RESPONSES TO ONTARIO ENERGY BOARD STAFF INTERROGATORIES

INTERROGATORY 7-STAFF-324

Reference: Exhibit 7, Tab 1, Schedule 1, Pages 1-2

Preamble:

The services weighting factor for all rate classes except CSMUR, USL, and Street Lighting has been set at one. For the Street Lighting and USL rate classes, the customer is required to pay for the services.

QUESTION (A):

a) For customers of rate classes with a services weighting factor of one, when a connection costing more than the basic allowance is required, please detail a. If the customer pays the entire cost of the service, please explain why a weighting factor of one is appropriate.

RESPONSE (A):

Where a connection costs more than the basic connection allowance, Toronto Hydro recovers the excess amount through a variable connection charge, in accordance with the Distribution System Code.

QUESTION (B):

b) For all rate classes, when a service connection requires maintenance, please detail how the cost is apportioned between the Toronto Hydro and the customer.

RESPONSE (B):

Toronto Hydro bears the entirety of maintenance costs for connection assets within Toronto Hydro's side of the demarcation point. For projects that require expansion, maintenance costs are apportioned in accordance with Appendix B of the Distribution System Code.

RESPONSES TO ONTARIO ENERGY BOARD STAFF INTERROGATORIES

INTERROGATORY 7-STAFF-325

Reference: Exhibit 7, Tab 1, Schedule 1, Pages 1-2

Preamble:

Toronto Hydro indicates that the billing and collections weighting factor reflects estimates of billing effort and costs related to each class based on the experience and expertise of Toronto Hydro's billing specialists.

QUESTION:

Please provide the derivation of the billing and collections weighting factors used.

RESPONSE:

The weighting factors used in Sheet I5.2 of the Cost Allocation Model for Billing and Collections are calculated based on metrics which are broadly representative of the amount of work and expertise required by Billing and Collections to service Toronto Hydro's customer classes. Examples of metrics include reconnections and billing adjustments. Each metric is broken out between customer classes and is assigned a weighting based on the varying complexity of the work between those customer classes, the level of expertise required and the time involved. Then, the results are weighted against the residential customer class baseline.

RESPONSES TO ONTARIO ENERGY BOARD STAFF INTERROGATORIES

INTERROGATORY 7-STAFF-326

Reference: Exhibit 7, Tab 1, Schedule 1, Pages 2-3

Preamble:

The load profiles were updated using 2019 historic actual data. Toronto Hydro states that "For the Residential, CSMUR and General Service rate classes Toronto Hydro used sample metering data sets, while entire rate class data sets were used for Unmetered Scatter Load Class ("USL") and Street Lighting rate classes."

QUESTION (A):

a) Please indicate the sample size used for each rate class, relative to the overall customer base.

RESPONSE (A):

Please refer to Table 1 for the sample sized used. Please note that entire rate class data sets were used for Unmetered Scatter Load Class ("USL") and Street Lighting rate classes.

Table 1: Sample Sizes used by Rate Class

Rate Class	Sample Size*	Total Customer Base[1]	Sample percentage compare to total customer base
Residential	7,000	614,206	1%
CSMUR	2,500	79,882	3%
GS<50 kW	4,000	71,515	6%
GS 50-999 kW	7,500	10,444	72%
GS 1,000-4,999 kW	300	455	66%
Large Use	30	40	75%

*Please note that the sample sizes listed above are rounded

[1] As per Table 2 in Exhibit 3, Tab 1, Schedule 1

QUESTION (B):

b) Please explain the process used to select the sample used for each rate class - e.g. random selection, stratified (based on which criteria), etc.

RESPONSE (B):

Toronto Hydro randomly selected customers in these rate classes that were active in the year 2019.

QUESTION (C):

c) Did Toronto Hydro consider using aggregate data of all customers in any of the residential, CSMUR, or general service rate classes? If not, why not? If so, why was this option rejected?

RESPONSE (C):

Toronto Hydro considered using aggregate data of all customers across these rate classes, but did not pursue it for all rate classes for the reasons outlined below.

Toronto Hydro utilized sample data through the random selection process for Residential, CSMUR and GS<50kW rate classes due to substantial data volumes. For the remaining classes (GS 50-999kW, GS 1-5MW and Large Users rate classes), only the customers with the full datasets were considered.

QUESTION (D):

d) In using a sample of customers for general service, does this include the GS 1,000 to 4,999 and Large Use rate classes, both of which contain under 500 customers?

RESPONSE (D):

As outlined in Table 1 above in part a) and described in part c), the sample sizes for these classes were significant, reaching 66% and 75% for GS1-5MW and Large User, respectively.

QUESTION (E):

e) Please explain the methodology used to perform weather normalization of the 2019 load profiles.

RESPONSE (E):

Toronto Hydro weather normalized the 2019 load profiles by creating monthly ratios between the 2019 weather normalized loads and 2019 non-weather normalized loads by rate class. Both load types are sourced from Exhibit 3. Please refer to Exhibit 3, Tab 1, Schedule 1 for details outlining Toronto Hydro's weather normalization methodology in its load forecast.

QUESTION (F):

f) Please provide the resulting 2019 and 2025 load profiles, including any regression outputs used to weather normalize the 2019 load profiles.

RESPONSE (F):

Please refer to Appendix A for the resulting 2019 (weather normalized) and 2025 (forecast including EV and DER) load profiles. Please refer to part e) for weather normalization details and to Exhibit 3, Tab 1, Schedule 1, Appendix B for the regression outputs.

QUESTION (G):

g) Please explain why a single year of historical data, 2019 was used to underpin 2025 load profiles.

