**Ontario Energy** Board

P.O. Box 2319 27th. Floor 2300 Yonge Street Toronto ON M4P 1E4

Telephone: 416- 481-1967 Facsimile: 416-440-7656 Toll free: 1-888-632-6273

Commission de l'Énergie de l'Ontario

C.P. 2319 27e étage 2300, rue Yonge Toronto ON M4P 1E4 Téléphone; 416-481-1967 Télécopieur: 416- 440-7656 Numéro sans frais: 1-888-632-6273



BY E-MAIL

November 4, 2013

Attention: Ms. Kirsten Walli, Board Secretary

Dear Ms. Walli:

Re: **Toronto Hydro-Electric System Limited** 

**Application for Disposition and Recovery of Smart Meter Amounts** 

Board File Number EB-2013-0287

In accordance with Procedural Order No.1 issued on September 12, 2013, please find attached the Board staff submission on the referenced application filed by Toronto Hydro-Electric System Limited.

Original Signed By

Martin Davies Project Advisor, Applications & Regulatory Audit

Attachment

cc: Parties to EB-2013-0287 proceeding

# 2014 ELECTRICITY DISTRIBUTION RATES Toronto Hydro-Electric System Limited Application for Disposition and Recovery of Costs Related to Smart Meter Deployment

EB-2013-0287

**BOARD STAFF SUBMISSION** 

November 4, 2013

#### Introduction

Toronto Hydro-Electric System Limited ("THESL") filed a stand-alone application with the Board on August 1, 2013, requesting the following approvals:

- Disposition of the separate 2008, 2009 and 2010 year-end balances and corresponding revenue requirements up to December 31, 2013 in the Smart Meter Deferral Account, by way of the Smart Meter Disposition Rider ("SMDR"), effective for 36 months from May 1, 2014 until April 30, 2017:
- Implementation of the Smart Meter Incremental Revenue Requirement Rate Rider ("SMIRR") to recognize assets that remain outside of rate base, effective from May 1, 2014 until THESL's next rebasing; and
- Discontinuation of the Smart Meter Rate Adder effective April 30, 2014.

THESL stated that its application was in accordance with Board guidelines and directives.<sup>1</sup>

This submission reflects observations and concerns which arise from Board staff's review of the record of the proceeding, including the original application and updates as provided in response to interrogatories.

## **Prudency of Claimed Cost Recovery**

# Background

THESL's evidence indicated an increase in its smart meter costs over time, as shown in the table below which is reproduced from THESL's evidence<sup>2</sup>:

<sup>&</sup>lt;sup>1</sup> Current guidelines and filing requirements were issued by the Board in *Guideline G-2011-0001:* Smart Meter Funding and Cost Recovery – Final Disposition ("Guideline G-2011-0001"), issued December 15, 2011.

<sup>&</sup>lt;sup>2</sup> EB-2013-0287, Toronto Hydro-Electric System Limited, Manager's Summary, p. 6.

**Table 3: Smart Meter Costs (\$/Unit Installed)** 

	2006	2007	2008	2009	2010	Average
Installed Meter Capital Costs						
Residential & GS<50 <sup>(1)</sup>	158.57	127.78	156.49	266.21	307.39	166.37
GS>50	948.62	546.38	1431.47	1441.08	1277.42	1091.94
Total Average Capital Costs	160.85	135.98	221.13	395.96	456.28	206.61
Total Average Cost (including OPEX)	163.56	144.19	226.61	450.27	527.96	220.69
% Change vs average 2006 cost		-12%	39%	175%	223%	34%
Note 1: Includes Collectors						

In response to an interrogatory, THESL explained that the increases were due to such factors as increased deployment costs for more "hard to reach" installations, and also an increased percentage of more costly meters, such as 3-phase.

## **Discussion and Submission**

Board staff submits that THESL's evidence and interrogatory responses adequately justify these costs, especially given that costs on either side (2006 and 2007, and 2011 and beyond), have already been reviewed and approved. Board staff also considers that THESL has documented the costs appropriately in the Board's model.

Board staff, accordingly, takes no issue with the prudence of the smart meter costs incurred by THESL.

