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November 25, 2013

via RESS e-filing – signed original to follow by courier

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
PO Box 2319
2300 Yonge Street, 27th floor
Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: Toronto Hydro-Electric System Limited ("THESL")
OEB File No. EB-2013-0287

THESL writes to the Ontario Energy Board ("OEB") in respect of the above-noted matter.

Pursuant to the OEB's Procedural Order No. 1 dated September 12th, 2013, THESL submits its reply submission.

Enclosed for convenience are excerpts from THESL's two prior Smart Meter deferral account proceedings before the OEB, as referred to in THESL's reply submission. Attachment 1 is Exhibit 4 from EB-2007-0582. Attachment 2 is the Manager's Summary from EB-2009-0069.

Please do not hesitate to contact me if you have any questions.

Yours truly,

[original signed by]

Rob Barrass
Lead Regulatory Counsel
Toronto Hydro-Electric System Limited
regulatoryaffairs@torontohydro.com

:RB/km

cc: Intervenors of Record for EB-2013-0287, by electronic mail only

Toronto Hydro-Electric System Limited

Application for Disposition and Recovery of Amounts Related to Smart Meter Activities in 2008-2010

EB-2013-0287

REPLY SUBMISSION

November 25, 2013

Summary of Application

These are the final submissions of Toronto Hydro-Electric System Limited (THESL) with respect to application EB-2013-0287 filed before the Ontario Energy Board (OEB) requesting the following approvals:

a) 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;

b) 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

c) Discontinuation of the Smart Meter Rate Adder effective April 30, 2014.

THESL received three submissions to which it is responding. Board staff filed a submission on November 4, 2013, the Vulnerable Energy Consumer Coalition (VECC) filed a submission dated November 8, 2013, and the School Energy Coalition (SEC) filed a submission dated November 11, 2013.

The submissions that follow summarize the positions of Board staff, VECC and SEC with respect to the issues their respective submissions raise, followed by THESL's responding submission and position with respect to each such issue.

Prudence of Claimed Cost Recovery

Board staff and both registered intervenors support a finding, without reservation, that the costs incurred by THESL and included for recovery in this application were prudent Smart Meter-related costs and are therefore recoverable by THESL.[1] Accordingly THESL requests that the OEB make a determination that the costs incurred by THESL in

[1] Board staff submission, page 2, VECC submission page 5, SEC submission page 1.

order to complete its Smart Meter Program and which form the basis for the claimed recovery in this application were prudently incurred Smart Meter-related costs that are fully recoverable by THESL. All issues raised by Board staff and the intervenors of record relate to the consequential calculation of the incremental revenue requirement to be recovered and the determination of the relevant rate riders; each of the issues raised are dealt with in the remainder of this submission.

Proposed Use of THESL Model Instead of Board Model

Once THESL has an approval for its smart meter-related costs, it is necessary to calculate an appropriate revenue requirement flowing from those costs.

As noted by Board staff, there are two "models" on the record in this proceeding that provide a calculation of the incremental revenue requirement associated with THESL's Smart Meter-related costs. The first is referred to as the THESL Model, which is in reference to THESL's filed calculations and submitted by THESL as the methodology that most accurately calculates the appropriate incremental revenue requirement to be recovered through rates.[2] The second is referred to as simply the "Model" or the "Board Model", which describes the model that is provided to Distributors in accordance with the OEB's Smart Meter Guidelines.[3]

Although Board staff submits a preference for the use of the Board Model for the purposes of determining the appropriate incremental revenue requirement for the sake of consistency with other distributors, Board staff ultimately concludes that "… the difference in the rates produced between the [Board] Model and THESL's model are not material given the total costs involved, and therefore the Board could instead approved [sic] the rates requested by THESL".[4]

[2] See Tables 5 and 6 of Manager's Summary
[3] EB-2013-0287, Toronto Hydro-Electric System Limited, Interrogatory Responses, Tab 2A, Sch. 15, Appendix F; this is the most "updated" run of the Board Model referred to by Board staff at pages 7 and 8 of its submission.
[4] Board staff submission, pages 7 and 8.

THESL ultimately agrees with Board staff's conclusion, in that the differences in outcome between the Board Model as filed and the THESL Model are not material with respect to the aggregate incremental revenue requirement that each produces.

However, there are differences between the models in terms of the precision with respect to how each identifies each category of cost, and consequently how those costs are allocated to classes. THESL respectfully submits that the Board should, in this instance, approve the THESL Model as presented for the purposes of determining the appropriate incremental revenue requirement and, subsequently, as the conceptual frame of reference for the allocation of costs across the relevant rate classes.

Board staff analyzed the differences between the Board Model and the THESL Model. Board staff concludes that the difference in result between the two models is immaterial (in the order of $200,000), and questions why THESL, given the small difference in result, did not simply adopt the Board Model. Board staff postulates that the purpose may have been " . . . to highlight areas in which THESL disagrees with Board policy"; on that basis Board staff embarks on an analysis of the possible policy related issues.[5]

THESL respectfully submits that Board staff has read too much into the use by THESL of its own model. In THESL's view, the THESL Model is the natural conclusion to what has become a trilogy of Smart Meter deferral account proceedings for THESL reaching back to the original Combined Smart Meter Proceeding (EB-2007-0582), wherein THESL first sought and was approved clearance for 2006 related Smart Meter amounts,[6] followed by a second application to clear Smart Meter amounts related to 2006 and 2007 Smart Meter spending (EB-2009-0069) and culminating in this, the third and final application related to Smart Meter amounts that have yet to be cleared from THESL's Smart Meter-related deferral accounts.

[5] Board staff submission, pages 3 and 4.
[6] THESL's specific application was EB-2007-0063.

THESL's activity with respect to clearing Smart Meter amounts predates the creation and distribution of an OEB-issued model. The THESL Model is not a challenge to the Board Model; it is the extension of the model that THESL has developed (and the OEB has previously approved) over the approximately seven-year span during which THESL has had amounts recorded in deferral accounts related to Smart Meters.

Included as attachments to this submission are Exhibit 4 from EB-2007-0582 and the Manager's Summary from EB-2009-0069. These documents include the calculations with respect to the Smart Meter-related revenue requirements that were claimed in each of those applications. In both instances, revenue requirements were approved. A review of the calculations shows that the manner in which the revenue requirements were determined are identical to that which is proposed in the THESL Model in this application[7]: the revenue requirement related to the relevant Smart Meter costs for the year in question is calculated, any Smart Meter Funding Adder (SMFA) revenue is deducted, and then carrying charges on the credit (if there was more SMFA revenue in the year then Smart Meter-related costs) or debit (if there were more Smart Meter-related costs in the year then SMFA revenue) is added.

In particular, THESL would note page 14 of the Manager's Summary in EB-2009-0069, which shows how the 2007 Balance amount due to 2006 Residual Amounts was calculated by totaling the annual revenue requirement including return and PILs and then adding a carrying charge calculated on the entire revenue requirement amount. This particular calculation was approved by the OEB on April 3rd, 2009,[8] at which time THESL has accrued more than a year's worth of additional Smart Meter-related costs in its deferral accounts which it reasonably expected would attract identical treatment going forward, subject to findings of prudence.

[7] See, for example, the table on page of 10 of the within Application, which shows how the revenue requirements for each of the claimed years was calculated in a manner consistent with the previous two applications.
[8] Transcript, EB-2009-0069, Volume 1, April 3, 2009; the issue of the claimed Smart Meter Clearance was uncontested by the parties to the application.

