EB-2023-0195
Toronto Hydro-Electric System Limited

Application for electricity distribution rates beginning January 1, 2025

AMPCO Interrogatories February 12, 2024

1B-AMPCO-001
Ref: 1B-1-1 Figure 1

Figure 1 provides a percentage breakout of SAIDI (Excluding Loss of Supply & Major Events) by outage cause for 2018-2022.

Please provide the data for each of the years 2018-2023.

1B-AMPCO-002
Ref: 1B-1-1

Please add a column to Tables 5-8 to show 2020-2024 actual spending.

1B-AMPCO-003
Ref: 1B-1-2 p.3

% Contribution to 4 Strategic Priorities	EB-2023-0195	EB-2018-0165
Growth	25%	
Sustainment	46%	
Modernization	17%	
General Plant	12%	

1B-AMPCO-004
Ref: 1B-1-3 p.4

Please complete the following Table:

Rate Period	2015-2019	2020-2024	2025-2029
EB#	EB-2014-0116	EB-2018-0165	
Requested Base Revenue Requirement			
OEB-Approved Base Revenue Requirement			

1B-AMPCO-005
Ref: 1B T1 S3 p.7

Please provide the footnote to Depreciation in Table 7 and Table 8.

1B-AMPCO-006
Ref: 1B-2-1 p.34

Toronto Hydro indicates it carefully considered the amount of funding requested for this proposal and based on research, the utility decided to allocate 0.3 percent of the proposed revenue requirement to the Innovation Fund, which amounts to approximately $16 million over the 2025-2029 rate period. This is the low end of a range found in research of comparable ratepayer-funded initiatives aimed at facilitating innovation by utilities and regulatory bodies in other jurisdictions, as well as general data on utility spending for research and development activities.

Please provide a description and details of comparable ratepayer-funded initiatives in other jurisdictions and the corresponding funding amounts.

1B-AMPCO-007
Ref: 1B-3-1 p.42

With respect to Figure 9: 2020 – 2024 Efficiency Achievements (Actual and Forecast), please provide the data and underlying calculations and assumptions used.

1B-AMPCO-008
Ref: 1B-3-2 p.26

With respect to Figure 4, please provide the MAIFI values for each of the years 2018-2023.

1B-AMPCO-009
Ref: 1B-3-2 p.35

In 2021, Toronto Hydro refined its unit cost methodology with respect to wood poles and applied the new methodology retrospectively to ensure year-over-year comparability in the results.

a) Please provide the two methodologies and discuss the differences.

b) Please provide the wood pole unit cost for the years 2018 to 2023 based on the original methodology.

c) Please explain the difference between the average wood pole replacement cost for the years 2020-2022 in Table 3 at 1B-3-2 page 22 and the wood pole preplacement data in

Figure 14 at 1B-3-2 page 35.

1B-AMPCO-010
Ref: 1B-3-3 p.13

Toronto Hydro slowed down the pace of work in the Underground Downtown, Underground Horseshoe, and Overheard Renewal programs by approximately 22 percent leading to a $189 million reduction compared to forecasted budgets for these programs in the 2020-2024 rate application.

a) Please discuss the process Toronto Hydro undertook to reprioritize the capital work and investment levels and conclude where to slow the pace of work.

b) Please provide the impact of the change on the forecast outcomes of each program.

c) Please discuss if incentive payments are impacted by the change.

1B-AMPCO-011

Ref: 1B-3-3 Appendix A p.14

With respect to the data in Table 2, Clearspring forecasts that Toronto Hydro's average SAIFI over 2025-2029 (1.17) is stable compared to the 2020-2022 average (1.18). However, Clearspring's average projections for CAIDI show a slight decline in 2025-2029 (51.70) compared to the 2020-2022 (48.36). In Table 3, Clearspring forecasts a slight decline in SAIDI.

Please discuss the drivers for the forecast decline in SAIDI/CAIDI.

1B-AMPCO-012

Ref 1: EB-2018-0165 1B-2-1 Appendix B
Ref 2: 1B-3-3 Appendix C

At Reference #1, Toronto Hydro filed a UMS Unit Costs Benchmarking Study. At Reference #2, Toronto Hydro filed an updated UMS Unit Costs Benchmarking Study dated October 2023.

a) Please explain why unit costs for OH Switch Replacement and Switchgear Replacement were included in the EB-2018-0165 study but not included in the October 2023 UMS Study.

b) Please provide the unit costs for OH Switch Replacement and Switchgear Replacement if calculated as part of UMS' work for the October 2023 study but not included in the report.