RESPONSE (G):

Toronto Hydro utilized only 2019 since 2020 and 2021 were abnormal years due to the pandemic (COVID-19) as addressed in Exhibit 7, Tab 1, Schedule 1, section 1.2. This methodology is in accordance with Toronto Hydro's previous filings (EB-2018-0165 and EB-2014-0116).

QUESTION (H):

h) As a scenario, please provide load profiles using 2023 historical actual data.

RESPONSE (H):

The requested analysis entails complex data extraction, data cleaning, analysis and modelling process. Toronto Hydro does not have sufficient time to complete 2023 historical actual update within the timelines for responding to interrogatories. 2019 is a sufficiently representative data set of the historical load profiles.

RESPONSES TO ONTARIO ENERGY BOARD STAFF INTERROGATORIES

INTERROGATORY 7-STAFF-327

References: Exhibit 7, Tab 1, Schedule 1, Pages 3-4

Cost Allocation Model, sheet I6.1 Revenue; sheet O1 Revenue to Cost

Preamble:

Toronto Hydro states that per OEB decisions EB-2014-0116 and EB-2018-0165, approved Street Lighting assets and operating expenses have been included in its 2025 revenue requirement. It goes on to state that for the purpose of cost allocation, these assets and expenses are directly allocated 95% to the street lighting rate class and 5% to the USL class.

Overall, allocated costs for Street Lighting are $26.4M, and allocated costs for USL are $3.8M. Street Lighting therefore reflects 87% of the revenue requirement.

Toronto Hydro states that 100% of the Street Lighting related revenue requirement is offset through a direct allocation to Revenue Offsets. The Cost Allocation model indicates that $19,377,998 of revenue is calculated for the street lighting rate class by multiplying existing base rates times forecasted volumes.

QUESTION (A):

a) Please provide the basis under which the 95% to 5% split remains appropriate ten years after it was first established.

RESPONSE (A):

The table provided shows the continuity of devices/connections for Street Lighting and USL. It is apparent that USL connections continue to maintain the proportion around 7% which is within the 5% range. For this reason, Toronto Hydro feels the split of 95% and 5% continues to be reasonable to use.

Year	Street Lighting Devices	USL Connections	Total Connections/ Devices	USL / Total Connections and Devices
2015	164,011	11,954	175,965	7%
2016	164,286	12,054	176,340	7%
2017	164,541	12,211	176,751	7%
2018	164,700	12,233	176,933	7%
2019	168,723	12,181	180,905	7%
2020	170,373	12,309	182,682	7%
2021	171,187	12,505	183,692	7%
2022	171,681	12,770	184,451	7%

QUESTION (B):

b) Do these assets, used only by street lighting and USL, serve a purpose similar to a common distribution asset such that the street lighting and USL rate class does not require the use of the common assets?

   i. If so, what steps, if any, has Toronto Hydro taken to ensure that Street Lighting and USL are not allocated costs associated with the common assets.

RESPONSE (B):

No. The street lighting and USL rate class do require the use of common assets.

RESPONSES TO ONTARIO ENERGY BOARD STAFF INTERROGATORIES

INTERROGATORY 7-STAFF-328

Reference: Exhibit 7, Tab 1, Schedule 1, Pages 6-13

Preamble:

The OEB required Toronto Hydro to review the cost allocation to the CSMUR rate class. It stated that "The Board expects that THESL will incorporate the distinction between the secondary and primary systems in future cost allocation studies." Toronto Hydro identified two areas for study, customer count, as well as Line Transformer and Secondary System usage, and noted that these would impact the cost allocation model in sheets I6.2 and I8.

Under the areas of study, Toronto Hydro identified that in addition to CSMUR, portion of customers in each of the Residential, GS < 50 kW rate classes occupied units a building which shared connections with other customers.

Toronto Hydro noted that customers could appropriately refer to customer units served, or buildings served. However, in multi-unit buildings with a bulk meter, it does not have visibility to the number of units and would need to estimate the number. Using a count of buildings is available.

Under the Line Transformer and Secondary System study, estimates were provided for number of buildings that rely on Toronto Hydro's line transformers, and on Toronto Hydro's secondary distribution system. No estimates were provided for the number of kW served using Toronto Hydro Line Transformers and Secondary for each of the examined rate classes.

Impacts of using the building count methodology for total customer counts, or for line transformer and secondary system usage, or the combination of both modifications were provided.

QUESTION (A):

a) Under the alternative line transformer and secondary approach, please indicate any updated values used in sheet I8.

RESPONSE (A):

This is to confirm that, under the alternative line transformer and secondary approach, the updated values are used in sheet I8 of the cost allocation model.

QUESTION (B):

b) If the values in sheet I8 were not updated, please indicate the kW required by each class for Line Transformer and Secondary under each of the 1NCP, 4NCP, and 12NCP scenarios, and please provide the impact of performing such an update.

RESPONSE (B):

Not applicable since the values for sheet I8 were updated.

QUESTION (C):

c) Under the alternative approach of counting units within buildings, including units served behind bulk meters, please explain how unit counts are indicative of cost causation when Toronto Hydro does not provide any service or customer interaction behind the bulk meters, and the aggregate load is already reflected in I8.
    i. If Toronto Hydro believes this is a suitable option for cost allocation, please provide the impacts of using this approach.

RESPONSE (C):

The rationale for using unit count, as opposed to buildings, is that larger buildings have more units, and consequently, more units will ultimately exert a greater proportionate impact on the system at large.

i. Toronto Hydro does not believe this is a suitable option at this time, as Toronto Hydro does not have sufficiently accurately or verifiable data with respect to the number of units in buildings served by bulk meters.

