in 2022 from 2021.
- c) Please explain in further detail the increased cost of \$1.1M in 2023 associated with the strike (e.g. breakdown of the costs, drivers of the increase, etc.).
- d) Are there any new positions forecast for 2026? If so, please provide a number of positions, job titles and job responsibilities.

4-Staff-144

Engineering & Design OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / Section 3.8.2 / p. 39 (pdf pp. 80-81)

Question(s):

- a) In 2024, Hydro Ottawa states that the Engineering & Design OM&A program cost is forecast to increase by \$1.5M due to the addition of 17 new positions related to the growing number of load requests and planned investments in grid modernization and electrification activities. Please provide the following:
 - i. Explain how Hydro Ottawa determined the number of positions required and provide any underlying calculations to support how the 17 new positions were determined.
 - ii. Please provide job titles and the number of new positions associated with each title.
- b) In 2026, the forecast total cost increase of \$6.3M in Engineering & Design OM&A program is partly due to the \$2.2M increase in compensation which includes 22 incremental positions to support system expansion, project volumes and grid resilience. Please provide the following:
 - i. Explain how Hydro Ottawa determined the number of positions required and provide any underlying calculations to support how the 22 new positions were determined.
 - ii. Please provide job titles and the number of new positions associated with each title.
 - iii. Has Hydro Ottawa considered phasing the hiring of these positions over the 5-year period?

4-Staff-145

Distribution Support OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / pp. 40-42 (pdf pp. 81-83)

Ref. 2: Exhibit 1 / Tab 3 Schedule 4 / Table 4 / pp. 23-24 (pdf pp. 543-544)

Question(s):

- a) In reference 1, Hydro Ottawa states that costs in the Distribution Support Program are driven by salaries and benefits, net of allocations to capital,

Maintenance, and Services to Third Parties work, non-capital tools, safety gear, and office expenses. Please provide actual/forecast cost for each of these drivers for 2021 to 2026.

- b) Please explain the third party services that Hydro Ottawa has used and will use for the 2021 to 2026 period.
- c) Reference 1 states that the goals for this program are continuous improvement in processes, leveraging technology to enhance accuracy and efficiency, and aligning with regulatory and industry standards. In addition, the introduction of the Salesforce CRM platform to the Service Desk team has created efficiency gains. Table 4 in reference 2 shows the productivity benefits from the CRM initiative for the 2021 to 2030 period are for capital expense, capital depreciation and services to third parties. Are there any cost savings realized as part of the OM&A costs from 2021 to 2030?
 - i. If so in response to c), please provide the OM&A cost saving for 2026. Please comment whether the cost savings have been embedded in the program cost in Table 16 of reference 1.
 - ii. If not, please explain why there are no cost savings resulting from the efficiency gains stated in reference 1.

4-Staff-146

Distribution Support OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / pp. 42-43 (pdf pp. 83-84)

Question(s):

- a) Although Table 17 in reference 1 shows no material cost increases for the 2021-2026 period, OEB staff notes that the rate of increase has changed from a relatively flat growth from 2021-2023 to a much higher growth rate from 2024 to 2026. Please provide the following:
 - i. Please provide a reason for the sharp increase between the 2024-2026 period.
 - ii. Is the increasing trend expected to continue into the forecast period to 2030? Please explain.

4-Staff-147

Collections OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / pp. 43-45 (pdf pp. 84-86)

Ref. 2: Exhibit 1 / Tab 3 / Schedule 4 / Sections 3.2.3 and 3.2.5 / pp. 26 and 28 (pdf Exhibit 1 part 1, pp. 546, 548)

Question(s):

- a) Please describe how bad debt expenses are calculated for the forecast years.

- b) Please explain the increasing trend in the Collections OM&A program cost, given that Hydro Ottawa is implementing the initiatives found in references 1 and 2 to address collections issues and improve efficiency.

4-Staff-148

Customer Billing OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / pp. 45-46 (pdf pp. 86-87)

Ref. 2: Exhibit 1 / Tab 3 / Schedule 4 / p. 25 (pdf Exhibit 1 part 1 p. 545)

Question(s):

- a) Please describe how the Meter-to-Cash program (reference 1) has improved customer experience and billing accuracy, and provide the savings achieved as well as projected savings from this program.
- b) In reference 1, the forecasted expense for 2024 is expected to increase by \$1.3M compared to 2023. This is primarily driven by higher IT costs related to Meter-to-Cash (\$0.6M), finance-related costs to support customer billing (\$0.4M), and compensation adjustments (\$0.3M).
- i) Please explain factors that contributed to the Meter-to-Cash IT cost increase of \$0.6M in 2024. Is this a one-time increase or recurring expense?
- ii) Please explain the finance related costs that contributed to the \$0.4M increase in 2024.
- c) Hydro Ottawa stated in reference 2 (lines 14-16) that online billing enrollment was projected to be maintained at 80% through 2030.
- i. Does Hydro Ottawa have any planned initiatives to increase the enrollment above 80%? If so, please explain.

4-Staff-149

Customer & Community Relations OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / pp. 46-48 (pdf pp. 87-89)

Ref. 2: Exhibit 2 / Tab 5 / Schedule 9 / p. 1 / (pdf Exhibit 2 part 4, p. 579)

Ref. 3: Exhibit 1 / Tab 3 / Schedule 4 / Table 4 and Section 3.2.8 / pp. 23, 30 (pdf Exhibit 1 part 1 pp. 543, 550)

Question(s):

- a) The projected expense for this program in 2024 is \$1.3M higher than 2023, mainly due to an increase in compensation related to the strike (\$1.1M) and higher external customer contact center cost (\$0.2M).
- i) Please explain in further detail the \$1.1M increase in compensation costs in 2024 in relation to the strike. How many positions were involved? What were the expenses incurred?

- ii) Please explain in further detail the increased contract rates and volumes of calls which contributed to the \$0.2M increase in the external customer contact center costs in 2024.
- b) For 2026, Hydro Ottawa projects an increase of \$1.4M compared to 2025 due to cloud computing and subscription costs related to Customer Relationship Management, My Account enhancements, and one additional IT position (reference 1).
 - i) In reference 2, the OM&A cost for customer engagement platform amounts to \$4.3M for the 2026 to 2030 period. This includes MyAccount as one of the initiatives under this program. Please provide the specific cost related to MyAccount enhancements for 2026 and provide both the quantitative and qualitative benefits of these enhancements. Please explain whether this is expected to be completed by 2026 or phased through 2030.
 - ii) Please provide a table which shows the total cloud computing implementation subscription cost per year from 2021 to 2026.
 - iii) Please confirm if the additional IT position in 2026 will be dedicated solely to this program. If not, what are the other responsibilities for this position?
- c) Reference 1 refers to the impact of the Move-In Move-Out Automation initiative as part of Hydro Ottawa's Facilitating Innovation and Continuous Improvement. Table 4 in Reference 3 shows that the productivity benefit from the Move-In Move-Out Automation initiative is forecast to be \$0.9M for the 2026-2030 period. Please explain whether the forecast productivity saving from the Move-In Move-Out Automation initiative has been incorporated into the Customer and Community Relations OM&A Program cost in 2026, given that the forecast cost increase in this program is above the materiality threshold (\$1.4M for the year).

4-Staff-150

Information Management and Technology OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2/ pp. 48-53 (pdf pp. 89-94)

Ref. 2: Exhibit 4 / Tab 1 / Schedule 2 / pp. 47-48 (pdf pp. 88-89)

Question(s):

- a) Hydro Ottawa's Customer & Community Relations program includes initiatives aimed at improving customer experience such as maintaining IT-based customer platforms. The cost for these initiatives were included in the forecasted expense (reference 2, page 89, lines 13-16). Within the Information Management and Technology OM&A program, Hydro Ottawa also mentioned enhancing customer experience as a key area of focus.

- i. Please clarify the distinction between the two programs, Information Management and Technology and Customer and Community Relations, in terms of costs allocated for customer experience enhancement.
 - ii. Please confirm that the initiatives related to similar customer experience objectives were not accounted for more than once.
- b) Please provide the savings realized from the implementation of Esker and Google Workspace in 2022, as described in reference 1.
- c) For the cost increase of \$1.8M in 2024 from 2023 shown in reference 1, please provide a breakdown of the increase into consulting costs, technology costs, and salaries. Please also explain whether consultant costs and technology costs are one-time expenses or recurring expenses.
- d) As stated in reference 1, the program expense in 2025 is projected to increase by \$1.4M primarily due to increases in compensation (\$0.7M), additional costs for consultancy, IT contracts and subscriptions (\$0.5M), and rental for a new backup data center (\$0.2M).
 - i. Please explain the additional consulting costs which contributed to the \$0.5M increase. Is this a one-time expense or recurring expense?
 - ii. Please confirm whether the location of the backup data centre aligns with the recommendation from the Derecho storm action report.
 - iii. Has Hydro Ottawa considered other alternative locations for the backup data center. If yes, was a cost comparison considered? If not, please explain why.
- e) Based on reference 1, the forecasted expense in 2026 is projected to increase by \$1.7M primarily due to annual inflationary increases in compensation and five new positions (\$1M), inflationary increases to software subscription fees (\$0.4M), and the implementation of AI-driven solutions (\$0.3M).
 - i. Please explain the five new positions being filled under this program, including their respective key roles and responsibilities. Are these positions dedicated solely to Cloud Computing, Cyber Security and Data & Systems Integration and Program Management?
 - ii. Please clarify whether Hydro Ottawa has considered phasing the hiring of these positions over the 5-year period, and what consideration was made to support the decision to hire all five positions in 2026.
 - iii. Did Hydro Ottawa explore other alternatives such as contracting or outsourcing these five positions? Please explain.
 - iv. Please explain the specific AI-driven solutions being considered in the forecast. Are these one-time costs or subscription-based?
 - v. Please explain the urgency of these AI-solutions and outline the implementation plan. Will all these initiatives be implemented in 2026?

- vi. Given the significant expenses related to software, cloud-based computing, and subscription costs, has Hydro Ottawa pursued negotiations with other vendors to get more favourable rates?
- vii. Please provide the basis for the increase in software subscription fees.
- f) Please provide a table detailing Hydro Ottawa's major subscription costs from 2021-2026.
- g) Are there any estimated cost savings from these above initiatives that have been incorporated in the 2026 forecast? If so, please explain where they have been incorporated into the application.

4-Staff-151

Safety, Environment & Business Continuity OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / pp. 53-55 (pdf pp. 94-96)

Ref. 2: Exhibit 4 / Tab 1 / Schedule 3 / Attachment C / Table 9 / p. 32 (pdf p. 218)

Question(s):

- a) Please explain the reason(s) for the \$952k increase (36%) in 2024 compared to 2023 (Table 22 in reference 1).
- b) Please explain the four new positions being hired for 2026 and one for 2028, including their roles and responsibilities as shown in reference 2.
- c) Please explain the considerations made in hiring all four positions in 2026 rather than spreading out hiring through the five-year period.