## Proposed Use of THESL Model Instead of Board Model

## Background

THESL's application noted that the Board's Smart Meter Guidelines provide utilities with a Smart Meter Model (the "Model") to assist in providing their incremental revenue requirements relating to smart meter activities. THESL stated that while the values it has provided in the present application have been calculated without direct use of the Model, it has populated the Model and provided the results for comparison purposes in Appendix F.

THESL concluded that using its data, the Model produces an SMDR of \$23.9 million, virtually identical to THESL's calculation, and a SMIRR of \$9.8 million, which is approximately \$0.1 million higher than THESL's calculation. THESL stated that the values it was requesting for clearance were in fact lower than those produced by the Model and that this variance was caused by three main differences in approach between THESL's calculations and those embedded within the Model, which were: (1) Capex versus In-Service, (2) PILs and (3) Carrying Charges.

THESL submitted that its calculations of the SMDR and the SMIRR produce more accurate values than those generated by the Model. THESL requested that the Board consider and approve the values derived from THESL's calculations for disposition, given that: (1) the Board's Smart Meter Guidelines are not prescriptive regarding the use of the Model, and (2) THESL's final calculations are in fact slightly lower than those produced by the Board's model.

Board staff asked<sup>3</sup> THESL to update and re-file both models as a result of any changes arising from its interrogatory responses. THESL re-filed the Model but stated that no changes were required to its model.<sup>4</sup> THESL stated that the changes that had been made produced marginally different results to those in the originally-filed version of the Model, which had produced an SMDR recovery \$333K higher and an SMIRR recovery \$3K higher than the updated Model. THESL concluded that, in comparison to its calculations, the updated Model resulted in an SMDR recovery \$354K lower than THESL's proposed calculations and an SMIRR recovery \$164K higher than THESL's calculations.

Board staff submits that the key conclusion from these updated numbers is that on a net basis (SMDR and SMIRR), the Model produces an overall level of recovery roughly \$200K lower than that of THESL. This difference is immaterial. Given this, it is not clear to Board staff why THESL did not adopt the Model for greater regulatory efficiency in processing this application. If the purpose was to

<sup>&</sup>lt;sup>3</sup> Toronto Hydro-Electric System Limited, EB-2013-0287, Interrogatory Responses, Tab 2A, Sch. 15.

<sup>&</sup>lt;sup>4</sup> Response to Board staff interrogatory # 15.

highlight areas in which THESL disagrees with Board policy, then for the record Board staff wishes to clarify a couple of matters with respect to the policy.

## Capex vs. In-Service Capital Additions

# **Background**

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THESL's position has been that the Model calculates incremental revenue requirement using total smart meter capital expenditures in the year, while THESL calculated incremental revenue requirement using the fixed asset balance and, as a result, it did not calculate incremental revenue requirement on its CWIP balances. THESL concluded that the net effect of this component results in an SMDR recovery of \$1.0 million less than that produced by the Model, prior to any adjustments made as a result of the interrogatory process.

## **Discussion and Submission**

Board staff understands that the difference of approximately \$1.9 million between smart meter additions and capital expenditures is attributable to capital expenditures incurred in 2008 to 2010 but for which the asset(s) did not go into service until 2011 or later. In addition, there are capital expenditures each year that do not go into service until a later year, but still within the 2008 to 2010 period. <sup>5</sup>

Board staff notes that, as the present application is solely to deal with smart meter cost recovery for the period January 1, 2008 to December 31, 2010, the \$1.9 million of additional capital expenditures which did not go into service during 2008-2010 presumably would have gone into service in 2011 or later – and thus was (explicitly or implicitly) approved and is being recovered in THESL's distribution rates for 2011 and beyond.

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<sup>&</sup>lt;sup>5</sup> EB-2013-0287, Toronto Hydro-Electric System Limited, Manager's Summary, p. 11, Table 6 and and Interrogatory Responses, Tab 2A, Sch. 15, p.3.

Board staff notes that this matter raises the issue as to whether or not the capital expenditures entered into the Model for each year should only be for assets that go into service in that year. This issue is exemplified in the present application by the \$5,611,816 computer software capital expenditure, which THESL documents was incurred in 2008 but did not come into service until 2009. In the Model, THESL has input this amount in 2008 but in its own model has entered it as a 2009 capital addition.

Board staff notes that THESL's approach will have the impact of increasing the deferred revenue requirement using the Board's approach, as there is an additional year of return on capital, associated PILs expense and depreciation expense by adding the IT capital expenditures in one year earlier.