In EB-2011-0144 THESL sought further clearance of Smart Meter-related costs. A review of the calculations of the incremental revenue requirement proposed in that proceeding shows that it was identical to the calculation methodology in the previous two clearances, as well as being identical to the methodology proposed by THESL in this proceeding.[9]

THESL respectfully submits that the THESL Model is consistent with the OEB's approval of THESL's Smart Meter recoveries from 2007 to the present and should be approved in this application. THESL does not view its approach to this matter as opposed to OEB policy. THESL is simply one of very few distributors that has a history of multiple Smart Meter-related proceedings such that it is appropriate (and consistent) to calculate its Smart Meter-related revenue requirement in a manner that captures the specific details of its costs. As the OEB will note in the submissions that follow, most of the issues that arise with respect to the two models are issues wherein the filed Board Model needs to be adjusted to more accurately reflect the correct THESL specific parameters, all of which have already been accounted for in the THESL Model. In THESL's view it would be counterproductive to order use of the Board Model, and then require modifications to the Board Model so that it mirrors the parameters already used in the THESL Model.

More importantly, and as will be discussed in more detail with respect to cost allocation, while the THESL Model and the Board Model produce aggregate results that are almost identical, [10] the THESL Model more precisely divides the costs into specific cost categories in anticipation of the THESL cost allocation calculations. The result is that the use of the Board Model requires material modification before one can properly allocate the costs to accurately reflect THESL's evidence with respect to cost causality,

[9] That application, including Smart Meter deferral account related relief, was ultimately withdrawn as the Board denied THESL's request for a Cost of Service based application for the 2012 test year.

[10] The small difference between the aggregate results of the two models can be attributed to the fact that the THESL Model calculates carrying costs on return and PILS whereas the current Board Model does not, while at the same time the Board Model as it was run in the most up to date version at Tab 2A, Sch. 15, Appendix F assumes an identified $5,611,816 in capital costs as 2008 costs although they did not go into service until 2009 whereas the THESL Model treats them as 2009 costs. Both issues are separately discussed in these submissions as discrete topics.

modification which again amounts to forcing the Board Model to morph into, essentially, the THESL Model.

Capex vs. In-Service Capital Additions

Board staff notes that one of the differences between the Board Model and the THESL Model is that THESL's run of the Board Model inputs $5,611,816 worth of capital spending as 2008 Smart Meter-related capital costs, even though those costs were not put into service until 2009. Although Board staff ultimately conclude that the difference between the two models is immaterial such that the OEB could approve either one as filed, Board staff notes that the Board Model can accommodate an in-service approach to capital spending. Consequently, both VECC and SEC specifically submit that the Board Model should be used and modified to reflect the in service date of the identified $5,611,816.

In THESL's view this argument is moot if the OEB accepts THESL's position that the appropriate calculation to use in this proceeding is the THESL Model. The THESL Model already specifically accounts for an in-service date of 2009 with respect to the identified $5,611,816 in capital costs such that no such refinement is necessary.

Use of OEB-issued Model Version 4.0

Board staff notes that the standard issue version of the current Board Model is locked, such that it does not accommodate unique characteristics such as, for example, THESL's OEB-approved 2008 deemed capital structure or THESL's working capital allowance rate for 2010.[11] Board staff submits that an "unlocked" version of the Board Model can be provided to make those or any other adjustments that may be necessary.[12]

Again, as with the issue raised with respect to capex vs. in-service capital additions, these issues are all moot if the OEB accepts THESL's Model, as THESL has already accounted for the THESL-specific information necessary to properly calculate the incremental

[11] Board staff submission page 8.
[12] Board staff submission page 8.

revenue requirement that flows from the approved smart meter-related costs. To require THESL to re-calculate the incremental revenue requirement using the Board Model while adjusting for all the differences between the current version of the Board Model and the THESL Model so that they match is redundant and unnecessary.

Carrying Costs

As noted above, the use of the THESL Model eliminates concern about capex vs. in-service treatment of capital, inaccurate capital structure assumptions, working capital assumptions, or any other areas where the Board Model has hard-coded an assumption that does not specifically apply to THESL. Accordingly, in THESL's view, the only issue of substance raised with respect to the THESL Model is that it calculates carrying costs on PILs and the return on capital after the first year whereas the Board Model does not.[13]

Board staff explains how the carrying charges on PILs were not calculated in the example in FAQ #8 from the August 2008 Accounting Procedures Handbook FAQs, although there were carrying charges calculated on capital expenditures. In Guideline G-2011-0001, Board staff submits, the OEB accepted a methodology that excluded carrying charges on capital expenditures, the return on capital and PILs expense.[14]

Board staff does not make any submissions as to why carrying charges were excluded on PILs amounts in the August 2008 FAQ, or why the Guideline G-2011-0001 appears to have excluded carrying charges on capital expenditures, return on capital, and PILs from 2011 forward. Similarly, the August 2008 FAQ or G-2011-0001 also does not provide any commentary explaining the rationale, if any, behind such exclusions.

Board staff goes on the assert that "THESL has modified the approach so that it is calculating carrying charges on PILs expense and the return on capital after the first year."[15]

[13] Board staff submission page 7.
[14] Board staff submission page 6-7.
[15] Board staff submission page 7

THESL respectfully submits that it is a misnomer to suggest that it has "modified" the approach to calculating carrying charges. As set out in detail above, THESL's previous smart meter-related clearance applications were both based on these same calculations and were both approved by the OEB, the second time in April 2009.

In the absence of a rationale from Board staff or in the two references provided by Board staff, THESL fails to understand why certain elements appear to have been (or should be) excluded from attracting carrying costs. Implicit in deferral account treatment is the notion that amounts that would, in the normal course, be paid to THESL are tracked for future payment. This delays recovery of those amounts by THESL, which in turn delays THESL's ability to, for example, reinvest those funds. Carrying costs are specifically allowed for recovery on amounts owing in deferral accounts to compensate parties (in this case the distributor) for the delayed recovery of those funds.

THESL further notes that the OEB documents referred to by Board staff appear to only exclude carrying costs on PILs up to or around 2011, and that only after that time is there any indication that OEB policy was to also exclude carry charges on return on capital. Again, THESL notes that by 2011 THESL had been carrying material amounts of smart meter-related costs, including return on capital, since 2008, and had already received OEB approval to clear 2006 and 2007 related amounts including carrying costs on both PILs and return on capital amounts as late as April 2009.

Board staff submits that the total amount of carrying costs on return on capital and PILs of approximately $0.529M is immaterial in any event. On that basis, and presumably on the basis that the output of the updated and filed Board Model and the THESL Model are similar enough in quantum, Board staff submits that the OEB could approve the THESL Model without modification.[16] THESL submits that the OEB should approve the THESL Model without modification for similar reasons, as well as in recognition of the context within which the OEB has previously approved the THESL Model.

[16] Board staff submission page 8

Cost Allocation

Approval of THESL's Proposed Cost Allocation

Board staff submitted that it took no issue with respect to THESL's proposed allocation of Smart Meter costs. VECC similarly submitted that it took no issue with respect to THESL's proposed allocation of Smart Meter costs. SEC did not raise any issues with respect to the proposed cost allocation and did not make reference to the submissions of Board staff with respect to the allocation of costs across the classes.

Accordingly THESL requests a determination by the OEB that it has appropriately allocated its Smart Meter costs across the three relevant customer classes (Residential, GS<50 kW, and GS 50-999 kW) for the purposes of recovering its prudently incurred Smart Meter Program costs.