4-Staff-152

Human Resources OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / p. 55-57 (pdf pp. 96-98)

Ref. 2: HOL_Attachment 4-1-2(B) - OEB Appendix 2-JC-OM&A Programs Table_20250415.xlsx

Ref. 3: Exhibit 4 / Tab 1 / Schedule 3 / Attachment C / Table 11 / p. 36 (pdf pp. 222)

Question(s):

- a) Please explain in more detail the additional costs incurred in 2023 due to the labour strike that contributed to the \$1.1M increase (reference 1).
- b) Please explain the positions, including their respective roles and responsibilities, for the new hire in 2024 and the two HR positions planned for 2026 as shown in reference 3.

4-Staff-153

Supply Chain OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / pp. 57-59 (pdf pp. 98-100)

**Ref. 2: HOL_Attachment 4-1-2(B) - OEB Appendix 2-JC-OM&A Programs
Table_20250415.xlsx**

Question(s):

- a) As part of its 2026-2030 Business Priorities for the program, Hydro Ottawa stated in reference 1 that it will leverage digital tools and data analytics to improve demand forecasting, inventory optimization, and availability of materials while minimizing carrying costs. Does Hydro Ottawa have any cost savings calculated for these initiatives. If so, please provide the amounts and indicate where they have been incorporated into the 2026 forecast.

4-Staff-154

Facilities OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / p. 59-60 (pdf p. 100-101)

Question(s):

- a) Aside from security costs, what other strike-related costs were incurred in 2023 in relation to the \$3.9M increase.
- b) How many days was strike-related security hired for?
- c) Please confirm amount, percentage increase, and the reason for the increase in insurance payment in 2024. Is this expected to continue in the forecast years?
- d) Please provide the cost and explain the scope for the consultant for the environmental initiatives work done in 2024.
- e) Does Hydro Ottawa have any cost savings estimated with regards to the initiatives stated in reference 1 (e.g. energy efficiency and flexible and well-maintained workspaces)? If so, please comment whether have they have been incorporated the 2026 forecast and where they are located in the application?

4-Staff-155

Finance OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / pp. 60-62 (pdf pp. 101-103)

Ref. 2: Exhibit 4 / Tab 1 / Schedule 3 / Attachment C / p. 39 (pdf p. 225)

Question(s):

- a) Given that the compensation is the primary cost driver and the headcount within the program has remained relatively flat over the past four years (lines 12-14 in reference 1), please explain the 16% decrease in the program cost in 2024.
- b) Please describe the complexity and evolving requirements noted in reference 2 (lines 14-17) that led to the required increase in Finance staff.

- c) Please explain the new position hired in 2024, as well as the three positions planned for 2027 through 2029, including their respective roles and responsibilities as shown in reference 2 (table 12).

4-Staff-156

Corporate Costs OM&A Program

Ref. 1: Exhibit 4 / Tab 1 / Schedule 2 / pp. 64-66 (pdf pp. 105-107)

Ref. 2: HOL_Attachment 4-1-2(B) - OEB Appendix 2-JC-OM&A Programs Table_20250415.xlsx

Question(s):

- a) Please explain in further detail the corporate function activities related to the strike and storm in 2023 that contributed to the increase in costs of \$1.5M.

4-Staff-157

Merit Increases

Ref. 1: Exhibit 4 / Tab 1 / Schedule 3 / Attachment 1 / pp. 3-4 (pdf pp. 131-132)

Question(s):

- a) Please provide sources of information that Hydro Ottawa used to forecast its merit increases for management and non-union employees.
- b) Please provide a table that shows the salary projections for the utility and broader public sectors, and consumer price indices that Hydro Ottawa used to determine the merit increases (during the historic period) as well as the resulting merit increase associated with each performance rating. Please comment on whether the merit increases are aligned with these projections.

4-Staff-158

Incentive-Based Pay

Ref. 1: Exhibit 4 / Tab 1 / Schedule 3 / Attachment 1 / pp. 4-5 / (pdf pp. 132-133)

Question(s):

- a) Table 2 in the reference shows the average annual incentive-based pay (\$) for the 2021 to 2023 period for senior management positions and members of the executive team. Please provide the average annual incentive-based pay as a percentage of the average annual salary for senior management and the executive team for each of the years.

4-Staff-1

Ref. 1: Exhibit 4 / Tab 1 / Schedule 3 / p. 10 (pdf p. 138 of pdf)

Question(s):

- a) Please provide a breakdown of the Pension and OPEB amounts between capital and OM&A from the last OEB-approved to 2030, for each year.

4-Staff-159

OM&A - New Positions

Ref. 1: Exhibit 4 / Tab 1 / Schedule 3 / Attachment C / Table 1 / p. 3 (pdf p. 189)

Question(s):

- a) Please explain how Hydro Ottawa determined the number of new positions required for each OM&A Program in Table 1 for 2024 and for the 2026-2030 period.
- i. Please provide any underlying calculations to support how the new positions were determined in 2024 and for the 2026-2030 period.
 - ii. Please provide job titles and the number of new positions associated with each title in a) i.

4-Staff-160

Ref. 1: Exhibit 4 / Tab 1 / Schedule 3 / Attachment C / p. 6 (pdf p. 192)

Preamble:

Hydro Ottawa states that it experienced an unprecedented volume of customer driven growth projects in the 2021-2025 period including the City of Ottawa's Zero Emission Bus project and the Department of National Defence (DND) Dwyer Hill Road project which were not included in the OEB-Approved 2021-2025 rate application.

Question(s):

- a) Please provide a table which shows a breakdown of OM&A costs per year for each of these aforementioned projects as well as any other unforeseen projects which had an impact on OM&A costs that were not included in the OEB-Approved 2021-2025 rate application.

4-Staff-161

Customer Connection and Capacity Program Growth Headcount

Ref. 1: Exhibit 4 / Tab 1 / Schedule 3 / Attachment C / p. 7 (pdf p. 193)

Preamble:

Hydro Ottawa states that its decision to increase headcount in the Distribution Operations, Engineering & Design, and Metering OM&A programs rather than leverage contracted resource was informed by forward looking projections of capital and OM&A program increases for the 2026-2030 period and beyond.

Question(s):

- a) How did Hydro Ottawa determine that increasing the headcount is a more cost-effective option than leveraging contracted services? Please explain in detail.

4-Staff-162

DER and Capacity Connection Request Complexity Headcount

Ref. 1: Exhibit 4 / Tab 1 / Schedule 3 / Attachment C / p. 9 (pdf p. 195)

Question(s):

- a) Please explain how Hydro Ottawa determined that four new Distribution Engineering positions are required to respond to the increased volume and complexity related to DER and Connection Requests in 2024.
- i. Please provide any underlying calculations to support how the four new positions were determined in 2024 if this information is not provided in response to 4-staff-159.
 - ii. Please provide job titles and the number of new positions associated with each title for 2024 if this information is not provided in response to 4-staff-159.

4-Staff-163

Engineering Headcount

Ref. 1: Exhibit 4 / Tab 1 / Schedule 3 / Attachment C / p. 10 (pdf p. 196)

Question(s):

- a) Please explain how Hydro Ottawa determined that ten new engineering positions are required to support the implementation of the ADMS and on-going activities and projects related to the grid modernization strategy in 2024.
- i. Please provide any underlying calculations to support how the ten new positions were determined in 2024 if this information is not provided in response to 4-staff-159.
 - ii. Please provide job titles and the number of new engineering positions associated with each title for 2024 if this information is not provided in response to 4-staff-159.

4-Staff-164

Benefits

Ref. 1: Exhibit 4 / HOL_Attachment 4-1-3(D) / Tab App.2-K_Employee Costs

Question(s):

- a) Please explain drivers of the year-over-year increase in benefit costs (row 24) from 2024 to 2026.

4-Staff-165

Total Compensation for Management

Ref. 1: Exhibit 4 / HOL_Attachment 4-1-3(D) – OEB Appendix 2-K _ Employee Costs_20240415

Ref. 2: Exhibit 4 / Tab 3 / Attachment A / pp. 14-15 (pdf pp. 142-143)

Preamble:

In reference 1, the total compensation amount for management increased by \$4.1M in 2023 while the number of FTEs for management increased by 1.

Reference 2 states that total compensation for management is higher in 2023 due primarily to overtime worked during the period of the strike responding to outages resulting from an exceptionally active summer of lightning strikes, tornados, and heat waves.

Question(s):

- a) Please provide the total compensation increase amount in 2023 as a result of overtime work by management employees noted above.
- b) Please explain the main drivers of the increase.
- c) Please explain or provide a copy of the overtime work agreement for management employees.

4-Staff-166

Wages and Salaries

Ref. 1: Exhibit 4 / Tab 1 / Schedule 3 / Section 2.4 / p. 5 (pdf p. 133)

Question(s):

- a) Reference 1 only shows wage increases for unionized employees. Please provide an average annual salary increase (in %) for management employees per year from 2021 to 2026.

4-Staff-167

Benefit Costs

Ref. 1: Exhibit 4 / Tab 1 / Schedule 3 / Attachment A / Table 9 / p. 15 (pdf p. 143)

Question(s):

- a) Reference 1 states that Hydro Ottawa projected its benefit costs using assumptions based on Mercer's 2024 Anticipated Benefit Costs published in fall 2023. Please provide a copy of Mercer's 2024 Anticipated Benefit Costs.
- b) Please explain the assumptions used to project Hydro Ottawa's benefit costs for 2024-2026.

4-Staff-168

Acquiring Talent, Demand Growth and Competitive Landscape for Talent

Ref. 1: Exhibit 4 / Tab 1 / Schedule 3 / Attachment B / pp. 28-32 (pdf pp. 173-176)

Ref. 2: Exhibit 4 / Tab 1 / Schedule 3 / Attachment B / pp. 15-16 (pdf pp. 160-161)

Ref. 3: Exhibit 4 / Tab 1 / Schedule 3 / Attachment B / pp. 28-32 (pdf pp. 173-176)

Question(s):

- a) Given Hydro Ottawa's effort in sustaining the trades (reference 1), please explain why there are ongoing challenges to recruit apprentices for trades roles such as System Operator and Station Electrician (reference 2). Is this due to the movement of employees to larger utilities for increased compensation, different career opportunities, or for similar roles with reduced workload (as stated in lines 24-26 of reference 1) or other reasons? Please explain.
- b) Reference 2 states that the population in Ottawa has shown the highest growth rate and its population is expected to increase by 15% from 2021 to 2031. This statement appears to contradict another statement in reference 1 which states that an additional challenge for Hydro Ottawa is the limited talent pool to draw from. Please explain why the talent pool is still limited.
- c) Has Hydro Ottawa implemented any measures to determine the effectiveness of its recruitment efforts stated in reference 3? If so, please explain or provide the resulting measures (if available).