c) Please provide the drivers for the increase in unit costs in the October 2023 UMS study compared to the EB-2018-0165 UMS Study for the following asset categories: UG Cable, Pole Top Transformers, Padmount/UG Transformer, Network Transformer Replacement and Breaker.

d) Please explain the basis for adding Cable Chambers to the asset category in the October 2023 UMS Study.

e) There were 17 electric utilities in the Peer Group Panel in the EB-2018-0165 study and only 12 electric utilities in the October 2023 UMS study. Please explain and discuss any impact on the results.

f) On page 8 of the UMS report in EB-2018-0165, UMS provides Table II-1 that shows the Fully Normalized Benchmark Comparisons. Please provide the same table using the data in the October 2023 UMS Study.

g) On page 29 of the UMS report in EB-2018-0165, UMS provides Table C-2 which shows the % of Labour and Non-Labour costs. Please provide the same table using the data in the October 2023 UMS Study.

2A-AMPCO-013
Ref: 2A-1-1 p.2

Please provide the OEB-approved depreciation amounts for the years 2020 to 2024.

2A-AMPCO-014
Ref: 2A-2-1 p.3

Please confirm the number of asset types included in Concentric Advisor's Depreciation Study (Appendix D) and the total asset count covered by the study.

2B-AMPCO-015
Ref: 2A-4-2

a) Please provide the Standardized Labour Rate calculation for the Power Line Technician for each of the years 2020-2025.

b) The on-cost rate for Material Handling is calculated by dividing procurement and warehousing related operating expenses that meet the capitalization criteria as described in Toronto Hydro's Capitalization Policy with the dollar value of material moving through the warehouse in a given year.

Please provide the calculation for the years 2020 to 2029.

c) Please explain the increase in Material Handling On Costs over 2025-2029 compared to 2021 actuals.

2B-AMPCO-016
Ref: 2B-A p.7

With respect to Figure 2:

a) Please provide the calculation for 26% of Assets at End of Useful Life by 2023.

b) Please provide the calculation for 11% of Assets To Reach Useful Life by 2030.

2B-AMPCO-017
Ref: 2B-A p.24

With respect to Figure 6, please provide the following:

a) 2021: Revision of Standard Design Practices Document

b) 2022: Grid Modernization Roadmap

2B-AMPCO-0-18
Ref: 2B-A p.24

Toronto Hydro is working to introduce an initiative which considers Probability of Failure and Consequence of Failure measures to its existing ACA measures.

a) Please provide the start date and forecast end date of this initiative.

b) Please provide the % completion rate to date for this initiative.

2B-AMPCO-019
Ref: 2B-A p.24

Toronto Hydro is in the process of developing a detailed AM Capabilities roadmap.

a) Please provide the start date and forecast end date of this initiative.

b) Please provide the % completion rate to date for this initiative.

2B-AMPCO-020
Ref: 2B-A p.24

Toronto Hydro is implementing Phase 3 of the EAIP Solution.

a) Please provide the start date and forecast end date of this initiative.

b) Please provide the % completion rate to date for this initiative.

2B-AMPCO-021
Ref: 2B-A p.24

Please provide the start date and forecast end date for ISO 55001 Certification and the % completion rate to date for this initiative.

2B-AMPCO-022
Ref: 2B-A p.24

a) Please provide Figure 6 to show the Planned Enhancements of the AM Process (2025-2029).

b) For each of the Planned Enhancements please provide the start and end dates and % completion to date.

2B-AMPCO-023
Ref: 2B-A p.37

Toronto Hydro maintains a strategic approach by utilizing a combination of internal and external resources to execute its extensive capital and maintenance programs.

a) Please provide the % of internal and external resources for each of the years 2020 to 2024 allocated to capital programs and maintenance programs.

b) Please provide the resource assumptions (internal and external) for 2025-2029.

2B-AMPCO-024
Ref: 2B-C

a) Please update Figures 10 and 11 with 2023 data.

b) With respect to Tables 4-6, please provide the data for Defective Equipment only by equipment type for the years 2018-2023.

c) With respect to the Cause Code Major Event Days (MEDs), please provide the Number of Interruptions, Number of Customer Interruptions, and Number of Customer Hours

Interrupted for each of the years 2018-2023.

d) In excel, please provide in excel the Number of Interruptions, Number of Customer Interruptions, and Number of Customer Hours Interrupted for each of the years 2018 to 2023 for Overhead Equipment, Underground Equipment, Station Equipment and Various.

e) Please define Various in Figure 20 and Figure 21.

f) In excel, please provide the Number of Interruptions, Number of Customer Interruptions, and Number of Customer Hours Interrupted for each of the years 2018 to 2023 for Overhead Transformers, Overhead Switches, Poles and Pole Hardware, Overhead Insulators, Overhead Conductors.

g) In excel, please provide the Number of Interruptions, Number of Customer Interruptions, and Number of Customer Hours Interrupted for each of the years 2018 to 2023 for Underground Cables and Cable Accessories, Underground Switches, Underground Transformers.

h) In excel, please provide the data in part c) and f), separately for the Horseshoe Area and Downtown and provide excel versions of the data.

i) Please provide the total number of customers and the number of customers in the Horseshoe Area and Downtown for each of the years 2018 to 2023.

