RESPONSES TO ONTARIO ENERGY BOARD SETTLEMENT CONFERENCE QUESTIONS

QUESTION STAFF-01:

Reference(s): 5-Staff-313

Update the long-term debt rate in the work form (last updated on March 11).

RESPONSE:

Toronto Hydro confirms that the latest revenue requirement workforms filed on April 22, 2024 include the updated long-term debt rate of 3.95% which was filed on March 11, 2024.

RESPONSES TO ONTARIO ENERGY BOARD SETTLEMENT CONFERENCE QUESTIONS

QUESTION STAFF-02:

Reference(s): N/A

Toronto Hydro's position regarding use of variance account for cost of capital changes resulting from the OEB's generic proceeding.

RESPONSE:

Toronto Hydro maintains its position and proposal with respect to setting 2025-2029 rates in accordance with the OEB's current cost of capital parameters.

RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO PRE-SETTLEMENT QUESTIONS

QUESTION AMPCO-01:

Reference(s): N/A

With respect to capital, please provide the following:

- 2024 capital expenditures to date
- capital expenditures at the same point in time in 2023
- 2024 in-service additions to date
- in-service additions at the same point in time in 2023.

RESPONSE:

Please refer to Table 1 below.

Table 1: 2023 and 2024 Capital Expenditures and In-Service Additions as of April Month-End ($ Millions)

	Capital Expenditures ($M)		In-Service Additions ($M)	
	2024	**2023**	**2024**	**2023**
April Year-to-Date ("YTD")	224.4	175.8	79.4	87.5
Annual Forecast/Actual	648.0	605.9	619.8	594.2
YTD Completion %	*34.6%*	*29.0%*	*12.8%*	*14.7%*

RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO PRE-SETTLEMENT QUESTIONS

QUESTION AMPCO-02:

Reference(s): 4-SEC-92

QUESTION (A):

a) Please update Table 1, Table 2 and Table 3 with 2023 actuals and provide and explain any adjustments for the 2024 Bridge Year.

RESPONSE (A):

See below for Table 1, Table 2 and Table 3 with 2023 actuals. In Table 3 only, as a result of the timing of hiring in 2023, annual FTE increases in 2024 Bridge year when compared to 2022 actuals have been adjusted by 13 FTEs (please see part (b) of the response). In some instances, the 2023 new hires started later in the year than planned, which produced this timing variance. This adjustment does not reflect an addition to the hiring plan for the 2024 Bridge Year; it is strictly a timing-related adjustment.

Table 1: Annual FTE by Program

Programs	Actual				Bridge	Forecast					2022-2029 Variance
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
Preventative and Predictive Overhead Line Maintenance	26	16	13	14	19	20	22	22	22	22	9
Preventative and Predictive Underground Line Maintenance	-	-	-	-	-	-	-	-	-	-	-
Preventative and Predictive Station Maintenance Program	-	-	-	-	-	-	-	-	-	-	-
Corrective Maintenance	7	7	5	6	3	3	3	4	4	4	(1.0)
Emergency Response	48	39	35	30	26	29	28	29	29	29	(6.0)
Disaster Preparedness Management Program	10	9	8	5	8	8	8	8	8	8	-
Control Centre Operations	81	78	84	88	108	113	117	119	120	120	36
Customer Operations	115	8	18	33	35	38	40	42	44	47	29
Asset and Program Management	165	144	143	152	184	198	212	217	219	219	76
Work Program Execution	366	415	420	422	478	498	511	520	535	544	124
Fleet and Equipment Services	24	16	16	20	20	20	20	20	19	20	4
Facilities Management	26	24	22	23	23	24	24	22	22	22	-
Supply Chain Services	29	24	26	32	37	37	39	39	40	40	14
Customer Care	110	102	106	117	140	146	146	150	151	151	45
Human Resources, Environment and Safety	69	69	71	79	82	85	85	85	85	85	14
Finance	80	87	85	93	99	103	106	106	106	106	21
Information Technology	105	102	106	107	118	124	126	128	128	129	23
Public, Legal and Regulatory Affairs	60	63	69	73	83	85	85	85	85	85	16
Charitable Donations (LEAP)	-	-	-	-	-	-	-	-	-	-	-
Common costs and Adjustments	-	-	-	-	-	-	-	-	-	-	-
Allocation and Recoveries	-	-	-	-	-	-	-	-	-	-	-
Total	**1,321**	**1,203**	**1,227**	**1,294**	**1,463**	**1,531**	**1,572**	**1,596**	**1,617**	**1,631**	**404**

Table 2: Annual FTE by SEC Requested Programs

Programs	Actual				Bridge	Forecast					2022-2029 Variance
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
System Planning – Asset and Program Management	62	70	81	80	98	105	115	119	120	120	39
External Work Execution – Work Program Execution	54	56	68	75	99	107	113	117	120	120	52
Internal Work Execution – Work Program Execution	312	359	352	347	379	391	398	403	415	424	72
Total	**428**	**485**	**501**	**502**	**576**	**603**	**626**	**639**	**655**	**664**	**163**

Table 3: 2023-2029 Annual FTE increase compared to 2022 Actuals

	Actual	Bridge	Forecast					2022-2029 Increase
	2023	2024	2025	2026	2027	2028	2029	
Total FTE increases Per Year	67	169	68	41	24	21	14	404
FTE Increase Capital	20	101	37	28	18	15	12	231
FTE Increase OM&A	47	68	31	13	6	6	2	173

QUESTION (B):

b) Of the total planned FTE increases in 2023 (new positions) confirmed in Table 3 in part a), please confirm the number filled at the end of 2023.

RESPONSE (B):

Of the total 80 planned FTE increase in 2023 compared to 2022, Toronto Hydro has filled 67 FTEs at the end of 2023. The variance of 13 FTEs between 2023 actuals and 2023 Bridge Year forecast is due to timing of the hiring. In terms of headcount Toronto Hydro ended the year 11 headcount ahead of its plan.

QUESTION (C):

c) Of the total planned FTE increases in 2024 (new positions) confirmed in Table 3 part a), please confirm the number filled to date.

RESPONSE (C):

Of the total 169 planned FTE increase by the end of 2024 compared to 2022, Toronto Hydro has filled 73 positions by the end of April 2024. In addition to the 73 positions, there are nine positions that have been filled with candidates who have accepted an employment offer but have not started as of April 30th, 2024.

RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO PRE-SETTLEMENT QUESTIONS

QUESTION AMPCO-03:

Reference(s): 4-AMPCO-86

Please provide the current number of vacancies in 2024 split between new positions and existing positions.

RESPONSE:

As of April 30, 2024 there are 77 vacancies. Approximately 60% of the vacancies are new positions and 40% are replacements for existing positions.

RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO PRE-SETTLEMENT QUESTIONS

QUESTION AMPCO-04:

Reference(s): N/A

Please provide the number of retirements and other staff departures (terminations, resignations) in 2024 to date.

RESPONSE:

As of April 30, 2024, there have been a total of 38 staff departures, including four retirements.

RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO PRE-SETTLEMENT QUESTIONS

QUESTION AMPCO-05:

Reference(s): 5-SEC-118 (b)

Please provide the latest forecast of Underlying Government Bond Rates for the forecast November 1, 2024 and July 7, 2025 debt issuances.

RESPONSE:

The latest forecast of underlying Government Bond Rates for the forecast November 1, 2024 and July 7, 2025 debt issuances are 3.40% and 3.60% respectively.

RESPONSES TO ENVIRONMENTAL DEFENCE PRE-SETTLEMENT QUESTIONS

QUESTION ED-01:

Reference(s): N/A

We are interested in assessing at a high level the degree to which the proposed rate and revenue requirement increases can be considered to be attributable to the levels of inflation we have seen in recent years and the anticipated future levels of inflation. The presentation provided on May 22nd provided high-level figures on rate increases and revenue requirement increases. Please provide those or equivalently high-level figures alongside figures that are adjusted for past and forecast inflation.

RESPONSE:

The requested analysis cannot be completed within the timelines of the settlement conference. However, a high-level analysis is presented below to normalize capital and OM&A expenditures for the impact of inflation across the two rate periods. This analysis illustrates the relative magnitude and impact of high-inflation seen in recent years on the 2025-2029 revenue requirement and rate increases proposed in the application.

Using the OEB's inflation factor, in combination with Toronto Hydro's forward-looking inflation assumptions, to adjust all the expenditures in 2020-2029 period to 2020 dollars,[1] Toronto Hydro estimates that approximately 60% of the increase in total expenditures in 2025-2029 compared 2020-2024 is associated with inflation. Please see the tables below for a summary of the analysis, and breakdown of capital and OM&A expenditures.

[1] 2021-2023 discounted using OEB Inflation Factor on a 2-year lag. 2024-2029 discounted using Toronto Hydro's forecasted inflation assumptions.