QUESTION (D):

d) In the context of the OEB direction around incorporating the distinction between primary and secondary systems in future cost allocation studies, please explain what lead Toronto Hydro to select the status quo methodology as it's proposal for cost allocation.

RESPONSE (D):

Please see Exhibit 7, Tab 1, Schedule 1 at page 13. Toronto Hydro has not selected the status quo methodology as its proposal for cost allocation.

RESPONSES TO ONTARIO ENERGY BOARD STAFF INTERROGATORIES

INTERROGATORY 7-STAFF-329

Reference: Exhibit 7, Tab 1, Schedule 1, Page 5

EB-2018-0165, Decision and Oder, December 19, 2019, Page 157

Preamble:

The residential rate class revenue-to-cost ratio is proposed to be reduced to 100% from 102.1%, and the CSMUR rate class revenue-to-cost ratio is proposed to be reduced to 100% from 111.7%. Toronto Hydro states that "In accordance with past OEB decisions, rates in the Residential and CSMUR class are set such that the revenue to cost ratios are equal at unity.

In its decision, the OEB stated: "The OEB notes that the revenue-to-cost ratio for the CSMUR class was set at 100% by the OEB when the class was first established for 2012 rates (and as implemented in 2013). There are now several years of actual data for this new class that can be assessed. The OEB concludes that it is appropriate to review in Toronto Hydro's next rebasing application the characteristics of this class, and whether a range should be adopted for the revenue-to-cost ratios going forward."

QUESTION (A):

a) Did Toronto Hydro consider adopting a range approach for revenue-to-cost ratios in the CSMUR rate class?
    i. If this was not considered, please explain why not.
    ii. If this was considered and rejected, please provide the reasons for that determination.

RESPONSE (A):

Toronto Hydro did not consider adopting a range approach for revenue-to-cost ratios in the CSMUR rate class in order to maintain consistency with the past decisions.

QUESTION (B):

b) Please reference the OEB decision instructing Toronto Hydro to adjust the revenue-to-cost ratios for residential and CSMUR rate classes to 100% and explain why it continues to be appropriate in this proceeding.

RESPONSE (B):

Toronto Hydro adjusted the residential rate class revenue-to-cost ratio to 100 percent in order to maintain consistency with the decision but takes no position on the issue of cost allocation.[1]

QUESTION (C):

c) If a revenue-to-cost ratio range approach were to be adopted for the CSMUR, what range would be most appropriate in Toronto Hydro's view?

RESPONSE (C):

Toronto Hydro is of the view that cost allocation policy, including revenue-to-cost ratios, should be set by the OEB on a sector-wide basis through policy consultations, as it has done from time-to-time (e.g. EB-2007-0667, EB-2012-0383). While Toronto Hydro's CSMUR rate class is atypical in the sector, the cost allocation and revenue-to-cost principles for this class should reflect as much as possible the principles developed for other classes.

[1] EB-2018-0165, Decision and Order, dated December 19, 2019, page 157 and EB-2010-0142, Decision and Order on Suite Metering Issues, Issued Feb 22, 2012 and as corrected March 9, 2012, page 27.

RESPONSES TO ENERGY PROBE RESEARCH FOUNDATION INTERROGATORIES

INTERROGATORY 7-EP-35

Reference: Exhibit 7, Tab 1, Schedule 1, Page 3

Preamble:

"The load profiles were scaled to the 2025 baseline load forecast based on the ratio of 2025 kWh to 2019 kWh by class. Resulting load profiles were modified to include electric vehicles ("EVs") and distributed energy resources ("DERs") forecasted load impacts."

QUESTION (A):

a) Are customers with EV chargers and customers with DER's distributed evenly throughout the Toronto Hydro service area or are they concentrated in certain areas?

RESPONSE (A):

Toronto Hydro does not have visibility into the geographic distribution of customers with EV chargers or DER's throughout its service area.

QUESTION (B):

b) What is Toronto Hydro doing to ensure that customers in lower income areas who do not own EV chargers and DER's are not allocated costs that are caused by customers in higher income areas who own EV chargers and DER's?

RESPONSE (B):

Toronto Hydro does not allocate costs to customers based on the technologies used by its customers.

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES

INTERROGATORY 7-SEC-122

Reference: Exhibit 7, Tab 1, Schedule 1, Table 4

QUESTION:

For each of the scenarios presented in Table 4, B, C & D, please provide details of how Toronto Hydro would propose to rebalance revenues to return the Revenue to Cost ratios to the OEB's ranges and the resulting distribution bill impacts.

RESPONSE:

As stated at the same reference, Toronto Hydro "sees merit to a collaborative approach which takes into account the views, preferences, and expertise of all the parties whose interests are affected by cost allocation matters."

To the degree Toronto Hydro were to rebalance CSMUR Revenue to Cost (R/C) ratios to return to OEB range, Toronto Hydro would propose the same approach across each of the B, C and D scenarios shown; gradually phase in a reduction of CSMUR R/C ratios over a five-year period. As a result, the reduction of revenue from the CSMUR rate class would be recovered from other rate classes, with a nil net impact on overall revenues.