2B-AMPCO-025
Ref: 2B-C p.14

Table 3 provides a percentage breakout of SAIFI (Excluding MEDs) by outage cause for 2018-2022.

Please provide the % Contribution to SAIFI by outage cause for each of the years 2018-2023.

2B-AMPCO-026
Ref: 2B-D1 p.12

Please complete the following table:

Performance Measures	Forecast End of 2024	Actual End of 2024	Forecast End of 2029
Box Framed Poles			

Remaining on the System			
Non-Energy Mitigating Cable Chamber Lids in High Risk Locations			
Rear Lot Customers on System			
Direct-buried Cable on system (km)			
Network Modernization (% of submersible units)			
PCB-contaminated Oil Spills			
Lead Cable Remaining on System (km)			

2B-AMPCO-027
Ref: 2B-D1 p.21

As part of the IPPR process, Toronto Hydro monitors and reports on the progress of capital programs, which includes program level expenditures, project-specific execution status and project expenditures.

Over the period 2020-2023, please provide the list of material projects/programs that performed poorly over 2020-2023, explain why and provide the key lessons learned for execution of the 2025-2029 portfolio.

2B-AMPCO-028
Ref: 2B-D1 p.23

AMPCO seeks to further understand how Toronto Hydro prioritizes projects comparatively at the project and portfolio level. Is this a manual or automated process? How did Toronto Hydro optimize its project portfolio?

2B-AMPCO-029
Ref: 2B-D1 p.25-26

At D1.2.3 Toronto Hydro Toronto explains its Project Management and Execution process. Hydro monitors changes to projects through a change management and governance process. This process includes monthly executive performance reporting, key program status

reporting, change request process management, project variance analysis, and numerous metrics to drive process adherence and continuous improvement. Depending on the magnitude of a required change to a project's cost, schedule, or scope of work, the change may require a detailed assessment of alternatives and formal approval from senior management and the executive team before proceeding.

a) Please complete the following table:

	2020-2024	2025-2029
# Projects		

b) Please provide the key internal document that governs Toronto Hydro's project management process.

c) Please provide an example of a monthly executive performance report.

d) Please provide an example of a project variance analysis.

e) Please explain what triggers a Project Variance Report. Please provide the number of Project Variance Reports over 2020-2023.

f) Please provide the % of Planned Capital Projects Completed on Time or Early for each of the years 2020-2023 and provide the calculation.

g) Please provide the % of Planned Capital Projects Completed on or below Budget for each of the years 2020 to 2023 and provide the calculation.

h) Please provide a list of projects 2020-2023 that required formal approval from senior management and the executive team before proceeding.

2B-AMPCO-030
Ref: 2B-D1 p.27

Toronto Hydro tracks Program Accomplishments as an Outcome Measure.

a) Please discuss if Toronto Hydro tracks Program Accomplishments at the segment/program level or portfolio level, or both.

b) Please discuss if each program has a specific and unique outcome measure that is formally tracked. If yes, please provide the Program Accomplishments for each segment in E5 to E8.

2B-AMPCO-031
Ref: 2B-D1 p.28

AMPCO seeks to understand if new and revised standards is a significant driver of costs over 2025-2029.

If material, please provide the number of new and revised standards over 2020-2023 and the impact on costs.

2B-AMPCO-032
Ref: 2B-D2 p.16

Please complete the following Table:

THESL System	2017	2022	2029
% Underground			
% Overhead			

2B-AMPCO-033
Ref: 2B-D2

Please list any third party asset studies undertaken over the period 2020-2024 and include the scope of work and summarize any conclusions and recommendations.

2B-AMPCO-034
Ref: 2B-D2 p.18

Toronto Hydro identified around 45,000 deficiencies each year through planned inspections, responding to equipment failures and power interruptions, or through the course of day-to-day work. The total number of deficiencies are higher compared to the last rate application partially due to the inclusion of deficiencies corrected on site, which were not counted in the previous DSP.

Please provide the number of deficiencies excluding deficiencies corrected on site.