Table 1: Total Expenditures (Capital and OM&A) Normalized for Inflation ($ Millions)

		2020-2024	2025-2029	Increase 2020-24 vs. 2025-29	Proportion of Total Increase
A	Excluding inflation (in 2020 $'s)	$3,995.8	$4,587.9	$592.1	40%
C=B-A	Inflation	$306.0	$1,197.1	$891.0	60%
B	**Total Expenditures**	**$4,301.8**	**$5,785.0**	**$1,483.1**	**100%**

Table 2: Capital Expenditures Normalized for Inflation ($ Millions)

		2020-2024 CAPEX	2025-2029 CAPEX	Increase $ 2020-24 vs. 2025-29	Proportion of Total Increase
A	Excluding inflation (in 2020 $'s)	$2,641.5	$3,125.5	$484.0	45%
C=B-A	Inflation	$ 199.6	$803.2	$603.5	55%
B	**Total Capital Expenditures**	**$2,841.1**	**$3,928.7**	**$ 1,087.5**	**100%**

Table 3: OM&A Expenditures Normalized for Inflation ($ Millions)

		2020-2024 OM&A	2025-2029 OM&A	Increase $ 2020-24 vs. 2025-29	Proportion of Total Increase
A	Excluding inflation (in 2020 $'s)	$1,354.3	$1,462.4	$108.1	27%
C=B-A	Inflation	$ 106.4	$393.9	$287.5	73%
B	**Total OM&A Expenditures**	**$1,460.7**	**$1,856.3**	**$ 395.6**	**100%**

RESPONSES TO ENVIRONMENTAL DEFENCE PRE-SETTLEMENT QUESTIONS

QUESTION ED-02:

Reference(s): N/A

QUESTION (A):

a) Please confirm whether Toronto Hydro is seeking to determine the custom scorecard measures in phase 1 and only defer the targets for those measures to phase 2.

RESPONSE (A):

Confirmed.

QUESTION (B):

b) Please confirm whether Toronto Hydro is seeking to settle both the scorecard measures and targets in this ADR, and if not, whether it is at least open to doing so.

RESPONSE (B):

Confirmed.

RESPONSES TO ENVIRONMENTAL DEFENCE PRE-SETTLEMENT QUESTIONS

QUESTION ED-03:

Reference(s): N/A

QUESTION (A):

a) We are interested in performance measurement that would encourage Toronto Hydro to maximize efficient utilization of the distribution system by its customers (i.e. achieve a higher load factor). One potential metric is revenue requirement per MWh delivered ($/MWh). Please discuss some other potential metrics, including the pros and cons of each, whether or not Toronto Hydro supports them.

RESPONSE (A):

As noted in CQ-ED-04, Toronto Hydro is actively encouraging its customers to electrify their homes and businesses, and is investing in grid modernization technology and capabilities to improve the system observability and controllability. Both of these efforts are expected to position Toronto Hydro well to maximize system utilization in the next decade as the energy transition accelerates. However, for all the reasons noted in the response to Technical Conference Undertaking JT2.5, Toronto Hydro does not view distribution costs per MWh delivered (and similarly revenue requirement per MWh delivered) as an appropriate metric for assessing performance in the 2025-2029 period.

Toronto Hydro is unable to identify and propose other metrics within the context of answering these settlement questions.

QUESTION (B):

b) Please provide a table showing (i) the revenue requirement per MWh delivered for each year over the past 3 years (ii) the revenue requirement per peak demand (MW) for each year over the past 3 years.

RESPONSE (B):

Please see the table below which outlines revenue requirement per MWh and revenue requirement per peak demand (MW) for 2021-2023.

	2021	2022	2023
Base Revenue Requirement (BRR) ($M)	743.5	782.3	840.3
MWh	23,564.8	23,981.0	23,908.0
Peak Demand MW	4,691	4,674	4,586
BRR/ MWh	0.0316	0.0326	0.0351
BRR/ MW	0.1585	0.1674	0.1832

RESPONSES TO ENVIRONMENTAL DEFENCE PRE-SETTLEMENT QUESTIONS

QUESTION ED-04:

Reference(s): N/A

Preamble:

The PEG framework report states as follows at page 93: "Revenue decoupling and high fixed charges both weaken utility incentives to promote beneficial electrification by denying them margins that could otherwise be gleaned between rate rebasings. Alternative means of incentivizing accommodation of beneficial electrification then merit consideration. The options include a PIM, management fees, or variance accounts for incremental costs of beneficial electrification."

Please discuss some potential options to incentivize Toronto Hydro to promote beneficial electrification in addition to Toronto Hydro's existing proposals, including the pros and cons of each, whether or not Toronto Hydro supports them.

RESPONSE:

Toronto Hydro is already actively encouraging its customers to electrify their homes and businesses.

In 2021, Toronto Hydro developed a Climate Action Plan to support the City of Toronto's net-zero vision. In 2022, Toronto Hydro's sole shareholder, the City of Toronto, provided an expanded mandate for climate action that requested Toronto Hydro establish "a new stream of non-rate regulated operations within its regulated business, specifically Climate Advisory Services" with the aim of achieving the City of Toronto's objective of net zero

greenhouse gas emissions by 2040.[1] Climate Advisory Services is funded through a reduction in Toronto Hydro Corporation's dividend to the City of Toronto and has a budget of $10 million in 2024, rising to $15 million in 2026.

Climate Advisory Services involves partnering with customers and local cleantech businesses to accelerate electrification. It works directly with customers – free of charge – to encourage and help them electrify their homes and businesses by making it easier, faster and more affordable for customers to adopt clean energy technologies.

Further details on specific initiatives underway to encourage customers to electrify their homes and business by installing heat pumps, electric vehicles, electric hot water systems, and solar panels, can be found in Toronto Hydro's annual Climate Action Status Report.[2]

[1] City of Toronto, Update on Toronto Hydro Climate Action Plan and Next Steps, City Council Decision 2022.EX34.9 (July 19, 2022), available at secure.toronto.ca/council/agenda-item.do?item=2022.EX34.9
[2] https://www.torontohydro.com/about-us/climate-action-plan

RESPONSES TO ENVIRONMENTAL DEFENCE PRE-SETTLEMENT QUESTIONS

QUESTION ED-05:

Reference(s): N/A

QUESTION (A):

a) We are interested in performance measurement that would encourage Toronto Hydro to contain costs charged to customers for DER connections. One potential metric is the cost charged to connecting customers per connection. Please discuss this metrics and other potential metrics that Toronto Hydro could envision, including the pros and cons of each., whether or not Toronto Hydro would support those.

RESPONSE (A):

Toronto Hydro is committed to streamlining the DER interconnection process to make it faster, cheaper and easier for customers to connect.

The utility has supported the growth of new residential and small business solar installations, which have roughly doubled each of the last three years for a total increase of approximately 760% from 2020 to 2023. Over the last year, Toronto Hydro has been able to reduce the average time from application to connection by one month, to approximately six months, for residential and small business systems (10 kW and less). Other recent efforts to improve the connection process for customers include:

- removing DER size restrictions for almost all customers;
- reducing application and Connection Impact Assessment costs by as much as $1,000 for systems between 10 kW and 250 kW; and

- conducting webinars to increase customer interest and knowledge in rooftop solar and net metering billing; and
- Continuing to work with the City of Toronto and The Atmospheric Fund to identify opportunities to accelerate the deployment of solar across the city.

Additionally, Toronto Hydro notes that the smart meters proposed in its Advanced Metering Infrastructure ("AMI") 2.0 investments are DER-ready by default (Exhibit 2B, Section E5.4). These meters will support two-way power flows such that customers installing DERs can do so without upgrading their meter in turn reducing connection time and cost. Toronto Hydro plans to replace hundreds of thousands of these residential, small commercial, and industrial meters by the end of the decade.

In the 2025-2029 custom scorecard and associated performance incentive mechanism (PIM), Toronto Hydro has included two direct measures related to DER connections: (1) New Services Connected on Time, which tracks the timeliness of DER connections, along with Low Voltage and High Voltage connections and service upgrade; and (2) Customer Satisfaction, which will track customer satisfaction at a more operational level across a number of customer interactions including customer connections (DER inclusive). In addition the utility has committed to a target to triple the amount of flexible system capacity procured from customer and third-party owner resources, and a target to achieve Grid Automation Readiness by the end of the rate period, which among other things would enable improved capabilities for managing bi-directional power flows.

Setting measures and targets with respect to DER costs per connection would be complex and burdensome, and in our view would not provide much incremental value relative to the efforts and investments that are already being undertaken (as summarized above) to make it faster, cheaper and easier for customers to connect DERs to the local grid.

QUESTION (B):

b) Please complete this table three times showing the average annual connection costs per connection for each of the past three years:

Average Annual DER Connection Costs per Connection				
	Micro	Small	Mid-Sized	Large
Assessment Costs				
Interconnection capital costs (meter, etc.)				
Distribution system upgrade costs				
Other costs				
Total costs				

RESPONSE (B):

Please refer to Toronto Hydro's response to interrogatory 2B-ED-26 (g). Toronto Hydro tracks generation connection costs at the program level and is unable to disaggregate the costs for connections of specific sizes. For the program level costs, please see Exhibit 2B, Section E5.1.4.