To complete this task, Toronto Hydro would implement the following:

1) Complete the 2025 Cost Allocation Model for both Status Quo cost allocation, as included in its pre-filed application, and Alternative cost allocation. The result would be two sets of allocated total costs to each rate class, which would allow for the calculation of a Cost

Allocation Difference (CAD) for each rate class,[1] which quantifies in dollars the difference between Status Quo and Alternative cost allocation, by rate class;

2) For 2025 rates, first complete rate design on the basis of Status Quo cost allocation to bring R/C ratios into balance with accepted ranges on a Status Quo basis. Second, add 1/5 of the CAD applicable to each rate class to the Status Quo costs assigned to each rate class;
3) For 2026 rates, first calculate the 2026 revenue requirement in accordance with the CRCI (no different than would be the case absent a phased-in change to cost allocation). Second, assign the 2026 revenue requirement to rate classes on the basis of Status Quo cost allocation proportions. Third, add 2/5 of the CAD applicable to each rate class to the assigned 2026 revenue requirement based on Status Quo cost allocation;
4) For 2027 through 2029 rates, repeat approach to 2026 rates, with the exception that CAD additions to assigned costs will be 3/5 in 2027, 4/5 in 2028, and 5/5 in 2029.

Due to the complexity of the task, Toronto Hydro did not have sufficient time within the time provided for interrogatory responses to prepare bill impacts for each rate class, for each year, associated with the approach above.

[1] CAD applicable only to distribution rate portion of assigned costs, exclusive of Revenue Offsets

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 7-VECC-78

References: Exhibit 7, Page 1 / Exhibit 8, Page 9
Exhibit 6, Tab 1, Schedule 3 (2026 RRWF)

Preamble:

The Application states:

> "Consistent with the methodology relied upon in EB-2014-0116 and EB-2018-0165, Toronto Hydro completed a cost allocation study for the 2025 test year, and extended the results to allocate the 2026 to 2029 revenue requirement to rate classes." (Exhibit 7, page 1)
>
> "In each annual application, Toronto Hydro will propose new distribution rates based on the escalated base revenue requirement resulting from application of the CRCI, in accordance with the OEB's decision in this proceeding. Toronto Hydro proposes that for the years 2026 to 2029, the final approved base revenue requirements be allocated to each rate class based on the same allocations to rate classes established in this proceeding for 2025." (Exhibit 8, pdf page 9)

QUESTION (A):

a) Based on the forecast 2026 base revenue requirement (per the 2026 RRWF) please demonstrate how the revenue requirement would be allocated to rate classes for that year and the rates for each class subsequently derived.

RESPONSE (A):

The revenue requirement for 2025 will be escalated using the Custom Revenue Cap Index (CRCI) to come up with revenue requirement for 2026. Subsequently, the base revenue requirement for

2026 will be distributed across various rate classes and divided into fixed and variable split, both based on the 2025 data. In the final stage of rate design, the fixed and variable revenue for each rate class will be divided by the forecasted 2026 billing determinants to determine the distribution rates.

QUESTION (B):

b) Will the approach proposed by THESL result in each rate class experiencing a different overall increase in distribution rates, where classes experiencing higher annual increases in their billing determinant would see a lower average rate increase (for base distribution rates)?

RESPONSE (B):

Yes, the distribution rates increase will vary across the classes, depending on the annual projected growth in billing determinant for each rate class.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 7-VECC-79

References: **Exhibit 7, Tab 1, Schedule 1, Page 2**
Cost Allocation Model, Tabs I4 & I5.2
Exhibit 8, Tab 2, Schedule 1, Page 3
THESL's Conditions of Service, Pages 92 and 97
Exhibit 2B, Section E5.1, Page 20

Preamble:

With respect to the Services weighting factor, the Application states:

> "All rate classes, with the exception of the Competitive Sector Multi-Unit Residential ("CSMUR"), Unmetered Scattered Load ("USL") and Street Lighting classes, received a weighting factor of one, reflecting the reality that service costs greater than a basic allowance are recovered through a direct contribution from the customers. The weighting factor for the CSMUR rate class is derived by dividing the number of units by the number of buildings housing these units, as originally directed by the OEB in EB-2010-0142. For the USL and Street Lighting classes, the cost of services is directly collected from those customers, requiring that they receive a weighting factor of zero." (Exhibit 7)

With respect to the basic connection fee allowance, the Application states:

> "For the next rate period, Toronto Hydro proposes to increase its Basic Connection Fee allowance for Rate Class 1 to 5 from $1396 to $3059. The Basic Connection Fee has not been updated since 2009. The updated Basic Connection Fee reflects the cost of the current connection standards and includes upgraded transformation from 100kVA, to 167KVA." (Exhibit 2B)

QUESTION (A):

a) Please confirm that the current basic connection fee allowance is the same for all customer classes (excluding USL and Street Lighting)? If not, please provide the basic allowance for each class.

RESPONSE (A):

Toronto Hydro confirms that the basic connection allowance is the same for all customer classes as defined in Toronto Hydro's Conditions of Service, Section 2.1.2.2, Capital Contribution Policy.

QUESTION (B):

b) Please confirm that: i) the full costs of Services assets for all customer classes are recorded in Account 1855, ii) the offsetting direct contributions from customers recorded as contributed capital in Account 1995 and iii) these capital contributions are associated with Account 1855 in Tab I4. If
not confirmed, please explain how the cost and contributed capital are treated in the Cost Allocation Model.

RESPONSE (B):

Toronto Hydro confirms statement i), ii), iii) in the above interrogatory.

QUESTION (C):

c) Are the actual total costs (including direct contributions) for Services the same for all customer classes on a per connection basis? If not, what are the relative differences?

RESPONSE (C):

The actual total costs, and/or contribution for services for all customer classes are not necessarily the same. What is same is the methodology to evaluate the costs. Each customer service connection is evaluated as the total cost less the customer contribution and any applicable basic

connection allowance, as prescribed by the Distribution System Code Section 3, Connections and Expansions.