2B-AMPCO-035
Ref: 2B-D2 p.17

With respect to Table 1:

a) Please provide the data in the Priority Deficiencies (Number assigned) column excluding deficiencies corrected on site.

b) Please provide the underlying data and calculations in Table 1, including assumptions.

2B-AMPCO-036
Ref: 2B-D2

a) For each of the asset types in Figures 15, 19, 20, 25 and 29, please provide in excel the number of failures for each of the years 2018 to 2023.

b) For each asset type in part a), please provide in excel the percentage of failures in assets past useful life for the period 2020-2023.

c) For each asset type in part a), please provide in excel the percentage of failures in assets with a Health Index of HI4 or HI5 for the period 2020-2023.

2B-AMPCO-037
Ref: 2B-D2 Appendix A

Please provide any costs over the test period resulting from Stantec's Climate Change Vulnerability Assessment Update.

2B-AMPCO-038
Ref: 2B-D3 p.9

For each of the asset types in Figures 15, 19, 20, 25 and 29 in 2B-D2, please provide in excel the total number of deficiencies (P1 + P2 + P3) for each of the years 2020 to 2023, including and excluding asset deficiencies corrected onsite.

2B-AMPCO-039
Ref: 2B-D3 p.9

a) With respect to Figure 2, please provide the total number of Work Requests split between Capital Work and Non-Capital Work for each of the years 2020-2023.

b) Please provide the number of Work Requests cancelled each year.

2B-AMPCO-040
Ref: 2B-D3 p.28

Please map the assets in Table 8 to the following Categories: Overhead, Underground, Station and Network.
2B-AMPCO-041
Ref: 2B-D3 p.28

With respect to Table 7, please provide Toronto Hydro's optimal timing to address assets in each Health Index band.

2B-AMPCO-042
Ref: 2B-D3 p.54

The IPPR process also creates a feedback loop that provides information about program level completion and historical work executed in each program. Information is reported on an individual project basis and includes the project's total spending and assets replaced or installed in any particular program.

Where applicable, for each of the segments in E5 to E8, please provide the actual asset units replaced and installed over 2020-2024 compared to forecast.

2B-AMPCO-043
Ref: 2B-D3 Appendix A

a) With respect to Tables 3-5, please add the asset population to the Table and uodate the excel versions.

b) Page 5: Please provide the Summary of Current Health Index Distribution as of year end 2023 and include asset population in the Table.

c) Page 4: The footnote to Table 3 states that Wood Pole results are re-calculated based on the refinement to the Wood Pole asset model highlighted in Table 1.

   Please provide the condition results for wood poles before the noted recalculation.

d) Page 6: Please confirm Table 5 is based on the future, projected for year end 2029, based on no investment. If yes, please provide the Summary of Future Health Index projected for year-end 2029 taking into account the planned investments for 2025-2029.

2B-AMPCO-044
Ref: 2B-D5 p.19

Please provide costs for the Intelligent Grid Programs in Table 2 for the years 2020-2024.

2B-AMPCO-045
Ref: 2B-D5 p.34

Please provide costs for the Grid Readiness in Table 3 for the years 2020-2024.

2B-AMPCO-046
Ref: 2B-D5 p.34

Toronto Hydro provides some examples of potential Innovation pilot projects.

a) Please explain how Toronto Hydro will determine the selection of Innovation pilot projects without duplicating existing or planned work by others.

b) Has Toronto Hydro investigated potential external funding opportunities for Innovation? Please discuss.

c) Has Toronto Hydro investigated potential cost sharing Innovation partnerships? Please discuss.

2B-AMPCO-047
Ref: 2B-D6 p.1

The primary objectives of the Facilities Asset Management Strategy (the "Strategy") are to maintain the safety, reliability, and functionality of stations and work centres.

Please provide a copy of the Strategy.

2B-AMPCO-048
Ref: 2B-D7

a) Please provide the specific accomplishments over 2020-2025 to be achieved under Toronto Hydro's Net Zero by 2040 strategy and the corresponding costs.

b) Please provide a copy of Toronto Hydro's Net Zero by 2040 strategy.

2B-AMPCO-049
Ref: 2B-E5.1 p.18

Please provide a breakdown of the number of customer connections by customer type for each of the years 2020-2029.

2B-AMPCO-050
Ref: 2B-E6.1

Please complete the following Table:

Area Conversions	2020-2024	2025-2029
Rear Lot Conversion (# of Customers)		
Rear Lot Conversion (# Poles Replaced)		
Box Construction (# Poles Replaced)		
Box Construction (# Transformers Replaced)		
Box Construction (# Switches Replaced)		
Box Construction (Overhead Primary Conductors)		

2B-AMPCO-051
Ref: EB-2018-0165 2B-E6.1 p.21

With respect to Rear Lot Conversion, Toronto Hydro applied an average cost of $0.036 million per customer plus inflation and engineering and support costs in developing the segment cost forecasts for the 2020-2024 period.