With respect to the major capital costs incurred for the deployment of smart meters and the AMI and computer infrastructure, it would appear that for most distributors, as in many applications that have been reviewed and approved by the Board, the costs, particularly for the meters and the meter installation costs, are generally correlated with the smart meter deployments in each year.

Board staff notes however that in a few cases, alignment between smart meter costs and meter installations was missing.<sup>6</sup> The Board has directed at least one distributor to better align the smart meter costs with when the meters were deployed and went into service.<sup>7</sup>

Based on the above, Board staff submits that THESL has misinterpreted the Board's policy and practice, and that the distinction between capital expenditures

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<sup>&</sup>lt;sup>6</sup> These were cases such as where smart meter installations were shown as occurring in a year, but there were no capital costs for the meters or meter installation. Even if the smart meters had been purchased in a prior year and were in inventory, the meter installation costs must occur at the same time as when the smart meter was deployed and hence came into service.

<sup>&</sup>lt;sup>7</sup> Decision and Order EB-2012-0310, January 10, 2013, pp. 6-9. This Decision and Order, regarding Kingston Hydro Corporation's smart meter cost recovery noted that the smart meter replacement program was not a "like-for-like" replacement with conventional meters as was common for meter reverification and testing, and thus that the usual treatment of inventoried meters as if they were "in service" should not apply. Kingston Hydro was directed to more closely align the meter procurement and installation costs with when the meters were actually deployed.

and capital additions is not as acute as THESL has suggested where the Board-issued smart meter model is concerned. As such, Board staff believes that it would be consistent for THESL to also reflect the \$5,611,816 computer software capital expenditure in 2009 when the assets went into service in the Board-issued smart meter model.

Board staff submits that the Model can accommodate in-service assets and given the unique circumstances of THESL's smart meter cost recovery should be filed on this basis. Board staff therefore submits that both the quanta and timing of costs are matched for the Model and THESL's model.

# **Carrying Costs**

# **Background**

Another difference cited by THESL between its model and that of the Board is that the Model only calculates carrying charges on OM&A and Depreciation expense, while THESL has calculated carrying charges on the net revenue requirement consequences of all smart meter costs components. THESL stated that the net effect of this component results in an SMDR recovery of \$0.6 million more than that produced by the Board's Smart Meter Model.

## **Discussion and Submission**

Board staff submits that THESL's approach deviates from the Board's standard practice as documented in Frequently Asked Question (FAQ) #8 from the August 2008 Accounting Procedures Handbook FAQs and from the methodology documented in Guideline G-2011-0001 (and which is incorporated into the Board-issued model). The example provided in FAQ # 8 showed the calculation of carrying charges on capital expenditures, OM&A and depreciation and on the Smart Meter Funding Adder revenues. There were no carrying charges calculated on PILs expense.

In Guideline G-2011-0001, the Board has accepted a methodology whereby carrying charges apply to the SMFA revenues and to depreciation and OM&A expenses, but not to capital expenditures, the return on capital or PILs expense.

This was an evolution of the methodology in FAQ # 8. Board staff notes that this methodology is incorporated into the Model. As such, it is the methodology that has been used in the approval of smart meter cost recovery applications since late 2011 and even applications prior to the issuance of Guideline G-2011-0001 largely reflected this approach.

THESL has modified the approach so that it is calculating carrying charges on PILs expense and the return on capital after the first year. In effect, it is calculating the carrying charges, based on the Board's prescribed rate for Deferral and Variance Accounts (currently 1.47%) on the total deferred revenue requirement beyond the first year (i.e., the deferred 2008 revenue requirement only attracts interest beginning in 2009 and each subsequent year).

Board staff observes that THESL has calculated the carrying cost on the deferred revenue requirement for each year in a separate appendix (Appendix D) from its models C1, C2 and C3.

THESL has indicated in its response to a Board staff interrogatory<sup>8</sup>, that the incremental impact of calculating the carrying charges on the return on capital and PILs expense is \$529K. As THESL's methodology calculates carrying charges on more costs than is the case for Model (or Guideline G-2011-0001), it is axiomatic that THESL's approach would give a higher deferred amount and hence higher SMDRs than does the Board's documented approach.