QUESTION (D):

d) Is THESL responsible for the maintenance, repair and replacement of the Services assets provided for all customer classes? If not, how do the responsibilities differ across customer classes?

RESPONSE (D):

Toronto Hydro is responsible for the maintenance, repair and replacement of the Services assets that Toronto Hydro owns.

QUESTION (E):

e) Please provide the calculations supporting the proposed Services weighting factor for the CSMUR class.

RESPONSE (E):

Please see Table 1 below.

Table 1: Service Weighting Factor for CSMUR rate class

Description	Residential	GS <50kW	GS - 50 to 999kW	GS - 1000 to 4999 kW	Large Use	CSMUR	Audit Trail (CSMUR)
Cost to provide services (as per condition of services)	3,059.0	3,059.0	3,059.0	3,059.0	3,059.0	14.7	A=$3,059/D
Number of Customers	-	-	-	-	-	98,427	B

Description	Residential	GS <50kW	GS - 50 to 999kW	GS - 1000 to 4999 kW	Large Use	CSMUR	Audit Trail (CSMUR)
in CSMUR Class							
Number of Buildings in CSMUR Class	-	-	-	-	-	472	C
Average Customer in Building (CSMUR Class)	-	-	-	-	-	208.5	D=B/C
Weighting Factor for Services	1.0	1.0	1.0	1.0	1.0	0.004796	$E=A/Cost_{Residential}$

QUESTION (F):

f) With respect to the USL class, Exhibit 7 states: "the cost of services is directly collected from those customers, requiring that they receive a weighting factor of zero". However, THESL' Conditions of Service (page 92) indicates that for Overhead supply the basic charge ($446 or $1,011 depending on the connection arrangements) is funded through rates. Please reconcile and explain whether it is appropriate for the USL class to have a zero weighting for Services.

RESPONSE (F):

Toronto Hydro's practice is to recover all the cost of connections through variable connection charge for both, Street Lighting and USL rate classes. The Conditions of Service currently displays outdated information and will be updated accordingly. Consequently, assigning zero weight to Service remains appropriate.

QUESTION (G):

g) With respect to Street Lighting, Exhibit 7 states: "the cost of services is directly collected from those customers, requiring that they receive a weighting factor of zero". However, THESL' Conditions of Service (page 97) indicates that the basic charge ($553.36 or $573.97 depending on the connection arrangements) is funded through rates. Please reconcile and explain whether it is appropriate for the Street Lighting class to have a zero weighting for Services.

RESPONSE (G):

Please refer to the response for part (f) of this interrogatory.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 7-VECC-80

Reference: Exhibit 7, Page 2 Cost Allocation Model (CAM), Tab I5.2

Preamble:

With respect to the Billing and Collecting weighting factors the Application states:

> "The class-specific weighting factors reflect estimates of billing effort and costs related to each class based on the experience and expertise of Toronto Hydro's billing specialists".

QUESTION (A):

a) Please provide any analysis undertaken to support/determine the proposed weighting factors for Billing and Collecting.

RESPONSE (A):

Please refer to 7-Staff-325.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 7-VECC-81

References: Exhibit 7, Page 2 and Footnote #5
Cost Allocation Model (CAM), Tab E1

Preamble:

With respect to the Density Factor, the Application states:

"In accordance with past OEB decisions, Toronto Hydro proposes to maintain the use of the modified density factor at 23 percent. This reflects a considerably higher customer density per kilometer in Toronto compared to the OEB's default value."

"Toronto Hydro's density of 133 customers per kilometers of line, as determined by the model, is well above the OEB's default of 60 customers per kilometers of line."

QUESTION (A):

a) What was the actual customer density for THESL in: i) EB-2014-0116 and ii) EB-2018-0165 as determined by the CAM model for each Application?

RESPONSE (A):

Customer density as per cost allocation model was as follows:

a. EB-2014-0116: 140 customers per km of line
b. EB-2018-0165: 140 customers per km of line

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 7-VECC-82

Reference: Cost Allocation Model (CAM), Tabs I7.1 and I7.2

QUESTION (A):

a) Do any of THESL's customers have more than one THESL-owned meter (e.g., customers with embedded generation)? If yes, please indicate which customer classes are involved and how many additional meters are associated with each.

RESPONSE (A):

The following table shows the customers that have more than one THESL-owned meter grouped by customer class:

Table 1: Customers with 1+ THESL-owned Meter

Customer Class	Number of additional meters
General Service Less than 50 kW	262
General Service 50 to 999 kW	1,380
General Service 1,000 to 4,999 kW	169
Large Use Service	44

QUESTION (B):

b) Do any of THESL's customers have more than one meter that THESL is responsible for reading on a regular basis? If yes, please indicate which customer classes are involved and how additional meters (over and above one per customer) THESL is required to read for each customer class.

RESPONSE (B):

For the meters listed in the previous response, Toronto Hydro is required to read all the additional meters for these customers.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 7-VECC-83

Reference: Cost Allocation Model (CAM), Tabs I3 and I9

Tab I3 identifies a number of accounts where some (or all) of the costs are directly allocated to one or more customer classes. Please provide a schedule that sets out for each such account: i) the nature of the assets being directly allocated and ii) why direct allocation is appropriate to the classes identified in Tab I9.

RESPONSE:

See the following table for the requested information.