4-Staff-169

Hybrid Work

Ref. 1: Exhibit 4 / Tab 1 / Schedule 3 / Attachment B / p. 17 (pdf p. 162)

Question(s):

- a) What are Hydro Ottawa's current hybrid work arrangements as a structured program? Please explain.
- b) Reference 1 states that the nature of Hydro Ottawa's work requires its employees to be located in or near Ottawa which can limit the size of the talent pool for some skill sets. Please provide a percentage of FTEs (per year) that have to be located in or near Ottawa as part of the total workforce from 2021 to 2026.

4-Staff-170

Ref. 1: Exhibit 4 / Tab 1 / Schedule 3 / Attachment B / pp. 28-32 (pdf pp. 173-176)

Ref. 2: Exhibit 4 / HOL_Attachment 4-1-3(D) / Tab App.2-K_Employee Costs

Question(s):

- a) Table 3 in reference 1 shows that the annual external job postings increased significantly from 131 in 2021 to 247 in 2022 while reference 2 shows the total number of FTE increased by only 10 in 2022. Please explain why the significant increase in job postings in 2022 is not reflected in the total number of FTEs in 2022.

4-Staff-171

Ref. 1: Exhibit 4 / Tab 1 / Schedule 3 / Attachment A / pp. 15-16 (pdf pp. 143-144)

Ref. 2: Exhibit 4 / HOL_Attachment 4-1-3(D) / Tab App.2-K_Employee Costs

Preamble:

Reference 1 states that the vacancy assumption is determined using historical and current trending which includes attrition (retirement and resignations), internal/external environmental factors and forecasting. The actual vacancy in 2022 and 2023 peaked at 12%. However, Hydro Ottawa states recent hiring efforts have been successful and the vacancy assumption is forecasted to continue to reduce. OEB staff notes that Table 10 in the reference shows the vacancy assumption of 10% for 2024 and 8% for 2025 and 2026.

In reference 1, Table 10 in reference 1 shows the 2024-2026 reconciliation of positions to FTEs in Appendix 2K (reference 2).

Question(s):

- a) Please further explain or provide a spreadsheet (or a table) that support the derivation of the vacancy assumption numbers of 10% in 2024 and 8% in 2025 and 2026 based on historical and current trending which includes attrition (retirement and resignations), internal/external environmental factors and forecasting noted above.
- b) Please provide the vacancy rates forecast for the rest of the CIR period (2027-2030).
- c) From the vacancy rates in (b) and Table 10 in the reference, please update the table by adding 4 columns to include years 2027-2030 so that the total number of positions and FTEs add up to 177 and 100 respectively for this period.

4-Staff-172

Shared Services and Corporate Cost Allocation

Ref. 1: Exhibit 4 / Tab 2 / Schedule 1 / pp. 1-7 (pdf p. 277-283)

Ref. 2: Exhibit 1 / Tab 5 / Scheduled 1 / Attachment A / p. 4 (pdf p. 896)

Ref. 3: <https://oec.ca/news/oecandenvari>

Ref. 4: Affiliate Relationships Code (ARC) for Electricity Distributors and Transmitters (Revised March 15, 2010) / Section 2.2.5, p. 8

Preamble:

Reference 1 states that Hydro Ottawa provides shared services to its affiliated companies: Hydro Ottawa Holding Inc., Hydro Ottawa Energy Services Inc. and the other non-regulated entities within Hydro Ottawa Capital Corporation. In addition, Hydro Ottawa provides shared corporate services to Non-Regulated Activities in the same manner as affiliated Service Level Agreements (SLAs).

Reference 2 states that “Hydro Ottawa Holding Inc. (Hydro Ottawa) is a private company wholly owned by the City of Ottawa. We own and operate four primary subsidiary companies: Hydro Ottawa Limited (electricity distribution), Portage Power (renewable energy generation), Enviri (energy solutions) and Hiboo Networks (telecommunications services).”

Reference 3 states that Enviri Holding Inc. (a subsidiary of Hydro Ottawa Holding Inc.) and OEC announced their equal ownership of Tereflex Limited earlier in 2025.

Question(s):

- a) Have there been any changes to Hydro Ottawa’s shared service methodology since its last rebasing application in 2021? If so, please explain and provide additional information of all changes.
- b) If not listed above, please provide additional names of all non-regulated entities that Hydro Ottawa provides or receives shared corporate services to (if any).
- c) Please confirm whether Hydro Ottawa has created new or updated any existing Service Level Agreements (SLAs) for shared services with regards to the additional non-regulated entities listed in question (b) above, and if so, whether such SLAs comply with transfer pricing requirements under the ARC? Please provide the updated Procurement Policy (reference 2) to include additional entitie(s).
- d) Please explain the pricing methodology that Hydro Ottawa has with the new entities, including how costs are allocated.
- e) Please provide updated Appendix 2-N for 2024, 2025 and 2026.

4-Staff-173

Shared Services and Corporate Cost Allocation

Ref. 1: Exhibit 4 / Tab 2 / Schedule 1 / p. 6 (pdf p. 282)

Ref. 2: Affiliate Relationships Code (ARC) for Electricity Distributors and Transmitters (Revised March 15, 2010) / Section 2.2.5, p. 8

Question(s):

- a) The cost of shared corporate services received by Hydro Ottawa from Hydro Ottawa Holding Inc. increased by almost \$1M in 2022 and by \$1.4M in 2023. Please provide the following:
- i. Please explain in detail the main drivers of the increase including events that triggered the demand for executive management time in 2022 and 2023.
 - ii. Reference 2 states that the transfer pricing rules set out in section 2.3 of the ARC do not apply when a utility receives a service, resources, product or use of asset from an affiliate in an emergency situation; a reasonable fully-allocated cost-related price shall be determined afterwards by the parties. Please explain if there were any instances that the cost-related price was determined differently during an emergency situation such as the events that triggered the cost increase in a) i? If yes, please explain in further detail.
- b) Please explain in detail the changing regulatory landscape, energy security priorities, climate change implications, and digital transformation that has necessitated an increase in other services for the period 2021 to 2026 (reference 1). Please also explain what other services are affected.
- c) The costs in Table 4 (reference 1) show an increasing trend in shared corporate services provided by Hydro Ottawa Holding Inc. from 2021 to 2026. Please explain how Hydro Ottawa derived the estimated costs in 2024, 2025, and 2026.

4-Staff-174

Ref. 1: Exhibit 4 / Tab 2 / Schedule 3 / Table 1 / p. 1 (pdf p. 307)

Preamble:

Table 1 in the reference shows that a breakdown of regulatory costs (one-time) by category. OEB staff notes that the total one-time regulatory cost related to the application has increased by \$3.1M (133%) from \$2.3M in the 2021 OEB approved to \$5.4M in 2026.

In its last rebasing application, Hydro Ottawa states that only one Hydro Ottawa external expert witness was engaged during the process, and Hydro Ottawa did not request incremental internal staff costs. OEB staff notes that there is no expert witness cost in 2021 shown in Table 1.

Question(s):

- a) Please explain why there is no expert witness cost shown in the "Expert Witness Cost" line for 2021 in Table 1.
- b) Please explain assumptions or provide calculations that Hydro Ottawa used to derive the estimated one-time regulatory cost for each category for 2026. Please

also explain why the incremental internal staff costs have been included in regulatory costs in this Application when the costs were excluded in the last rebasing application.

4-Staff-175

LEAP

Ref 1: Exhibit 4 / Tab 2 / Schedule 5 / p. 1 (pdf p. 314)

Ref. 2: Filing Requirements, Chapter 2, December 9, 2024, Corrected May 7, 2025

Question(s):

- a) OEB staff was unable to verify Hydro Ottawa's calculated LEAP amount of \$324k in reference 1. OEB staff calculated the LEAP amount for 2026 to be \$372k ($0.12\% \times 2026$ Service Revenue Requirement amount of \$309,993,323). Please explain how Hydro Ottawa derived the LEAP amount of \$324k for 2026.

Exhibit 5 – Cost of Capital

5-Staff-176

Ref. 1: EB-2024-0063 Cost of Capital Decision, March 27, 2025, p. 65

Ref. 2: Chapter 2 Appendices, 2-OA Capital Structure

Question(s):

- a) Please revise Appendices 2 - OA Capital Structure to show the Capitalization Ratio (% and \$), Cost Rate (%), and Return (\$) of both Notional Long-term Debt and Actual Long-term Debt. Please ensure the average of the Notional Long-term Debt and Actual Long-term Debt matches that in the RRWF.

5-Staff-177

Short-Term Debt

Ref. 1: Exhibit 5 / Tab 1 / Schedule 1 / p. 3 (pdf p. 3)

Preamble:

Hydro Ottawa Capital Corporation maintains short-term credit facilities and also has the ability to issue commercial paper to support the liquidity needs of Hydro Ottawa.

Question(s):

- a) Please confirm Hydro Ottawa will apply the deemed OEB short-term debt rate, rather than the actual short-term debt, when borrowing short-term funds from Hydro Ottawa Capital Corporation.

5-Staff-178

Long-Term Debt

Ref. 1: Exhibit 5 / Tab 1 / Schedule 1 / p.4 (pdf p. 4)

Question(s):

- a) As stated in reference 1, Hydro Ottawa Capital Corporation (HOCC) issues long-term debt to support the financing requirements of Hydro Ottawa and the costs associated with the long-term debt are passed on to Hydro Ottawa on the same terms and conditions as HOCC receives from external markets. Please confirm if HOCC includes administration fees or related fees from securing long-term debt for Hydro Ottawa. If yes, please provide details.

5-Staff-179

Anticipated Long-Term Debt

Ref. 1: Exhibit 5 / Tab 1 / Schedule 1 / pp. 6-7 (pdf pp. 6-7)

Ref. 2: HOL _Attachment 5-1-1(B) - OEB Appendix 2-OB-Debt Instruments_20250415

Ref. 3: EB-2019-0261, Settlement Proposal, p. 25

Question(s):

- a) Please explain the methodology Hydro Ottawa has used to forecast the debt rates for the upcoming debts in 2025 and 2026.
- b) Please update Appendix-OA and Appendix-OB and attach the corresponding promissory notes if there are any changes to the forecasted debt.
- c) Hydro Ottawa is planning to secure additional debt in 2025-2026 as mentioned in reference 1, primarily to fund its capital expenditure program and to repay maturing debt. Table 3 of reference 1 shows a total debt amount of \$532M, whereas reference 2 shows the total amount of \$478M. Please explain and reconcile the discrepancies.
- d) In Reference 2, the table showing 2026 long-term debts indicates the most recent debt in 2026 will have a principal of \$55M, which does not align with Table 3 in Reference 1. Please reconcile.
- e) What due diligence has HOCC undertaken to ensure its preferred lender is offering a competitive rate and product?
- f) Has HOCC considered other financial institutions and channels aside from BMO Capital Market to fund its short-term and long-term debt requirement? If not, please explain why.

