

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

1 **INTERROGATORY 50:**

2 **Reference(s):** Exhibit 7, Tab 1, Schedule 1, page2

3

4

5 a) What is the basic service allowance that is funded through rates (per lines 15-17)?

6 Also, please indicate where in THESL's Conditions of Service the basic service
7 allowance is set out and established as a common standard for all customer classes
8 (except Street Lighting and USL).

9 b) The Application states that the cost of "services" is directly collected from the USL
10 and Street Lighting classes. Please confirm that this "direct collection" is by way of a
11 customer capital contribution as opposed to via a direct allocation in the Cost
12 Allocation model.

13

14

15 **RESPONSE:**

16 a) Please see Exhibit 2B, Section E5.2, page 12. Please also refer to Table 5 (pages 89
17 to 95) of Toronto Hydro's Condition of Service, provided in response to 1A-BOMA-
18 9.

19

20 b) Confirmed, the cost of "services" for the USL and Street Lighting rate classes is
21 collected through a capital contribution.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 51:

Reference(s): Exhibit 7, Tab 1, Schedule 3, pp. 2-5

- a) Please confirm the date of the study for Toronto Hydro referenced in Table 1.
- b) Please confirm that the Toronto Hydro referenced in Table 1 is pre-amalgamation.
- c) What was the kW/customer capability for the Toronto Hydro minimum system referenced in Table 1?
- d) Why has Toronto Hydro not undertaken to complete (either on its own or with the aid of an appropriate consultant) a new THESL-specific minimum system study?
- e) Please confirm that at page 3, line 5 the text should read “greater than 60 customers per kilometer”.
- f) What is the impact on the status quo revenue to cost ratios of using the minimum system definition as proposed by THESL as opposed to using the OEB Cost Allocation model values? As part of the response, please provide a copy of the CA model with the OEB prescribed value for density.

RESPONSE:

- a) The study for Toronto Hydro referenced in Table 1 was completed in 1999.
- b) The study was completed for the post amalgamation Toronto Hydro.
- c) The minimum load used was a 100-Watt light bulb.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

- 1 d) The undertaking of a minimum system study would likely be a significant expense for
2 Toronto Hydro. It is clear that Toronto Hydro's density is well above the OEB
3 model's default threshold for high density, and the since the current thresholds were
4 based on evidence provided as part of the initial Cost Allocation consultation,
5 Toronto Hydro has used the most relevant information contained in that study as a
6 value for the density factors.
- 7
- 8 e) Confirmed, the text should read "greater than 60 customers per kilometer".
- 9
- 10 f) The following table compares the revenue to cost ratios using the OEB's default high-
11 density input compared to the ratios as filed by Toronto Hydro. An electronic version
12 of the CA model is being provided as IR_7_VECC_51_CAModel_20141105.xlsx.

	Residential	Competitive Sector Multi-Unit Residential	GS<50	GS - 50 to 999	GS - 1000 to 4999	Large Use >5MV	Street Light	Unmetered Scattered Load
Rev to Cost Ratio (OEB value for density)	89%	96%	95%	127%	108%	100%	90%	81%
Rev to Cost Ratio (THESL value for density)	93%	107%	90%	118%	101%	95%	105%	90%

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 52:

Reference(s): Exhibit 7, Tab 1, Schedule 3, p. 5

- a) Please provide a schedule that itemizes each of directions from the OEB's EB-2010-0142 Decision that THESL considered (per lines 8-10) and, for each, describe why no revisions to its cost allocation model were required.
- b) If not addressed in part (a), please indicate how THESL has addressed the following direction from the OEB's EB-2010-0142 Decision (page 13):

The Board recognizes the submission by the SSMWG that the composite allocators in the model should be adjusted to ensure that the applicable costs are allocated to the Quadlogic class appropriately. In particular, this would mean that the composite allocators based on Net Fixed Assets (NFA and NFA ECC) would need to be increased to the Quadlogic class if its meter costs were to be directly allocated using the Board's current model. Similarly, the composite allocators based on operating and maintenance costs (O&M and OM&A) would need to be increased if there were direct allocation of certain other costs elsewhere in this Decision.