Board Staff Request regarding Sheets 10A and 10B

With reference to cost allocation, Board staff submits that " . . . a completed Board-issued model including sheets 10A and 10B would provide further evidence of the reasonableness of the allocation of costs."[17] Board staff refers to the completion of these sheets in accordance with an earlier submission that it may be appropriate for the OEB to approve " . . . the rates arising from the updated run of the Model, provided by THESL in response to a Board staff interrogatory with sheets 10A and 10B appropriately completed to calculate class-specific SMDRs and SMIRRs."[18]

THESL respectfully submits that this request fails to recognize that the combination of the THESL Model and the THESL specific cost allocation proposal uses a much more refined set of cost categories and related cost allocators than the combination of the Board Model and the related default OEB-issued cost allocation as represented through the use of sheets 10A and 10B.

[17] Board staff submission page 9.
[18] Board staff submission page 7-8.

It is not the case that one can take the output from the Board Model and run it through THESL's cost allocation methodology to produce similar resulting class specific rate riders simply because the THESL Model and the Board Model are within $.2M with respect to the aggregate costs. The THESL Model relies on THESL's specific Smart Meter cost information to group into categories and sub-categories all the relevant Smart Meter costs in ways that the Board Model does not. In order to properly input the Board Model results into the THESL cost allocation it would first be necessary to adjust the Board Model to include all the same, more precise categories that are used in the THESL Model. This would essentially, and redundantly, turn the Board Model into the THESL Model.

Similarly, it is not the case that the cost allocation that is represented by Sheets 10A and 10B is precisely the same as the cost allocation calculation in the THESL Model, as THESL has refined the direct allocations to the different classes and provided more precise allocators when direct allocations are not possible. Specifically, in THESL's model, detailed year by year cost components by rate class are used to determine the overall allocated costs by class. The standard Board Model, however, utilizes a generic allocator based on the weighted meter capital cost by rate class. In addition, as THESL does not bill on a calendared monthly basis, the rates from the OEB Model's cost allocation would further need to be adjusted for 30 days of service to align with THESL's standard billing practices.

Accordingly THESL respectfully submits that it would not be particularly useful to file the completed Sheets 10A and 10B as suggested by Board staff, because in order to reflect the cost allocation structure that THESL has put forward and both Board staff and VECC expressly support it would be necessary for THESL to overhaul the Board Model and Cost Allocation to replicate the more precise cost groupings, allocators, and rate design assumptions that the THESL Model and Cost allocation already use. This exercise would essentially be one of transforming the Board Model and Cost Allocation into the THESL Model and Cost Allocation.

Denominators for the SMDR and SMIRR

Board staff raises an issue with respect to the appropriate customers numbers to be used for the purpose of determining the appropriate SMDR and SMIRR. Neither VECC nor SEC raised a similar issue or made reference to the issue as raised by Board staff.

Board staff generally submits that THESL should use its best current estimates for the number of customers it expects to serve in each of the three relevant customer classes (Residential, GS<50 kW, and GS 50-999 kW) as of mid-2014. However Board staff goes on to submit that, in the alternative, the August 2013 customer counts filed in this proceeding[19] are preferable to the December 2012 year end customer counts as was originally proposed as part of the Application.

As noted by Board staff, THESL is not adverse[20] to using more up to date customer numbers for the purpose of determining the appropriate SMDR and SMIRR, and is content to use the August 2013 customer counts as provided at Tab 2A, Sch. 14.

Accounting Issues

Stranded Meters

Board staff submitted that, 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. Neither VECC nor SEC raised any similar issue or made reference to Board staff's submission with respect to Stranded Meters.

THESL is aware of the expectation in section 3.7 of Guideline G-2011-0001 that distributors should bring forward any requests for stranded meter cost recovery in a cost

[19] EB-2013-0287, Toronto Hydro-Electric System Limited, Interrogatory Responses, Tab 2A, Sch. 14.
[20] At page 11 it appears that Board staff inadvertently omitted the word "not" when describing how, in the noted interrogatory response, THESL is "not averse" to using a more recent customer count.

of service application. As noted in page 3 of the Application, " . . . the disposition of stranded meter amounts will be addressed in THESL's next rebasing application."

Other Accounting Matters

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 OEB 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.

Accordingly, Board staff submits, 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.

Neither VECC nor SEC raised similar issues or made reference to Board staff's submission with respect to other accounting matters.

THESL can confirm that, assuming full recovery as requested in this Application, all of THESL's Smart Meter costs will have been dealt with such that the only outstanding issue will be the continued use of account 1555 to track stranded conventional meter costs until THESL applies for disposition of those costs in its next rebasing application.

Summary

Accordingly THESL requests that the Board make the following determinations:

a) that the Smart Meter-related costs described in this application were prudently incurred by THESL and that THESL is entitled to recover the appropriate related incremental revenue requirement associated with those costs;

b) that the THESL Model, without modification, appropriately calculates the revenue requirement associated with the approved Smart Meter-related costs and as such will form the basis for THESL's Smart Meter-related cost recovery;

c) that the allocation of Smart Meter-related incremental revenue requirement across the relevant customer classes as submitted by THESL is appropriate and as such will form the basis for THESL's Smart Meter-related cost recovery; and

d) that the SMDR and SMIRR riders will be calculated using customer numbers as of August 2013 as provided by THESL at the request of Board Staff.

ALL OF WHICH IS RESPECTFULLY SUBMITTED THIS 25th DAY OF NOVEMBER 2013

Attachment 1

Table 7 - 2006 Smart Meter Expenditures and Recoveries

	Col. 1	Col. 2	
1	**Category**	**Amount ($000's)**	
2	**Expenditures**		
3	Meter Capital	30,972	/c
4	IT Capital	4,274	/c
5	Depreciation	690	
6	OM&A	526	
7	**Total**	**36,462**	
8			
9	**Recoveries**		
10	**Total**	**2,966**	

Table 8 - Recovery of Smart Meter Deferral Account Balance

	Col. 1	Col. 2	Col. 3	Col. 4	
1		($000's)	($000's)	Calculation	
2	**Smart Meter 2006 Expenses**				
3	Incremental Operating Expense		398	A	/c
4	Depreciation Expense		690	B	
5	Total Expenses		1,088	C = A + B	
6					
7	**Calculated Return on Rate Base**				
8	Smart Meter Fixed Assets Net Book Value - Dec 31, 2006	30,282		D	/c
9	Net Fixed Assets (average of Smart Meter Fixed Assets opening and closing 2006 Net Book Value)	15,141		E = D / 2	/c
10	Working Capital Allowance	60		F = A * 15%	/c
11	Total Rate Base	15,201		G = E + F	/c
12					
13	Debt Cost - weighted debt rate	5.18%	512	H = G * 65% * 5.18%	/c
14	Return on Equity	9.00%	479	I = G * 35% * 9%	/c
15	Return on Rate Base		991	J = H + I	/c
16					
17	**Revenue Requirement Before PILs**		**2,079**	K = C + J	/c
18					
19	**Calculation of Income for PILs Purposes**				
20	Incremental Operating Expenses		398	A	/c
21	Depreciation Expense		690	B	
22	Interest Expense		512	H	/c
23	**Income for PILs purposes**		479	L = K - A - B - H	/c
24					
25	**Grossed up PILs**		51	M	/c
26					
27	Revenue Requirement Before PILs		2,079	K	/c
28	Grossed up PILs		51	M	/c
29	**2006 Revenue Requirement for 2006 Smart Meters**		2,130	N = K + M	/c
30					
31	**Revenue Earned - Smart Meter Funding**				
32	Residential		2,295	O	
33	Non-Residential		671	P	/c
34	Total Revenue		2,966	Q = O + P	
35					
36	**Difference Over Recovered**		-837	R = N - Q	/c
37					
38	**Carrying Charge on Over Recovery**		-30	S	/c
39					
40	**Difference Over Recovered plus Carrying Charge**		**-867**	T = R + S	/c
41					