5-Staff-180

Ref. 1: EB-2019-0261 / HOL_IRR_VECC_part 2 of 2_20200605 / VECC-92 / Figure A / p. 150

Question(s):

- a) In Hydro Ottawa's previous application (EB-2019-0261), Hydro Ottawa responded to a VECC IR by providing a scatter plot showing the weighted average coupon vs weighted average term of Hydro Ottawa compared to other peers to illustrate how Hydro Ottawa financing strategy is beneficial to ratepayers. Please provide an updated copy if available.

5-Staff-181

Ref. 1: Exhibit 5 / Tab 1 / Schedule 1 / Table 4 / p. 8 (pdf p. 8)

Question(s):

- a) Please update Table 4 with the achieved ROE for 2024.

5-Staff-182

Credit Rating Report

Ref. 1: Exhibit 1 / Tab 5 / Schedule 3 / Attachment A / p. 2 (pdf Exhibit 1 part 2 p. 1007)

Question(s):

- a) The Morningstar DBRS Rating Report stated that HOCC's unregulated business segments are riskier compared to its regulated operation. However, these segments only represent a small portion of HOCC earnings and do not materially affect HOCC's overall credit quality. Please explain how HOCC ensures that there is no cross-subsidization between its unregulated and regulated businesses.

Exhibit 6 – Revenue Requirement and Revenue Deficiency or Sufficiency

6-Staff-183

Ref. 1: Exhibit 6 / Tab 2 / Schedule 1 / p. 11 (pdf p. 27), Table 7

Ref. 2: Exhibit 6 / Tab 2 / Schedule 1 / p. 12 (pdf p. 28), Table 8

Preamble:

In Reference 1, Hydro Ottawa provided a reconciliation of the Fixed Asset Continuity Schedule and Schedule 8 Capital Additions in the PILs Workform for 2024 – 2030.

In Reference 2, Hydro Ottawa provided a reconciliation of the Fixed Asset Continuity Schedule and PILs Workform amortization for 2023 – 2030. OEB staff notes that in Row 4, the non-rate-regulated utility assets amortizations and non-rate base assets amortization/transfer are added back to the Appendix 2-BA fixed asset depreciation in

2023 as part of the calculation to arrive at the amortization reported in the PILs Workform.

Question(s):

- a) Please provide the reconciliation outlined in Reference 1 for 2023.
- b) Please confirm the OEB staff's observation related to Table 8.
 - i. Please confirm if the amortization amounts reported in the PILs Workform for 2023 only relate to rate base assets and rate-regulated utility assets.
 - ii. If not, please provide an explanation why the amortization related to non-rate base assets and non-rate-regulated utility assets is reported in the PILs Workform.

6-Staff-184

Ref. 1: Exhibit 6 / HOL_Attachment 6-3-1(B)_Hydro Ottawa 2026-2030 PIL Tax Model_20250604 / Tab H1

Ref. 2: Exhibit 6 / Tab 2 / Schedule 1 / Attachment A: 2023 Tax Return

Preamble:

In both References 1 and 2, Hydro Ottawa indicated that a tax loss of \$2,960,516 incurred in 2023 has been carried back to 2021 to reduce taxable income in that year.

Section 7.2.3 of the 2006 Electricity Distribution Rate Handbook (2006 EDR Report) states the following.

A distributor expecting to have any loss carry-forwards still available on December 31, 2005 must disclose the amount of those loss carry-forwards in the 2006 application and apply them in full to reduce the taxable income calculated in the 2006 regulatory tax calculation. These amounts are to be entered in the 2006 OEB Tax Model.

Question(s):

- a) Please explain why Hydro Ottawa proposes to carry back the 2023 tax loss to the 2021 taxable income instead of carrying it forward, as the guidance stated in the 2006 EDR Report. Please provide any precedent cases where the losses were carried back.
- b) Please provide an updated PILs Workform based on the scenario where the tax loss is carried forward to the bridge and test years.
- c) Please provide a copy of Hydro Ottawa's 2024 Tax Return.

6-Staff-185

Ref. 1: Exhibit 6 / HOL_Attachment 6-3-1(B)_Hydro Ottawa 2026-2030 PIL Tax Model_20250604

Ref. 2: Accounting Procedures Handbook for Electricity Distributors, Article 220, January 1, 2012

Preamble:

In Tab H1 of Reference 1, Hydro Ottawa stated that the estimated base year property tax value is \$3.7M in 2026. The estimated amount is based on current property tax payments with projected increases. Hydro Ottawa further stated that the property tax values are recorded in three USoA accounts:

- Account 6105, Taxes Other Than Income Taxes
- Account 5012, Station Buildings and Fixtures Expense
- Account 5015, Transformer Station Equipment - Operation Supplies and Expenses

Question(s):

- a) Please provide a breakdown of the base year property tax value of \$3.7M by USoA accounts.
- b) Please provide a table outlining the property tax amounts reported in Account 6105 for the years 2023 – 2025, as well as the estimated property tax amounts for the years 2026 – 2030.
 - i. Please explain how the property tax amounts are derived for the test years.
 - ii. If applicable, please explain any variances between the property tax amounts provided in part b) and those provided in the Revenue Requirement Workform for the test years.
 - iii. As defined in Reference 2, Taxes other than income taxes or PILs should only be included in Account 6105. Please restate the property taxes that are booked in other USoA accounts to 6105, if any.

6-Staff-186

Ref. 1: Exhibit 6 / HOL_Attachment 6-3-1(A)_OEB Appendix 2-H - Other Revenue_20250415

Ref. 2: Exhibit 6 / Tab 3 / Schedule 5 / p.7 (pdf p. 221)

Question(s):

- a) Account 4362 – Loss Retire of Utility and Other Property has a sub-category of “Net Book Value and Proceeds”. What is included in this sub-category?
- b) Please confirm that Account 4405 does not contain interest amounts related to DVAs. If not confirmed, please revise Appendix 2-H to remove any interest amounts associated with DVAs.
- c) Reference 2 states that material cash balances are not anticipated for Interest and Dividend Income between 2024 and 2030. Please explain why there are no

projected cash balances between 2024 and 2030, while cash balances were present from 2021 to 2023.

- d) Please confirm that Hydro Ottawa records MicroFit-related revenues under Account 4235. If not, please update Appendix 2-H.

6-Staff-187

Shared Services and Corporate Cost Allocation and Other Revenue

Ref. 1: Exhibit 6 / Tab 3 / Schedule 5 / p. 5 (pdf p. 219)

Ref. 2: Exhibit 4 / HOL_Attachment 4-2-1(A) – OEB – Shared Services and Corporate Cost Allocation_20250415

Ref. 3: Exhibit 6 / HOL Attachment 6-3-1(A) – OEB Appendix 2-H – Other Revenue_20250415

Ref. 4: [Filing Requirements for Electricity Distribution Rate Applications - 2025 Edition for 2026 Rate Applications – Chapter 2, May 7, 2025 / pp. 43-44 \(pdf pp. 49-50\)](#)

Preamble:

In reference 1, Hydro Ottawa states that revenues and costs incurred from the shared services provided and received are recorded in other revenue under USoA Accounts 4325 Revenues from Merchandise and 4330 Costs and Expenses of Merchandising, which is consistent with section 2.4.3.2 of reference 4.

OEB staff notes that the account information stated above is not accurate. According to the Filing Requirements in reference 4:

- Revenue from affiliate transactions should be recorded in Account 4375, Revenues from Non Rate-Regulated Utility and Operations.
- Expenses from affiliate transactions should be recorded in Account 4380, Expenses of Non Rate-Regulated Utility Operations.

In addition, the Filing Requirements state that the balances recorded in Account 4375, Revenues from Non Rate-Regulated Utility Operations, and Account 4380, Expenses of Non Rate-Regulated Utility Operations (reference 3), must reconcile to the balances recorded in Appendix 2-N – Shared Services and Corporate Cost Allocation (reference 2) for the three historical years.

Question(s):

- a) Please update the revenue and expense from affiliate transaction balances in Appendix 2-H according to the requirements noted above.
- b) Please reconcile the balances in Accounts 4375 and 4380 with the balances in the Appendix 2-N.

6-Staff-188

Other Revenue

Ref. 1: Exhibit 6 / HOL_Attachment 6-3-1(A)_OEB Appendix 2-H - Other Revenue_20250415

Question(s):

- a) Please explain the large variances above the materiality threshold of \$1M for the following accounts:
 - i. \$1.2M decrease in Account 4235 in 2026
 - ii. \$1.0M decrease in Account 4330 in 2027

6-Staff-189

Other Revenue

Ref. 1: Exhibit 6 / HOL_Attachment 6-3-1(A)_OEB Appendix 2-H - Other Revenue_20250415

Ref. 2: Exhibit 1 / Tab 3 / Schedule 1 / p. 26 (pdf Exhibit 1 part 1, p. 240)

Ref. 3: Exhibit 8 / Tab 3 / Schedule 2 / p. 2 (pdf p. 120)

Preamble:

Hydro Ottawa states in reference 2 that it “proposes to set both rates and revenue related to Other Revenue for 5 years. Where rates are proposed to be adjusted in years two to five, for simplicity, an annual inflation rate of 2.1% is proposed to avoid annual adjustments to the rates throughout the rate term.”

In reference 1, OEB staff notes that only Account 4225 Late Payment Charges shows an increase of 2.1% per year from 2027-2030 while Other Revenue accounts show different rates of growth or decline for this period.

In reference 3, Hydro Ottawa states that “To remain consistent with OEB province wide charges, such as the pole attachment and retailer service charges, Hydro Ottawa proposes to inflate the 2026 rate by the OEB approved inflationary factor for the 2027-2030 period. As a placeholder for the OEB approved inflationary factors, the 2027-2030 rates have been escalated by 2.10% annually.”

Question(s):

- a) Please explain Hydro Ottawa's assumptions used to forecast other revenue amounts for each account in reference 1 for the 2026 Test Year and for the 2027 to 2030 period.
- b) For other revenues in reference 1 that will be adjusted based on the annual rate of inflation for the 2027 to 2030 period, please confirm whether Hydro Ottawa will

update these revenues using the OEB's approved inflation factor when the information is available.

- c) Please confirm whether Hydro Ottawa will update the pole attachment revenue (recorded in Account 4210 Rent from Electric Property) based on the OEB's approved pole attachment charge for the 2026-2030 period when the information is available.

