



February 12, 2024

Nancy Marconi
Registrar
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street
Toronto ON
M4P 1E4

Dear Ms. Marconi,

RE: EB-2023-0195 Toronto Hydro Application for Electricity Distribution Rates effective January 1, 2025 - CCMBC Interrogatories

Attached are the interrogatories of the Coalition of Concerned Manufacturers and Businesses of Canada (CCMBC) to Toronto Hydro in the EB-2023-0195 proceeding.

Respectfully submitted on behalf of CCMBC,

Tom Ladanyi
TL Energy Regulatory Consultants Inc.

cc. Daliana Coban (Toronto Hydro)
Thomas Eminowicz (OEB Staff)
Charlotte Kanya-Forstner (OEB Staff)
Lawren Murray (OEB Staff)
Deniz Oktem (Toronto Hydro)
Catherine Swift (CCMBC)
Intervenors of Record

EB-2023-0195

**Toronto Hydro Application for Electricity Distribution Rates
effective January 1, 2025**

Interrogatories of

Coalition of Concerned Manufacturers and Businesses of Canada

February 12, 2024

1B-CCMBC-1

Reference: Exhibit 1B, Tab 1, Schedule 3, Page 9, Table 9: OM&A 2020-2029 Cost Drivers

Questions:

- a) Please explain the reason for the \$9.5 million Distribution Operations cost driver in 2024.

- b) Please explain the reason for the \$13.9 million Distribution Operations cost driver in 2025.

1B-CCMBC-2

Reference: Exhibit 1B, Tab 2, Schedule 1, Page 25, Table 3: 2026-2029 Revenue Growth Factor

Question:

What is the main reason for the large increase in the Revenue Growth Factor from 2.62% in 2027 to 7.43% in 2028?

1B-CCMBC-3

Reference: Exhibit 1B, Tab 2, Schedule 1, Page 26

Preamble: “Substituting the labour component of the inflation factor with a Toronto-specific index is responsive to the consideration that labour is a key cost driver within the utility’s plan, and a Toronto-specific labour index could be more suitable to account

for the localized inflationary cost pressures that the utility faces in the 2025-2029 rate period.”

Questions:

- a) Please confirm that Toronto Hydro proposes that ratepayers bear the risk of inflation.
- b) Does the Toronto-specific labour index only cover the City of Toronto, or does it cover a larger area?
- c) What percentage of Toronto Hydro employees are residents of the City of Toronto?
- d) Do the businesses and manufacturers operating in Toronto face the same inflationary cost pressures as Toronto Hydro?

2B-CCMBC-4

Reference: Exhibit 2B, Section D3, Appendix D, Nexant Report, Toronto Hydro-Electric Service Limited: 2018 Value of Service Study, Page 6, 1 Executive Summary, 1.1 Response to Survey and Table 1-1: Total Number of Completed Surveys by Customer Class.

Preamble: “The primary objective of the VOS study was to estimate system-wide outage costs by customer class. The VOS analyses are based on data from three separate surveys (one for each customer class) conducted between January and April 2018. The responses were used to estimate the value of service reliability for each customer segment, using procedures that have been developed and validated over the past 25 years by the Electric Power Research Institute (EPRI) and other parties.”

Questions:

- a) The quoted paragraph mentions the primary objective of the study. What were other objectives?
- b) Please confirm that the study found that customers who have higher electricity costs have higher outage costs.
- c) Considering that the study was conducted four years ago, have any changes occurred since then that would affect the results?
- d) The paragraph mentions costs and value. Based on Nexant’s use of the two words is cost an objective measure and is value a subjective measure? Please discuss.

- e) Considering the very small sample sizes for Small/Medium Business and Large Commercial & Industrial customer classes what confidence should the OEB have in the results of the study?

2B-CCMBC-4

Reference: Exhibit 2B, Section D3, Appendix D, Nexant Report, Toronto Hydro-Electric Service Limited: 2018 Value of Service Study, Page 7, 1.2 Outage Cost Estimates, Table 1-2: Cost per Outage Event Estimates by Customer Class

Preamble: “Cost per outage event is the average cost per customer incurred from each outage duration. Given the dynamic survey instrument design which accounted for historical outage onset times, these values represent the average outage cost across all time periods.”

