INTERROGATORIES OF
THE SMART SUB-METERING WORKING GROUP

Toronto Hydro Electric System Limited
2011 Rates Application

EB-2010-0142

December 23, 2010

**INTERROGATORIES OF THE SMART SUB-METERING WORKING GROUP ("SSMWG")
TO TORONTO HYDRO ELECTRIC SYSTEM LIMITED ("THESL")**

Reference: Cost *of Service Study for Individually Metered Suites in Multi-Unit Residential Buildings*, prepared by BDR, dated November 29, 2010 (the "Cost of Service Study")

1. Please file, in Excel format, the Cost of Service Study for individually metered suites in multi-unit residential buildings showing the formulas, inputs, and assumptions used in the model.

2. On page 2 of the Cost of Service Study, it states that: "Based on information from THESL management, a determination was made of the number of smaller multi-unit residential buildings served through secondary infrastructure, and on that basis an estimate was made of the cost of secondary lines that should be allocated to the SMSC." Please provide the number of buildings that were assumed to be served through secondary infrastructure and the total number of buildings served by THESL that are included in the suite-metered sub-class.

3. On page 10 of the Cost of Service Study it states that: "Once a population load shape had been computed, it was returned to THESL staff, who normalized it for weather and provided the weather-normalized load shape to BDR." Please provide details of the weather normalization methodology used, including the equations estimated and the data used.

4. On page 20 of the Cost of Service Study it states that: "The larger multi-unit residential buildings could have their own transformers or be fed from THESL-owned transformers. Residential rates do not reflect the issue of customer-owned transformers. If the building has a customer-owned transformer, a credit is applied to a General Service account associated with the building." On Page 21, the Cost of Service Study states: "To the degree that buildings with customers in the SMSC are served at primary voltage, they have been excluded from an allocation of line transformer costs."

    (a) Please provide a table showing the proportion of SMSC customers for whom there are costs associated with (i) transformer and secondary costs, (ii) transformer but no secondary costs, (iii) secondary but no transformer costs, and (iv) neither transformer nor secondary costs.

    (b) Please confirm that THESL-owned meters are always downstream of the transformer.

    (c) Please explain in detail the reason for not allocating secondary costs to multi-unit residential buildings where THESL owns the meter and the meters are downstream of the transformers.

    (d) Please detail THESL's practice in respect of the transformation credit. How is it calculated and applied? Does THESL agree that in the case of condominiums, the credit benefits the condominium corporation and by extension the unit owners who are ultimately responsible to pay THESL's General Service account?

5. On page 25, Table 5.2 of the Cost of Service Study, the allocated Distribution and General Administration expenses to SMSC are substantially lower than costs allocated to NSMSC. Please confirm that these are fully allocated costs and not directly attributable incremental costs.

6. On page 25, Table 5.2 of the Cost of Service Study, the Depreciation and Amortization costs for Suite-Metered is less than half than for Non-Suite Metered. Please confirm that this is the result of the difference in the allocation of transformation and secondary lines to the SMSC and NSMSC. If there are other significant factors, please identify them.

7. On page 6, of the Cost of Service Study it states that: "The population of the SMSC was thus identified as consisting, in 2009, of 119,947 customers,..." Please confirm the number of customers in this group for 2009 that are suite metered as a result of THESL's suite metering program.

8. Please provide detailed meter costs for the Quadlogic meter. This information can be provided subject to confidentiality. The costs should be broken down by capital cost per suite and installation cost per suite for the Quadlogic systems installed in 2009.

9. THESL's pre-filed evidence indicates that 5,534 suite meters were installed in 2009 (D1, T8, S7, page 5, Table 2) and that the suite metering program had a capital budget (actual) of $3.3 million (D1, T7, S1, Table 2). This works out to a cost of $596.32 per meter ($3.3 million divided by 5,534). Please explain how the $297 cost used in the Cost of Service Study is appropriate.

10. Table 4.5, Account #1860 "Meters" allocated $35.65 million to the Residential Suite Metered Class. Please provide a breakdown of all of the costs by type and amount that have been included in this figure. For example, if this figure includes conventional mechanical meters or meters similar to those used in THESL's Smart Meter Program (hereinafter "Smart Maters"), please itemize and indicate the costs allocated to these types of meters.