6-Staff-190

Other Revenue – Account 4362

Ref. 1: Exhibit 6 / HOL_Attachment 6-3-1(A)_OEB Appendix 2-H - Other Revenue_20250415

Ref. 2: Exhibit 6 / Tab 3 / Schedule 5 / Table 3 / p. 4 (pdf p. 219)

Question(s):

- a) OEB staff notes that the OEB Approved amounts in Table 3 in reference 2 are equal to the amounts shown in Appendix 2-H, under actual and bridge year revenue in Account 4362 (row 41). Please reconcile and update Table 3 and/or Appendix 2-H as well as the variance analysis explanation as required.

6-Staff-1

Ref. 1: Innovation-related Proposals in Rate Applications, March 20, 2025

Ref. 2: Chapter 2 Filing Requirements for Electricity Distribution Rate Applications – 2025 Edition for 2026 Rate Applications, May 7, 2025

Ref. 3: Exhibit 1 / Tab 3 / Schedule 4 / pp. 1-38 (pdf Exhibit 1 part 1, pp. 518-555)

Preamble:

On March 20, 2025, the OEB issued a letter for Innovation-related Proposals in Rate Applications (the Letter) which provides guidance to support electricity distributors on incorporating innovation-related proposals in rate applications. The Letter states that distributors should explore and leverage additional sources of funding which include but are not limited to seeking out any applicable tax incentives for innovative projects when incorporating innovation-related proposals as part of or outside of their rebasing applications.

Section 2.6.2 of Reference 2 states that:

Distributors are expected to exercise sound tax planning and are expected, for rate-setting purposes, to maximize tax credits and take the maximum deductions allowed.

Question(s):

- a) Please confirm whether Hydro Ottawa is planning to take any tax incentives for funding the innovation initiatives outlined in Reference 3, and whether such incentives have been included in the PILs forecast.
 - i. If confirmed, please elaborate further.
 - ii. If not confirmed, please explain why Hydro Ottawa doesn't apply tax incentives to support its funding during its rebasing term.

Exhibit 7 – Cost Allocation

7-Staff-191

Ref. 1: Exhibit 7 / Tab 1 / Schedule 1 / p. 5 (pdf p. 5)

Preamble:

Hydro Ottawa indicates that it is obliged to ensure that at least 5,000 kW of power is available to each Large Use customer as and when needed.

Question(s):

- a) How much power is reserved for the large use customers beyond the amount Hydro Ottawa is already compensated for through rates?
- b) From the perspective of costs imposed on Hydro Ottawa, how does this obligation to maintain capacity differ from a standby service?
- c) If the fixed charge for Large Use customers was designed to recover the costs of maintaining the first 5,000kW of capacity, please explain the rationale of also designing the variable charge to be recovered from the first kW delivered.

7-Staff-192

Ref. 1: Exhibit 7 / Tab 1 / Schedule 1 / pp. 6-7 (pdf pp. 6-7)

Preamble:

Hydro Ottawa indicates that services weighting factors have been produced for all rate classes that have secondary customers.

Question(s):

- a) Are primary customers required to supply their own connection to Hydro Ottawa's primary system?
- b) Are secondary customers provided with a connection to Hydro Ottawa's secondary system at Hydro Ottawa's expense?
- c) For rate classes that have both primary and secondary customers, is the cost per customer calculated as the weighted average of all customers, or only of the secondary customers?
- d) What proportion of customers in each rate class are secondary customers?

7-Staff-193

Ref. 1: Exhibit 7 / Tab 1 / Schedule 1 / pp. 15-18 (pdf pp. 15-18)

Ref. 2: Exhibit 8 / Tab 5 / Schedule 2 / p. 1 (pdf p. 272)

Preamble:

The status quo sentinel light revenue-to-cost ratio is below unity (100%), and Hydro Ottawa proposes to reduce it further below unity to mitigate a bill impact. The street lighting ratio, which starts at a status quo 151.40% is proposed to be decreased to 120% over 5 years.

The balance of USoA account 1568 is proposed to be disposed of in 2027.

Question(s):

- a) Please indicate the bill impact that would result in the sentinel light rate class from maintaining the status quo ratio.
- b) Has Hydro Ottawa considered other options to mitigate the sentinel light impact other than a reduction in revenue-to-cost ratio away from unity.
- c) Please explain rationale for why a reduction in street lighting rates would require mitigation.
- d) What would be the impact to the large use rate class if street lighting was brought to 120% in 2026?
- e) Please provide any examples where a distributor has been granted approval in a rate proceeding to begin disposition of a variance account in a future rate period.

7-Staff-194

Ref. 1: Exhibit 7 / Tab 1 / Schedule 1 / Attachment F / pp. 1-8 (pdf pp. 24-31)

Preamble:

The proposed primary / secondary split for poles counts all poles that contain primary conductors (regardless of whether secondary conductors are present), as primary poles. All customers require the use of primary assets, so these poles are required to provide service to all downstream customers, regardless of their connection at primary or secondary voltage.

Question(s):

- a) Does the addition of secondary conductors necessitate the use of more costly poles
 - i. Are there circumstances where taller poles would be required for the additional space taken up by secondary conductors?
 - ii. Are there circumstances where stronger poles would be required due to the extra weight of the secondary assets?
- b) If available, please provide a count or estimate of the number of poles that contain

- i. Only primary conductors
- ii. Primary and secondary conductors, and
- iii. Only secondary conductors.

7-Staff-195

Ref. 1: Exhibit 7 / Tab 1 / Schedule 1 / Attachment G / p. 14 (pdf p. 50)

Preamble:

The best fit 1NCP for Street Lights for 2026 is less than every year from 2018 to 2023. The best fit 12NCP for Street Lights for 2026 however, is greater than every year from 2018 to 2023.

Question(s):

- a) Please explain the cause of this apparent discrepancy.
- b) Please explain how the best fit 1 NCP for 2026 for Street Lights is less 4 times the 4 NCP and less than 12 times the 12 NCP for the same year. The 1 NCP should be the highest peak of the entire year, the 4 NCP is supposed to be the sum of the monthly peaks from the four highest peaking months, and 12 NCP is supposed to be sum of all 12 monthly peaks.

7-Staff-196

Ref. 1: Exhibit 7 / Tab 1 / Schedule 3 / pp. 2-5 (pdf pp. 62-65)

Preamble:

Hydro Ottawa is providing three scenarios of backup generator operation, where the generator is on for the entire billing period, off for the entire billing period, and is on for some of the billing period. It then provides details for how much standby volume would be charged under each of these scenarios. This is done for both the current implementation of standby rates, as well as the proposed implementation of standby rates.

Question(s):

- a) For each of the three scenarios, please provide the bill that would result from the old structure at status quo 2026 rates.
- b) For each of the three scenarios, please provide the bill that would result from Hydro Ottawa's proposed 2026 rates.

Exhibit 8 – Rate Design

8-Staff-197

Ref. 1: Exhibit 8 / Tab 1 / Schedule 2 / pp. 5-7 (pdf pp. 6-8)

Preamble:

Hydro Ottawa has is proposing to increase the GS < 50 kW fixed charge above the ceiling as calculated in the cost allocation model.

Question(s):

- a) As a scenario, please provide the fixed and variable charges that would result from limiting fixed charges to the greater of the fixed charge from the prior year and the ceiling in the cost allocation model, but not increasing the fixed proportion of total revenue in any year.

8-Staff-198

Ref. 1: Exhibit 8 / Tab 2 / Schedule 1 / Attachment A

Question(s):

- a) Hydro Ottawa has used the initial version of the RTSR model which does not produce a rate for EV Charging customers. Please provide a new RTSR Model where the EV Rate Parameter is used, and rates are produced for qualifying EV Charging customers.

8-Staff-199

Ref. 1: Exhibit 8 / Tab 3 / Schedule 2 (pdf pp. 119-123)

Question(s):

- a) Hydro Ottawa is proposing an updated SSS administrative charge. Has Hydro Ottawa performed any consultation on the updated SSS admin charge, and if so, what has been the feedback?

8-Staff-200

Ref. 1: Exhibit 8 / Tab 4 / Schedule 1 / pp. 1-3 (pdf pp. 119-123)

Preamble:

Hydro Ottawa is proposing updated specific service charges, based on a 2024 review of costs. It then proposes to increase these charges by an inflationary rate of 2.1% rounded to the nearest dollar.

Some charges such as the Easement Certificate are not inflating over the five years. In that instance, a 2.1% increase on \$30 would be 62 cents, which would normally round to one dollar.

Question(s):

- a) Does Hydro Ottawa propose to inflate using the 2.1% inflationary rate, or use the OEB approved inflationary factor as it is known?

- b) Please explain if, for the purpose of calculating the next year's rate, Hydro Ottawa is proposing to track a precise charge for each year or to apply inflation each year to the prior year's rounded rate? If neither, please explain.
- c) If the inflation rate is subject to change, are the rates that are currently behaving as fixed also subject to change?
- d) Please provide details of any consultation performed on the proposed specific service charges.

Exhibit 9 – Deferral and Variance Accounts

9-Staff-201

Ref. 1: Attachment 9-3-1(A) / OEB Workform Deferral and Variance Account, April 28, 2025

Ref. 2: EB-2019-0261, Draft Rate Order, December 11, 2020 / Chapter 2 Appendices

Ref. 3: Attachment 6-3-1(A)/ Appendix 2-H – Other Revenue, April 15, 2025

Ref. 4: Exhibit 9 / Tab 1 / Schedule 3 / pp. 3-5 (pdf pp. 13-15)

Ref. 5: Exhibit 6 / Tab 3 / Schedule 5 / p. 4 (pdf p. 218)

Ref. 6: Exhibit 9 / Tab 2 / Schedule 1 / pp. 6-7 (pdf pp. 82-83)

Ref. 7: EB-2015-0004, Decision and Rate Order, Schedule C, December 22, 2015

Preamble:

Sub-account 1508 Gains and Losses on Disposal of Fixed Assets was established in the accounting order approved in 2016-2020 Custom IR Decision and Order. The account was to record the difference between the forecast and actual loss on the disposal of fixed assets, related to the retirement of assets or damage to plant. Table 2 in Schedule 9-1-3 outlines the forecasted loss from the retirement of utility and other property for 2026 -2030. In Reference 4, Hydro Ottawa stated that costs related to significant weather damages are not included in the budgeted amounts in Account 4362, as such costs are unpredictable. Hydro Ottawa proposed to continue this 1508 Sub-account to record the difference between the forecast loss and the actual gain/loss on the disposal of fixed assets related to scheduled retirements or unforeseen damage to its plant, including costs associated with weather-related damage for Test years 2026-2030. In Reference 6, Hydro Ottawa proposed to reserve the right to use a Z-factor cost recovery mechanism in the future.

In Reference 5, Hydro Ottawa stated that the implementation of its metering upgrades program will commence in 2026, which will increase asset derecognition charges from \$0.4M to \$0.8M per year.