Please provide the actual average cost per customer over the 2020 to 2023 period and show the calculation.

2B-AMPCO-052
Ref: EB-2018-0165 2B-E6.1 p.25

With respect to Box Construction, Toronto Hydro used the average cost of $0.029 million per pole plus inflation and engineering and support costs to derive the forecast costs for 2020-2024.

Please provide the actual average cost per pole over the 2020 to 2023 period and show the calculation.

2B-AMPCO-053
EB-2018-0165 2B-E6.1 p.26

When planning box construction conversion projects, Toronto Hydro considers reliability, third party scheduling conflicts and the planned decommissioning of municipal stations. Table 12 provides a list of the eight remaining stations carrying box construction lines, the conversion date and the projected costs.

a) Please update Table 12.

b) Please identify where Toronto Hydro coordinated the elimination of box construction with the station and external dependencies in Table 12 over 2020-2024.

2B-AMPCO-054
Ref: 2B E6.1 p.18

The evidence states "Based on asset condition assessment, 9 percent of the wood poles have material deterioration and are in poor condition and this percentage is expected to increase to approximately 35 percent by 2029 without any investments. As with age, when considering box-framed poles on their own, these percentages increase: to 15 percent HI4 or HI5 as of 2022 and 61 percent by 2029 (without investment)."

Please provide the data for box-framed poles for 2029 including planned investments.

2B-AMPCO-055
Ref: 2B E6.1 p.20

a) With respect to Table 10 Status of 2020-2024 DSP Planned Projects, please provide the cost for each of the completed phases.

b) Please provide the projected costs of projects/phases with completion dates of 2023 and 2024.

2B-AMPCO-056
Ref: EB-2018-0165 2B-E6.1 p.14

The evidence states "Rear Lot projects include the replacement of PCB at-risk transformers. Through the Area Conversion program, Toronto Hydro is proposing to eliminate approximately 100 PCB at-risk transformers by 2024 as part of the planned projects in the rear-lot system.

Please provide the number of PCB at-risk transformers replaced by 2024.

2B-AMPCO-057
Ref: EB-2018-0165 2B-E6.1 p.19

Toronto Hydro indicates there are currently 400 PCB at-risk transformers on box construction feeders. This accounts for a third of the transformers on box construction feeders as of 2017. The Box Construction Conversion segment will eliminate an estimated 325 PCB at-risk transformers by 2024 through the planned projects.

Please provide the number of PCB at-risk transformers replaced over 2020-2024.

2B-AMPCO-058
Ref: 2B-E6.2

a) Page 11 Figure 5: Please provide a table that sets out the number of equipment failures for each of the years 2013 to 2023 for UG Transformer, Underground Cable and Underground Switch in the Horseshoe area.

b) Page 28: Do Table 6 and Figure 28 reflect the Horsehoe area? If not please provide for the Horseshoe area.

c) Page 31: The forecasted volumes are estimates based on a preliminary selection of areas targeted for complete rebuilds on 27.6 kV feeders, rebuilds with voltage conversion, and spot replacements.

   Please provide the preliminary selection of areas.

d) Page 32: Please provide the number of transformer spot replacements for each of the years 2013 to 2023.

2B-AMPCO-059
Ref: 2B-E6.3

a) Please add 2023 data to the following: Figure 15, Figure 21, Figure 22, and Figure 36.

b) Please provide the number of interruptions on the URD System for each of the years 2018 to 2023.

c) Page 34: Please provide Figure 35 for the Downtown area.

d) Page 34: Please provide Figure 36 for the Downtown area and include 2023 data.

e) Page 37: Please provide the number of interruptions, customer interruptions (CI) and customer hour interruptions (CHI) for both PILC cable and AILC cable for each of the years 2018 to 2023.

2B-AMPCO-060
Ref: 2B-E6.5

a) Please add 2023 data to Figure 2, Figure 5, Figure 6, Figure 9, Figure 15, and Figure 20.

b) Please provide the number of outages on the Overhead System for each of the years 2013 to 2023.

c) Please provide the number of outages for Pole-top Transformers, Poles and Pole Accessories, Overhead Switches and Conductors for each of the years 2018 to 2023.

d) Page 38: The total number and timing of the areas targeted will depend on the specific locations and required scope and level of investment for projects selected (which have not yet been determined). Please discuss when the targeted areas will be determined.

2B-AMPCO-061
Ref: 2B-E6.6 p. 42

For each of the segments in Table 24, please provide a table that sets out the total quantity of assets by asset type replaced for each of the years 2020-2029.