RESPONSES TO ENVIRONMENTAL DEFENCE PRE-SETTLEMENT QUESTIONS

QUESTION ED-06:

Reference(s): N/A

Toronto Hydro's energy transition planning has focused on EVs and has not fully assessed the impact of fully decarbonizing buildings on distribution capital planning. When and how does Toronto Hydro propose to fully assess and plan for the decarbonization of buildings and how to minimize the distribution costs of meeting that demand.

RESPONSE:

As part of the ongoing Regional Planning Process led by the IESO, Toronto Hydro is considering the longer-term (i.e. 25-year) system needs associated with decarbonization of building heat.

In the next five years, Toronto Hydro expects that the grid can accommodate an increasing winter peak attributable to the decarbonization of building heat. Through ongoing engagements with customers, and continuous improvement in modelling and forecasting capabilities, Toronto Hydro's annual capacity planning process will continue to monitor the impacts of building electrification and other material growth drivers on the local grid.

If demand-related investments over the 2025-2029 are greater than anticipated (due to building electrification or other material drivers) Toronto Hydro proposes a Demand Related Variance Account which provides the utility flexibility to make additional investments that may be need to be ready and able to serve higher demand.

To minimize the distribution costs of meeting future demand associated with building electrification, Toronto Hydro plans to invest in grid modernization technology and capabilities that enhance grid edge visibility and advance energy transition grid readiness objectives including DER enablement and integration and peak demand management initiatives. Toronto Hydro is actively participating in that process led by the IESO. The Utility has also proposed making proactive investments in grid modernization, outlined in Exhibit 2B-D5, that enhance grid edge visibility to enable the utility and customer to better coordinate peak demand management initiatives to lower overall grid investments and manage customer costs.

RESPONSES TO ENVIRONMENTAL DEFENCE PRE-SETTLEMENT QUESTIONS

QUESTION ED-07:

Reference(s): N/A

a) Please complete this table to help us assess the impact of Toronto Hydro's efforts to increase capacity for its customers to connect DERs.

	Customers who cannot connect a DER now	Customers who could not connect a DER assuming all work in the DSP to increase connection capacity is completed
#	42,717	
% of total	5.44%	

RESPONSE:

Please see Table 1 below. Details regarding the forecast numbers are provided in JT2.3.

Table 1: Customers who Cannot Connect a DER

	Customers who cannot connect a DER now	**Customers who could not connect a DER assuming all work in the DSP to increase connection capacity is completed**
#	42,717	10,892
% of total	5.44%	1.39%

RESPONSES TO ENVIRONMENTAL DEFENCE PRE-SETTLEMENT QUESTIONS

QUESTION ED-08:

Reference(s): N/A

QUESTION (A) AND (B):

a) On average, how long does it take for Toronto Hydro to temporarily disconnect a service for a residential customer?

b) On average, how long does it take for Toronto Hydro to reconnect a service for a residential customer?

RESPONSE (A) AND (B):

On average, it takes Toronto Hydro 1.5-hours to temporarily disconnect or reconnect a residential customer at a meter and 2-hours at a pole. These estimates include but are not limited to, scheduling, coordination, travel time to the site, tailboard, traffic set-up/teardown and the disconnect or reconnect operation. As described in JT2.7, the type of disconnection/reconnection required depends on various customer- and site-specific factors such as access, physical configuration and the customer's needs, etc. which can affect the duration of the process.

QUESTION (C):

c) What is the approximately hourly cost of the staff that conduct temporary disconnections?

RESPONSE (C):

As described in Undertaking JT2.7, the OEB-approved specific service charges for disconnections during regular business hours are $120 at the meter and $300 at the pole.

Each charge is applied once for disconnection and once for reconnection. These specific service charges were set and approved by the Ontario Energy Board in Toronto Hydro's 2015 Custom Incentive Rate Application,[1] according to the utility's prevailing labour and vehicle costs. The tables below provide the cost breakdowns for the approved charges for a meter and pole disconnect/reconnect, respectively.

Table 1: Meter Disconnect/Reconnect Service Charge Elements

Cost Description	Rate/Amount	Hours/Units	Cost
Direct Labour (Inside Staff) Straight Time	$55.84	0.5	$27.92
Direct Labour (Field Staff) Straight Time	$80.14	1.0	$80.14
Small Vehicle Time	$8.59	1.0	$8.59
Other	$2.00	1.0	$2.00
		Total Cost at the Meter	**$118.65**

Table 2: Pole Disconnect/Reconnect Service Charge Elements

Cost Description	Rate/Amount	Hours/Units	Cost
Direct Labour (Inside Staff) Straight Time	$55.84	0.5	$27.92
Direct Labour (Field Staff) Straight Time	$80.14	3.0*	$240.41
Large Vehicle Time	$19.89	1.5	$29.84
Other	$2.00	1.0	$2.00
		Total Cost at the Pole	**$300.17**

**Based on a 2-person line crew*

[1] EB-2014-0116, Decision and Order (December 29, 2015) at page 45; Exhibit 8, Tab 2, Schedule 1, Appendix A, pages 4 and 6.

RESPONSES TO ENVIRONMENTAL DEFENCE PRE-SETTLEMENT QUESTIONS

QUESTION ED-09:

Reference(s): N/A

QUESTION (A):

a) JT2.9 states the Toronto Hydro collects a $500 connection deposit for micro generation requests. If the full $500 is not required, does Toronto Hydro refund a portion?

RESPONSE (A):

Confirmed. Where actual costs are less than the deposit, Toronto Hydro refunds the difference once the connection is complete and in-service.

QUESTION (B):

b) Is the $500 amount a fee charged to customers or a deposit used for variable costs that may arise? What does the $500 amount cover and what does it not cover?

RESPONSE (B):

The $500 amount is a deposit. It is used to cover the cost of processing and conducting a technical review of the customer's application, preparing the offer to connect / connection agreement and general administration such as payment confirmation. These costs do not include the cost of the bi-directional meter, final inspection site visit, isolation, or time of meter crews.

QUESTION (C):

c) Please confirm that the $500 is charged for all or almost all micro connection (i.e. that a site assessment is required for all or almost all micro connections).

RESPONSE (C):

Confirmed. Toronto Hydro charges $500 for all micro connection projects. A site assessment is mandatory for all projects to ensure that the main DER disconnect is installed in a safe and compliant manner, and safely accessible by Toronto Hydro crews when required.

QUESTION (D) AND (E):

d) Please provide the average cost charged to customers in each of the past three years to connect micro-generation facilities.

e) Please provide a breakdown of the costs in (d) into cost areas, such as meters, assessments, etc.

RESPONSE (D) AND (E):

As noted in response to 2B-ED-26 part (g), Toronto Hydro tracks generation connection costs at the program level and is unable to disaggregate the costs for microgeneration connections.

QUESTION (F):

f) Please confirm that Toronto Hydro has not defined a basic connection for micro-generation connections.

RESPONSE (F):

Toronto Hydro has defined a basic connection for a micro-embedded generation facility, which includes the supply and installation of a bi-directional meter.

RESPONSES TO ENVIRONMENTAL DEFENCE PRE-SETTLEMENT QUESTIONS

QUESTION ED-10:

Reference(s): N/A

a) Electrification is going to require increased distribution capital spending. However, that increased spending will correspond with increased demand and revenue that can help to reduce or eliminate rate impacts. Please discuss the merits of the following potential options to minimize the rate increases arising from the distribution expansion that will accompany electrification:
   i. Improving the load factor;
   ii. Extending depreciation periods;
   iii. Obtaining cheaper debt financing for capital, including from government sources;
   iv. Increasing local generation (exporting and non-exporting);
   v. Better timing of distribution capital expansions to correspond with demand increases;
   vi. Encouraging electrification in areas with greater grid capacity;
   i. Encouraging electrification to occur in different parts of the service area over time to allow for a better matching of capacity expansion and demand growth;
   ii. Appropriately sizing infrastructure built today for future growth; and
   iii. Demand response and energy efficiency.

RESPONSE:

Toronto Hydro sees merits in these strategies and is already down the path of leveraging them to mitigate current and future rate increase, as summarized below.

Load Factor: Toronto Hydro is actively encouraging its customers to electrify their homes and businesses (see CQ-ED-04), and is investing in grid modernization technology and capabilities (Exhibit 2B, Section D5) to improve system observability and controllability (e.g., balance power loads at a more granular level with near-real-time data from technologies including AMI 2.0, troubleshoot outages remotely, and effectively manage the distribution of power throughout the grid). These efforts, along with investments in improved software systems and analytics, position Toronto Hydro to be able to maximize system utilization in the next decade as the energy transition accelerates. The utility has already begun to demonstrate the benefits of this modernization approach through its successful Network Condition Monitoring and Control Program (2B, E7.3.3 at pages 7-8 and 1B-CCC-42).