Board staff observes that the \$529K is below the materiality threshold of \$1M that would normally apply to a utility of THESL's size.

## **Conclusions re: Methodological Differences**

Board staff submits that given the SMDRs and SMIRRs using the Model are available on the record through interrogatories, for consistency with other distributors it would be appropriate to approve these rates. These are the rates arising from the updated run of the Model, provided by THESL in response to a

<sup>&</sup>lt;sup>8</sup> EB-2013-0287, Toronto Hydro-Electric System Limited, Interrogatory Responses, Tab 2A, Sch. 15.

Board staff interrogatory<sup>9</sup> with sheets 10A and 10B appropriately completed to calculate class-specific SMDRs and SMIRRs. However, as noted above, the difference in the rates produced between the Model and THESL's model are not material given the total costs involved, and therefore the Board could instead approved the rates requested by THESL.

## **Use of Board-issued Model Version 4.0**

# **Background**

A related issue to the preceding is that in its response to a Board staff interrogatory<sup>10</sup>, THESL has raised a concern that the Model is hardcoded with a deemed capital structure of 40/60 (equity/debt), and it is unable to adjust to the deemed capital structure of 37.5% equity and 62.5% debt as approved in its 2008 rates application EB-2007-0680.

## **Discussion and Submission**

Should the Board determine that THESL is to utilize the Model either to calculate the approved SMDRs and SMIRRs, or for comparison purposes, Board staff submits that THESL can request an unlocked model in order to make any necessary adjustment to reflect its capital structure. Other inputs that could be adjusted include the Working Capital Allowance rate for 2010, as was discussed in response to a Board staff interrogatory, <sup>11</sup> or for any adjustments which may be made to the approved smart meter costs.

Further, as has already been discussed, Board staff submits that THESL should update the Model filed in response to the Board staff interrogatory to also appropriately fill out sheets 10A and 10B to calculate class-specific SMDRs and SMIRRs. This would allow for a further check on THESL's proposed SMDRs and SMIRRs; should the Board decide that the Model should be used.

<sup>&</sup>lt;sup>9</sup> EB-2013-0287, Toronto Hydro-Electric System Limited, Tab 2A, Sch. 15.

<sup>10</sup> Ibid

<sup>&</sup>lt;sup>11</sup> EB-2013-0287, Toronto Hydro-Electric System Limited, Interrogatory Responses, Tab 2A, Sch. 10.

#### **Cost Allocation**

## **Background**

THESL, for the most part, has separated the costs between the three applicable customer classes of Residential, GS < 50 kW and GS > 50 kW. Further, it has shown the allocation of the costs by class in developing its proposed SMDRs and SMIRRs.<sup>12</sup>

#### **Discussion and Submission**

Board staff takes no issue with THESL's approach and considers that the allocation of costs and the resulting SMDRs and SMIRRs seem reasonable, subject to issues discussed in this staff submission. As noted above, a completed Board-issued model including sheets 10A and 10B would provide further evidence of the reasonableness of the allocation of costs.

#### Denominators for the SMDR and SMIRR

# **Background**

The SMDR and SMIRR are fixed monthly charges. The number of customers in applicable classes is used in the denominator to determine the class-specific SMDRs and SMIRRs.

THESL has used 2012 RRR customer counts for the Residential, GS < 50 kW and GS 50-999 kW classes as the denominators for its proposed SMDRS and SMIRRs.

In its response to a Board staff interrogatory<sup>13</sup>, THESL confirmed that these were December 31, 2012 numbers, and stated that it believed that "the Board's

<sup>&</sup>lt;sup>12</sup> Tables 7 and 8 respectively, in THESL's application.

<sup>&</sup>lt;sup>13</sup> EB-2013-0287, Toronto Hydro-Electric System Limited, Interrogatory Responses, Tab 2A, Sch. 14.

preference is to use Board Approved or actual customer values in clearing deferral and variance accounts. However, THESL is not averse to using a more recent actual value to more closely reflect the anticipated number of customers during the recovery period."