Table 9 - PILs Calculation - 2006

	Col. 1	Col. 2	Col. 3	Col. 4	
		($000's)		**($000's)**	
1	**Income Tax**				
2	Net Income	479			/c
3	Amortization	690			
4	CCA - Class 47 (8%) Smart Meters	-1,239			/c
5	CCA - Class 45 (45%) Computers	0			
6	Change in taxable income	-70			/c
7	Tax Rate	36.12%			
8	**Income Taxes Payable**	-25			/c
9					
10	**Ontario Capital Tax**				
11	Smart Meters	30,282			/c
12	Computer Hardware	0			
13	Computer Software	0			
14	Rate Base	30,282			/c
15	Less: Exemption	0			
16	Deemed Taxable Capital	30,282			/c
17	Ontario Capital Tax Rate	0.300%			
18	**Net OCT Amount**	**91**			/c
19					
20					
21		**PILs Payable**	**Gross Up**	**Grossed Up PILs**	
22	Change in Income Taxes Payable	-25	36.12%	**-40**	/c
23	Change in OCT	91		**91**	/c
24	PILs	66		**51**	/c

Table 10 - 2007 Incremental Revenue Requirement Due to 2006 Smart Meters

	Col. 1	Col. 2	Col. 3	Col. 4	
1		**($000's)**	**($000's)**	**Calculation**	
2	**Rate Base**				
3	2006 Smart Meter Fixed Assets Cost	**Start of 2007**	**End of 2007**		
4	Residential	30,480	30,480	A	/c
5	General Service	493	493	B	
6	Total	30,972	30,972	C = A + B	
7					
8	Less Smart Meter Accumulated Depreciation				
9	Residential	675	2,677	D	/c
10	General Service	15	48	E	
11	Total	690	2,725	F = D + E	/c
12					
13	Smart Meter Fixed Assets Net Book Value				
14	Residential	29,805	27,803	G = A - D	/c
15	General Service	477	445	H = B - E	
16	Total	30,282	28,248	I = G + H	/c
17					
18	Average Smart Meter Fixed Assets		29,265	J = avg($I_{start\ of\ 2007}$, $I_{end\ of\ 2007}$)	/c
19					
20	**Smart Meters Included in Rate Base**		29,265	K - J	/c
21					
22	**Return on Rate Base**				
23	Deemed Debt	65%	19,022	L = K * 65%	/c
24	Deemed Equity	35%	10,243	M = K * 35%	/c
25			29,265	N = L + M	/c
26					
27	Weighted Debt Rate	5.18%	985	O = L * 5.18%	/c
28	Equity Rate	9.00%	922	P = M * 9.00%	/c
29	**Return on Rate Base**		1,907	Q = O + P	/c
30					
31	**Amortization Expenses**				
32	2006 Smart Meters:				
33	Residential		2,002	R = $D_{start\ of\ 2007}$ - $D_{end\ of\ 2007}$	/c
34	General Service		33	S = $E_{start\ of\ 2007}$ - $E_{end\ of\ 2007}$	
35			2,035	T = R + S	/c
36					
37	**Revenue Requirement Before PILs**		3,942	U = T + Q	/c
38					
39	**Calculation of Income for PILs Purposes**				
40	Depreciation		2,035	T	/c
41	Interest Expense		985	O	/c
42	**Income for PILs purposes**		922	V = U - T - O	/c
43					
44	**Grossed up PILs**		412	W	/c
45					
46	Revenue Requirement Before PILs		3,942	U	/c
47	Grossed up PILs		412	W	/c
48	**2007 Revenue Requirement for 2006 Smart Meters**		**4,354**	X = U + W	/c

Table 11 - 2007 Incremental Revenue Requirement - PILs Calculation

	Col. 1	Col. 2	Col. 3	Col. 4	
		(000's)		**(000's)**	
1	**Income Tax**				
2	Net Income	922			/c
3	Amortization	2,035			/c
4	CCA - Class 47 (8%) Smart Meters	-2,379			/c
5	CCA - Class 45 (45%) Computers	0			
6	Change in taxable income	578			/c
7	Tax Rate	36.12%			
8	Income Taxes Payable	**209**			/c
9					
10	**Ontario Capital Tax**				
11	Smart Meters	28,248			/c
12	Computer Hardware	0			
13	Computer Software	0			
14	Rate Base	28,248			/c
15	Less: Exemption	0			
16	Deemed Taxable Capital	28,248			/c
17	Ontario Capital Tax Rate	0.300%			
18	Net Amount (Taxable Capital x Rate)	**85**			/c
19					
20					
21		**PILs Payable**	**Gross Up**	**Grossed Up PILs**	
22	Change in Income Taxes Payable	209	36.12%	**327**	/c
23	Change in OCT	85		**85**	/c
24	PILs	294		**412**	/c

Table 12 - Allocation and Recovery of Smart Meter Amounts

	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	
1	**Allocations**	**Residential**	**GS < 50 kW**	**GS - 50-1000 kW - Non Interval**	**Total**	
2						
3	Operational Data					
4	Number of Customers (2006 Approved)	597,210	66,505	9,550	673,265	
5	2006 Smart Meters Installed	191,370	2,070	560	194,000	
6	Allocation Percentages					
7	2006 Smart Meters Installed	98.64%	1.07%	0.29%	100.0%	
8	**Allocated Amounts**	**Residential $**	**GS < 50 kW $**	**GS - 50-1000 kW - Non Interval $**	**Total $**	
9	2007 Rate Base Addition of Smart Meters	4,294,516	46,453	12,567	4,353,535	/c
10	2006 Expense and Return Recovery	-855,059	-9,249	-2,502	-866,810	/c
11	**Total Recovery**	**3,439,456**	**37,204**	**10,065**	**3,486,725**	/c
12	**Charge Calculations**	**Recovery Basis**	**Residential**	**GS < 50 kW**	**GS - 50-1000 kW Non Interval**	
13			$ per Customer / 30 Days	$ per Customer / 30 Days	$ per Customer / 30 Days	
14	Base Rates Addition	Customer	0.59	0.06	0.11	/c
15	12-Month Rate Rider for Expense Recovery	Customer	-0.12	-0.01	-0.02	/c
16	**Total**		**0.47**	**0.05**	**0.09**	/c

Attachment 2

IN THE MATTER OF the *Ontario Energy Board Act, 1998,* S. O. 1998, c.15 Schedule B of the *Energy Competition Act, 1998;*

AND IN THE MATTER OF an application for disposition/recovery of amounts related to Smart Meters.

TORONTO HYDRO-ELECTRIC SYSTEM LIMITED

APPLICATION FOR APPROVAL AND DISPOSITION/RECOVERY OF AMOUNTS RELATED TO 2006 AND 2007 SMART METERS

MANAGER'S SUMMARY

OEB File No. EB-2009-xxxx
Filed: March 2, 2009

MANAGER'S SUMMARY

1. Introduction

Toronto Hydro-Electric System Limited ("THESL") filed a Notice of Motion with the Ontario Energy Board ("OEB" or "Board") on June 9, 2008 for an Order to review and vary the Board's May 15, 2008 Decision in EB-2007-0680, in part with respect to the treatment of 2007 Smart Meter operating expenses. On December 11, 2008, the OEB issued its Decision on the Motion and ordered that THESL "is to apply through the combined Smart Meter process, EB-2007-0063, for the clearing of the 2007 Smart Meter revenue requirement related expenses". THESL herewith submits an application ("Application") for:

1. Disposition of the 2007 year-end balance in the Smart Meter deferral account together with the residual balance in the 2006 Smart Meter deferral account, by way of a rate rider effective for 12-months from May 1, 2009; and
2. Approval of Smart Meter rate rider values for 2009.