11. Please provide and compare the load shapes for suite metered customers that are served by Quadlogic (or similar type) meters installed with multi-residential customers that are served through regular mechanical meters or Smart Meters.

12. With respect to the suite-metered sub-class please confirm that the following categories of customers have been included in this sub-class and provide the number of customers and costs for:

    (a) Customers in bulk metered buildings that have been converted to individually metered units with standard mechanical residential meters and/or with Smart Meters (i.e., not the Quadlogic type used by THESL as part of its Suite Meter Program);

(b) Customers in individually metered units that have been converted from standard mechanical residential meters to Smart Meters;

(c) Customers of new buildings with individually metered units that are served utilizing Smart Meters installed initially (i.e., conversion not required);

(d) Customers in multi-unit buildings that continue to be served by standard mechanical meters.

Reference : Exhibit D1, Tab 8, Schedule 7, page 5, Table 2; and the Cost of Service Study

13. THESL's evidence is that it installed 3,889 smart suite meters in 2008, and 5,534 in 2009, for a total of 9,423. THESL is seeking approval for a $2.6 million capital investment in suite meters, for 2011, which relates to the installation of Quadlogic electronic metering systems installed primarily by a third party services provider at no cost to a new condominium developer or the owner of an existing building that wishes to convert from a bulk metered configuration. These meters and costs are the suite metering program which was the subject of the SSMWG's involvement in THESL's 2010 rate case (EB-2009-0139) and which were taken to hearing. The SSMWG submitted and adduced evidence to the effect that these suite metering program customers were being cross-subsidized by other THESL residential rate class customers. The concerns about cross-subsidization were clearly directed only at the customers of THESL's suite metering program, which totalled 9,423, as of the end of 2009.

The cost allocation study ordered by the Board stated the following:

> "For the reasons that follow the Board finds that THESL should undertake a cost allocation study related to its provision of suite metering services. The study shall include an analysis of the implications of creating and maintaining a separate rate class for those customers served in this manner. The Board is of the opinion that the potential for cross-subsidization is ongoing and that there may be merit in the establishment of a separate rate class for multi unit-resident customers that are served directly by THESL through its suite metering provision. This should be filed as part of the next cost of service application, which THESL intends to file later this year, but in any event no later than six months from the date of this Decision.
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> The Board believes that continual delay is not useful. It is significant that the Board recently completed an extensive compliance proceeding against THESL [EB-2009-0308 (January 27, 2010)] which, amongst other things, required THESL to alter its Conditions of Service and to make it clear that condominium developers and unit-holders are able to choose between THESL as a suite metering supplier and a smart sub-metering regime that includes competing suppliers for these services. In other words, the Board has clearly stated that a utility does not hold a monopoly for individual metering in multi-unit buildings. It would defeat the purpose of that exercise to allow cross-subsidization, (if it exists), to exert a negative impact on competition."

It is clear from both the position of the parties, the evidence adduced, and the Decision of the Board that THESL was required to undertake a cost allocation study comparing the costs to serve THESL's suite metering program customers to the costs to serve other residential rate class customers. The Cost of Service Study prepared by BDR instead compares a suite metered class of multi-unit buildings which consists of almost 120,000 units, more than 90 percent of which are not suite-metering program customers.

(a) Please recast the definition of the suite metered sub-class for the purposes of the cost allocation study to include only those 9,423 customers which were customers of THESL's suite metering program as of the end of 2009. Please take those customers that are removed from the suite metered sub-class definition in the Cost of Service Study for the purposes of this interrogatory, and add them to the residential net of suite metered customer class, and redo the cost allocation study using the Board's approved methodologies.

(b) Please provide, in Excel format, this revised cost of service study showing the formulas, inputs and assumptions used in the model.

(c) Please provide a breakdown of all of the capital costs incurred in respect of the primary and secondary infrastructure required (excluding the Quadlogic metering systems) to serve the 5,534 suite meter customers added in 2009. For clarity, this request includes all upstream connection, expansion and/or reinforcement costs incurred and any costs incurred by a developer or building owner for expansion facilities that were subsequently transferred (or where the transfer is pending) to THESL. Please confirm that these costs have not been reduced by any expansion deposit collected by THESL which may be returnable to the developer(s) or owner(s) in question.