While recognizing that the lump sum adjustment of \$400,000 proposed by the SSMWG is correct directionally, the Board finds that changes to the cost allocation model would be required to yield a reliable adjustment to the composite allocators and the Board does not consider it appropriate to make such changes in this proceeding. The Board would consider it appropriate for changes of this kind to be considered during the next review of the cost allocation model (emphasis added).

Once the necessary changes to the cost allocation model have been made, the

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

1 approach proposed by the SSMWG can be considered in a subsequent proceeding.
2 While a new rate class is being created in this proceeding, the Board is of the view
3 that the development of this new rate class will be an iterative process that is likely to
4 span more than one proceeding. The Board accordingly directs that THESL will not
5 alter the cost allocation model's calculation of the composite allocators for the
6 purpose of this proceeding.

7

8 c) If not addressed in part (a), please indicate how THESL has addressed the following
9 direction from the OEB's EB-2010-0142 Decision (page 15)

10

11 The Board notes that THESL agreed that the appropriate weighting factor should be
12 0.064 and also notes that no empirically based alternatives were presented. The
13 Board therefore finds that THESL should use a service drop factor of 0.064 for 2012,
14 as proposed by VECC and the associated logic to derive this allocation factor when
15 the cost allocation study is next updated.

16

17 Specifically, the Board directs THESL to derive the service drop allocation factor
18 when the cost allocation study is next updated by taking the weighting factor of 10
19 used for services for the GS 50- 599 and GS 1,000-4,999 classes divided by the
20 average number of Quadlogic customers per building. (emphasis added)

21

22 d) If not addressed in part (a), please indicate how THESL has addressed the following
23 direction from the OEB's EB-2010-0142 Decision (page 18)

24

25 The Board expects that THESL will incorporate the distinction between the
26 secondary and primary systems in future cost allocation studies, and that it will

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

1 include the appropriate proportions within each class where some customers are
2 served from the secondary system and the rest are served from the primary system.

3
4

5 **RESPONSE:**

6 a) The full paragraph in Toronto Hydro's evidence which is referenced by this
7 interrogatory reads as follows:

8

9 In its EB-2010-0142 decision with respect to the new CSMUR
10 class, the OEB required the utility to review each of the
11 assumptions set out in the decision and note any that may require
12 revision at the time of its next Cost of Service filing. Toronto
13 Hydro has reviewed the directions from that decision, and has not
14 determined a need for any revisions. Allocations to the CSMUR
15 class have been based on the same assumptions as set out in the
16 OEB's decision

17

18 That paragraph references the OEB's Decision in EB-2010-0142 (page 29) where the
19 OEB stated:

20

21 The Board therefore directs THESL to review each of the
22 assumptions set out in the Decision and Order when its cost
23 allocation study is refreshed for its next COS application. THESL is
24 directed to note any assumptions that would require revisions and
25 provide explanations for any such revisions at that time.

26

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

- 1 Toronto Hydro's evidence clearly states that Toronto Hydro has reviewed the
2 current OEB's CAM and has not seen any need to diverge from the model to
3 properly incorporate the findings on the CSMUR class for the 2015 filing.
4
- 5 b) Toronto Hydro's interpretation of the referenced finding was that the OEB intended
6 to review the Cost Allocation model and its logic as part of a generic review of the
7 model. To Toronto Hydro's knowledge, this particular component of the model has
8 not been altered by the OEB, and Toronto Hydro (as well as other LDCs) continues to
9 rely on the current version.
10
- 11 c) For this filing, Toronto Hydro has used the same methodology as directed by the
12 OEB to derive the CSMUR service allocations.
13
- 14 d) A more complete version of the OEB findings in the EB-2010-0142 Decision is as
15 follows (page 18):
16

17 The Board is of the view that in the absence of a move to more
18 detailed based asset-based cost allocation, which the Board does not
19 presently plan to adopt; it would not be possible to appropriately
20 allocate such costs.
21

22 The Board directs that the secondary load of the Quadlogic class will
23 be the same as the primary load.
24

25 The Board expects that THESL will incorporate the distinction
26 between the secondary and primary systems in future cost allocation

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

1 studies, and that it will include the appropriate proportions within
2 each class where some customers are served from the secondary
3 system and the rest are served from the primary system.