USofA	UsofA Description	GS 50-999 kW[2]	GS 1,000-4,999 kW[2]	Large Use >5MW[2]	Street Light[1]	Unmetered Scattered Load[1]	Competitive Sector Multi-Unit Residential[3]
1830	Poles, Towers and Fixtures	-	-	-	51,670,667	2,719,509	-
1835	Overhead Conductors and Devices	-	-	-	4,444,946	233,945	-
1840	Underground Conduit	3,332,831	17,590,062	24,918,126	3,297,621	173,559	-
1845	Underground Conductors and Devices	2,817,669	14,871,131	21,066,481	5,436,780	286,146	-
1860	Meters	-	-	-	-		58,170,360
1940	Tools, Shop and Garage Equipment	-	-	-	2,261	119	-
2105	Accum. Amortization of Electric Utility Plant - Property, Plant, & Equipment	- 1,243,863	- 6,564,876	- 9,299,820	- 17,014,401	- 895,495	- 29,179,160
	Sub-Total	4,906,637	25,896,316	36,684,787	47,837,873	2,517,783	28,991,200

USofA	UsofA Description	GS 50-999 kW[2]	GS 1,000-4,999 kW[2]	Large Use >5MW[2]	Street Light[1]	Unmetered Scattered Load[1]	Competitive Sector Multi-Unit Residential[3]
5040	Underground Distribution Lines and Feeders - Operation Labour	2,547	13,445	19,046	-	-	-
5045	Underground Distribution Lines & Feeders - Operation Supplies & Expenses	7,777	41,046	58,145	-	-	-
5110	Maintenance of Buildings and Fixtures - Distribution Stations	-	-	-	78,739	4,144	-
5135	Overhead Distribution Lines and Feeders - Right of Way	-	-	-	2,500,372	131,599	-
5145	Maintenance of Underground Conduit	5,611	29,614	41,952	-	-	-
5150	Maintenance of Underground Conductors and Devices	14,174	74,810	105,976	-	-	-
5310	Meter Reading Expense	-	-	-	-	-	315,547
5705	Amortization Expense - Property, Plant, and Equipment	134,961	712,297	1,009,042	2,387,018	125,633	3,246,012
	Sub-Total	165,071	871,213	1,234,162	4,966,129	261,375	3,561,559
	Grand Total	5,071,707	26,767,529	37,918,949	52,804,002	2,779,158	32,552,759

Note:

1. All assets and expenses are directly allocated 95 percent to the Street Lighting class, and 5 percent to the USL class. Since these assets are used by only these two rate classes.

2. The cost related to feeders used by GS 50-999 kW, GS 1,000-4,999 kW and Large User rate class.

3. Expenses related to meter cost and meter reading by CSMUR class.

Toronto Hydro believes that the direct allocation is suitable for the classes outlined in tab I9, as the assets and expenses listed in the table exclusively serve their respective classes. For example,

streetlighting costs (both capital and OM&A) are tracked separately, providing direct benefits to the same class and thus should be the foundation for recovery within that particular rate class.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 7-VECC-84

References: Exhibit 7, Tab 1, Schedule 1, Pages 2-3

Exhibit 7, Tab 1, Schedule 2 Cost Allocation Model (CAM), Tabs I8

Preamble:

The Application states:

> "For the Residential, CSMUR and General Service rate classes Toronto Hydro used sample metering data sets, while entire rate class data sets were used for Unmetered Scatter Load Class ("USL") and Street Lighting rate classes."

QUESTION (A):

a) Please explain why sample metering data sets were used for the Residential, CSMUR and General Service rate classes.

RESPONSE (A):

Please refer to 7-Staff-326, parts b) and c).

QUESTION (B):

b) Please explain how the sample set for each rate class was determined and how THESL ensured the sample set was representative of the overall class.

RESPONSE (B):

Please refer to 7-Staff-326, parts a), b) and c).

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 7-VECC-85

Reference: Exhibit 7, Tab 1, Schedule 1, Pages 2-3 & Tab 1, Schedule 2
Cost Allocation Model (CAM), Tabs I8

Preamble:

The Application states:

> "The hourly load profiles were reconciled to the 2019 purchased energy and wholesale market participant data and weather normalized to 2025 heating and cooling degree days. The weather normalization methodology is based on a ratio between the 2019 weather normalized and 2019 non-weather normalized loads from the revenue load forecast. Weather normalization in the revenue load forecast is calculated by making adjustments to the monthly energy purchases either in excess or below what would be purchased under average weather conditions. Average weather conditions are based on a ten-year historical average of heating and cooling degree-days, and dew-point temperature."
>
> And
>
> "The load profiles were scaled to the 2025 baseline load forecast based on the ratio of 2025 kWh to 2019 kWh by class."

QUESTION (A):

a) With respect to the first reference, was the ratio used to do the adjustment (per Exhibit 7, Tab 1, Schedule 2, Column (h)) based on the annual weather normal HDD and CDD values relative to the actual annual HDD and CDD values or was a different ratio calculated for each month?

RESPONSE (A):

Toronto Hydro weather normalized the 2019 load profiles by creating monthly ratios between the 2019 weather normalized loads and 2019 non-weather normalized loads by rate class sourced from Exhibit 3.

Please refer to Exhibit 3, Tab 1, Schedule 1, section 5.1 for details outlining Toronto Hydro's weather normalization methodology in its load forecast.

QUESTION (B):

b) With respect to the second reference, was the scaling factor (per Exhibit 7, Tab 1, Schedule 2, Column (i)) used based on the ratio of the annual 2025 forecast kWh versus the annual weather normalized 2019 kWh or was a different scaling factor calculated for each month?

