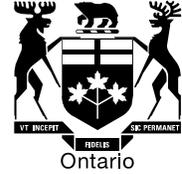


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BY E-MAIL

October 12, 2011

Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge St., 27th Floor
P.O. Box 2319
Toronto, ON M4P 1E4

Dear Ms. Walli:

**Re: Electricity Distribution Rate Application for Toronto Hydro-Electric System Limited – Phase 2
Board Staff Interrogatories
Board File No: EB-2010-0142**

Please find the attached Board staff interrogatories in the above proceeding related to Phase 2. Please forward the following to Toronto Hydro-Electric System Limited and all other parties to this proceeding.

Sincerely,

Original Signed By

Martin Davies
Project Advisor, Applications & Regulatory Audit

Attachment

Board Staff Interrogatories Suite Metering Supplementary Evidence Toronto Hydro-Electric System Limited EB-2010-0142

1) Ref: EL1/T5/S1/p. 1.

At the above reference it is stated:

"The Updated BDR Study identified 9,149 suite metered customers served by Quadlogic technology at the end of 2009. For the current analysis, 24,898 suite meter customers are forecast to be served by Quadlogic meters in 2012".

- a) The evidence states that the 9,149 suite meter customers are housed in 48 multi-unit residential buildings. Please provide the number of buildings in each of the 5 electricity load requirement categories: less than 50 KVA, 50 KVA to 100 KVA, 100KVA to 250 KVA, 250KVA to 500 KVA and more than 500 KVA. Please also provide the different supply voltages (kV) that are used to serve the buildings in each of the 5 load categories.
- b) THESL forecasts 24,898 suite meter customers in 2012. How many multi-unit residential buildings does that customer forecast represent? Please provide the number of buildings in each of the 5 load categories: less than 50 KVA, 50 KVA to 100 KVA, 100KVA to 250 KVA, 250KVA to 500 KVA and more than 500 KVA . Please also provide the different supply voltages (kV) that are projected to serve the buildings in each of the 5 load categories.
- c) How is the load for the common areas metered in multi-unit residential buildings that are suite metered and is it allocated in some manner to the suites in the building?

2) Ref: EL1/T5/S1/p. 2 and p.9.

It is stated on page 2 when discussing the load forecast that:

"As in the Updated BDR Study, some of the raw load data contains periods with zero use (due to unoccupied units). THESL has used the same methodology employed in the Updated BDR Study to obtain an updated estimate of average monthly load. This updated evidence is 334 kWh per month. Due to the time constraints associated with filing this evidence, THESL has not done a detailed investigation as to why the most recent sample produces a lower average monthly load than the Updated BDR Study"

Table 4 – “Suite Meter Rates” on page 9 is based on a Suite Meter Class consumption of 334 kWh/month and a Remaining Residential Class consumption of 677 kWh/month:

- a) Please state how much of the raw load data contains periods with zero use and whether or not there has been any variability in this amount between the various suite metering studies undertaken by THESL and, if so, the extent of any such variability.
- b) Please comment on the extent to which THESL believes the differentials in consumption between the two rate classes in Table 4 are related to this factor and/or what other factors would explain this differential.
- c) Please provide any views THESL may have as to why the most recent sample produced a lower average monthly load than the updated BDR Study.

3) Ref: EL1/T5/S1/pp. 2-3.

It is stated when discussing meter costs that:

“The Board has indicated that the new Suite Meter class is to be defined (presently) by the meter type servicing the customers in this class – specifically Quadlogic meters. The use of this technology for serving Suite Meter customers was based on a number of factors, including physical characteristics, cost and Measurement Canada approval. Currently, this is the brand of meter being installed by THESL. The contract with the vendor for these meters will expire at the end of 2011, and there is no guarantee that this same technology will be used by THESL.”

- a) Please identify the stage which THESL is in for negotiating a new contract for the provision of meters beyond 2011 and when THESL would expect that a decision on a new supplier would be reached.
- b) Please provide THESL’s views as to the magnitude of the potential impact of a new contract on the results of the present study, particularly as regards to the price of the meters.
- c) Would the need for a new contract be a factor in THESL’s increased 2012 meter cost estimate of \$550?

4) Ref: EL1/T5/S1/p. 3.

Re: Forecast Number of Quadlogic and other Customers

- a) Please confirm that THESL’s forecast of suites metered by Quadlogic equipment is 24,989, compared to 9,149 suites used in the previous cost allocation study filed on February 18, 2011.
- b) Is THESL’s forecast of suites metered by equipment other than Quadlogic also increased by a similar factor? What is THESL’s forecast of the number of such suites?

5) Ref: EL1/T5/S1/p. 4.