Questions:

- a) How were the costs determined? Did customers provide their own estimates of cost per event to Nexant or did Toronto Hydro provide the costs to Nexant?
- b) The quoted paragraph suggests that the time of day and outage duration were averaged out. Please explain how this was done.

2B-CCMBC-4

Reference: Exhibit 2B, Section D3, Appendix D, Nexant Report, Toronto Hydro-Electric Service Limited: 2018 Value of Service Study, Page 38, 6. Small & Medium Business Results

Preamble: “Table 6-1 summarizes the survey response for SMB customers. With 245 total completed surveys, customer response was below the overall sample design target of 800. The study results are valid but obtaining results by smaller geographic regions within the service territory (as with residential customers) was not feasible and the confidence bands are wider than they otherwise would have been if the targets had been reached. The original sample design had a sample draw of 3,200 customers for an expected response rate of 25 percent. Once the customers in the first sample draw had been contacted and it was clear that the response rate was below target, Nexant worked with THESL to boost responses by increasing incentives from \$50 to \$100 and adding 3,200 customers to the sample. Even with the increased incentives, the response rate remained low. It was similar across the four usage categories, ranging only from 3.5 percent to 4.2 percent.”

Questions:

- a) How was the sample design target of 800 customers determined?

- b) How was the original sample design of 3,200 customers determined?
- c) The quoted paragraph indicates that another 3,200 were added to the sample for a total of 6,400 customers. Were all of these customers randomly selected?
- d) Of the 6,400 customers contacted, only 245 customers responded to the survey. Considering the low response rate and the diversity of small and medium customers, are the results representative of the entire population of small and medium business customers of Toronto Hydro?

2B-CCMBC-4

Reference: Exhibit 2B, Section E1, Pages 4 and 5, Table 3: Investment Category Trigger Drivers

Preamble: “System Access – Customer Service requests - Toronto Hydro strives to connect demand and DER customers to its system as efficiently as possible in alignment with its obligation under the Distribution System Code. This obligation holds unless it poses safety concerns for the public or employees or compromises the reliability of the distribution system. In situations where the existing infrastructure falls short of enabling a connection, the utility undertakes system expansions or enhancements to accommodate the customer's needs.”

“System Service - Capacity Constraints - Expected load changes can impact service consistency and demand requirements for the system. To address this, Toronto Hydro proactively adjusts and expands its infrastructure to optimize reliability and meet evolving customer needs.”

Questions:

- a) Please explain the decision-making process that Toronto Hydro uses to identify capacity constraints, particularly as they relate to large condominium developments at Yonge and Eglinton, Yonge and St. Clair, Bayview and Eglinton and Mount Pleasant and Eglinton.
- b) Does Toronto Hydro charge developers of such large condominium developments to pay a contribution for the cost of expanding infrastructure to relieve capacity constraints? If the answer is yes, how is the amount of contribution determined? If the answer is no, please explain why not.
- c) Please file Toronto Hydro’s policies for dealing with customer service requests and the requirements for contributions from customers.

2B-CCMBC-5

Reference: Exhibit 2B, Section 5.1, Page 7, High Voltage Connections (750 Volts and above) (“HV”)

Preamble: “These connections primarily relate to larger residential and commercial developments. These customers typically engage Toronto Hydro years before service is expected to be required. Figure 3 provides a year-over year comparison of the volume of new formalized high voltage requests that Toronto Hydro receives on an annual basis. High voltage connections increased by 27.6 percent for the period 2020 to 2022. As per section 7.2.2 of the DSC, these service requests must be completed within ten business days from the day on which all applicable service conditions are satisfied, or at a later date as agreed to by the customer and distributor.”

Questions:

- a) Did Toronto Hydro perform an economic evaluation of each of these high voltage connections as required by Appendix B of the DSC?
- b) What was the cost of these connections in each of the three years?
- c) What was the total amount of contributions collected from these customers in each of the three years?
- d) Did the cumulative increase in load as a result of this connections use up available capacity that required investments to increase capacity in subsequent years? If the answer is no, please discuss the amount of excess capacity on the Toronto Hydro system. If the answer is yes, please provide the costs of capacity expansion that was and will be required in 2023, 2024, 2025 and subsequent years as a result of the high voltage connections in 2020, 2021, and 2022.