On a combined basis, the proposals set out in this Application would result in a *0.08%* total bill decrease (*$0.09* per month) for residential customers consuming 1,000 kilowatt-hours per month.

THESL proposes that the rate riders consequent upon this proposal take effect May 1, 2009.

1.1. 2007 Smart Meter Deferral Account Methodology

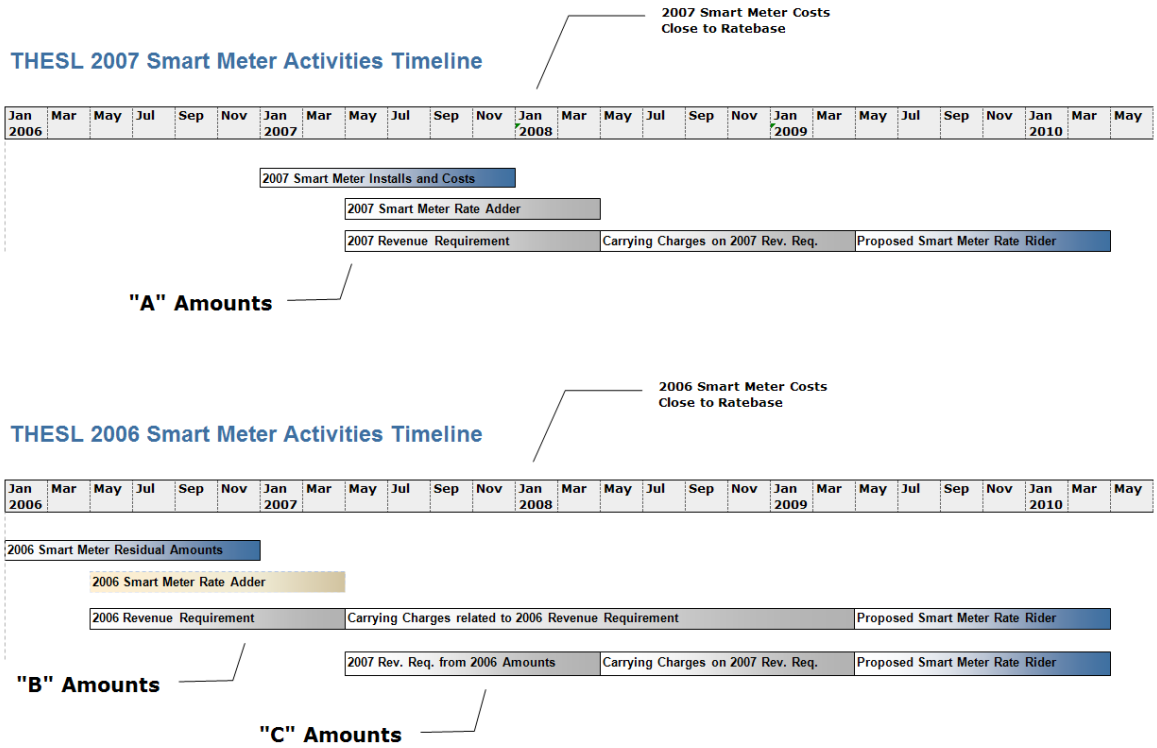
For purposes of disposing the Smart Meter deferral account from 2007, and the residual amounts from the 2006 Smart Meter deferral account, THESL records the revenues received from customers through the Smart Meter rate adders, offset by the revenue requirement that would have flowed from the actual Smart Meter activity, were that to have been perfectly forecasted when setting rates for that year. This is the methodology approved by the Board in the Combined Smart Meter Proceedings (EB-2007-0063), and confirmed in the Board's Rate Order dated October 23, 2007.

1.2. Timeline of Smart Meter Activities, Costs and Revenues

For purposes of clarity, the Smart Meter deferral account amounts can be divided into three separately calculated components:

1. The 2007 Balance Amount for 2007 Smart Meters ("A" Amounts)
2. The 2006 Balance Amount for 2006 Residual Amounts ("B" Amounts)
3. The 2007 Balance Amount due to the 2006 Residual Amounts ("C" Amounts)

The time periods for the Smart Meter costs, revenues from Smart Meter rate adders, and the associated Smart Meter revenue requirements, are shown in the following timelines (see Exhibit 1 for a full page reproduction of the chart):



1.3. Summary of Deferral Account Amounts

On the basis of the Smart Meter deferral account methodology, the 2007 year-end credit balance in the 2007 Smart Meter deferral account is $1,461,100. This balance is the sum of THESL's computed revenue requirement arising from 2007 Smart Meter activities and expenditures, prior to the assets being closed and included in the 2008 rate base, less revenues received in 2007 through the Smart Meter rate adder, plus carrying charges. Refer to "A" Amounts in the Timeline in Section 1.2.

In addition, the debit balance of the residual amounts from the 2006 Smart Meter deferral account is $213,000. This balance is the sum of THESL's computed revenue requirement, plus carrying charges, arising from $3,462,000 in 2006 Smart Meter activities and expenditures that was not recovered in THESL's 2006 Smart Meter deferral account disposition application (EB-2007-0582). Refer to "B" Amounts in the Timeline in Section 1.2. In the September 21, 2007 Decision, the Board approved 2006 Smart Meter total costs of $26.139 million with the balance of 2006 Smart Meter actual costs to be recovered later.

And finally, the debit balance from the 2007 incremental revenue requirement due to 2006 Smart Meters is $504,600. This balance is the sum of THESL's 2007 revenue requirement, plus carrying charges, arising from the $3,462,000 in residual costs from 2006 Smart Meter activities and expenditures, prior to the assets being closed and included in the 2008 rate base. Refer to "C" Amounts in the Timeline in Section 1.2.

THESL proposes that the net credit amount of $743,500 from the above Smart Meter deferral account balances be returned to customers through a distinct Smart Meter disposition rate rider, effective for 12 months beginning May 1, 2009 and expiring April 30, 2010.

2. Application Details

2.1. THESL Smart Meter Expenditures

The actual 2007 Smart Meter expenditures and 2006 residual capital amounts, along with the revenues recovered, are summarized in Table 7. THESL confirms that all cost information contained in this Application has been audited as part of THESL's 2008 annual financial audit.

Table 7
2006/2007 Smart Meter Expenditures and Recoveries

	Col. 1	Col. 2
1	**Category**	**Amount ($000's)**
2	**Expenditures**	
3	Meter Capital (2007)	29,188.4
4	Residual Meter Capital (2006)	3,462.0
5	Depreciation & Amortization (2007)	1,183.3
6	Depreciation & Amortization (2006)	310.7
7	OM&A	1,761.8
8	**Total**	**35,906.2**
9		
10	**Recoveries**	
11	**Total**	**5,617.1**

In the amounts stated in Table 7, $29,188,400 is the total capital cost to install 214,652 Smart Meters and Collectors during 2007. Of the 214,652 Smart Meters, 202,882 meters were for residential customers, 7,564 meters were for General Service < 50kW customers, and 4,206 meters were for General Service >50 kW customers.

The 2007 Smart Meter capital of $29,188,400 includes cost of the meters, warehousing, parts and supplies, and capitalized labour (including training and planning costs).

The 2006 residual Smart Meter capital claimed in this Application totals $3,462,000. This amount originates from the difference in the OEB-approved meter cost and the actual contract price for Smart Meters paid during that period.