Question(s):

- a) According to Tab 2-H of Reference 2, the forecasted amount was an annual loss of \$388,726 for the period of 2021 to 2025 as recorded in Account 4362 – Loss from Retirement of Utility and Other Property.
 - i. Please clarify the OEB approved baseline amounts for 2022 and 2023 outlined in Table 1 of Reference 4 in relation to Reference 2.
- b) Please provide a breakdown of the annual variances recorded in this variance account related to the unforeseeable events/extreme weather.
- c) Please explain how the estimated losses for 2026 to 2030 were determined.
- d) Please confirm whether the estimated annual increase of \$0.4M in asset derecognition charges, as described in Reference 5, is included in the estimated losses for 2026 to 2030 in Account 4362, particularly for the year 2026.
- e) Please confirm that the costs recorded in Sub-account 1508 Gains and Losses on Disposal of Fixed Assets will be excluded from any potential Z factor claims.

9-Staff-202

Ref. 1: Exhibit 9 / Tab 1 / Schedule 1 / p. 6 (pdf p. 6)

Ref. 2: Exhibit 9 / Tab 1 / Schedule 3 / p. 42 (pdf p. 52)

Ref. 3: Chapter 2 Filing Requirements for Electricity Distribution Rate Applications – 2025 Edition for 2026 Rate Applications, May 7, 2025, p.68

Preamble:

In Reference 1, Hydro Ottawa proposed to discontinue the generic Group 2 Account 1511, Incremental Cloud Computing Implementation Costs.

In Reference 2, Hydro Ottawa stated that the forecasted cloud computing costs are included in the proposed OM&A budget outlined in Schedule 4-1-2. Hydro Ottawa further proposed to establish a new deferral account for incremental cloud computing costs.

OEB staff notes that the requested new DVA for incremental cloud computing costs is not provided in Schedule 9-2-1 – New Deferral and Variance Accounts.

Question(s):

- a) Please confirm whether a new DVA for incremental cloud computing is requested.
 - i. If yes, please provide the details for the proposed new DVA, including comments on the three eligibility criteria for the establishment of a new DVA as outlined in Section 2.9.2 of Reference 3.
 - ii. If not, please update this exhibit accordingly.

9-Staff-203

Ref. 1: Exhibit 9 / Tab 1 / Schedule 3 / pp. 5-10 (pp. 15-20 of pdf)

Ref. 2: EB-2019-0261, Draft Rate Order, December 11, 2020 / Deferral and Variance Account Continuity Schedule

Ref. 3: Attachment 9-3-1(A) / OEB Workform Deferral and Variance Account, April 28, 2025

Preamble:

In Reference 2, the closing principal balance for Account 1508, Earnings Sharing Mechanism (ESM) Variance Account as of Dec. 31, 2019, is a credit of \$4,985,981.

In Reference 3, the opening principal balance for the ESM variance account as of January 1, 2020, is a credit of \$3,672,684.

In Reference 1, Hydro Ottawa stated that there is no over-earning in 2020, 2022, and 2023. As outlined in Tables 3 and 4, the ratepayer's shares of overearning recorded for 2019 and 2021 are \$1,152K and \$840K, respectively.

Sub-account ESM Variance Account	A. Transactions	B. Principal Adjustments	C. OEB Approved Disposition - Principal	D. Total Changes in Principal (A+B-C)	E. Interests (incl. Adjustments)	F. OEB Approved Disposition - Interests	G. Total Changes in Interests (E-F)	Total (D+G)
Opening Balance	(3,672,684)	-		(3,672,684)	(101,330)		(101,330)	(3,774,014)
2020	(1,313,297)	(354,767)		(1,668,065)	(68,338)		(68,338)	(1,736,402)
2021	(1,809,267)		(4,985,981)	3,176,714	(2,022)	(210,025)	208,002	3,384,717
2022	700,743	-		700,743	(41,654)		(41,654)	659,090
2023		311,597		311,597	(99,323)		(99,323)	212,274
Projected Interest on Dec. 31, 2023				-	(101,155)		(101,155)	(101,155)
Total Claim	(6,094,505)	(43,170)	(4,985,981)	(1,151,694)	(413,822)	(210,025)	(203,797)	(1,355,491)

OEB staff has summarized the amounts recorded in Account 1508, Sub-account ESM Variance Account, as reported in Reference 3, in the table below.

OEB staff has further calculated the variances between the ratepayer's share of overearning reported in Reference 3 and the amounts reported in Reference 1 in the table below.

Sub-account ESM Variance Account	A. Ref. 1 - Transactions	B. Ref. 1 - Principal Adjustments	C. Ref. 1 -Total Adjusted Principal Transactions (A+B)	D. Ref. 3 - Ratepayer's Share of Overearning	Variance (C-D)
2019	-	-	-	(1,152,000)	1,152,000
2020	(1,313,297)	(354,767)	(1,668,065)	-	(1,668,065)
2021	(1,809,267)		(1,809,267)	(840,000)	(969,267)
2022	700,743	-	700,743	-	700,743
2023		311,597	311,597	-	311,597
Total	(2,421,821)	(43,170)	(2,464,991)	(1,992,000)	(472,991)

Question(s):

- a) Please confirm and explain the differences between the opening balance for the ESM Variance Account for a credit of \$3,672,684 in Reference 3 and the closing balance for a credit of \$4,985,981 as reported in Reference 2.
- b) Please explain the differences calculated by the OEB staff and clarify the transactions and principal adjustments recorded in the Sub-account 1508 ESM for the years 2019 – 2023 related to Tables 3 and 4 in Reference 1.
 - i. Please update the DVA Workform if necessary.
- c) In Reference 1, Hydro Ottawa proposed the continuation of the ESM Variance Account with modification, i.e., establishing a deadband tied to Hydro Ottawa Adjusted PEG model results. Please explain the impacts of the requested modifications on Hydro Ottawa and Hydro Ottawa's ratepayers.

9-Staff-204

Ref. 1: Exhibit 9 / Tab 1 / Schedule 3 / p. 11 (pdf p. 21)

Preamble:

Hydro Ottawa states it “received an invoice from Hydro One related to a 2019 CCRA as well as a refund from Hydro One. Although the 2019 CCRA balance has been disposed of, Hydro Ottawa has recorded a return of \$23k (principal balance) to rate payers in this account.”

Question(s):

- a) For both the mentioned invoice and the refund:
 - i. Please categorize the costs as construction costs or load true-up.
 - ii. Please provide the agreements between Hydro Ottawa and Hydro One.
 - iii. Please provide any invoices and calculations from Hydro One (i.e. output of the Hydro One DCF model).

- iv. For the invoice, if the invoice was due to reduced or unrealized load, please explain why the load forecast at the time of the agreement with Hydro One was not realized.

9-Staff-205

Ref. 1: Exhibit 9 / Tab 1 / Schedule 3 / pp. 11-17 (pdf pp. 21-27)

Ref. 2: OEB Letter re: Adjustments to Correct for Errors in Electricity Distributor “Pass-Through” Variance Accounts After Disposition. October 31, 2019

Ref. 3: Attachment 9-3-1(A) / OEB Workform Deferral and Variance Account, April 28, 2025

Ref. 4: EB-2019-0261, Draft Rade Order, December 11, 2020 / Deferral and Variance Account Continuity Schedule

Ref. 5: EB-2019-0261, Settlement Proposal, December 11, 2020 / Attachment 6 Accounting Order, pp. 1-2

Preamble:

In Reference 1, Hydro Ottawa states it “received an invoice from Hydro One related to a 2019 CCRA as well as a refund from Hydro One. Although the 2019 CCRA balance has been disposed of, Hydro Ottawa has recorded a return of \$23k (principal balance) to rate payers in this account.”

Hydro Ottawa further states that it seeks to clear the (\$23K) adjustment to the 2019 value and the principal balance of \$1,064K for the year 2020 as part of this Application.

Hydro Ottawa has provided the following sample journal entry as part of the draft accounting order for the continuation of the Sub-account CCRA on page 16 of Reference 1.

Table 10 - CCRA Sample Journal Entry

Account	Debit	Credit
Account 1508 - Sub-Account CCRA	x,xxx.xx	
Account 4080 – Distribution Services Revenue		x,xxx.xx
To record revenue requirement difference as actual CCRA payments are higher than forecasted		
Account 1508 - Sub-Account CCRA	x,xxx.xx	
Account 6035 - Other Interest Expense		x,xxx.xx
To record carrying charges		

OEB staff has compiled the variances between the CCRA amounts reported in Reference 3 and the amounts reported in Table 8 of Reference 1 in the table below.

Sub - account CCRA	A. Ref. 3 - Transactions	B. Ref. 3 – Principal Adjustments	C. Ref. 3 – Total Adjusted Principal Transactions (A+B)	D. Ref. 1 – CCRA Revenue Requirement Calc.	Variance (C-D)
2021	(263,730)	-	(263,730)	(308,000)	44,270
2022	(1,508,337)	-	(1,508,337)	(1,026,000)	(482,337)
2023	119,723	(25,681)	94,041	(273,000)	367,041
Total	(1,652,344)	(25,681)	(1,678,026)	(1,607,000)	(71,026)

Question(s):

- a) For both the mentioned invoice and the refund:
 - i. Please categorize the costs as construction costs or load true-up.
 - ii. Please provide the agreements between Hydro Ottawa and Hydro One.
 - iii. Please provide any invoices and calculations from Hydro One (i.e., output of the Hydro One DCF model).
 - iv. For the invoice, if the invoice was due to reduced or unrealized load, please explain why the load forecast at the time of the agreement with Hydro One was not realized.
- b) Please comment on the four factors outlined in Reference 2 for the return of \$23K recorded in the Sub-account 1508 CCRA related to the previously disposed 2019 balance.
 - i. Please explain how the adjustment is reported in Reference 2.
 - ii. Please provide a breakdown of principal and interest, and indicate under which year it falls.
- c) Please explain the difference between the debit amount of \$1,111,627 recorded in the Sub-account 1508 CCRA for the year 2020 transactions and the principal balance of \$1,064K for the year 2020 as reported in Table 7 of Reference 1.
- d) Please confirm and explain the variances calculated by the OEB staff and update the DVA Workform if necessary.
- e) Please confirm whether Hydro Ottawa will continue reporting amounts in the following four sub-accounts outlined in the accounting order as approved in its last CIR application:
 1. Account 1508 – SA CCRA – Depreciation
 2. Account 1508 – SA CCRA – Interest
 3. Account 1508 – SA CCRA – Return
 4. Account 1508 – SA CCRA – PILs
 - i. If confirmed, please update the draft accounting order accordingly to reflect the sub-accounts.
 - ii. If not confirmed, please provide an explanation.