Extending depreciation periods: Toronto Hydro undertook a comprehensive depreciation study in 2022, which resulted in longer depreciation lives for many of its assets. The implementation of the revised depreciation rates resulting from this study in 2023 and 2024 (prior to this rebasing application) yielded revenue requirement reductions of approximately $135.6 million which are being returned to customers in the 2025-2029 rate period through the clearance of the Useful Life Changes Variance Account.

Obtaining cheaper debt financing for capital, including from government sources: By virtue of its A credit rating, Toronto Hydro continues to have access to low-cost debt financing through its long-term bond program and short-term credit facility. The economic benefits associated with lower cost debt financing are passed on to customers through the weighted average cost of capital (WACC) when the utility rebases its rates. Furthermore, in the response to interrogatory 1B-Staff-10, Toronto Hydro provided a table which lists government grant funding the utility has applied for over the past 5 years. As part of the Innovation Fund proposal, Toronto Hydro intends to continue to

identify and apply for government funding as opportunities become available in relation to work that is being undertaken as part of the Innovation Fund. Any government funding that the utility would be able to secure for Innovation would be returned to customers through the proposed Innovation Fund Variance Account.

Increasing local generation (exporting and non-exporting): As described in detail in Exhibit 2B, Section E3, Toronto Hydro intends to alleviate short-circuit and thermal capacity constraints on its system through its Generation Protection Monitoring and Control (2B, E5.5), Non-Wires Solutions (2B, E7.2) and Stations Expansion (2B, E7.4) programs to remove grid barriers to DERs proliferation. The utility is also developing hosting capacity analysis tools to help customers proactively identify optimal locations for DER siting in the future, and plans to research and develop flexible hosting capacity solutions during the next rate period (2B, E5.3.4). As part of Toronto Hydro's Intelligent Grid strategy for 2025-2029 detailed in Exhibit 2B, Section D5, planned upgrades to its Advanced Distribution Management System (ADMS) will be vital to optimize the integration and management of DERs, leverage real-time data processing capabilities and analytics to manage the two-way flow of electricity. Furthermore, through its non-rate regulated Climate Advisory Services function, Toronto Hydro is partnering with local cleantech businesses to accelerate electrification by working directly with customers – free of charge – to help and encourage customers to adopt clean energy technologies such as solar generation.[1]

Better timing of distribution capital expansions to correspond with demand increases: Please see Exhibit 2B, Section D4 at page 9 and Toronto Hydro's response to 2B-Staff-176(a) which both describe the least regrets approach to investing in system capacity. In

[1] Further details on specific actions underway to encourage solar can be found in Toronto Hydro's annual Climate Action Status Report. Available here: https://www.torontohydro.com/about-us/climate-action-plan

accordance with this planning philosophy, Toronto Hydro has taken a "wait and see approach" to making incremental investments in new system capacity for accommodating wide-scale building electrification in the mid-2030s. This decision reflects Toronto Hydro's commitment to optimize the timing of distribution capital expansion to better correspond with demand increases.

Encouraging electrification in areas with greater grid capacity, and in different parts of the service area over time to allow for a better matching of capacity expansion and demand growth: As described in the response to CQ-ED-04, Toronto Hydro's Climate Action Team was established to enable the achievement of the City of Toronto's net zero goals by working with customers and local clean tech partners to accelerate electrification.[2] Overtime, this function coupled with enhanced visibility into the grid edge made possible by the utility's grid modernization investments (Exhibit 2B, Section D5), will enable Toronto Hydro to maximize system utilization, including by encouraging electrification in areas with greater grid capacity. As described in the 2025-2029 Grid Modernization Strategy (Exhibit 2B, Section D5 at pages 30, 69-71), Toronto Hydro is committed to developing the capabilities required to display a Hosting and Load Capacity Map (or equivalent data portal) to provide DER interconnection and load capacity at different locations on the network. Making this information readily available in a self-service format will allow customers and clean tech partners to identify areas at the project planning stage that are more likely have lower connection complexity and cost. Toronto Hydro's Climate Action team is already fielding initial requests to identify areas with excess capacity and making this information widely available will provide a three-fold advantage of being responsive to customers, encouraging electrification and increasing

[2] Further details on specific initiatives underway to encourage customers to electrify their homes and business by installing heat pumps, electric vehicles, electric hot water systems, and solar panels, can be found in Toronto Hydro's annual Climate Action Status Report. Available here: https://www.torontohydro.com/about-us/climate-action-plan

system capacity utilization. Further analysis on an area-by-area basis would be required to determine whether the costs of specific electrification encouragement efforts would sufficiently increase system capacity utilization to provide a net benefit to ratepayers.

Appropriately sizing infrastructure built today for future growth: Toronto Hydro assesses the size of its infrastructure when it is (i) evaluating short-term capacity constraints, (ii) replacing assets, and (iii) responding to third-party relocation requests. When evaluating constraints at a localized level (see Exhibit 2B, Section E5.3), Toronto Hydro considers the investments necessary to serve future growth in accordance with the System Peak Demand forecast. Similarly, as noted in the response to undertaking JT2.6 regarding sizing transformers, when replacing assets Toronto Hydro assesses the size of the asset to determine the required future capacity in accordance with section 3.1.7 of the Distribution System Code.

Demand response and energy efficiency: Toronto Hydro has been a leader in Ontario in developing non-wires solutions capabilities by integrating the use of demand-side management into its planning process, as described in the evidence at Exhibit 2B, Section 7.2. Toronto Hydro's flagship NWS program, Local Demand response ("LDR"), has been running since 2018 and is intended to continue in the 2025-2029 rate period with a target to triple the amount of system capacity (30MW) procured from flexible resources to support six stations across the city. This could help avoid about 25% percent of the total load required to be transferred in these areas. For more information, please see Toronto Hydro's response to interrogatories 1B-Staff-40, 1B-Staff-88 and 1B-Staff-89.

RESPONSES TO ENVIRONMENTAL DEFENCE PRE-SETTLEMENT QUESTIONS

QUESTION ED-11:

Reference(s): N/A

a) Could you explain how the System Enhancements program (DSC E7.1) is intended to enable or facilitate DER's (incl. DR)? It seems to be more reliability driven, with the possible exception of the $4.7 million for system observability.

RESPONSE:

Through the System Enhancement program Toronto Hydro is deploying intelligent grid technologies such as SCADA-enabled switches, sensors and reclosers that provide enhanced capabilities for monitoring, controlling, and protecting the grid. These technologies play a key role in enabling bi-directional power flows (Exhibit 2B, Section E7.1). SCADA systems offer the overarching control and data acquisition needed to manage complex power flows while reclosers provide the on-the-ground switching and protection mechanisms. Together, they enable power to flow safely and efficiently in both directions, so that Toronto Hydro can safely, reliably and efficiently accommodate the increasing presence of DERs on its grid (Exhibit 2B, Section D5.2.2).

SCADA systems continuously monitor the grid's operational parameters, including voltage, current, power flows, and the status of various components. This data is essential for understanding the direction and magnitude of power flows at any given time at a localized level. Increased situational awareness of the distribution system will enhance Toronto Hydro's asset management decision-making and increase its load and generation forecasting capabilities by leveraging increasingly granular information (Exhibit 2B, Section E2.4.3.2). In addition, SCADA systems enable grid operators to remotely control devices like

switches and reclosers, and to adjust grid operations based on certain conditions. For instance, if power flows exceed certain thresholds, ADMS can trigger alarms and notifications to operators, so that switching operations to maintain stability and prevent damage can be triggered (Exhibit 2B, Section E5.2.1).

RESPONSES TO SCHOOL ENERGY COALITION PRE-SETTLEMENT QUESTIONS

QUESTION SEC-01:

Reference(s): n/a

a) Please confirm that based on OEB's inflation factor methodology, the 2025 OEB approved Inflation Factor for electricity distributors is expected to be 3.6%.

RESPONSE:

Confirmed.

RESPONSES TO SCHOOL ENERGY COALITION PRE-SETTLEMENT QUESTIONS

QUESTION SEC-02:

Reference(s): Exhibit 1B, Tab 4, Schedule 1

a) Please confirm that Toronto Hydro's proposal is that its Innovation Fund amount be set at 0.3% of its approved 2025-2029 base revenue requirement.

RESPONSE:

Confirmed.

RESPONSES TO SCHOOL ENERGY COALITION PRE-SETTLEMENT QUESTIONS

QUESTION SEC-03:

Reference(s): Exhibit 1B, Tab 3, Schedule 1, Pages 42-43

The Efficiency Achievement Measure target of $6.9M "is based on the 2029 forecasted revenue requirement impact of the empirically- derived efficiency (stretch) factor included in the Custom Revenue Cap Index.".

QUESTION (A):

a) If the OEB approves a different 2029 revenue requirement and/or efficiency (stretch) factor, is Toronto Hydro's expectation that the Efficiency Achievement Measure target would be mathematically adjusted? If not, please explain why.