In the September 21, 2007 Decision (EB-2007-0747/EB-2007-0748), the Board approved $26.139 million in 2006 Smart Meter costs, with the balance of 2006 Smart Meter costs ($4,590,100) to be recouped later. The amount of $3,462,000 claimed in this Application for 2006 residual Smart Meter capital is calculated from the difference of the actual 2007 Smart Meter cost versus the OEB-approved Smart Meter cost, plus PST and inventory overhead, for the 201,878 standard single-phase Smart Meters installed during 2007. The remaining $1,128,100 in unrecovered 2006 Smart Meter costs will be claimed in a final Application after 100% of the Smart Meters have been installed.

The 2006 Smart Meter residual capital amount of $3,462,000 has been added to THESL's 2008 rate base in accordance with the Board's May 15, 2008 Decision in EB-2007-0680.

For purposes of calculating the 2007 Smart Meter-related incremental ratebase, IT expenditures have been excluded from this Application as not all Smart Meter IT-related assets were fully functional by the end of 2007. Smart Meter IT expenditures in 2007 included costs related to communications, data servers and infrastructure, interfaces, hardware and software.

The accumulated depreciation and amortization associated with the 2007 and 2006 installed Smart Meters is $1,494,000, consisting of $1,183,300 for the 2007 Smart Meter expenditures, and $310,700 for the residual 2006 Smart Meter expenditures ($79,900 for 2006, and $230,800 for 2007) and has been calculated assuming a 15-year lifetime with straight-line depreciation.

OM&A costs include costs for communications and non-capitalized labour associated with the Smart Meter implementation.

2.2. Disposition of Smart Meter Deferral Account Balance Amounts

THESL requests disposition of the 2007 year-end balance of the Smart Meter deferral account and the 2006 Smart Meter residual amounts, by way of rate riders in effect during the 2009 rate year.

In accordance with the Board-approved methodology, carrying costs were applied to the difference between the amounts recovered through the Smart Meter rate adders, and the corresponding revenue requirement amount.

2.3. 2007 Balance Amount for 2007 Smart Meters ("A" Amounts)

Table 8a details the 2007 expenditures on Smart Meters, and the resulting revenue requirement, as well as the amounts recovered under the rate adders in effect from May 1, 2007 to April 30, 2008. Revenues from the rate adder exceeded the revenue requirement associated with the installed Smart Meters by *$1,416,200* at the end of 2007. Accordingly, this credit amount together with related carrying charges of $44,900 (for a total amount of $1,461,100) is proposed for disposition through a rate rider to 2009 rates. The monthly interest rate for calculating the carrying charges is the Board prescribed rate during the period.

The Carrying Charge amount of $44,900 for the 2007 Smart Meter deferral account relates to the period May 1, 2008 to April 30, 2009, and is the result of the over-recovery in rate adders in the period ending April 30, 2008.

For more information, refer to "A" Amounts shown in the Timeline in Section 1.2.

Table 8a
2007 Balance Amount for 2007 Smart Meters ("A" Amounts)

	Col. 1	Col. 2	Col. 3		Col. 4
1		**($000's)**	**($000's)**		**Calculation**
2	**Smart Meter 2007 Expenses**				
3	Incremental Operating Expense		1,761.8		A
4	Depreciation & Amortization		1,183.3		B
5	Total Expenses		2,945.1		C = A + B
6					
7	Calculated Return on Rate Base				
8	Smart Meter Fixed Assets Net Book Value - Dec. 31, 2007	28,005.3			D
9	Net Fixed Assets (Average of Smart Meter Fixed Assets				
10	Opening and Closing 2007 Net Book Value)	14,002.6			E = D / 2
11	Working Capital Allowance	264.3			F = A * 15%
12	Total Rate Base	14,266.9			G = E + F
13					
14	Debt Cost - Weighted Debt Rate	5.18%	480.4		H = G * 65% * 5.18%
15	Return on Equity	9.00%	449.4		I = G * 35% * 9%
16	Return on Rate Base		929.8		J = H + I
17					
18	Revenue Requirement before PILs		**3,874.9**		K = C + J
19					
20	**Calculation of Income for PILs Purposes**				
21	Incremental Operating Expenses		1,761.8		A
22	Depreciation & Amortization		1,183.3		B
23	Interest Expense		480.4		H
24	**Income for PILs purposes**		449.4		L = K - A - B - H
25					
26	**Grossed Up PILs**		326.0		M (see table 8b)
27					
28	Revenue Requirement before PILs		3,874.9		K
29	Grossed up PILs		326.0		M
30	**2007 Revenue Requirement for 2007 Smart Meters**		4,200.9		N = K + M
31					
32	**Revenue Earned - Smart Meter Funding**				
33	Residential		4,984.4		O
	General Service <50		551.6		P
34	General Service 50 to 1000 kW - Non Interval		81.1		Q
35	Total Revenue		5,617.1		R = O + P + Q
36					
37	**Difference Over Recovered**		-1,416.2		S = N - R
38					
39	**Carrying Charge on Over Recovery (May 08-Apr 09)**		-44.9		T
40					
41	**Difference Over Recovered plus Carrying Charge**		**-1,461.1**		U = S + T
42					

Table 8b provides the derivation of the 2007 PILs amount included in the calculation of the 2007 balance amount for 2007 Smart Meters.

Table 8b
PILs Calculation for 2007 Balance Amount for 2007 Smart Meters

	Col. 1	Col. 2	Col. 3	Col. 4
		($000's)		**($000's)**
1	**Income Tax**			
2	Net Income	449.4		
3	Depreciation & Amortization	1,183.3		
4	CCA - Class 47 (8%) Smart Meters	-1,167.5		
5	CCA - Class 45 (45%) Computers	0.0		
6	Change in Taxable Income	465.1		
7	Tax Rate	36.12%		
8	**Income Taxes Payable**	**168.0**		
9				
10	**Ontario Capital Tax**			
11	Smart Meters	28,005.3		
12	Computer Hardware	0.0		
13	Computer Software	0.0		
14	Rate Base	28,005.3		
15	Less: Exemption	0.0		
16	Deemed Taxable Capital	28,005.3		
17	Ontario Capital Tax Rate	0.225%		
18	**Net OCT Amount**	**63.0**		
19				
20				
21		**PILs Payable**	**Gross Up**	**Grossed Up PILs**
22	Change in Income Taxes Payable	168.0	36.12%	**263.0**
23	Change in OCT	63.0		**63.0**
24	PILs	231.0		**326.0**

2.4. 2006 Balance Amount for 2006 Residual Amounts ("B" Amounts)

Table 9a details the 2006 Smart Meter residual amounts, and the resulting 2006 revenue requirement. In the September 21, 2007 Decision (EB-2007-0747/EB-2007-0748), the Board approved $26.139 million in 2006 Smart Meter costs, with the balance of 2006 Smart Meter costs ($4,590,100) to be recouped later. The amount of $3,462,000 claimed in this Application for 2006 residual Smart Meter capital is calculated from the difference of the actual 2007 Smart Meter cost versus the OEB-approved Smart Meter cost, plus PST and inventory overhead, for the 201,878 standard single-phase Smart Meters installed during 2007. The remaining $1,128,100 in unrecovered 2006 Smart Meter costs will be claimed in a final Application after 100% of the Smart Meters have been installed.

The 2006 revenue requirement associated with the 2006 Smart Meter residual amounts of $3,462,000 claimed in this Application was $197,200. Accordingly, this recovery amount together with related carrying charges of $15,800, for a total amount of $213,000, is proposed for disposition through a rate rider to 2009 rates.

Carrying charges of $15,800 are calculated at the Board prescribed rate, and relate to the period of May 1, 2007 to April 30, 2009.

For more information, refer to "B" Amounts in the Timeline in Section 1.2.