2B-AMPCO-062
Ref: 2B-E6.7

a) Page 1: Please provide the number of major asset failures by asset type by year for the each of the years 2020 to 2023 addressed under the Reactive and Corrective Capital.

b) Page 8: Please provide the number of interruptions, CI and CHI for each of the assets in Table 4 for each of the years 2018-2023.

c) With respect to Figure 6, please provide the underlying data and include 2023 data.

d) Page 12: Please provide the total number of deficiencies (P1+P2+P3) by major asset type by year for the each of the years 2020 to 2023 addressed under Reactive and Corrective Capital.

e) Please provide the number of P4 deficiencies for each of the years 2020-2023 and the number addressed under Reactive Capital 2020-2024.

f) Page 13: Please provide Table 7 for 2020-2024.

g) Page 14: Please add 2023 data to Table 8, Figure 14,

h) Please identify the FESI-7 Feeders in each of the years 2018 to 2023.

i) Please identify the FESI-6 Large Customer Feeders in each of the years 2018 to 2023.

j) In addition to FESI-7 and FESI-6 Large Customer metrics, Toronto Hydro has begun to track a new metric, Customers Experiencing Multiple Sustained and Momentary Interruptions, or CEMSMI-10.

   Please provide the methodology to calculate the metric and provide the calculation using available data.

k) Page 18: Figure 11 shows the breakdown of asset types replaced under the WPF segment between 2020-2022.

   Please provide the number of assets replaced under the WPF segment for each of the years 2020 to 2023 for all six asset types included in Figure 11.

l) Page 23: Please add the numerical values to Figure 15.

m) Please provide the WPF addressed for each of the years 2020 to 2029.

n) With respect to Reactive Capital spend, please provide the total number of assets replaced by major asset type for each of the years 2020-2023.

o) Please provide the percentage of Reactive Capital spend in the Downtown area for each of the years 2020-2023.

2B-AMPCO-063
Ref: 2B-E7.1 p. 25

For each expenditure segment in Table 6, please provide the volume of work for each of the years 2020-2029.

2B-AMPCO-064
Ref: EB-2018-0165 2B-8.3 p.10

Table 5 provides Life Cycle Analysis Replacement Criteria. Please advise of any updates to the data.

2B-AMPCO-065
Ref: EB-2018-0165 2B-8.3 p.12

a) Please update Tables 6 and 7 with actuals/updated forecast.

b) Please provide Tables 6 and 7 with 2025-2029 data.

2B-AMPCO-066
Ref: 2B-E8.3

a) Please provide the total number of vehicles in Toronto Hydro's fleet for the years 2018 to 2029 broken down by heavy duty vehicles and light duty vehicles.

b) Please provide the number of EV and hybrid vehicles in the fleet at the end of 2023.

c) Please provide the number and cost of EV and hybrid vehicles to be added for each year 2024-2029.

d) Please provide the average age of the fleet for each of the years 2020 to 2029 assuming planned investments.

e) Please provide the average age of each heavy duty and light duty vehicle type for each of the years 2020 to 2029 assuming planned investments.

f) For each vehicle replaced 2020-2029, please provide the age and mileage (km) for each vehicle and other criteria that Toronto Hydro used to determine need for replacement.

g) Please provide a copy of Toronto Hydro's Fleet Asset Management Strategy.

h) Please provide the vehicle replacement rate for the years 2020 to 2029.

2B-AMPCO-067
Ref: 2B-E8.4

Please provide the following metrics for each for each of the years 2025-2029.

a) IT Spend as a % of Revenue
b) IT FTEs as a % of Employees
c) IT Spend as a % of Operating Expense

4-AMPCO-068
Ref: 4-1-1 p. 4

Please provide a copy of Toronto Hydro's resource plan.

4-AMPCO-069
Ref: 4-1-1 p. 10

The evidence states "Managing workforce-related costs downwards to live within a standard IRM funding paradigm would entail a reduction to Toronto Hydro's overall staffing complement of up to 200 resources by the end of the rate period, putting total FTEs below 2015 levels.

Please provide the details of this calculation.

4-AMPCO-070
Ref: 4-1-1 p. 15

With respect to Figure 3, Toronto Hydro indicates it spends considerably less OM&A relative to capital in comparison to the peer group, in many years showing an OM&A-to-CAPEX ratio of less than half that of the peer group.

Please provide an explanation for this variance.

4-AMPCO-071
Ref: 4-1-1 p. 15

With respect to Figure 5, Toronto Hydro has a considerably lower FTE per $1 million in capital expenditures relative to the peer group, staffing an average of 2.86 FTE per $1 million in capital expenditure, compared to an average of 7.5 FTE for the peer group.