It is stated when discussing meter costs that:

"For 2012, THESL estimates an installed per meter cost of \$550. The value is higher than the \$440 value used in the Updated BDR Study. THESL has estimated this number based on the number and types of meters in service in 2012. Factors driving the increased per meter cost estimate compared to the previous value include costs related to inspections, network meters, and larger 3-phase meters which are more costly."

- a) Please provide a breakdown of the cost components for both the 2012 installed meter cost of \$550 and the \$440 value used in the Updated BDR Study.
- b) Please provide a breakdown and explanation of the \$110 increase between the factors cited above as leading to the increase.

6) Ref: EL1/T5/S1/p. 4.

It is stated when discussing meter costs that:

"With respect to meter reading costs, as was indicated in the Updated BDR study, these costs are expected to be reduced as the reading of the meters is moved in-house. In that study, meter reading for the Quadlogic customers was assigned a weighting factor of 7 compared to 1 for a smart meter residential customer. Based on 2012 data, the weighting factor compared to other residential meters used in the evidence is estimated to be 3.6. This lower value reflects the reduced costs."

- a) Please discuss how the initial weighting factor of 7 was determined by THESL.
- b) Please provide quantitative support for the reduction in the weighting factor from 7 to 3.6, specifying which costs are now lower and how these reductions affected the weighting factor to produce the 3.6 level.

7) Ref: EL1/T5/S1/pp. 4-5.

It is stated when discussing meter costs that:

"In the BDR study, meter reads were assumed to happen every two months. For the current study, reads have been assumed to occur monthly, as the suite meters are being read and billed at the same time as the bulk meter (which is used to bill the building common load area). This serves to increase the costs allocated to the Suite Meter class."

Please identify the magnitude of the cost increase to the Suite Meter class arising from monthly meter reads.

8) Ref: EL1/T5/S1/pp. 4-5.

It is stated when discussing marketing expenses that:

"In the Updated BDR study, a direct allocation of marketing costs associated with the suite meter program was included. The amount allocated to the Quadlogic class was \$90,000. In 2012, there are no marketing dollars included in the budget for suite meter activity and hence no expenses have been directly allocated to the Suite Meter class."

- a) Please state why \$90,000 of marketing costs were allocated to the suite metering program in the Updated BDR study and what they represented.
- b) Please state why a change was made for 2012 so that no such expenses have been allocated directly to the Suite Meter class.

9) Ref: EL1/T5/S1/p. 6.

For the revenue-to cost ratios shown in Table 2 – “Revenue/Cost Ratios,” please provide the numerators and denominators for each of these ratios and the sources for them.

10) Ref: EL1/T5/S1/p. 4 and 7.

It is stated when discussing meter costs that:

“A sensitivity analysis was also conducted by directly allocating the estimated Quadlogic meter costs to the Suite Meter class, rather than using the model’s meter cost weighting factors.”

Table 3 – “Sensitivity of R/C Ratios to Alternative Assumptions” shows that the direct allocation of meter costs would reduce the Revenue-to-Cost ratio for the Suite Meter class from 104.7% to 99.2%. Please state why THESL used the model’s meter cost weighting factors rather than direct allocation for these costs and which approach THESL would view as the most accurate.

11) Ref: EL1/T5/S1/p. 9.

Table 4 – “Suite Meter Rates” provides estimated monthly bills for the Suite Meter Class and the Remaining Class. Please provide these bills in the format of Appendix 2-V “Bill Impacts” of the Board’s Filing Requirements.

12) Ref: EL1/T5/S1/p. 10 and p. 12.

It is stated that:

“Under the current tariff, THESL must bill the property owner under existing residential rates (or the prospective suite meter rate, if approved) for each unit in which a suite meter is installed. THESL cannot install the meters and then wait for an indefinite period to begin recovering the associated costs. However, relative to the situation in which consumption for unconverted units is billed under the applicable bulk rate, costs to the property owner are substantially higher.”

- a) Please state whether THESL is aware of any other jurisdictions using an approach similar to the proposed transitional meter-only rate and, if so, which ones.
- b) Please state whether this charge would be the same for all classes to which it is applicable and which classes these would be. If it would vary by class, please provide the class-specific charges.

- c) Please state how THESL would know when to switch from the transitional rate to the regular rate.
- d) Please state whether in THESL's view the acceptance of this proposal by the Board would result in any additional costs other than the \$53,000 referenced on page 12 and, if so, what they would be.

13) Ref: EL1/T5/S1/p. 12.

It is stated that:

"Regular billing and customer care costs related to the unconverted units would not be incurred by THESL during the transition since the meters would not be used for billing purposes in that period."

Please state whether or not there would be any fixed costs related to regular billing and customer care costs which should be allocated to the meter-only rate and, if not, why not.