RESPONSE (B):

The scaling factors used were based on the ratio of the monthly 2025 forecast kWh versus the monthly weather normalized 2019 kWh.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 7-VECC-86

References: **Exhibit 7, Tab 1, Schedule 1, pages 2-3 & Tab 1, Schedule 2**
Exhibit 3, Appendix J, page 37
Cost Allocation Model (CAM), Tabs I8
EB-2022-0016 (Bluewater Power), Exhibit 7, pages 5-11
EB-2022-0044 (Kingston Hydro), Exhibit 7, Tab 4, Schedule 1, Attachment 1

Preamble:

The Application states:

> "Resulting load profiles were modified to include electric vehicles ("EVs") and distributed energy resources ("DERs") forecasted load impacts." (page 3)
> And
> "One load profile needed to be added to the analysis: a residential LDEV load profile. For the Integration Model, it was not necessary to include a residential LDEV load profile because billing demand is not a component of residential rates. However, how LDEV's may impact the cost allocations between the residential and other classes in the CAM is pertinent." (Appendix J, page 37)

QUESTION (A):

a) With respect to the second reference, wouldn't it also have been necessary to develop (solely for cost allocation purposes) load profiles for: i) CSMUR LDEV energy usage and ii) GS<50 LDEV, MDEV and HDEV energy usage? If not, why not?

RESPONSE (A) PREPARED BY CLEASPRING:

Regarding part i), for cost allocation purposes the LDEV energy usage for the CSMUR customer class uses the same residential LDEV load profile as used by the residential customer class. Regarding part ii), the GS<50 customer class for cost allocation purposes uses the non-residential LDEV, MDEV, and HDEV load profiles. These are the same profiles used by the other general service and large use customer classes.

The LDEV load profile used for the residential and CSMUR customer classes are found in Table 43 of the Clearspring Integration Model Report. The LDEV load profile used for GS<50 (and the other GS and LU classes) is found in Table 7. The MDEV and HDEV load profiles used for GS<50 (and the other GS and LU classes) are found in Table 19.

QUESTION (B):

b) If yes, please explain how these profiles were determined and provide the profiles used?

RESPONSE (B) PREPARED BY CLEASPRING:

Please refer to response 7-VECC-86, a).

QUESTION (C):

c) With respect to Tab 1, Schedule 2, please explain why the total hourly demand for the customer class (Column (c)) was based on the average use per sample customer for the hour times the number of customers in the class.

RESPONSE (C):

The columns (c) and (d) in the Tab 1, Schedule 2 are the sample size and total of sample size loads based on the average hourly load profile multiplied by the number of customers. This exercise was done to estimate a percentage of usage for a rate class (column (e)). The resulting percentage was then applied to the actual load purchased by Toronto Hydro (column (f)) to determine the rate class's portion of the actual purchased load (column (g)).

Columns (d) and (e) were developed to estimate a rate class's portion of actual purchased load (column (f)), resulting in column (g).

QUESTION (D):

d) What implicit assumptions does this approach (per part (c)) assume regarding the nature of the sample used and how did THESL ensure these assumptions were met?

RESPONSE (D):

Toronto Hydro needed to estimate each rate class's contribution to its total actual purchased loads. The sample size and total of sample sizes (Columns (c) and (d)) were used to estimate a rate class's percentage of total hourly loads (Column (e)). Toronto Hydro used this resulting percentages to estimate a rate class's portion of the actual purchased loads (Column (f)).

QUESTION (E):

e) With respect to the calculation described in part (c), why wouldn't it be more appropriate to determine the hourly profile for the class by multiplying the hourly profile for the sample by the ratio of class's total energy to the energy use accounted for by the sample?

RESPONSE (E):

Toronto Hydro used the sample size and total of sample sizes (Columns (c) and (d)) to create a ratio of the rate class (Column (e)). However, because Column (d) is a sum of the calculations from all sample sizes and not the actual loads that took place, Toronto Hydro used the resulting ratios and applied them to the actual loads (Column (f)) to estimate a rate class's portion of what took place (Column (g)).

QUESTION (F):

f) With respect to Tab 1, Schedule 2, is the difference between the hourly values in Column (d) and Column (f) due solely to losses?

RESPONSE (F):

Toronto Hydro confirms that the difference is not due to losses.

QUESTION (G):

g) If the response to part (f) is no, what other factors account for the difference?

RESPONSE (G):

Column (d) is a sum of the calculations from all sample sizes, while Column (f) is the actual loads purchased. Column (d) does not represent any actual loads that took place; it is a sum of estimations used to calculate a rate class's percent allocation of the actual loads in Column (f).

QUESTION (H):

h) If the response to part (e) is yes, why does the percentage difference between the two columns vary so widely over the hours?

RESPONSE (H):

Please refer to 7-VECC-86 part f).

QUESTION (I):

i) With respect to Tab 1, Schedule 2, why is it more appropriate to use the maximum value in Column (c) as the NCP value as opposed to the maximum value in Column (h)?

RESPONSE (I):

Column (c) is a sample size estimation that is used calculate a ratio of a rate class's portion from the actual loads. Column (c) is not intended to represent a rate class's actual usage; it is used to create a ratio to applied to the actual loads.

QUESTION (J):

j) With respect to Tab 1, Schedule 2, why is it more appropriate to use the maximum value in Column (f) to determine the hour on which to base the CP for the month as opposed to the maximum value in Column (d)?

RESPONSE (J):

Please refer to 7-VECC-86 part g).

QUESTION (K):

k) With respect to Tab 1, Schedule 2, please confirm that the weather correction factor used in Column (h) uses the same ratio to adjust each hour's actual use to "weather normal" use and, in doing so, assumes that for each hour in January 2019 the actual HDD value differs from what would be weather normal for that hour in January by the same percent?