RESPONSE (A):

In principle, yes, it is Toronto Hydro's expectation that the Efficiency Achievements target would be mathematically adjusted to reflect the impact of the approved efficiency portion of the stretch-factor (not the PIM aspect of the X-factor). However, this expectation is predicated on the stretch factor being set in accordance with appropriate total cost benchmarking results. In that regard, Toronto Hydro notes that it does not agree with the total cost benchmarking results filed by PEG in its recent report. This is because in Toronto Hydro's respectful view PEG's analysis does not appropriately recognize and account for the distinct operating challenge and associated cost pressures of serving a mature dense urban environment. These challenges are detailed in Exhibit 1B, Tab 3, Schedule 3 at pages 2-9 and in Toronto Hydro's response to interrogatory 1B-Staff-121. They were also summarized by Mr. Dan Smart at the Evidence Day Overview presentation.

QUESTION (B):

b) The $6.9M impact is based on a forecast of an inflation factor of 2%. If the 2029 OEB approved inflation factor is different (higher or lower) would that impact the target?

RESPONSE (B):

No. In order to develop and deliver plans necessary to achieve the target on this metric, Toronto Hydro requires a firm target to manage towards.

QUESTION (C):

c) As the $6.9M impact is calculated based on the 2029 revenue requirements, would capital related cost avoidance or reductions be calculated on a revenue requirement basis?

RESPONSE (C):

Yes.

RESPONSES TO SCHOOL ENERGY COALITION PRE-SETTLEMENT QUESTIONS

QUESTION SEC-04:

Reference(s): Exhibit 1B, Tab 3, Schedule 1, Pages 45-46

Please provide the total amount for each of capital and OM&A included in the 2025-2029 forecast budget that is to be spent on Grid Automation Readiness custom measure milestones.

RESPONSE:

Toronto Hydro expects to spend up to approximately $12 million of the System Enhancement program to achieve the SCADA target on the Grid Automation Readiness measure. In addition, the 23 operational technology milestones related to FLISR implementation (i.e. manual FLISR enablement and software releases) will be achieved as part of the ADMS Upgrade Project, which is forecasted to cost approximately $34 million. Workforce investments as part of Control Center Operations and the System Planning segment of Asset and Program Management are also required to support Toronto Hydro's grid modernization efforts (Exhibit 2B, Section D5) including the achievement of the Grid Automation readiness measure.

RESPONSES TO SCHOOL ENERGY COALITION PRE-SETTLEMENT QUESTIONS

QUESTION SEC-05:

Reference(s): Exhibit 1B, Tab 3, Schedule 1, Page 22

Toronto Hydro describes the System Security Enhancements metric: "For the 2025 – 2029 period, Toronto Hydro plans to increase the total number of initiatives that enhance the utility's physical and cyber security posture against the NIST framework by delivering 100 cyber security projects and integrating 10 stations into the Physical Security Operations Centre by the end of the rate period. Completion of these milestones make up the target of 100% on the System Security Enhancements custom metric."

QUESTION (A):

a) Please confirm that the achievement of the metric is made of the following: Between 2025 and 2029 Toronto Hydro must a) deliver 100 cyber security projects, and b) integrate 10 stations into the Physical Security Operations Centre.

RESPONSE (A):

Confirmed.

QUESTION (B):

b) Please provide a list of the 100 cyber security projects.

RESPONSE (B):

For the reasons noted below, Toronto Hydro is unable to provide specifics on the 100 cyber security projects.

On an annual basis, Toronto Hydro creates a cyber security enhancements work plan to effectively respond to new threats, vulnerabilities or modes of cyber security attacks, new technology such as cloud and AI disrupting cyber security landscape, new or evolving requirements from regulatory bodies, changes in cyber security standards and best practices, and other relevant IT market considerations. These projects cover the five functions and 19 categories presented in Figure 3 at Exhibit 1B, Tab 3, Schedule 1 at page 22 that align with the National Institute of Standards and Technology ("NIST") and OEB Cyber Security Frameworks ("CSFs"). This agile approach is necessary to effectively manage threats and vulnerabilities and maintain a robust system security posture in a dynamic and constantly evolving nature of the cybersecurity environment. For instance, in response to the escalating data threats in 2023,[1] Toronto Hydro implemented a modernized data loss prevention ("DLP") solution to strengthen the organization's data protection measures under the Endpoint & Application Protection category.

[1] Global News, *BORN Ontario data breach left health data of millions exposed. What went wrong?* (September 26, 2023). Available here: https://globalnews.ca/news/9985743/born-ontario-health-data-breach/#:~:text=BORN%2C%20an%20agency%20funded%20by%20the%20province%2C%20is,and%201.9%20million%20infants%20born%20in%20the%20province; Security Week, *Several Major Organizations Confirm Being Impacted by MOVEit Attack* (June 6, 2023). Available here: https://www.securityweek.com/several-major-organizations-confirm-being-impacted-by-moveit-attack/; Vulcan, *CVE-2023-34362: MOVEIt Transfer zero-day vulnerability exploited in the wild* (November 1, 2023). Available here: https://vulcan.io/blog/cve-2023-34362-moveit-transfer-zero-day-vulnerability-exploited-in-the-wild/; and BleepingComputer, *City of Toronto confirms data theft, Clop claims responsibility* (March 23, 2024). Available here: https://www.bleepingcomputer.com/news/security/city-of-toronto-confirms-data-theft-clop-claims-responsibility/

RESPONSES TO SCHOOL ENERGY COALITION PRE-SETTLEMENT QUESTIONS

QUESTION SEC-06:

Reference(s): Exhibit 2A, Tab 1, Schedule 1, Appendix A

Please update the Appendix for the most recent updated actuals/forecast included in the evidence.

RESPONSE:

Please refer to Appendix A to Toronto Hydro's response to interrogatory 1B-SEC-1,[1] which reflects the most recent updated in-service additions including 2023 actuals and the updated 2024 forecast.

[1] Available here: https://www.rds.oeb.ca/CMWebDrawer/Record/844954/File/document

RESPONSES TO SCHOOL ENERGY COALITION PRE-SETTLEMENT QUESTIONS

QUESTION SEC-07:

Reference(s): 2B-AMPCO-49

With respect to customer connections, Toronto Hydro states "the 2025-2029 capital expenditure forecast was developed based on historical data". Please provide in detail how Toronto Hydro forecasted the 2024-2029 customer connections expenditures, including all supporting calculations.

RESPONSE:

Please see below for the detailed calculations underpinning Toronto Hydro's customer connection expenditures for the 2025-2029 period.

Toronto Hydro notes that this methodology was not used to derive 2024 bridge amounts as these were determined based on the current feeder request pipeline, ongoing pre-offer to connect design discussions and demand load requirements as noted in Exhibit 2B, Section E5.1.4.1 at pages 21-22.

Gross Capital Expenditure Forecast:

First, the 2025-2029 gross expenditures (Table 2) were forecasted using a linear extrapolation of 2015-2022 actuals and the 2023 bridge (comprised of committed projects), excluding other allocations which represent costs not directly impacted by linear historical trends (Table 1). These allocations relate to capitalized labour costs from OM&A programs including but not limited to Control Centre Operations, Work Program Execution, and Customer Operations which support the execution of Customer Connections.

Table 1: Historical and Bridge Customer Connections Gross Capital Expenditures (Excl. other allocations) ($ Millions)

	Actuals								Bridge
	2015	2016	2017	2018	2019	2020	2021	2022	2023
Customer Connections Gross*	61.3	59.6	51.4	73.3	89.1	95.0	124.6	126.2	118.5

**Excluding other allocations*

Table 2: Forecasted Customer Connections Gross Expenditures excluding other allocations ($ Millions)

	2025	2026	2027	2028	2029
Customer Connections Gross*	148.0	158.0	167.9	177.9	187.8

**Excluding other allocations*

Second, other allocation costs, amounting to approximately 13%, are added to the gross costs to arrive at the total gross capital expenditure forecasts (Table 3).

Table 3: Forecasted Total Customer Connections Gross Expenditures ($ Millions)

	2025	2026	2027	2028	2029
Customer Connections Gross*	148.0	158.0	167.9	177.9	187.8
Other allocations	19.4	21.0	22.1	23.3	24.5
Total Customer Connections Gross	**167.4**	**178.9**	**190.0**	**201.2**	**212.3**

**Excluding other allocations*

Capital Contribution Forecast:

Toronto Hydro applied a 5-year (2018-2022) average percentage to determine the 2025-2029 capital contribution amounts. To derive this average, Toronto Hydro determined the annual capital contribution percentages for the 2018-2022 actuals (Table 4). This ratio was then applied to the 2025-2029 forecasted gross amounts to determine the capital contributions and net expenditures (Table 5).