2B-CCMBC-6

Reference: 2B, Section D2, Appendix A, page 6, and Table 2: Climate parameters and data sources used in the 2015 Study and the current (2022) study

Preamble: “Annual probabilities were estimated for the baseline period (1981-2010), the 2030s (2021-2050) and the 2050s (2041-2070), by dividing the number of event occurrences, by 30 years. The annual probabilities were then translated to study period probabilities by estimating the likelihood of occurrence over a 28-year period (from 2022 to 2050). Because seven years have passed since the 2015 Study (study period from 2015 to 2050), the length of the study period has changed, which influences the climate parameter probability of occurrence.”

Questions:

- a) Why were annual probabilities estimated for the baseline 1981 to 2010 period since actual experience is known?
- b) Please compare and discuss the estimated probabilities for the 1981 to 2010 period with actual experience for the same period.
- c) Please compare and discuss the probabilities of occurrences predicted by the 2015 Study with actual experience since then.
- d) Has Stantec used the same data as the 2015 Study extended by 7 years?
- e) Of the climate parameters listed in Table 6, none deal with low temperature. Please explain why low temperature is not listed as a climate parameter.
- f) The table indicates that different data sources were used for some of the Climate Parameters in the 2022 Study than in the 2015 Study. For example, for the High Winds climate parameter Cheng et Al. (2012) was used in the 2015 Study but Cannon et Al (2020) was used in the 2022 Study. Please explain how and why data sources were selected and used by Stantec.

2B-CCMBC-7

References: Exhibit 2B, Section D2, Appendix A, Stantec, Climate Change Vulnerability Assessment Update, Page 7, Table 3: Probability score classes applied in this study and the 2015 Study (from Engineers Canada, 2011), Table 4: Updates to climate parameter probabilities, and Page 9.

Preamble: “There is a decrease in the estimated number of days with maximum temperatures exceeding 40°C in the 2030s and 2050s, compared to the 2015 Study. As a result, the estimated probability of 40°C temperatures occurring over the study period is about 90% and is classified as a probability score of 6, a decrease from the 2015 Study score of 7.”

Questions:

- a) What was the probability of Days > 40°C in the 2015 Study?
- b) Were there any Days > 40°C were experienced in Toronto since 2015? Please provide dates and the duration in hours of > 40°C.
- c) Do all areas of Toronto experience the same temperature or are some areas, such as near Lake Ontario cooler?

2B-CCMBC-8

References: Exhibit 2B, Section D2, Appendix A, Stantec, Climate Change Vulnerability Assessment Update, Page 20

Preamble: “The only climate parameter probability scores that changed as a result of this analysis include extremely hot days (>40°C), and 25mm freezing rain events, both of which are projected to occur less frequently over the study period than was estimated in the 2015 Study. Though these decreases resulted in a downgrading from high to medium risk for multiple infrastructure asset classes, we do not recommend relaxing any of the adaptation measures provided in the 2015 Study.

Question:

Please confirm that the 2022 Study by Stantec did not find any increase in risk of incidents of severe weather events.

3-CCMBC-9

Reference: Exhibit 3, Tab 1, Schedule 1, Appendix J, 2.4 Estimate Monthly Billing Demand Impact, Page 7

Preamble: “Three of Toronto Hydro’s rate classes are billed on peak demand which is calculated as the highest kVA demand for that customer in each month (Footnote 6). Billing demand times and amounts will vary from customer to customer and from month to month. The presence of EV charging will put upward pressure on billing demand and that pressure is a function of the number of EVs being charged at the premise, the load profiles of those EVs, and the base load profile for that customer. A load profile that estimates the hourly charging requirements (or production expectations) of an EV/DER at the general service customer premise is necessary for the analysis.

Footnote 6: These rate classes are GS 50-999, GS 1-5MW, and Large Users. The remaining rate classes do not have a billing demand rate component.

Footnote 7: Since only the three general service rate classes have a billing demand component, it is only a general service load profile that needs to be calculated. Residential home charging can be ignored when estimating billing demand impacts.”