Please provide an explanation for this variance.

4-AMPCO-072
Ref: 4-1-1 p. 18-19

Please provide Figures 8, 9 and 10 for the years 2023 to 2029.

4-AMPCO-073
Ref: 4-1-1 p. 22

For each of the years 2020-2024, please provide the staffing levels projected in the 2020-2024 rate application.

4-AMPCO-074
Ref: 4-1-1 p.32-50

AMPCO calculates the change in FTEs allocated to the Major Programs and Functions between the end of 2022 and the end of 2029 as follows:

# FTEs	**End of 2022**	**End of 2029**	**Variance**
Internal Work Execution	360	421	61
External Work Execution	69	120	51
System Planning	85	116	31
Information Technology	107	126	19
Control Centre Operations	85	118	33
Customer Care	106	147	41
Corporate Services	233	263	30
Total	1,045	1,311	266

Figure 11 on page 20 shows 1631 Total FTEs in 2029 compared to 1227 at the end of 2022, an increase of 404 FTEs.

Please provide the allocation of the 138 incremental FTEs (404-266) not allocated to the Major Program and Functions in the above table.

4-AMPCO-075
Ref: 4-1-1 p.50

With respect to Corrective Work Requests, Toronto Hydro uses a prioritization framework that classifies asset deficiencies into four categories (P1, P2, P3, P4) depending upon the urgency/severity of the deficiency.

a) Please complete the following Table:

# of Deficiencies	2018	2019	2020	2021	2022	2023
P1						
P2						
P3						
P4						

b) Please provide the same table in part a) on the basis of deficiencies not addressed at the end of each year.

c) Please complete the following Table:

# of Deficiencies Allocated to:	2018	2019	2020	2021	2022	2023
Overhead						
Underground						
Stations						
Network						
Other						

d) Please complete the following Table:

# of Deficiencies Allocated to:	2018	2019	2020	2021	2022	2023
Corrective Maintenance						
Reactive Capital						

d) Please complete the following Table:

# of Deficiencies Allocated to:	2018	2019	2020	2021	2022	2023
Horseshoe						
Downtown						

4-AMPCO-076
Ref: 4-2-1 p.7

For the Overhead Line Patrol segment, starting in 2019 Toronto Hydro has tracked the exact number of kilometers of overhead distribution patrolled each year in order to ensure it is more accurately charged for areas patrolled.

Please provide the number of kilometres patrolled for each of the years 2019 to 2029 (actual & forecast).

4-AMPCO-077
Ref: 4-2-1 p.12

Figure 2 provides data for wood poles in HI4 & HI5 from 2020-2022. Please add 2023 to Figure 2.

4-AMPCO-078

Ref: 4-2-5 p. 3

The Emergency Response Program includes funding for Storm and Major Event Restoration.

Please provide the spending for each of the years 2020 to 2023 and the forecast for 2025-2029.

4-AMPCO-079
4-2-2 p.31

Figure 19 shows cable diagnostic testing deficiencies identified between 2021 and 2022.

Please provide the number of deficiencies for transformer, switchgear, accessory and other for each of the years 2020 to 2023.

Please explain what equipment is included in "Other".

4-AMPCO-080
Ref: 4-2-16 p. 14

Internal audit provides independent and objective reporting to Toronto Hydro Corporation's Audit Committee and management through operational, compliance, and performance audits.

a) Please provide the current internal Audit Plan for 2024-2029.

b) Please provide a list of any external audits undertaken over 2020-2024 with respect to Toronto Hydro.

4-AMPCO-081
Ref:4-4-1 p. 8

From 2019 to 2023 year-to-date, newly hired employees were brought into their roles at an average of 87 percent of the salary grade.

Please provide Toronto Hydro's assumptions in the 2025-2029 budget with respect to placement in salary grades, i.e. does Toronto Hydro include 100% of salary grades for all positions in the compensation budget?

4-AMPCO-082
Ref:4-4-3 p. 27

a) Please complete the following Table:

OM&A Outsourcing	2020	2021	2022	2023	2024

Forecast $					
Actual $					
% OMA Outsourced					

b) Please summarize the work activities outsourced over 2020-2024.

c) Please summarize the work activities to be outsourced over 2025-2029.

4-AMPCO-083
Ref: 4-4

Please provide Toronto Hydro Retirement Actuals and Projections for the years 2018 to 2029.