4
5 Toronto Hydro identified three out of 215 buildings in the CSMUR class that served
6 from the secondary system. The 123 units in these three buildings make up 0.2% of
7 the 56,966 units in the CSMUR rate classes. Since this figure represents an
8 insignificant proportion of the CSMUR units served, Toronto Hydro maintained the
9 OEB's direction to allocate the secondary load the same as the primary load in the
10 2015 COS model.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

1 **INTERROGATORY 53:**

2 **Reference(s):** **Exhibit 7**

3 **Cost Allocation Model, Sheet I9 – Direct Allocation**

4

5

6 a) Please explain how the costs to be directly allocated to Street Light and USL for each
7 of the following USOA accounts were established:

8 i. 1830

9 ii. 1835

10 iii. 1840

11 iv. 1845

12 v. 1850

13 vi. 1860

14 b) Given there are asset costs for Poles and Conductors (#1830 & #1835), Line
15 Transformers (#1850) and Meters (#1860) directly allocated to Street Light and USL,
16 why are there no directly allocated costs to these classes for the following associated
17 expense accounts:

18 i. 5020

19 ii. 5025

20 iii. 5035

21 iv. 5040

22 v. 5045

23 vi. 5055

24 vii. 5065

25 viii. 5125

26 ix. 5130

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

- 1 x. 5135
- 2 xi. 5150
- 3 xii. 5160
- 4 xiii. 5175
- 5 c) Given there is no direct allocation from the “expenses” accounts noted in part (b) to
- 6 Street Lighting and USL, are the directly allocated asset costs for Street Light and
- 7 USL included in the allocation bases for these accounts where applicable?
- 8 d) Please explain basis for the costs/credits directly allocated to Street Light and USL
- 9 for accounts #5085 and #5096.
- 10 e) Are the asset costs of the actual Street Light devices included in THESL’s costs? If
- 11 so, in which USOA account are they recorded and directly allocated?
- 12 f) How were the Meter and Meter Reading costs that are directly allocated to the
- 13 CSMUR class established?
- 14 g) How were the asset-related costs that were directly allocated to the GS>50-999;
- 15 GS1,000-4999 and LU classes for accounts #1840 and #1845 determined?
- 16 h) Why are there no costs from the expense accounts #5145 and #5150 directly allocated
- 17 to the GS>50-999; GS1,000-4999 and LU classes – given there are associated asset
- 18 costs that are directly allocated?
- 19 i) Given there is no direct allocation from these two accounts (i.e., #5145 and #5150)
- 20 for these customer classes, are the directly allocated asset costs for GS>50-999;
- 21 GS1,000-4999 and LU classes included in the allocation base for accounts #1840 and
- 22 #1845 where applicable?
- 23 j) Do the assets that are directly allocated attract a share of the amortization associated
- 24 with General Plant to customer classes involved? If so, please indicate how this
- 25 accomplished in the Cost Allocation model.
- 26

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

1 **RESPONSE:**

2 a) Costs directly allocated for the noted accounts were established based on Toronto
3 Hydro's records for these assets.

4
5 b) Expense items for Streetlighting were rolled into accounts 5085, 5096 and 5145 for
6 direct allocation.

7
8 c) Please see response to part (b).

9
10 d) Expense costs directly related to the incremental Street Light assets were rolled into
11 accounts 5085 and 5096 as noted in the response to part (b).