Table 4: Historical Customer Connections Gross Costs and Capital Contributions ($ Millions) and Percentage

	2018	2019	2020	2021	2022	Avg.
Customer Connections Gross (A)	81.1	97.2	105.6	136.1	139.5	-
Customer Connections CC (B)	(37.6)	(65.9)	(69.0)	(43.6)	(63.5)	-
Capital Contribution % (-B)/A	**46.4%**	**67.8%**	**65.3%**	**32.0%**	**45.5%**	**51.4%**

Table 5: 2025-2029 Capital Contributions (excl. Basic Connections Allowance Update) ($ Millions)

	2025	2026	2027	2028	2029
Customer Connections Gross	167.4	178.9	190.0	201.2	212.3
Customer Connections CC	(86.3)	(92.4)	(98.1)	(103.9)	(109.7)
Net Customer Connections	**81.1**	**86.5**	**91.9**	**97.3**	**102.6**

Rounding variances may exist

Basic Connection Allowance Update:

Toronto Hydro proposes to update the basic connection allowance effective January 1, 2025, and this change is forecasted to reduce customer contributions by $3.4 million per year for the period,[1] resulting in the forecast shown below in Table 6.

Table 6: 2025-2029 Customer Connections Capital Expenditures ($ Millions)

	2025	2026	2027	2028	2029
Customer Connections Gross	167.4	178.9	190.0	201.2	212.3
Customer Connections CC	(82.9)	(89.0)	(94.7)	(100.5)	(106.3)
Net Customer Connections	**84.5**	**90.0**	**95.4**	**100.7**	**106.0**

[1] Exhibit 2B, Section E5.1.4.1 at page 20 and interrogatory response 2B-SEC-62 (d).

RESPONSES TO SCHOOL ENERGY COALITION PRE-SETTLEMENT QUESTIONS

QUESTION SEC-08:

Reference(s): 2B-SEC-60

Please update Appendix A for the most up to date request.

RESPONSE:

Please see Appendix A to this response for the referenced table updated with the latest forecast.

RESPONSES TO SCHOOL ENERGY COALITION PRE-SETTLEMENT QUESTIONS

QUESTION SEC-09:

Reference(s): JT4.15, Appendix A

Please explain why 'System Service Capital Contributions' are a positive number.

RESPONSE:

The positive amounts presented for System Renewal and System Service represent capital contributions paid by Toronto Hydro to Hydro One and are related to the Stations Renewal and Stations Expansion programs, respectively.

Please see Appendix A to Toronto Hydro's response to CQ-SEC-10 for the total annual in-service additions ("ISAs") of these programs, inclusive of the capital contributions paid by Toronto Hydro.

RESPONSES TO SCHOOL ENERGY COALITION PRE-SETTLEMENT QUESTIONS

QUESTION SEC-10:

Reference(s): JT4.15, Appendix A

Please provide a revised version of JT 4.15 that shows each program net of capital contributions.

RESPONSE:

Please refer to Appendix A to this response.

RESPONSES TO SCHOOL ENERGY COALITION PRE-SETTLEMENT QUESTIONS

QUESTION SEC-11:

Reference(s): April 2, 2024 Load Forecast Update

With respect to the April 2nd, 2024 load forecast update:

QUESTION (A):

a) Please confirm that the April 2, 2024 update is the most current load forecast and if it is not, please provide the reference to the most up to date.

RESPONSE (A):

Confirmed.

QUESTION (B):

b) Please explain why the total customer numbers and total GWh in the update do not agree with the totals in Appendix IB filed on the same date.

RESPONSE (B):

Total Customer Numbers

The difference in total customer numbers between the updated Table 7 (Exhibit 1B, Tab 1, Schedule 3) and Appendix 2-IB is attributed to the Unmetered Scattered Load ("USL") and Street Lighting ("SL") customer classes. In Table 7, the total number of customers includes USL and SL *customer numbers*. Appendix 2-IB reflects the number of USL and SL *connections*. Table 1 below reconciles the 2025 customer figures between the updated Table 7 and Appendix 2-IB.

Table 1: 2025 Customer Numbers Reconciliation

Rate Class	OEB Appendix 2-IB (Update April 2, 2024)		Table 7 (Exhibit 1B, Tab 1, Schedule 3) THESL 2025-2029 Evidence Update (Update April 2, 2024)	
	Customer Numbers	Devices/ Connections	Customer Numbers	Devices/ Connections
Residential	618,693		618,693	
CSMUR	97,539		97,539	
GS < 50 kW	72,948		72,948	
GS 50-999 kW	9,941		9,941	
GS 1000-4999 kW	473		473	
Large User	44		44	
Street Lighting (SL)	n/a	172,781	1	n/a
Unmetered Scattered Load (USL)	n/a	12,873	791	n/a

Total GWh

The difference in the total GWh between the two sources is related to line losses. The values provided in Table 7 are presented at the purchased level while the values in Appendix 2-IB are presented at the distribution level.

QUESTION (C):

c) Please confirm that the forecasted total customers for 2025 to 2029 are not adjusted in any way to reflect the energy transition. If not confirmed, please explain the reason(s) for the adjustments and the resulting change.

RESPONSE (C):

Confirmed.

QUESTION (D):

d) Please provide a table that could be used to calculate the distribution revenue that would be recorded in the variance account, showing for each month and for each class, the forecast customer numbers, weather normalized kWh and MVA.

RESPONSE (D):

Please see Appendix A to this response for the 2025-2029 monthly forecasted billing determinants for all rate classes that would be used to calculate the distribution revenue in the variance account.

RESPONSES TO SCHOOL ENERGY COALITION PRE-SETTLEMENT QUESTIONS

QUESTION SEC-12:

Reference(s): Exhibit 4, Tab 4, Schedule 5, Page 5
JT3.38

With respect to the Mercer Compensation Study:

QUESTION (A):

a) SEC has followed the step-by-step explanation of the calculation of 4-SEC-116c (Table 4), but gets a different final number ($3.655M). Please review the attached spreadsheet and explain the discrepancy. If revised or additional data needs to be provided, please do so.

RESPONSE PREPARED BY MERCER (A):

The discrepancy between the total dollar difference provided by Mercer in the response to interrogatory 4-SEC-116 and the amount referenced in the question above appears to be driven by rounding. To further elaborate, the compensation values in the Summary of Findings table, on page 4, of the 2022 Mercer Study were rounded to the nearest thousand. This rounding – for instance, $132,000 versus $131,550 – drive differences in results when applied across a large employee population. We note that the total dollar difference amount provided by Mercer did use actual compensation values as opposed to rounded figures.

QUESTION (B):

b) Please confirm that job grades W2-Y3 are considered 'non-executive management', T1-V4 are considered 'non-executive non-management', and grades

SIT, PE, and PWU are considered 'union', for the purposes of Appendix 2-K categorization. If not confirmed, please provide the correct categorization of the job grades.

RESPONSE PREPARED BY TORONTO HYDRO (B):

The job grades in the Summary of Findings table on page 4 of the 2024 Mercer Compensation Study are considered in the following categories for the purposes of Appendix 2-K categorization in 4-AMPCO-84 (a): Y1 and Y3 in Non-Executive Management; T1-W4 in Non-Union Non-Management; and SIT, SE and PWU in Union.

QUESTION (C):

c) Please explain how the 'Overall' line is calculated in the table.

RESPONSE PREPARED BY MERCER (C):

The overall percentages presented in the Summary of Findings table, on page 4, of the Mercer Study were calculated using a dollar weighted approach. Specifically, the sum of Toronto Hydro's compensation values, across all grades for each compensation element, was divided by the sum of the market data for each compensation element – this was separately done for each comparator peer group. The outcome of this calculation is a representation of Toronto Hydro's market competitive positioning for each of the compensation elements across the Energy and General Industry Peer Groups. This calculation is consistent with the methodology used in the 2017 Mercer Study for Toronto Hydro's rate application.

RESPONSES TO SCHOOL ENERGY COALITION PRE-SETTLEMENT QUESTIONS

QUESTION SEC-13:

Reference(s): JT3.45

Please provide an updated version of JTC 3.45 for the most recent proposed 2025-2029 rates.

RESPONSE:

The updated version is in Appendix A to this response.

RESPONSES TO SCHOOL ENERGY COALITION PRE-SETTLEMENT QUESTIONS

QUESTION SEC-14:

Reference(s): April 2, 2024 Load Forecast Update

With respect to the Cost Allocation model updates:

QUESTION (A):

a) Please complete the following table for the updated 2025 revenue requirement, cost allocation and rate design.

Class	Allocated Dist. Revenue Requirement ($)	Revenue/Cost Ratio from Cost Allocation Model (%)	Adjusted R/C Ratio (%)	Dollars Reallocated ($)

RESPONSE (A):

Please see Table 1 below for the required information.

Table 1: Updated 2025 Cost Allocation and Rate Design

Class	Allocated Dist. Revenue Requirement ($)	Revenue/Cost Ratio from Cost Allocation Model (%)	Adjusted R/C Ratio (%)	Dollars Reallocated ($)
Residential	391,331,004	102.66%	100.0%	- 10,409,282
GS <50	161,603,117	98.05%	99.5%	2,382,158

Class	Allocated Dist. Revenue Requirement ($)	Revenue/Cost Ratio from Cost Allocation Model (%)	Adjusted R/C Ratio (%)	Dollars Reallocated ($)
GS 50-999 kW	270,164,679	95.76%	99.0%	8,662,263
GS 1,000-4,999 kW	86,165,616	92.93%	98.3%	4,606,116
Large Use >5MW	39,661,369	98.19%	99.6%	543,579
Street Light	27,180,721	116.44%	116.4%	-
Unmetered Scattered Load	3,838,546	121.02%	120.0%	- 39,176
Competitive Sector Multi-Unit Residential	46,071,538	112.47%	100.0%	- 5,745,657
Total	1,026,016,590	n/a	n/a	- 0

QUESTION (B):

b) Complete the same table assuming that the Residential and CSMUR classes are not required to be at 100%.