Question:

Please explain why residential home charging can be ignored. Would that not result in customers in GS 50-999, GS 1-5MW, and Large Users rate classes subsidizing residential customers who have Level 2 chargers? Please discuss.

3-CCMBC-10

Reference: Exhibit 3, Tab 1, Schedule 1, Appendix J, 3.2 LDEV Billing Demand Forecast, Page 14

Preamble: “A load profile that estimates the hourly charging requirements of an LDEV at the general service customer premise is necessary to forecast the impact of LDEVs on billing demand. Most of this charging will be from commuters who are working at the place of business.”

Questions:

- a) What percentage of Toronto Hydro general service customers have EV chargers at the place of business?
- b) Do businesses with EV chargers have a different load profile than businesses that do not have them?
- c) What could be done to prevent cross-subsidies between businesses with EV chargers and businesses without EV chargers?

3-CCMBC-11

Reference: Exhibit 3, Tab 1, Schedule 1, Appendix J, 4.2 MDEV & HDEV Billing Demand Forecast, Page 21

Preamble: “MDEVs and HDEVs will put upward pressure on Toronto Hydro’s three rate classes with billing demand, and that pressure is a function of the number of EVs being charged at the premise, the load profiles of those EVs, and the base load profile for that customer.”

Question:

- a) Please confirm that customers with chargers for MDEVs and HDEVs, not the vehicles, will put upward pressure on Toronto Hydro’s three rate classes.
- b) What could be done to prevent cross-subsidies between customers with chargers for these electric vehicles and customers without such chargers?

4-CCMBC-12

Reference: Exhibit 4, Tab 1, Schedule 1, Page 2, Table 1: Historical and Bridge Year OM&A Expenditures by Program

Questions:

- a) Please update the table to show Actual results for 2023 and 2024.
- b) What is Work Program Execution and why did it increase from \$14.2 million in 2021 to \$17.3 million in 2022?

- c) Please file a table to show FTEs by Program.

4-CCMBC-13

Reference: Exhibit 4, Tab 1, Schedule 1, Page 9, Table 3: 2020-2025 OM&A Trends, Table 4: 2025-2029 OM&A Trends

Questions:

- a) What percentage of the OM&A per FTE is due to compensation including employee benefits?
- b) What are the other costs included in OM&A per FTE?
- c) Are the FTE numbers used in the table just permanent employees, or do the FTE numbers include contract and seasonal and part time employees?
- d) Please add two lines to each table OM&A/MW and OM&A/MWhr and file them.

4-CCMBC-14

Reference: Exhibit 4, Tab 1, Schedule 1, Page 18, Figure 8: FTE per 1,000 Customers, Page 19, Figure 9: OM&A Expenditure per Customer, Figure 10: MWh of Load per Customer

Questions:

Please add histograms to each of the Figures to show 2023 to 2029.

4-CCMBC-15

Reference: Exhibit 4, Tab 1, Schedule 1, Page 33

Questions:

- a) What proportion of Internal Execution, Internal Execution, and Planning workforce time is spent on work for capital projects?
- b) Are all of the costs of this workforce time spent on capital projects capitalized?

4-CCMBC-16

Reference: Exhibit 4, Tab 1, Schedule 1, Page 40

Preamble: "The Control Centre is also one of the key executors and enablers of Toronto Hydro's Grid Modernization Strategy - as the utility adds more distribution assets and modernizes its system operations through more sophisticated data analysis

and automation, this program will require more staff both to handle increasing volumes of work and acquire specialized skills and knowledge, made necessary by technologies the utility plans to implement in the 2025-2029 rate period such as Network Condition Monitoring & Control, Advanced Metering Infrastructure 2.0, Fault Location, Isolation, and Service Restoration, and the Advanced Distribution Management System.”

Questions:

- a) Toronto Hydro intends to increase resources in this area to by 39 percent from 85 to 118 staff between the end of 2022 and 2029.
- b) Why is Toronto Hydro’s Grid Modernization Strategy so labour intensive?
- c) Will Toronto Hydro’s Grid Modernization Strategy result in offsetting staff reductions in other areas? If the answer is yes, what are the offsetting staff reductions. If the answer is no, please explain why not.