Table 9a
2006 Balance Amount for 2006 Residual Amounts ("B" Amounts)

	Col. 1	Col. 2	Col. 3	Col. 4
1		**($000's)**	**($000's)**	**Calculation**
2	**Smart Meter 2006 Expenses**			
3	Incremental Operating Expense		0.0	A
4	Depreciation & Amortization		79.9	B
5	Total Expenses		79.9	C = A + B
6				
7	Calculated Return on Rate Base			
8	Residual Smart Meter Fixed Assets Net Book Value - Dec. 31, 2006	3,382.1		D
9	Net Fixed Assets (Average of Smart Meter Fixed Assets			
10	Opening and Closing 2006 Net Book Value)	1,691.1		E = D / 2
11	Working Capital Allowance	0.0		F = A * 15%
12	Total Rate Base	1,691.1		G = E + F
13				
14	Debt Cost - weighted debt rate	5.18%	56.9	H = G * 65% * 5.18%
15	Return on Equity	9.00%	53.3	I = G * 35% * 9%
16	Return on Rate Base		110.2	J = H + I
17				
18	Revenue Requirement before PILs		**190.1**	K = C + J
19				
20	**Calculation of Income for PILs Purposes**			
21	Incremental Operating Expenses		0.0	A
22	Depreciation & Amortization		79.9	B
23	Interest Expense		56.9	H
24	**Income for PILs purposes**		53.3	L = K - A - B - H
25				
26	**Grossed Up PILs**		7.1	M (see table 9b)
27				
28	Revenue Requirement before PILs		190.1	K
29	Grossed up PILs		7.1	M
30	**2006 Revenue Requirement for 2006 Smart Meters**		197.2	N = K + M
31				
32	**Revenue Earned - Smart Meter Funding**			
33	Residential		0.0	O
	General Service <50		0.0	P
34	General Service 50 to 1000 kW - Non Interval		0.0	Q
35	Total Revenue		0.0	R = O + P + Q
36				
37	**Difference Under Recovered**		197.2	S = N - R
38				
39	**Carrying Charge on Under Recovery (May 07-Apr 09)**		15.8	T
40				
41	**Difference Under Recovered plus Carrying Charge**		**213.0**	U = S + T
42				

Table 9b provides the derivation of the PILs amounts included in the calculation of the 2006 balance amount for 2006 Smart Meter residual amounts.

Table 9b
PILs Calculation for 2006 Balance Amount for 2006 Residual Amounts

	Col. 1	Col. 2	Col. 3	Col. 4
		($000's)		**($000's)**
1	**Income Tax**			
2	Net Income	53.3		
3	Depreciation & Amortization	79.9		
4	CCA - Class 47 (8%) Smart Meters	-138.5		
5	CCA - Class 45 (45%) Computers	0.0		
6	Change in Taxable Income	-5.3		
7	Tax Rate	36.12%		
8	**Income Taxes Payable**	**-1.9**		
9				
10	**Ontario Capital Tax**			
11	Smart Meters	3,382.1		
12	Computer Hardware	0.0		
13	Computer Software	0.0		
14	Rate Base	3,382.1		
15	Less: Exemption	0.0		
16	Deemed Taxable Capital	3,382.1		
17	Ontario Capital Tax Rate	0.300%		
18	**Net OCT Amount**	**10.1**		
19				
20				
21		**PILs Payable**	**Gross Up**	**Grossed Up PILs**
22	Change in Income Taxes Payable	-1.9	36.12%	**-3.0**
23	Change in OCT	10.1		**10.1**
24	PILs	8.2		**7.1**

It should be noted that the 2006 depreciation amount of $79,900 is related to the difference of the depreciation of the actual 2006 Smart Meter capital amount and the depreciation of the Board-allowed 2006 Smart Meter capital amount arising from the Board's September 21, 2007 Decision.

2.5. 2007 Balance Amount Due to 2006 Smart Meter Residual Capital Amounts ("C" Amounts)

As described earlier, in the September 21, 2007 Decision (EB-2007-0747/EB-2007-0748), the Board approved $26.139 million in 2006 Smart Meter costs, with the balance of 2006 Smart Meter costs ($4,590,100) to be recouped later. The 2006 Smart Meter residual capital amounts did not enter rate base in 2007, therefore, there is a revenue requirement in 2007 that relates to that residual amount. In accordance with the Board's Decision in the THESL 2008 EDR Application (EB-2007-0680), the 2007 (and prior) Smart Meter related capital accounts have been included in THESL's rate base as of January 1, 2008.

The 2007 revenue requirement resulting from the 2006 Smart Meter residual capital amount of $3,462,000 claimed in this Application, prior to the residual capital amounts being closed and included in the 2008 rate base, is shown in Table 10. Return on rate base at THESL's 2007 allowed rates and capital structure is $212,900. No operating expense or working capital is associated in 2007 with the 2006 Smart Meter capital residual amount. The revenue requirement before PILS, consisting only of return on rate base and net amortization expense, is $443,700.

After deduction of amortization adjusted for CCA and interest expense related to return, incremental taxable income is $67,800. The income-related PILS amount is $24,500, which is grossed up to $38,300. Together with additional Ontario capital tax of $7,100, this results in an increase in PILS expense of $45,400. The derivation of the 2007 PILS amount is shown in Table 11.

It should be noted that the 2006 General Service Smart Meter depreciation and amortization amounts in Table 10 are zero as all General Service Smart Meter costs have been included in the costs closed to rate base in 2007 following the Board's approval of those costs in EB-2007-0063.

The carrying charge amount of $15,500 for the 2007 balance amount due to the 2006 Smart Meter residual amounts relates to the period May 1, 2008 to April 30, 2009.

The final 2007 balance amount resulting from the 2006 Smart Meter residual capital amounts is therefore $504,600.

Table 10
2007 Balance Amount due to 2006 Residual Amounts ("C" Amounts)

	Col. 1	Col. 2	Col. 3	Col. 4
1		**($000's)**	**($000's)**	**Calculation**
2	**Rate Base**			
3	Residual 2006 Smart Meter Fixed Assets Cost	**Start of 2007**	**End of 2007**	
4	Residential	3,462.0	3,462.0	A
5	General Service	0.0	0.0	B
6	Total	3,462.0	3,462.0	C = A + B
7				
8	Less: Smart Meter Accumulated Deprec. & Amort.			
9	Residential	79.9	310.7	D
10	General Service	0.0	0.0	E
11	Total	79.9	310.7	F = D + E
12				
13	Residual Smart Meter Fixed Assets Net Book Value			
14	Residential	3,382.1	3,151.3	G = A - D
15	General Service	0.0	0.0	H = B - E
16	Total	3,382.1	3,151.3	I = G + H
17				
18	Residual Average Smart Meter Fixed Assets		3,266.7	J = avg($I_{start\ of\ 2007}$, $I_{end\ of\ 2007}$)
19				
20	**Residual Smart Meters Fixed Assets in Rate Base**		3,266.7	K = J
21	(added January 1, 2008)			
22	**Return on Rate Base**			
23	Deemed Debt	65%	2,123.4	L = K * 65%
24	Deemed Equity	35%	1,143.4	M = K * 35%
25			3,266.7	N = L + M
26				
27	Weighted Debt Rate	5.18%	110.0	O = L * 5.18%
28	Equity Rate	9.00%	102.9	P = M * 9.00%
29	**Return on Rate Base**		212.9	Q = O + P
30				
31	**Depreciation & Amortization Expenses**			
32	2006 Smart Meters:			
33	Residential		230.8	R = $D_{end\ of\ 2007} - D_{start\ of\ 2007}$
34	General Service		0.0	S = $E_{end\ of\ 2007} - E_{start\ of\ 2007}$
35			230.8	T = R + S
36				
37	**Revenue Requirement Before PILs**		443.7	U = T + Q
38				
39	**Calculation of Income for PILs Purposes**			
40	Depreciation & Amortization Expense		230.8	T
41	Interest Expense		110.0	O
42	**Income for PILs purposes**		102.9	V = U - T - O
43				
44	**Grossed Up PILs**		45.4	W (see table 11)
45				
46	Revenue Requirement Before PILs		443.7	U
47	Grossed Up PILs		45.4	W
48	**2007 Revenue Req't for 2006 Smart Meters**		489.1	X = U + W
49				
50	**Carrying Charge on Under Recovery (May 08-Apr 09)**		15.5	Y
51				
52	**Revenue Requirement Plus Carrying Charge**		**504.6**	Z = X + Y