9-Staff-206

Ref. 1: Exhibit 9 / Tab 1 / Schedule 3 / pp. 17-27 (pdf pp. 27-37)

Ref. 2: Attachment 9-3-1(A) / OEB Workform Deferral and Variance Account, April 28, 2025

Ref. 3: EB-2019-0261, Settlement Proposal, December 11, 2020 / Attachment 6 Accounting Order, pp. 5-6

Preamble:

In the accounting order for the CVA as provided in Reference 3, this sub-account is “an asymmetrical account, in that overspending or faster pace of spending will not result in recording debits in this account. Overspending or earlier spending will therefore not result in recording amounts to be recovered from customers during the 2021-2025 period.” Additionally, Hydro Ottawa has provided the following sample journal entry as part of the draft accounting order.

Table 15 - 1508 Sub- Account CVA Sample Journal Entry to collect additional revenue requirement

Account	Debit	Credit
Account 1508 - Sub-Account CVA XXX	x,xxx.xx	
Account 4080 – Distribution Services Revenue		x,xxx.xx
To record revenue requirement difference as cumulative capital additions are higher than forecasted		
Account 1508 - Sub-Account CVA XXX	x,xxx.xx	
Account 6035 - Other Interest Expense		x,xxx.xx
To record carrying charges		

OEB staff has compiled the variances between the amounts recorded in the Capital Variance Account in Reference 2 and the amounts outlined in Table 11 of Reference 1 in the table below.

Sub-account CVA	A. Ref. 2 - Transactions	B. Ref. 2 - Principal Adjustments	C. Ref. 2 -Total Adjusted Principal Transactions (A+B)	D. Ref. 1, Table 11 - Total Principal	Variance (C-D)
2021	30,483		30,483	1,670,000	(1,639,517)
2022	(559,111)	-	(559,111)	(1,585,000)	1,025,889
2023	41,224	(64,863)	(23,639)	(637,000)	613,361
Total	(487,405)	(64,863)	(552,268)	(552,000)	(268)

Question(s):

- a) Please confirm and explain the variances calculated by the OEB staff.
 - i. Please update Reference 2 if necessary.
- b) Please provide a detailed CCA schedule supporting the CCA amounts presented in Tables 12 – 14, broken down by accounts.
- f) Please confirm whether Hydro Ottawa will continue reporting amounts in the following four sub-accounts outlined in the accounting order as approved in its last CIR application:
 - 1. Account 1508 – SA SR/SS Capital Additions – Depreciation
 - 2. Account 1508 – SA SR/SS Capital Additions – Interest
 - 3. Account 1508 – SA SR/SS Capital Additions – Return
 - 4. Account 1508 – SA SR/SS Capital Additions – PILs
 - i. If confirmed, please update the draft accounting order accordingly to reflect the sub-accounts.
 - ii. If not confirmed, please provide an explanation.

9-Staff-207

Ref. 1: Exhibit 9 / Tab 1 / Schedule 3 / pp. 20, 22, 24 (pdf pp. 30, 32, 34)

Ref. 2: EB-2019-0261, Settlement Proposal, September 18, 2020

Question(s):

- a) For Tables 12, 13, 14, please provide the data and calculations to support the amounts in the “(Under)/Over additions” row, including at a minimum the approved amounts from reference 2, and the actual amounts.

9-Staff-208

Ref. 1: Exhibit 9 / Tab 1 / Schedule 3 / pp. 29-31 (pdf pp. 39-41)

Ref. 2: Exhibit 9 / Tab 3 / Schedule 1 / p. 3 (pdf p. 86)

Ref. 3: [2021 OEB Custom Incentive Rate Progress Report](#) / pp. 12-14

Ref. 4: [2022 OEB Custom Incentive Rate Progress Report](#) / pp. 12-14

Ref. 5: [2023 OEB Custom Incentive Rate Progress Report](#) / pp. 12-14

Ref. 6: EB-2019-0261, Settlement Proposal, September 18, 2020 / Attachment 5 / pp. 3-5

Preamble:

In Reference 6, the thresholds for Metrics #3, #4 and #5 are stated to be:

Yellow	>Target <5% above target
Red	≥ 5% above target

The 2021, 2022 and 2023 reports (references 3-5) show the thresholds for Metrics #3, #4 and #5 as:

Yellow	>Target <105% target
--------	----------------------

Red $\geq 105\%$ target

Question(s):

- a) Please confirm the Hydro Ottawa Annual reports in references 3, 4 and 5 should say the results are “red” if the actual value is equal to or greater than 5% more than the target.
- b) Please confirm that the actual SAIDI results, i.e. the metric shown in Table 8 – Metric #3, for 2022 and 2023, have been classified as Red.
 - i. If confirmed, will Hydro Ottawa post a corrected version of the 2023 report on its website and resubmit a corrected version of the report to the OEB?
 - ii. If not confirmed, please reconcile the information regarding the Performance Outcomes Accountability Mechanism (POAM) deferral account in references 1 and 2.

9-Staff-209

Ref. 1: Exhibit 9 / Tab 1 / Schedule 3 / p. 30 (pdf p. 40)

Ref. 2: Attachment 9-3-1(A) / OEB Workform Deferral and Variance Account, April 28, 2025

OEB staff has compiled the variances between the amounts recorded in the Sub-account POAM in Reference 2 and the annual credit of \$400K recorded in 2022 and 2023 as stated in Reference 1 in the table below.

Sub-account POAM	A. Ref. 2 - Transactions	B. Ref. 1	Variance (A-B)
2021	(107,638)	-	(107,638)
2022	(292,362)	(400,000)	107,638
2023	(400,000)	(400,000)	-
Total	(800,000)	(800,000)	0

Question(s):

- a) Please reconcile and explain the differences calculated by OEB staff.
- b) Please update the DVA Workform if necessary.

9-Staff-210

Ref. 1: EB-2023-0143, Decision and Order, Getting Ontario Connected Act Variance Account, October 31, 2023

Ref. 2: Exhibit 9 / Tab 1 / Schedule 3 / p. 41 (pdf p. 51)

Preamble:

On October 31, 2023, the OEB issued a decision and order in EB-2023-0143 for the Getting Ontario Connected Act Variance Account (GOCA variance account). The decision states as follows:

“The OEB notes that the GOCA variance account will only be available to a utility until the end of its current IRM period. The account is not available for utilities that have reflected Bill 93 in their most recent rebasing applications.”

In Reference 2, Hydro Ottawa stated that it “will continue to track the variance between locate costs resulting from Bill 93 and the approved cost included in base rates for 2024 and 2025.”

Question(s):

- a) Please confirm that the OM&A cost in the test year reflects the Bill 93 impact for the utility’s locate cost.
 - i. If so, please confirm whether the GOCA variance account will be discontinued starting in 2026 and beyond.
 - ii. If not, please provide the rationale why the Bill 93 impact is not reflected in the test year’s OM&A cost.

9-Staff-211

Ref. 1: Exhibit 9 / Tab 2 / Schedule 1 / p. 4 (pdf p. 79)

Ref. 2: Exhibit 3 / Tab 1 / Schedule 1 / p. 10 (pdf p. 10)

Preamble:

Hydro Ottawa states the Large Load Revenue Variance Account would “manage discrepancies between predicted large load requests as outlined in Table 8 of Schedule 3-1-1 - Revenue Load and Customer Forecast and actual billed demand for these large load requests.”

Question(s):

- c) Please explain what impact variances between the actual loads realized and forecast loads in Table 8 for 2024 and 2025 will have for the purposes of the Large Load Variance Account.
 - i. Will the values for 2026 through 2030 be updated with a revised load forecast using 2024 actuals?

9-Staff-212

Ref. 1: Exhibit 9 / Tab 1 / Schedule 4 / pp. 2-3 (pdf pp. 55-56 of)

Ref. 2: 2020 Accelerated CCA for CCRA, April 28, 2025

Ref. 3: Attachment 9-3-1(A) / OEB Workform Deferral and Variance Account, April 28, 2025

Preamble:

In Reference 1 Table 1, Hydro Ottawa outlined the impact of prior “regular” CCA rules vs. Accelerated CCA rules on CCRA for 2020. Hydro Ottawa stated that no balance is required past 2020 as Accelerated CCA for CCRA payments were reflected in the base rates for the 2021 – 2025 rate years in Hydro Ottawa’s 2021-2025 Approved Settlement Agreement.

Question(s):

- c) Please confirm whether the AIIP addition of \$520K reported in Reference 2 is the total AIIP addition in 2020 for CCRA.
 - i. Please explain and reconcile the AIIP addition of \$520K and the 2021 transaction amount of \$1,111,627 reported in Account 1508, CCRA Payment Differential Variance Account in Reference 3.
- d) Please explain why the “regular” CCA under the legacy CCA rules reported in Table 1 of Reference 1 is higher than the Accelerated CCA.
 - i. Please provide the calculation for the “regular” CCA of \$504,182 under the legacy CCA rules reported in Table 1 of Reference 1.

9-Staff-213

Ref. 1: Exhibit 9 / Tab 1 / Schedule 4 / pp. 4-11 (pdf pp. 57-64)

Ref. 2: Attachment 9-3-1(A) / OEB Workform Deferral and Variance Account, April 28, 2025

Ref. 3: EB-2019-0261, Draft Rate Order, December 11, 2020 / Deferral and Variance Account Continuity Schedule

Preamble:

Table 2 in Reference 1 outlines the impact of 2021 immediate expensing for 2021 – 2025.

OEB staff has summarized the amounts recorded in Account 1592, sub-account CCA Changes, as reported in Reference 2, in the table below.

Account 1592, Sub-account CCA Changes	Transactions	Principal Adjustments	Interests (incl. Adjustments)	Total
Opening Balance	-	-	-	-
2020	-	-	-	-
2021	-	50,067	2,392	52,459
2022	-	-	-	-
2023	(873,859)	8,982	(41,684)	(906,561)
Projected Interest on Dec. 31, 2023			(71,566)	(71,566)
Total Claim	\$ (873,859)	\$ 59,049	\$ (110,857)	\$ (925,668)

Table 5 in Reference 1 provides a reconciliation to Account 1592, Sub-account CCA Changes at the end of 2023.

Question(s):

- a) Please provide a detailed CCA schedule supporting the CCA amounts (both under legacy CCA rules and the Immediate Expensing CCA rules) presented in Table 2 of Reference 1, broken down by account for 2021 - 2025.
- b) Please confirm whether the CCA impact of \$ 476K presented in Table 2 of Reference 1 is included in the balance of the proposed PILs Contribution and the Other Expenses in the proposed Revenue Requirements.
 - i. Please provide the rationale for smoothing the amounts recorded in Sub-account, CCA Changes related to the Immediate Expensing impact for 2021 – 2023, particularly given that the impact for 2024 and 2025 offsets half of the impact from 2021 – 2023.
- c) Please update Reference 2 to ensure that the amounts for each year presented in Table 5 correspond accurately to the respective year. Also, please update the interest amounts in Reference 2 accordingly.
- d) Please update Reference 2 to ensure that the opening balance is aligned with the balance recorded in Reference 3.