4-AMPCO-084
Ref: Appendix 2-K

Please recast Appendix 2-K with the following:

a) Please breakout Management, Executive, Union and Non-Union Separately.

b) Please explain the variance in Executive positions between 2020 (71) and 2023 (86).

c) Please explain the variance in Executive positions between 2023 (86) and 2024 (96).

d) Please define part-time.

e) Please provide the number of part-time FTEs included in the total number of employees by year.

f) Please provide a breakdown of Salary, Overtime and Incentive Pay separately.

g) Please update for 2023 Actuals.

h) Please provide the compensation costs allocated to OMA and Capital by year in Appendix 2-K.

i) Please provide an excel version of Appendix 2-K including a), f), g) and h).

j) Please discuss if overtime hours are converted into FTEs and included in the FTE totals.

4-AMPCO-085

a) Please complete the following Table:

Overtime (OT)	2020	2021	2022	2023	2024
OEB Approved $					
Actual $					
Forecast Hours					
Actual Hours					

b) Please complete the following Table:

Overtime (OT)	2025	2026	2027	2028	2029
Forecast Hours					

c) Please provide the total hours worked (actuals/projections) excluding overtime in each of the years 2020 to 2029.

4-AMPCO-086

a) Please provide vacancy data (calculated FTEs and $) for each of the years 2020 to 2024 (YTD actuals).

b) Please provide the current number of vacancies.

4-AMPCO-087
4-4-1 p. 7

Total cash compensation costs include base salary wages, overtime and incentive payments.

a) Please identify which employee groups are not eligible for incentive payments.

b) For each of the years 2020-2024, please provide the forecast and actual incentive payments paid.

c) Please discuss any changes in the Incentive Pay Program since 2020.

d) Please provide Toronto Hydro's assumptions regarding achievement of incentive payments for 2025-2029 as it relates to forecast compensation costs.

4-AMPCO-088
4-4-3 p. 25

Table 2 provides Training and Development Programs for 2020-2022. Please provide training costs for the years 2020 to 2029.

4-AMPCO-089

a) For the period 2020-2024, please provide a list of one-time expenses.

b) Please provide a list of one-time expenses for 2025-2029.

4-AMPCO-090

Please complete the following Table:

	Formula	2020	2021	2022	2023
Retention Rate %					
Turnover Rate %					
Absenteeism Rate %					
Attrition Rate %					
Internal Hires %					

4-AMPCO-91
Ref: EB-2018-0165 4A-2-1 p.29

On average, Toronto Hydro pruned 1,628 circuit kilometres and approximately 53,000 trees annually between 2015 and 2017.

a) Please provide the circuit km pruned for each of the years 2018 to 2023.

b) Please provide the number of trees pruned for each of the years 2028 to 2023.

c) Please provide a map of Toronto Hydro's current vegetation management cycles.

4-AMPCO-092
Ref: EB-2018-0165 4A-2-7 p.16

Table 4 provides historical control centre work volumes for 2013 to 2017.

Please provide the same table for the years 2018 to 2023.

4-AMPCO-093
Ref: EB-2018-0165 4A-2-9 p.17

Figure 2 provides the number of deficiencies processed for the years 2015 to 2020.

Please provide the same data for the years 2020 to 2023 and include the numerical values in the bar chart.

4-AMPCO-094
Ref: EB-2018-0165 4A-2-9 p.19

When Toronto Hydro installs new assets on its distribution system on a planned or reactive basis, key data management systems must be updated based on relevant installation and inspection records. Figure 3 shows the historical and projected trend in the number of equipment change-outs processed and forecasted to be processed through the above systems for the years 2015 to 2020.

Please provide the same Figure with data for the years 2020 to 2023 and include the numerical values in the Figure.

4-AMPCO-095
Ref: EB-2018-0165 4A-4-3 p. 10

From 2013 to 2017, THRESL had a 32 percent improvement in corporate attendance, from 5.23 days in 2013 to 3.54 days in 2017.

Please provide corporate attendance in days for each of the years 2018 to 2023.

4-AMPCO-096
Ex9-1-1 p.29

a) Please provide the calculations for Actual Historic & Forecast Bridge Capital-Related Revenue Requirement for each of the years 2020-2024.

Please explain what is included under other adjustments.

4-AMPCO-097
EB-2018-0165 Decision p.195

The CRRRVA records the variance between the capital-related revenue requirement included in rates and the actual capital-related revenue requirement (excluding balances captured in the Externally Driven Capital and Derecognition variance accounts).

The OEB finds merit in better understanding the program level details that cause variances in overall capital spending as proposed by VECC. The approach offered by Toronto Hydro to require it to report on in-service additions by investment category for the 2020-2024 period at the time of its next rebasing is approved.

Please provide the OEB-approved ISA compared to actual ISA at the investment level for each of the years 2020 to 2024.