12
13 Upon further review, Toronto Hydro has identified an incorrect calculation for the
14 amounts directly assigned in account 5085. The correct amount should be \$180,242.

15 The changes in the revenue to cost ratios as a result of this correction are shown in the
16 table below:

	Residential	Competitive Sector Multi-Unit Residential	GS<50	GS - 50 to 999	GS - 1000 to 4999	Large Use >5MV	Street Light	Unmetered Scattered Load
Rev TO Cost - Profile	93.4%	106.7%	89.9%	117.6%	100.9%	95.2%	105.5%	89.8%
Rev TO Cost- Revised	93.8%	106.9%	90.4%	118.3%	101.4%	95.6%	92.2%	86.5%

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

1 Although, the Streetlighting revenue to cost ratio has changed, it does not change the
2 proposed 2015 Streetlighting rates since Toronto Hydro has proposed to hold these
3 rates constant at 2014 levels. Changes to the revenue to cost ratios for the remaining
4 classes are minor.

5

6 e) No. In accordance with the OEB's ruling, the Street Light "devices" are not to be
7 included in Toronto Hydro's costs.

8

9 f) Rate class meter capital costs for the CSMUR class are calculated as the number of
10 meters in the class multiplied by the rate class cost per meter.

11

12 Meter reading costs for the CSMUR class are calculated as the meter reading cost per
13 meter multiplied by the number of meters multiplied by the number of reads. Upon
14 further review, Toronto Hydro discovered an incorrect calculation of this amount.
15 The correction results in a reduction in directly allocated CSMUR meter reading costs
16 from \$1,115,520 to \$659,338 (a difference of \$456K) which would increase the
17 CSMUR revenue to cost ratio from 106.7% to 110.2%.

18

19 g) The directly assigned asset related costs to the GS>50-999, GS1,000-4999 and LU
20 classes for accounts 1840 and 1845 are based on the estimated replacement costs for
21 the dedicated feeders serving these customers. The ratio of these costs to the
22 replacement cost of all feeders is then applied to the 2015 amounts in accounts 1840
23 and 1845 to establish the direct assignment values.

24

25 h) All costs associated with underground maintenance are grouped into account 5150.

26

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

1 Upon review, Toronto Hydro has identified amounts, totalling \$253,274, for account
2 5150 which should be directly allocated to the GS > 50-999 kW, GS 1,000-4999 kW
3 and LU rate classes. Correcting for this amount has an immaterial impact on the
4 revenue to cost ratios.

6

7 i) Please see response to part (h) above.

8

9 j) Based on Toronto Hydro's understanding of the CAM logic, it does not appear that
10 the assets that are directly allocated attract a proportional share of the amortization
11 associated with General Plant.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

1 **INTERROGATORY 54:**

2 **Reference(s):** **Exhibit 7, Tab 1, Schedule 2, page 7 (corrected)**
3 **Cost Allocation Model, Tab I6.2-Customer Data**
4
5

- 6 a) Please explain the source of the 1.8:1 ratio of devices to connections used in the Cost
7 Allocation model.
8 b) Please explain how this value was established and whether/how it has changed from
9 previous Cost Allocation results filed by THESL.
10
11

12 **RESPONSE:**

- 13 a) The 1.8:1 ratio of devices to connections is based on information provided as part of
14 the initial Cost Allocation filing in 2006 (EB-2006-0247). Data samples on devices
15 and relays across Toronto Hydro's operating areas were used to derive the 1.8:1 ratio
16 for the system as a whole. The ratio takes into account that some streetlight devices
17 are connected in a daisy chain configuration and others are directly connected. This
18 value has been used in each of Toronto Hydro's cost of service based rate filings
19 since 2008.
20
21 b) Please see response to part (a).