## **Discussion and Submission**

The following table summarizes the number of customers in the Application and in the response to a Board staff interrogatory<sup>14</sup>:

	Residential	GS < 50 kW	GS 50-999 kW
Application, Tables 7 and 8	602,375	67,970	12,225
(December 31, 2012)			
Board staff Interrogatory #	607,721	68,481	11,913
14 (August 2013)			

Board staff submits that while THESL is correct that Group 1 and Group 2 DVA rate riders are typically based on last Board-approved or actual customer numbers, this is not the practice for smart meter cost recovery. There are several reasons for this, including that Group 1 and Group 2 DVA balances for recovery and the amounts recovered are recorded in Account 1595, and any under- or over-recovery at the end of the recovery period flows through as a true-up in a subsequent DVA rate rider. As such, there is a full mechanism to ensure no under- or over-recovery in the long run.

Board staff further submits that for smart meters, the situation is different. The deferred net revenue requirement recovered through the SMDR, and the incremental revenue requirement recovered through the SMIRR until the distributor next rebases through a cost of service application are not subject to true up. As such, the denominator should be the best estimate available for the mid-year customer count for the test year (i.e., the recovery period), as that is the number of customers who will be paying the SMDR and SMIRR. This has been the Board's usual practice with respect to smart meter cost recovery applications, and is analogous to the concept of cost of service rate applications.

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<sup>&</sup>lt;sup>14</sup> Ibid.

Board staff submits that the best approach to this issue would be for THESL to provide its best current estimates of the number of customers that it would expect to serve, for each of these three customer classes, as of mid-2014. In the alternative, Board staff submits that the August 2013 customer counts documented in the Board staff interrogatory would be preferable to the December 31, 2012 customer counts, as THESL has stated that it is averse to using a more recent customer count.

# **Accounting Issues**

## (1) Stranded Meters

# **Background**

THESL states that in accordance with the Smart Meter Guidelines, the disposition of stranded meter amounts will be addressed in THESL's next rebasing application.<sup>15</sup>

Board staff asked THESL through an interrogatory<sup>16</sup> to confirm that it is continuing to amortize the capital cost of conventional meters stranded through replacement by smart meters for residential and GS<50 kW customers and to provide an estimate by customer class of the net book value of conventional meters stranded by replacement by smart meters as of December 31, 2014.

THESL responded that it is continuing to amortize the referenced capital cost and that the estimated NBV of the stranded conventional meters is currently forecast to be \$13.04 million as of the end of 2014. THESL stated that it was unable to break the requested information down by customer class.

## **Discussion and Submission**

Board staff submits that THESL's proposal is consistent with Guideline G-2011-

<sup>&</sup>lt;sup>15</sup> EB-2013-0287, Toronto Hydro-Electric System Limited, Manager's Summary, p.3.

<sup>&</sup>lt;sup>16</sup> EB-2013-0287, Toronto Hydro-Electric System Limited, Tab 2A Sch. 12.

0001 based on the evidence in the Application. However, in its next cost of service application, THESL should make a proposal for the recovery of stranded meter costs through class-specific Stranded Meter Rate Riders, as envisaged in Section 3.7 of Guideline G-2011-0001.

## (2) Other Accounting Matters

# **Background**

THESL's smart meter costs from January 1, 2011 going forward are in its approved rate base and revenue requirement and are being recovered in distribution rates.

## **Discussion and Submission**

Board staff submits that assuming that the Board approves the disposition of the 2008-2010 smart meter costs sought in this Application, subject to any adjustments that the Board may determine, all of THESL's smart meter costs will have been dealt with. As such, no new capital or operating costs for smart meters should be allowed in accounts 1555 and 1556.

Account 1555 should only be used to track the costs for stranded conventional meters until THESL applies for disposition of these costs in its next cost of service application.

#### Conclusion

Board staff is satisfied that THESL has justified the prudence of the smart meter costs for which it is seeking recovery. In reaching this conclusion, Board staff is aware of the unique circumstances arising from THESL's application, in that its smart meter costs prior to 2008 have already been the subject of a prior proceeding for recovery and its post 2010 costs are already being incorporated into rate base.

In this context, Board staff's only concern with THESL's application is that; . THESL's proposed approach contains some departures from the Guideline.

Board staff submits that an applicant making a request for smart meter cost recovery should follow the Board's approach unless there are unique aspects of an applicant's circumstances that would justify a departure from making use of them. While Board staff would prefer that SMDRs and SMIRRs are determined using the Model, the resultant rates are not materially different using THESL's approach.

- All of which is respectfully submitted -