RESPONSE (B):

Please see Table 2 below for the required information.

Table 2: 2025 Cost Allocation and Rate Design Assuming Residential/CSMUR not 100%

Class	Allocated Dist. Revenue Requirement ($)	Revenue/Cost Ratio from Cost Allocation Model (%)	Adjusted R/C Ratio (%)	Dollars Reallocated ($)
Residential	391,331,004	102.66%	102.66%	-
GS <50	161,603,117	98.05%	98.05%	5,763
GS 50-999 kW	270,164,679	95.76%	95.76%	20,955
GS 1,000-4,999 kW	86,165,616	92.93%	92.94%	11,143
Large Use >5MW	39,661,369	98.19%	98.19%	1,315
Street Light	27,180,721	116.44%	116.44%	-

Class	Allocated Dist. Revenue Requirement ($)	Revenue/Cost Ratio from Cost Allocation Model (%)	Adjusted R/C Ratio (%)	Dollars Reallocated ($)
Unmetered Scattered Load	3,838,546	121.02%	120.00%	- 39,176
Competitive Sector Multi-Unit Residential	46,071,538	112.47%	112.47%	-
Total	1,026,016,590	n/a	n/a	n/a

RESPONSES TO SCHOOL ENERGY COALITION PRE-SETTLEMENT QUESTIONS

QUESTION SEC-15:

Reference(s): Exhibit 2B, Section D4
2B-Staff-155 (a)
2B-SEC-46

With respect to Toronto Hydro's peak demand forecast used for capacity planning:

QUESTION (A):

a) Please confirm that that reference to 'Toronto Hydro's System Peak Demand forecast' is the demand forecast Toronto Hydro uses for capacity planning purposes.

RESPONSE (A):

Confirmed.

QUESTION (B):

b) [2B-Staff-155a] Please confirm that the Toronto Hydro's System Peak Demand forecast is on a gross basis.

RESPONSE (B):

Confirmed.

QUESTION (C) AND (D):

c) Is the information included in Table 1 (2B-SEC-46a) and Table 2 (2B-SEC-46b) on a gross or net basis?

d) If the answer to part (b) is confirmed, and part (c) is the information is on a net basis. Please provide a revised version of both Tables 1 and 2 (2B-SEC-46) on a gross basis.

RESPONSE (C) AND (D):

The information included in Table 1 (2B-SEC-46a) and Table 2 (2B-SEC-46b) is on a gross basis.

QUESTION (E):

e) [2B-D4, Figure 5] Figure 5 includes both "Toronto Hydro Peak Demand – Gross" and "Toronto Hydro Peak Demand – Net" forecast demand information.

i. Please explain why the Toronto Hydro Peak Demand – Net is greater than the Toronto Hydro Peak Demand – Gross in certain historic years (2022 and 2023).

ii. In response to the request in 2B-SEC-46c, Toronto Hydro provided the information in Figure 5 in tabular form. The table provides does not include a "Toronto Hydro Peak Demand – Gross" or "Toronto Hydro Peak Demand – Net" line, instead there is "Toronto Hydro 2022 Peak Demand" and Toronto Hydro 2023 Peak Demand" which do not appear to match the numbers in Figure 5. Please provide an explanation and any required revised information. SEC also notes that the referenced excel file appears to be information related to (2B-SEC-46b) and not for Table 3 (2B-SEC-46c).

RESPONSE (E):

The referenced 2B-D4 Figure 5 does not align with the information in 2B-SEC-46(c) because it was superseded by the January 29, 2024 Evidence Update (Exhibit 2B, Section D4).[1]

[1] Available here: https://www.rds.oeb.ca/CMWebDrawer/Record/834051/File/document

The values included in our response to 2B-SEC-46(c), including the excel file,[2] are aligned with the 2023 System Peak Demand Forecast filed on January 29, 2024.

[2] Toronto Hydro notes that in response to 2B-SEC-46, two excel files were labeled as 2B-SEC-46_App A. The first excel related to 2B-SEC-46(b) and the second excel related to SEC-46(c) re Figure 5 data: https://www.rds.oeb.ca/CMWebDrawer/Record/843566/File/document

RESPONSES TO SCHOOL ENERGY COALITION PRE-SETTLEMENT QUESTIONS

QUESTION SEC-16:

Reference(s): 2A-SEC-30

The interrogatory asked Toronto Hydro to provide the proposed revenue requirement impact in each year between 2025 and 2029 (broken down by component) of only the proposed 2025 to 2029 capital expenditures. As part of the response, Toronto Hydro references that the estimate includes impacts from 2023 actual and update 2024 forecast. This would seem to indicate the revenue requirement information takes into account more than just the impact of the proposed 2025 to 2029 capital expenditures. Please explain what the table Toronto Hydro provided is meant to represent and if it shows (subject to the PILs calculation caveat) that if Toronto Hydro proposed zero capital expenditures between 2025 to 2029 its capital-related revenue requirement would be reduced by values in the table.

RESPONSE:

Toronto Hydro notes that its statement implying the revenue requirement was impacted by the 2023 actuals and updated 2024 forecast was made in error. Toronto Hydro confirms that the values included in the table are correct and only reflect the capital-related revenue requirement associated with the proposed 2025 to 2029 capital expenditure plan.

RESPONSES TO SCHOOL ENERGY COALITION SETTLEMENT CONFERENCE QUESTIONS

QUESTION SEC-17:

Reference(s): 4-Staff-296

Reconcile 2020 amount for public safety damage prevention of $2.8M to 2020CIR Exhibit 4A, tab 2, page 4 ($4.5M).

RESPONSE:

Table 1 below provides the reconciliation of total Public Safety and Damage Prevention segment costs in EB-2018-0165, Exhibit 4A, Tab 2, Schedule 8, Table 3 (2020 Test Year) and interrogatory response 4-SEC-89, subpart (c), Table 14 (2020 – 2023 Actual and 2024 Bridge Year) with interrogatory response to 4-Staff-296, subpart (e), Table 2.

Table 1: Breakdown of Public Safety and Damage Prevention Segment ($ Millions)

	Test[1]	Actual				Bridge
	2020	2020	2021	2022	2023	2024
Locates costs related to Toronto Hydro owned Distribution assets	2.8	2.7	2.5	3.0	3.8	3.7
Locates costs related to Toronto Hydro owned Streetlighting assets[2]	1.7	2.0	1.9	2.4	2.2	1.6
Total Public Safety & Damage Prevention OM&A Costs	**4.5**	**4.7**	**4.4**	**5.4**	**6.0**	**5.3**

[1] Please refer to Toronto Hydro's response to interrogatory 4-Staff-296 subpart (e), Note 1.
[2] As noted in Toronto Hydro's response to interrogatory 4-Staff-296 subpart (c). In preparing the GOCA forecast, the utility has excluded locates costs related to Toronto Hydro owned streetlighting assets, which are offset by revenues recovered from streetlighting services and recorded in USoA 4220, and therefore are not included in Toronto Hydro's non-capital related revenue requirement.

RESPONSES TO SCHOOL ENERGY COALITION SETTLEMENT CONFERENCE QUESTIONS

QUESTION SEC-18:

Reference(s): N/A

a) Please provide a list of CAPEX and OPEX projects/programs intended to enable or facilitate DER's (incl. DR) in addition to those set out in D5.2.2.4 including the quantum of each broken down by CAPEX and OPEX.

RESPONSE:

Investments that enable and facilitate DERs are summarized in various interrogatory responses, including: 1B-PP-08, 1B-CCC-13, 1B-CCC-43, 1B-CCC-44 and 4-Staff-309. For ease of reference the table below consolidates the programs identified in these responses and the costs associated with these programs in 2025-2029.