RESPONSE (K):

Toronto Hydro confirms the above statement.

QUESTION (L):

l) If part (k) is not confirmed what relationship does the approach used by THESL assumes exists between the actual HDD value for each hour in January and the weather normal for that hour in January?

RESPONSE (L):

Please refer to response 7-VECC-86, k).

QUESTION (M):

m) Did THESL consider the use of a methodology such as that employed by Bluewater and Kingston in their 2022 COS Applications which accounts for the fact that the difference

between actual and weather-normal HDD and CDD values can vary by day? If yes, why was such an approach rejected?

RESPONSE (M):

Toronto Hydro did not consider the employed by Bluewater and Kingston in their 2022 COS Applications.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 7-VECC-87

References: Cost Allocation Model (CAM), Tab I6.1
EB-2023-0054, OEB Decision re: THESL's 2024 Rates

QUESTION (A):

a) In the 2024 Tariff Sheet it is not clear if the Service Charge for USL is billed on a per customer or a per connection basis. Please clarify.

RESPONSE (A):

The Service Charge for USL rate class is charged on a per customer basis.

QUESTION (B):

b) Please explain how the 2024 rates used in Tab I6.1 account for both the Service Charge and the Connection Charge applicable to USL customers.

RESPONSE (B):

In the cost allocation model cell L39 is modified to calculate the service charges and connection charges as per customer and per connection respectively. This is described in Exhibit 7, Tab 1, Schedule 1, page 4.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 7-VECC-88

References: Exhibit 7, Tab 1, Schedule 1, Table 1, Page 5
Cost Allocation Model (CAM), Tab O1

QUESTION (A):

a) With respect to the proposed Revenue to Cost ratios for GS<50, GS 50-999, GS 1000-4999 and Large Use, are the differences in the proposed ratios simply due to rounding or did the approach used by THESL to determine each class's ratio lead to distinctly different results for each class?

RESPONSE (A):

The differences in the proposed ratios are not simply due to rounding. Toronto Hydro's approach to determine each class's ratio led to distinctly different results for each class.

QUESTION (B):

b) If the approach used by THESL led to distinctly different results for each class please explain the approach used and provide (in a working excel model) the supporting calculations.

RESPONSE (B):

Toronto Hydro maintained the revenue-to-cost ratio within the range, as provided in the Report of the Board: *Review of Electricity Distribution Cost Allocation Policy* (EB-2010-0219) and the updated policy for the Street Lighting class as provided in the Report of the Board: *New Cost Allocation Policy for Street Lighting Rate Class* (EB-2012-0383), for all the classes except for Residential and CSMUR rate class. Residential and CSMUR class revenue-to-cost ratio maintained at unity. In order to maintain the revenue-to cost ratio, rates are adjusted downwards for Residential, CSMUR and

USL. The extra revenue is allocated to those classes with revenue-to-cost ratios below 1.0 proportionately to amounts those classes were below their allocated costs.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 7-VECC-89

Reference: Exhibit 7, Tab 1, Schedule 1, page 5 (Table 1)
Cost Allocation Model (CAM), Tab O1

Preamble:

The EB-2018-0165 Decision states:

> "However, the OEB is concerned by the large shift for the residential class from well below 100% to above 100% (94.3% to 103.2%) at the same time that residential rates are transitioning to a fully fixed rate design. This shift of 8.9 percentage points has a direct impact on the distribution rates for the residential class, and, when combined with the transition to fixed rates, can have a compounding impact on the bills for low volume consumers. The OEB concludes that this impact should be mitigated. Therefore, the OEB is setting the revenue-to-cost ratio for the residential class at 100% for the Custom IR term. In the next rebasing application, the OEB will assess whether the standard policy range will again be applied, rather than continuing to fix the ratio at 100%."
>
> And
>
> "The OEB notes that the revenue-to-cost ratio for the CSMUR class was set at 100% by the OEB when the class was first established for 2012 rates (and as implemented in 2013). There are now several years of actual data for this new class that can be assessed. The OEB concludes that it is appropriate to review in Toronto Hydro's next rebasing application the characteristics
> of this class, and whether a range should be adopted for the revenue-to-cost ratios going forward."

The Application states:

> "In accordance with past OEB decisions, rates in the Residential and CSMUR class are set such that the revenue to cost ratios are equal at unity (i.e. 1.0 or 100 percent)."

QUESTION (A):

a) Please explain why THESL considers setting the Residential ratio at 100% to be in accordance with the OEB's EB-2018-0165 Decision (i.e., why the Residential ratio should continue to be fixed at 100% as opposed to applying the standard policy range).

RESPONSE (A):

Please refer to response 7-Staff-329, b).

QUESTION (B)

b) Please provide THESL's views as to whether, for the CSMUR class, a range should be adopted for the class's revenue to cost ratio.

RESPONSE (B):

Please refer to response 7-Staff-329, a).

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 7-VECC-90

Reference: Exhibit 7, Tab 1, Schedule 1, Page 13

QUESTION (A):

a) Please provide the Cost Allocation Models used to produce the results set out in columns B, C and D of Table 4.

RESPONSE (A):

Please see enclosed attachments for the cost allocation model for scenario B, C, and D of Table 4. Toronto Hydro notes that the changes are made to the following inputs in the alternate approach compare to status quo including “Primary Customer Base”, “Line Transformer Customer Base”, “Secondary Customer Base” in tab I6.2 and consequential impact on load profile for NCP1, 4 and 12 in tab I8.