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

1 **INTERROGATORY 55:**

2 **Reference(s):** Exhibit 7, Tab 2, Schedule 1, pp. 2-3

3

4

5 a) Please explain how the revenue deficiency from reducing the CSMUR R/C ratio to
6 100% and holding the Street Light rates at 2014 levels was assigned to the remaining
7 customer classes in order to yield the results set out in parts (B) and (C).

8 b) Please provide an alternative version of parts (B) and (C) where the R/C ratio for
9 Street Light is maintained at 104%.

10

11

12 **RESPONSE:**

13 a) The allocator for redistribution of revenue deficiency is the revenue shortfall from the
14 rate classes that are below a 100% Revenue to Cost Ratio in the OEB's Cost
15 Allocation Model.

	Revenue Shortfall from COS Model	% of Total Shortfall
RESIDENTIAL	\$(19,911,971)	62%
GS < 50 kW	(10,408,329)	32%
LARGE USER	(1,537,315)	5%
SMALL SCATTER LOAD	(433,423)	1%
Total	(32,291,040)	100%

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

- 1 The revenue deficiency from maintaining the CSMUR class at 100% and holding
2 Street lighting rates constant – an amount of \$4.1M – is redistributed based on the
3 class percentages derived from the above table.

	Rev Recovery
RESIDENTIAL	\$2,520,965
GS < 50 kW	\$1,317,751
LARGE USER	\$194,633
SMALL SCATTER LOAD	\$54,874
	\$4,088,222

- 4 b) An alternative version of Tables (B) and (C), where the revenue to cost ratio for the
5 Street Lighting class is maintained at 104%, is attached as Appendix A to this
6 response.

OEB Appendix 2-P Cost Allocation

Please complete the following four tables.

A) Allocated Costs

Classes	Costs Allocated from Previous Study	%	Costs Allocated in Test Year Study (Column 7A)	%
Residential	\$ 256,839,427	46.86%	\$ 300,574,607	42.50%
GS < 50 kW	\$ 74,280,097	13.55%	\$ 103,048,743	14.57%
GS 50-999 kW	\$ 136,457,707	24.90%	\$ 165,834,091	23.45%
GS 1000-4999 kW	\$ 38,493,073	7.02%	\$ 58,526,202	8.27%
Large User	\$ 20,035,803	3.66%	\$ 32,008,512	4.53%
Street Lighting	\$ 17,331,487	3.16%	\$ 22,419,560	3.17%
Unmetered Scattered Load (USL)	\$ 4,627,832	0.84%	\$ 4,253,100	0.60%
Competitive Sector Multi-Unit Residential (New Rate Class in 2013)		0.00%	\$ 20,618,388	2.92%
		0.00%		0.00%
Embedded distributor class		0.00%		0.00%
Total	\$ 548,065,426	100.00%	\$ 707,283,203	100.00%

Notes

- 1 Customer Classification - If proposed rate classes differ from those in place in the previous Cost Allocation study, modify the rate classes to match the current application as closely as possible.
- 2 Host Distributors - Provide information on embedded distributor(s) as a separate class, if applicable. If embedded distributor(s) are billed as customers in a General Service class, include the allocated cost and revenue of the embedded distributor(s) in the applicable class. Also complete Appendix 2-Q.
- 3 Class Revenue Requirements - If using the Board-issued model, in column 7A enter the results from Worksheet O-1, Revenue Requirement (row 40 in the 2013 model). This excludes costs in deferral and variance accounts. Note to Embedded Distributor(s), it also does not include Account 4750 - Low Voltage (LV) Costs.