9-Staff-214

Ref. 1: Exhibit 9 / Tab 1 / Schedule 4 / p. 9 (pdf p. 62)

Ref. 2: Hydro Ottawa 2026-2030 PIL Tax Model, Tab H1, June 4, 2025

Preamble:

In Reference 1, Hydro Ottawa proposed to “exclude the impact of the decrease in Grossed Up PILs due to Accelerated CCA for 2026 and 2027 and the impact of the

decrease in accumulated Grossed Up PILS due to the 2021 immediate expensing measure in the proposed revenue requirement for 2026 and 2027.” The difference in grossed up PILs is provided in Table 3.

Hydro Ottawa proposed to record a corresponding amount in the fixed asset subledger (similar to Capital Contributions) and amortize these amounts over 36 years.

The amounts added to 2026 and 2027 proposed revenue requirements and set up as PILs Contribution are outlined in the Table 4 of the reference 1.

OEB staff notes that the test year additions that are accelerated investment incentive properties (AIIP) reported in Reference 2 for 2026 and 2027 are \$204,328,417 and \$276,568,422. These additions are different from those reported in Table 3 in Reference 1.

OEB staff further notes that the total grossed up PILs difference included in the Revenue Requirement provided in Table 4 for both years differs from those reported in the 2026 and 2027 Revenue Requirement Workforms. The variances are summarized in a table below.

	2026	2027
A: Table 4 -Total Grossed Up PILs Difference Included in Revenue Requirement	\$5,066,000	\$4,096,000
B: Other Expenses Reported in Revenue Requirement Workform	\$4,590,474	\$4,596,313
Variances (A-B)	\$475,526	(500,313)

Question(s):

- a) Please explain and reconcile the following variances observed by the OEB staff:
 - i. The variances in the AIIP additions as reported in both references.
 - ii. The variances in total grossed up PILs difference included in revenue requirement reported in Table 4 and those reported in the 2026 and 2027 Revenue Requirement Workforms.
- b) Please provide a detailed CCA schedule supporting the CCA amounts presented in Tables 3 and 4, broken down by account for 2026 and 2027.
- c) Please provide the rationale for determining the amortization period of 36 years for the proposed “PILs Capital Contribution.”
- d) Please explain why Hydro Ottawa proposes smoothing out the AIIP impact for the final two years of the accelerated CCA impact now, particularly given that the Custom IR specifies the revenue requirement for each individual test year from 2026 to 2030.

- i. What is the justification for addressing the AIIP impact outside of the derivation of the PILs?
- ii. Is Hydro Ottawa aware of any precedent case where a similar smoothing mechanism (i.e., addressing the AIIP impact outside of the PILs) has been proposed?
- e) Please confirm that a credit of \$5.066M and a credit of \$4.096M is included in Account 2440, Deferred Revenue in 2026 and 2027.
- f) Please confirm if the amortization of the “PILs Contribution” is reported in Account 4245, Government and Other Assistance Directly Credited to Income.

9-Staff-215

Ref. 1: Exhibit 9 / Tab 2 / Schedule 1 / pp. 1-6 (pdf pp. 77 - 82)

Ref. 2: Chapter 2 Filing Requirements for Electricity Distribution Rate Applications – 2025 Edition for 2026 Rate Applications, May 7, 2025, p.68

Question(s):

- a) Please provide detailed comments on the three eligibility criteria for the establishment of a new DVA as outlined in Section 2.9.2 of Reference 2 for the three proposed new DVAs provided in Reference 1.

9-Staff-216

Ref. 1: Exhibit 9 / Tab 2 / Schedule 1 / p. 5 (pdf p. 81)

Ref. 2: Exhibit 1 / Tab 3 / Schedule 1 / p. 35 (pdf p. 249)

Preamble:

In reference 1, Hydro Ottawa states the Tariff Impact Deferral Account “will track costs incurred during the test period directly attributable to imposed global tariffs.”

In reference 2, Hydro Ottawa states it “requests a deferral account to address the risk of tariffs from supply chain disruptions and tariffs on imported components essential for Hydro Ottawa’s distribution infrastructure.”

Question(s):

- a) Please provide a more detailed explanation of the types of items that Hydro Ottawa proposes be included in the Tariff Impact Deferral Account.
- b) Please elaborate on what Hydro Ottawa means by “directly attributable” in this context.
- c) What constitutes “components essential for Hydro Ottawa’s distribution infrastructure”?
 - i. Does the request propose to include items purchased for general plant capital or OM&A costs in this account, such as vehicles and IT equipment?
 - ii. Does the request include consulting services if tariffs are applied?

- iii. Does the request include cloud computing services if tariffs are applied?

9-Staff-217

Ref. 1: Exhibit 9 / Tab 2 / Schedule 1 / pp. 1-7 (pdf pp. 77-83)

Questions:

- a) Hydro Ottawa is requesting approval of a new symmetrical variance account to record the difference between forecasted and actual NWS costs in other revenue and OM&A, net of any external funding related to NWS.
- b) Please confirm if the account is intended to capture various uncertainties, including potential external funding (like NRCan's funding for the ODERA project) as well as funding that could come from the eDSM Framework. If so, please provide some examples of variances that Hydro Ottawa may anticipate and explain why this variance account will best address this uncertainty. Has Hydro Ottawa explored any other options to address these uncertainties?

9-Staff-218

Ref. 1: Exhibit 9 / Tab 1 / Schedule 5 / p. 1 (pdf p. 66)

Ref. 2: HOL_Attachment 9-1-5(A) - OEB LRAMVA Workform_20250415.xlsx

Ref. 3: HOL_Attachment 9-3-1(A) - OEB Workform Deferral and Variance Account (Continuity Schedule)_20250415.xlsx

Ref. 4: 2021 Conservation and Demand Management Guidelines for Electricity Distributors (CDM Guidelines)

Ref. 5: EB-2024-0118, [Non-wires Solutions Guidelines for Electricity Distributors](#), March 28, 2024 (NWS Guidelines)

Preamble:

In the 2021 CDM Guidelines, the use of LRAMVA is no longer the default approach for CDM activities once the CFF wind-down is complete.

There appears to be a discrepancy in the LRAMVA amount proposed for disposition by Hydro Ottawa between references:

- The LRAMVA balance per the OEB LRAMVA Workform is \$(633,668).
- The LRAMVA balance per Exhibit 9-1-5, as well as the OEB Workform Deferral and Variance Account (Continuity Schedule), is \$(684,997).

The difference appears to be in the calculation of carrying charges (where interest can be calculated on the LRAMVA balance until the time of intended disposition):

- Carrying charges were calculated until December 31, 2025, in Exhibit 9-1-5 and the OEB Workform Deferral and Variance Account (Continuity Schedule), amounting to \$(100,730).

- Carrying charges were calculated until Q4 2023 in the OEB LRAMVA Workform amounting to \$(49,402).

The principal amount is consistent between all three references at \$(584,266).

Hydro Ottawa also indicates it will calculate the impact of CDM savings for the years 2024 to 2025 in the LRAMVA once the IESO releases reports of those years.

Question(s):

- a) Please confirm the LRAMVA amount Hydro Ottawa is requesting for disposition.
- b) Please update the corresponding schedule(s) accordingly to ensure that the LRAMVA balance is consistent between the three references.
- c) If Hydro Ottawa were to successfully dispose of the 2021-2023 LRAMVA balance requested in this application, please confirm if the LRAMVA balance would be zero and if Hydro Ottawa intends to close out the LRAMVA account. If not, please explain why Hydro Ottawa intends to keep the LRAMVA account open, and if Hydro Ottawa plans on filing a LRAMVA claim for disposition in a future proceeding (and if so, when and for which years).
- d) Please discuss why Hydro Ottawa has not calculated LRAMVA for historic CDM programs up until the end of 2025 to allow for full consideration of all related amounts until its next rate period. As part of the response, please consider the OEB's NWS Guidelines (reference 5), which indicates on page 30 that distributors are not to use an LRAMVA for CDM activities funded by the IESO through the 2021-2024 CDM Framework (with the possible exception of the Local Initiative Program).

9-Staff-219

Ref. 1: HOL_Attachment 9-1-5(A) - OEB LRAMVA Workform_20250415.xlsx

Ref. 2: HOL_Attachment 9-1-5(B) – IESO Final Verified 2017 CDM Summary Report_20250415.xlsx

Ref 3: Exhibit 9 / Tab 1 / Schedule 5 / pp. 1-9 (pdf pp. 66-74)

Preamble:

From the OEB LRAMVA Workform, it is unclear how the 1) net energy savings persistence, and 2) net peak demand savings persistence, reported under tabs “5. 2015-2027 LRAM” and “7. Persistence Report” were determined/calculated as the values are hardcoded. It is also unclear if and how the values in IESO’s Final Verified 2017 CDM Summary Report were used in the compilation of the OEB LRAMVA Workform to arrive at the LRAMVA balance requested for disposition.

Question(s):

- a) Please clarify and provide the supporting calculations for the values reported under Tabs 5 and Tab 7 of the OEB LRAMVA Workform.

9-Staff-220

Ref. 1: Exhibit 9 / Tab 3 / Schedule 1 / pp. 31-32 (pdf pp. 41-42)

Ref. 2: [OEB Letter Re: Revisions to the Ontario Energy Board Cost Assessment Model, February 9, 2016](#)

Preamble:

In reference 1, Hydro Ottawa states that in 2020 it incurred OEB assessed costs of \$486,978.09 that have been recorded into Account 1508 Other Regulatory Assets - Sub-Account - OEB Cost Assessment Variance.

Reference 2 states that the OEB established Account 1508 Other Regulatory Assets, Sub-account OEB Cost Assessment Variance to record any material differences between OEB cost assessments built into rates, and cost assessments that would result from the application of the new cost assessment model effective April 1, 2016.

Question(s):

- a) Please clarify whether \$486,978 represents the OEB cost assessment incurred by Hydro Ottawa in 2020 or a variance between the OEB cost assessments that were built into rates and cost assessments that would result from the application of the new cost assessment model effective April 1, 2026.
- b) Please provide supporting calculations used to derive \$486,978

9-Staff-221

Ref. 1: Exhibit 9 / Tab 3 / Schedule 1 / p. 3 (pdf p. 86)

Ref. 2: Attachment 9-3-1(A) / OEB Workform Deferral and Variance Account, April 28, 2025

Question(s):

- a) Please provide the support for the credit balance of \$208,445 requested for disposition for Sub-Account 1522, Pension & OPEB Forecast Accrual versus Actual Cash Payment Differential Carrying Charges, as reported in Table 1 of Reference 1.