Program	Expenditure Type	2025-2029 Investment ($ Millions)
Asset and Program Management – System Planning (Exhibit 4, Tab 2, Schedule 9)	OPEX	$47.3
Control Center Operations (Exhibit 4, Tab 2, Schedule 7)	OPEX	$47.3
Customer Operations – Customer Connections and Key Accounts (Exhibit 4, Tab 2, Schedule 8)	OPEX	$25.8
Customer Care (Exhibit 4, Tab 2, Schedule 14)	OPEX	$263.2
Public Legal and Regulatory Affairs (Exhibit 4, Tab 2, Schedule 18)	OPEX	$160.2

Program	Expenditure Type	2025-2029 Investment ($ Millions)
Preventative and Predictive Station Maintenance – Customer Location Maintenance (Exhibit 4, Tab 2, Schedule 3 at page 8)	OPEX	$8.3
Generation Protection, Monitoring and Control (Exhibit 2B, Section E5.5)	CAPEX	$35.0
Non-Wires Solutions – Renewable Enabling Energy Storage Systems (Exhibit 2B, Section E7.2)	CAPEX	$22.5
Non-Wires Solutions – Local Demand Response (Exhibit 2B, Section E7.2; Exhibit 4, Tab 2, Schedule 9)	OPEX	$5.7
Stations Expansion – Sheppard TS (Exhibit 2B, Section E7.4)	CAPEX	$15.0
Metering – AMI2.0 (Exhibit 2B, Section E5.4; 1B-Staff-144)	CAPEX	$201.6
IT/OT – ADMS (Exhibit 2B, Section E8.4 and Appendix A)	CAPEX	$34.1
System Enhancements (Exhibit 2B, Section E7.1)	CAPEX	$151.2
Innovation Fund (Exhibit 1B, Tab 4, Schedule 2)	Revenue Requirement	$16.0
Total 2025-2029 DER Enabling Investments		**$1,033.2**

It is only possible to disaggregate DER-specific costs for investments that are discretely focused on DER-connections such as the Generation Protection, Monitoring & Control and the Renewable Enabling Energy Storage Systems programs. For other investments (such as AMI 2.0, ADMS, and various supporting operational programs) Toronto Hydro cannot isolate the specific investments associated with DERs. This is due to the inherent nature of these modernization initiatives, which involve deploying technologies (and associated personnel) that are responsive to multiple overlapping drivers and deliver multiple simultaneous benefits. For example, if Toronto Hydro *does not* invest in the ADMS, customers will forego the associated service quality, reliability and efficiency benefits, as

well as the opportunity to better integrate DERs within Toronto Hydro's control center operations, thereby forgoing the potential benefits of greater DER proliferation and utilization.

RESPONSES TO SCHOOL ENERGY COALITION SETTLEMENT CONFERENCE QUESTIONS

QUESTION SEC-19:

Reference(s): 9-Staff-342 (e)

9-Staff-342a says that the amounts recorded in IFVA are to be booked on a revenue requirement basis. What happens in 2030 with the undepreciated capital costs for innovation capital spending that are funded from the IFDA?

RESPONSE:

In 2030, any undepreciated capital costs related to projects carried out under the Innovation Fund will be transferred into the opening rate base.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION PRE-SETTLEMENT QUESTIONS

QUESTION VECC-01:

Reference(s): 3-Staff 278 (b)

JT1.1.16

Preamble:

The response to 3-278 b) sets out the net impact of customer reclassification on the GS<50 and GS 50-999 customer classes for the years 2020-2022.

JT 1.1.16 noted that for each of the years 2020 to 2022 the reduction in the GS 50-999 customer count due to reclassification exceeds the increase in the GS<50 customer count due to reclassification and requested an explanation as what accounted for the difference.

a) The response to JT 1.1.16 discusses the use of the reclassification variables in THES' regression models but does not respond to the question which asked about the actual reclassification results. Since customer reclassification involves reclassifying customers from one class to another, the overall net impact on the actual total customer count should be zero (i.e., no impact). Please address the question posed in JT 1.1.16. As part of the response please also include the actual customer reclassification results for 2023.

RESPONSE:

As outlined in the response to JT1.1.16, the reclassification between the GS<50 kW and GS 50-999 kW customer rate classes is based on a model output rather than a simple

manual adjustment, this methodology can result in a minor degree of variability. The 'RECLASS' variable is primarily intended to capture reclassifications occurring within the year and can be inclusive of changes in customer count attributed to other activities, such as new connections and disconnections.

As outlined in the response JT 1.1.16, the reclassification captured in these two classes is the product of the model output, rather than a manual adjustment. The model output approach results in a small degree of the variability of reclassification count. The RECLASS variable is primarily intended to capture reclassifications occurring within the year, but it may also include customer changes attributed to other activities, such as new connections and disconnections

Due to internal resourcing constraints Toronto Hydro requests additional time to provide customer reclassification results in detail, if needed.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION PRE-SETTLEMENT QUESTIONS

QUESTION VECC-02:

Reference(s): JT 1.1.17

Exhibit 3, Tab 1, Schedule 2 - Appendix 2-IB (Updated April 2, 2024)

QUESTION (A) AND (B):

a) JT 1.17 indicates that, for the GS 1,000-4,999 class, the net impact in 2024 of new connections and customer reclassification increased the customer count by 4. However, Appendix 2-IB shows an increase of 32 (i.e., from 439 in 2023 to 471 in 2024). Please reconcile.

b) T 1.17 indicates that, for the LU class, the net impact in 2024 of new connections and customer reclassification decreased the customer count by 1. However, Appendix 2-IB shows an increase of 3 (i.e., from 42 in 2023 to 45 in 2024). Please reconcile.

RESPONSE (A) AND (B):

Toronto Hydro would like to clarify that in JT 1.17, the 2024 customer count is forecasted to have a net increase of 4 new connections and customer reclassifications for GS 1-5MW and 3 for Large Use compared to the December 2023 customer count. Appendix 2-IB reflects the average monthly customer numbers for the year. Please refer to Appendix A to this response for a reconciliation.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION PRE-SETTLEMENT QUESTIONS

QUESTION VECC-03:

Reference(s): JT 4.7

Exhibit 3, Tab 1, Schedule 1, Appendix J, Page 12, Table 4

Updated Exhibit 3, Tab 1, Schedule 1, Appendix J, Page 12, Table 4

a) It is noted that in the Updated Exhibit 3, the LDEV registrations for 2022, 2023 and 2025 are all higher than in the original Application. However, the forecast LDEV registrations for 2029 are materially lower (154,179 vs. 232,533), even though the EV sales target for 2030 used in the Update (per JT 4.7) is more aggressive than that in the original Application. Please reconcile.

RESPONSE:

Toronto Hydro notes that the original LDEV registration 2029 forecast should be 179,770 rather than the 232,533 in the preamble. The LDEV registration forecast leveraged for the Exhibit 3 Load Forecast is the same forecast used in Toronto Hydro's System Peak Demand which underpins the utility's growth investments in the Distribution System Plan (see Exhibit 2B, Section D4).

On January 29, 2024, Toronto Hydro filed an update to its System Peak Demand Forecast which included an update to the EV forecast. Due to timing constraints, the utility was unable to update the load forecast underpinning the revenue forecast (Exhibit 3), which was subsequently updated on April 2, 2024. For details of the update to the System Peak Demand Forecast please refer to 2B-SEC-61. Specifically, with respect to the EV forecast, the 2029 LDEV registration forecast decrease is attributed to:

1. **2022 Actual Light-Duty Vehicle Registrations**: Toronto Hydro updated its EV forecast to reflect the 2022 actual LDV registrations (593,210) which is 18.5% lower than the 2022 bridge forecast (728,075 LDV) used in the pre-filed (i.e. original) forecast. This resulted in a lower EV baseline.
2. **EV Forecast Adjustments**: Due to greater uncertainty in EV adoption observed in 2023,[1] Toronto Hydro adjusted its EV forecast by applying a probabilistic methodology to model the LDEV registration at median (50th percentile) of the EV adoption targets. This resulted in a LDEV forecast lower than the rate of EV sales.

[1] https://nationalpost.com/news/canada/electric-vehicle-interest-down-autotrader

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION PRE-SETTLEMENT QUESTIONS

QUESTION VECC-04:

Reference(s): JT1.1.3
Updated Exhibit 3, Tab 1, Schedule 1, Appendix J, Page 24, 28 (Tables 24, 32)

Preamble:

JT 1.1.3 states:

"Toronto Hydro considers the DER capacity connected to its system to build its DER forecast, without distinguishing whether or not that generation capacity is selling to Toronto Hydro's system."

QUESTION (A):

a) With respect to Table 24, for the most recent year where actual nameplate capacity of Renewable DER is available, please provide a breakdown as between renewable generating capacity that is: i) selling to the THES system (i.e., inputting directly) vs. ii) behind a customer's meter.

RESPONSE (A):

Please note that Table 24 makes reference to Toronto Hydro's renewable forecast from solar PV connections only and excludes contribution from bio-gas and wind based renewable DERs. If considering all renewable connections, and using the nameplate capacity from the last full year of data in 2022 at the time of filing, then this figure can be broken down between 99.6 MW of connections known to be selling to the Toronto Hydro system (i.e. connected in front of the meter) versus 16.6 MW behind a customer's meter.

QUESTION (B):

b) With respect to Table 32, for the most recent year where actual nameplate capacity of Non-Renewable DER is available, please provide a breakdown as between non-renewable generating capacity that is: i) selling to the THES system (i.e., inputting directly) vs. ii) behind a customer's meter.

RESPONSE (B):

Considering non-renewable connections using the nameplate capacity from the last full year of data in 2022 at the time of filing, this figure can be broken down between 6.82 MW of non-renewable DER connections selling to the Toronto Hydro system (i.e. connected in front of the meter) versus 163.18 MW connected behind a customer's meter.