B) Calculated Class Revenues

Classes (same as previous table)	Column 7B	Column 7C	Column 7D	Column 7E
	Load Forecast (LF) X current	L.F. X current approved rates X	LF X proposed rates	Miscellaneous Revenue
Residential	\$ 214,465,673	\$ 255,976,588	\$ 262,655,243	\$ 19,071,920
GS < 50 kW	\$ 69,430,402	\$ 82,869,007	\$ 85,242,953	\$ 7,953,908
GS 50-999 kW	\$ 158,177,191	\$ 188,793,186	\$ 188,618,199	\$ 6,383,816
GS 1000-4999 kW	\$ 52,894,930	\$ 63,133,011	\$ 58,138,327	\$ 897,088
Large User	\$ 27,857,584	\$ 33,249,560	\$ 30,233,172	\$ 320,212
Street Lighting	\$ 12,284,580	\$ 14,662,323	\$ 14,646,487	\$ 8,660,640
Unmetered Scattered Load (USL)	\$ 2,673,863	\$ 3,191,403	\$ 3,284,569	\$ 558,279
Competitive Sector Multi-Unit Residential (New Rate	\$ 17,001,339	\$ 20,292,034	\$ 19,348,161	\$ 1,270,227
Embedded distributor class				
Total	\$ 554,785,562	\$ 662,167,112	\$ 662,167,112	\$ 45,116,090

Notes:

- Columns 7B to 7D - LF means Load Forecast of Annual Billing Quantities (i.e. customers or connections X 12, (kWh or kW, as applicable). Revenue Quantities should be net of Transformer Ownership Allowance. Exclude revenue from rate adders and rate riders.
- Columns 7C and 7D - Column total in each column should equal the Base Revenue Requirement
- Columns 7C - The Board cost allocation model calculates "1+d" in worksheet O-1, cell C21. "d" is defined as Revenue Deficiency/Revenue at Current Rates.
- Columns 7E - If using the Board-issued Cost Allocation model, enter Miscellaneous Revenue as it appears in Worksheet O-1, row 19.

C) Rebalancing Revenue-to-Cost (R/C) Ratios

Class	Previously Approved Ratios	Status Quo Ratios	Proposed Ratios	Policy Range
	Most Recent Year: 2011	(7C + 7E) / (7A)	(7D + 7E) / (7A)	
	%	%	%	%
Residential	89%	92	94	85 - 115
GS < 50 kW	97%	88	90	80 - 120
GS 50-999 kW	118%	118	118	80 - 120
GS 1000-4999 kW	124%	109	101	80 - 120
Large User	116%	105	95	85 - 115
Street Lighting	71%	104	104	70 - 120
Unmetered Scattered Load (USL)	82%	88	90	80 - 120
Competitive Sector Multi-Unit Residential (New Rate C		105	100	85-115
Embedded distributor class				

Notes

1 Previously Approved Revenue-to-Cost Ratios - For most applicants, Most Recent Year would be the third year of the IRM 3 period, e.g. if the applicant rebased in 2009 with further adjustments over 2 years, the Most recent year is 2011. For applicants whose most recent rebasing year is 2006, the applicant should enter the ratios from their Informational Filing.

2 Status Quo Ratios - The Board's updated Cost Allocation Model yields the Status Quo Ratios in Worksheet O-1. Status Quo means

D) Proposed Revenue-to-Cost Ratios

Class	Proposed Revenue-to-Cost Ratios			Policy Range
	0	1	2	
	%	%	%	
Residential	94			85 - 115
GS < 50 kW	90			80 - 120
GS 50-999 kW	118			80 - 120
GS 1000-4999 kW	101			80 - 120
Large User	95			85 - 115
Street Lighting	104			70 - 120
Sentinel Lighting				80 - 120
Unmetered Scattered Load (USL)	90			80 - 120
Competitive Sector Multi-Unit Residential (New Rate	100			85-115
				0
Embedded distributor class				

Note

1 The applicant should complete Table D if it is applying for approval of a revenue to cost ratio in 2014 that is outside the Board's policy range for any customer class. Table (d) will show the information that the distributor would likely enter in the IRM model) in 2014. In 2015 Table (d), enter the planned ratios for the classes that will be 'Change' and 'No Change' in 2014 (in the current Revenue Cost Ratio Adjustment Workform, Worksheet C1.1 'Decision – Cost Revenue Adjustment', column d), and enter TBD for class(es) that will be entered as 'Rebalance'.