4-CCMBC-17

Reference: Exhibit 4, Tab 1, Schedule 1, Pages 41 and 42

Preamble: “In addition, the utility forecasts total DERs installed on the grid to increase by approximately 67 percent from 2023 to 2029, which is driving investments in the Generation Protection, Monitoring and Control program. Each additional device installed in the system pursuant to these programs requires oversight from Control Centre Operations personnel for: 1) commissioning and testing in the field to reliably communicate with the SCADA system, and 2) daily operations and troubleshooting (e.g. responding to alarms or asset management tasks). Headcount increases in this area are essential to enabling the utility to safely and reliably accommodate these utility- and customer-driven changes to its grid.”

Questions:

- a) Please confirm that customers who own DERs are causing an increase in headcount and resulting OM&A costs?
- b) Has Toronto Hydro considered charging customers who own DER’s for the incremental costs they are imposing?

4-CCMBC-18

Reference: Exhibit 4, Tab 1, Schedule 1, Page 47

Preamble: “Parallel to the insourcing effort, the utility plans to hire new staff to replace retiring staff and/or fill vacant positions. The addition of new and relatively inexperienced staff drives the need for more training time and quality assurance (“QA”) work.”

- a) Please confirm that in general, compensation and benefits of experienced employees who are retiring are higher than new inexperienced employees.
- b) What is the saving in OM&A costs from the replacement of experienced retiring employees with new employees over the 2023-2029 period?

4-CCMBC-19

Reference: Exhibit 4, Tab 4, Schedule 5, Mercer Non-Executive Compensation and Benefits Review, Executive Summary and Summary of Findings (Mercer Review does not have page numbers)

Preamble:” On an overall organization basis, THESL’s total remuneration, including the value of all cash compensation, benefit and pension plans are positioned within a market competitive range relative to the 50th percentile of the energy market, and are above the general industry market. The general industry market is generally representative of publicly traded, for-profit organizations.”

- a) Please reconcile the quoted paragraph from the Executive Summary with the table in the Summary of Findings which shows that Toronto Hydro’s Total Remuneration (TRem) is above that of the General Industry Peer Group for 13 out of 15 pay grades, with one pay grade 41% above industry average.
- b) Please reconcile the quoted paragraph from the Executive Summary with the table in the Summary of Findings which shows that Toronto Hydro’s Total Cash Compensation (TTC) is above that of the General Industry Peer Group for 6 out of 15 pay grades, with one pay grade 33% above industry average.
- c) Do the results in the table indicate that Toronto Hydro’s employees enjoy significantly higher benefits than employees in the General Industry Peer Group.

4-CCMBC-20

Reference: Exhibit 4, Tab 4, Schedule 5, Mercer Non-Executive Compensation and Benefits Review, Appendix A (Mercer Review does not have page numbers)

Questions:

- a) How were the General Industry Comparator Companies selected?
- b) Of the 24 companies in the General Industry Comparator Companies, 9 are located in Alberta. Why was such a large proportion of Alberta companies selected? Does that not skew the results of the review?

8-CCMBC-21

Reference: Exhibit 8, Tab 1, Schedule 1, 2.5 Standby Rates, (there are no page numbers in this exhibit)

Preamble: “In its 2006 rate application, Toronto Hydro applied to harmonize the standby rates inherited from its six pre-amalgamation utilities. The OEB approved Toronto Hydro’s proposal on an interim basis, pending a separate generic proceeding to establish standby rates for all Ontario electricity distributors.”

Questions:

- a) How does Toronto Hydro determine its standby rate?
- b) Does Toronto Hydro charge its standby rate to customers who own large load displacement generators who generate their power at peak times to avoid paying the Global Adjustment charge under the Industrial Conservation Initiative?
- c) Does Toronto Hydro charge its standby rate to residential customers who own rooftop solar panels to generate electricity for their own use during sunny periods?
- d) Where is the Standby Rate shown in the EB-2023-0195 evidence on Tariff of Rates and Charges?
- e) How many customers were charged a Standby Rate in 2023 and how much has Toronto Hydro collected in revenues from Standby Rates in 2023?
- f) What is the revenue from Standby Rates that Toronto Hydro expects to collect from Standby Rates in 2024?