14) Ref: Cost Allocation Model

Please provide a 'live' version of this model.

15) Ref: Cost Allocation Model W I6.1 and O1; Exh L1/5/1/ p. 9

Re: Quadlogic Rate Class Revenue:

- a. Please provide a calculation of the revenue that would be generated from the Suite Meter class with the rates shown in Table 4. What revenue to cost ratio would result from these rates?
- b. Please confirm that the revenue shown in cell E21 of worksheet O1 (\$7,918,515) is the outcome of the existing approved Residential rates plus allocated Miscellaneous Revenue.
- c. Please confirm that the revenue shown in cell E25 of worksheet O1 (\$8,536,315) would be the outcome of the Residential distribution rates increased by 8.78% plus allocated Miscellaneous Revenue.
- d. Please provide illustrative rates that would generate revenue of \$7,277,195, i.e. the class revenue requirement in cell E40 (\$8,156,811) less allocated Miscellaneous Revenue \$878,875.

16) Ref: Cost Allocation Model W I7.2 and O1

Re: Allocated Cost of Meter Reading:

- a. Please confirm that the weighting factor of 3.60 that is applied to the Quadlogic rate class for Meter Reading in worksheet I7.2 results in a class revenue

- requirement that is approximately \$525,000 higher than the outcome if the weighting factor were the same as for a Residential class customer (i.e. 1.00).
- b. Please describe the frequency with which data is actually downloaded from meters in the Residential and Quadlogic rate classes, in order to address the question of whether the latter are downloaded twice as often and whether the cost is directly related to the frequency of “meter reading”.
 - c. Please state in which class in the cost allocation model the load outside of the individual suites is included and how it is calculated (e.g. from a master meter less the load of each suite), and explain how the load in question is treated in the cost allocation model.

17) Ref: Cost Allocation Model W I6.2 and I7.1

Re: Installed Cost of Meters in the Quadlogic Class:

There is an apparent inconsistency between the number of Quadlogic customers in worksheet I6.2 (24,898) and the number of installed meters in worksheet I7.1 (25,033)

- a. Are these amounts correct, or should one of the data entries be changed?
- b. The installed cost of the Quadlogic meters and the installed cost of 24,303 Residential meters are identical at \$550 per meter. Please describe the components of equipment and installation cost of the meters for both the Quadlogic meters and these Residential meters.

18) Ref: Cost Allocation Model W I3 and I4

Re: Allocated Costs of Services and Secondary Distribution Facilities

- a. Please explain why THESL has reassigned amounts from distribution “conductor and devices” accounts 1835 and 1845 (\$115 million and \$272 million respectively) and assigned the costs to “services” account 1855.
- b. Were the amounts transferred from the respective secondary voltage subaccounts in worksheet I4, i.e. accounts 1835-5 and 1845-5, or were amounts also transferred from the primary voltage sub-accounts?
- c. Please confirm that the same transfer of assets from 1835 and 1845 to 1855 occurred in the previous cost allocations (November and February).
- d. Please provide an estimate of the effect on the Quadlogic class revenue requirement of making this transfer of costs from the conductor accounts to the services account.

19) Ref: Cost Allocation Model W I5.2

Re: Services Weighting Factors

- a. Please provide the justification for using a weighting factor of 1.0 for the Quadlogic class (which was the default value provided in the previous version of

- the Board's cost allocation model). Alternatively, considering that a multi-unit building would have only one service drop with perhaps some economy of scale compared to the same number of services to typical Residential customers, please explain why THESL did not use a weighting factor for the Quadlogic class other than 1.0.
- b. Please confirm that the default weighting factor of 1.0 was used for the Quadlogic class and the Other Suite-Meter class in the February study.

20) Ref: Cost Allocation Model W I8 and EL1/T5/S1/p.3.

Re: Forecast of Average Consumption of customers in the Quadlogic class

- a. Does THESL have billing information confirming that the monthly consumption per suite will likely decrease to 334 kWh per suite, compared to 361 kWh and 397 kWh for Quadlogic and Other Suite-metered in the February study?
- b. Considering the forecast that average consumption in the Residential class will decrease to 677 kWh per customer, compared to 776 kWh per customer in the February study, please explain how much of this decrease is due to any difference in how the residential class is defined in the respective studies (eg. Inclusion of the "Other Suite Meter" customers), versus how much of the decrease is due to lower consumption within a typical dwelling unit.
- c. Please describe how the near-zero consumption of vacant suites and vacant residences affects the average consumption statistics of suite-metered and residential customers.
- d. Please provide the Quadlogic class revenue requirement that would result from an alternative assumption about consumption per suite, by replacing the assumption of 334 kWh per suite with the assumption of say 361 kWh per suite and making proportional changes to the Quadlogic input data in Worksheet I8.