Table 11
PILs Calculation for 2007 Balance Amount for 2006 Residual Amounts

	Col. 1	Col. 2	Col. 3	Col. 4
		($000's)		**($000's)**
1	**Income Tax**			
2	Net Income	102.9		
3	Depreciation & Amortization	230.8		
4	CCA - Class 47 (8%) Smart Meters	-265.9		
5	CCA - Class 45 (45%) Computers	0.0		
6	Change in Taxable Income	67.8		
7	Tax Rate	36.12%		
8	Income Taxes Payable	**24.5**		
9				
10	**Ontario Capital Tax**			
11	Smart Meters	3,151.3		
12	Computer Hardware	0.0		
13	Computer Software	0.0		
14	Rate Base	3,151.3		
15	Less: Exemption	0.0		
16	Deemed Taxable Capital	3,151.3		
17	Ontario Capital Tax Rate	0.225%		
18	Net Amount (Taxable Capital x Rate)	**7.1**		
19				
20				
21		**PILs Payable**	**Gross Up**	**Grossed Up PILs**
22	Change in Income Taxes Payable	24.5	36.12%	**38.3**
23	Change in OCT	7.1		**7.1**
24	PILs	31.6		**45.4**

2.6. Allocation and Disposition of Amounts Related to 2007 and 2006 Smart Meter Activities

THESL proposes that the 2007 Smart Meter deferral account credit balance of $1,461,100, less the clearance of the 2006 Smart Meter residual capital deferral account debit balance $213,000, less the clearance of the 2007 incremental revenue requirement due to 2006 Smart Meters $504,600, for a total net credit amount of $743,500 be disposed to those rate classes that had Smart Meters installed in 2007. Those classes are Residential, GS < 50 kW, and GS 50 – 1000 kW.

THESL proposes that these amounts be disposed on the fixed monthly customer charge, which is consistent with how the rate rider for Smart Meters has been collected over 2007. THESL proposes that the December 2008 customer numbers be used for the calculation of the class rate riders. Calculation of the allocation and disposition of these amounts by rate class is shown in Table 12.

Table 12
Allocation and Recovery of Smart Meter Amounts

	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
1	**Allocators**	**Residential**	**GS < 50 kW**	**GS - 50 to 1000 kW - Non Interval**	**Total**
2					
3	Operational Data				
6	Number of Customers (End of 2008 Actuals)	605,509	65,917	10,026	**681,452**
7	2006 Smart Meters Installed	191,370	2,070	560	**194,000**
8	2007 Smart Meters Installed	202,882	7,564	4,206	**214,652**
9	Allocator Percentages				
12	2006 Smart Meters Installed	98.64%	1.07%	0.29%	**100.0%**
13	2007 Smart Meters Installed	94.52%	3.52%	1.96%	**100.0%**
14	**Allocated Amounts**	**Residential $**	**GS < 50 kW $**	**GS - 50 to 1000 kW - Non Interval $**	**Total $**
15	2007 Balance Amount for 2007 Smart Meters ("A" Amounts)	(1,380,994)	(51,487)	(28,630)	**(1,461,111)**
16	2006 Balance Amount for 2006 Residual Amounts ("B" Amounts)	210,129	2,273	615	**213,017**
17	2007 Balance Amount due to 2006 Residual Amounts ("C" Amounts)	497,807	5,385	1,457	**504,648**
18	**Total**	**(673,059)**	**(43,830)**	**(26,558)**	**(743,446)**
19	**Charge/Disposition Calculations**	**Recovery Basis**	**Residential**	**GS < 50 kW**	**GS - 50 to 1000 kW - Non Interval**
20			$ per Customer /30 days	$ per Customer /30 days	$ per Customer /30 days
21	2007 Balance Amount for 2007 Smart Meters ("A" Amounts)	Customer	(0.19)	(0.06)	(0.23)
22	2006 Balance Amount for 2006 Residual Amounts ("B" Amounts)		0.03	0.00	0.01
23	2007 Balance Amount due to 2006 Residual Amounts ("C" Amounts)		0.07	0.01	0.01
24	**Total**		**(0.09)**	**(0.05)**	**(0.21)**

3. Bill Impacts

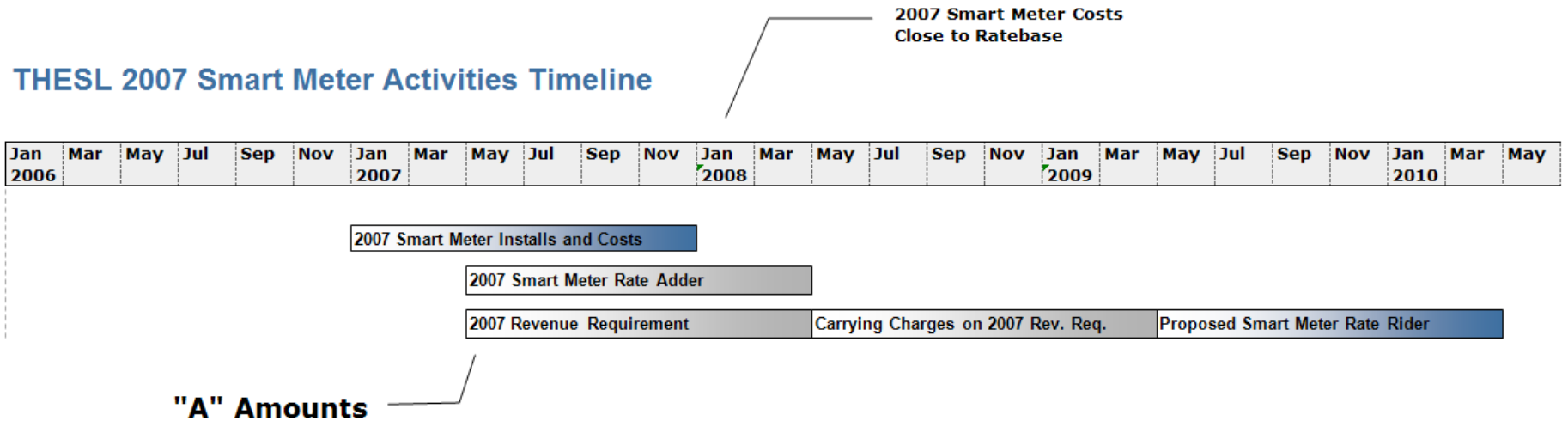
Bill impacts arising from the proposals set out in this Application, separately and in combination, are shown at Exhibit 2.

THESL does not propose any measures to mitigate the rate impacts that are consequential to this Application. THESL views the impacts as minimal and reasonable given the policy context for, and necessity of, the Smart Meter activities and corresponding amounts.

Exhibit 1

Smart Meter Activity Timelines

THESL 2007 Smart Meter Activities Timeline



THESL 2006 Smart Meter Activities Timeline

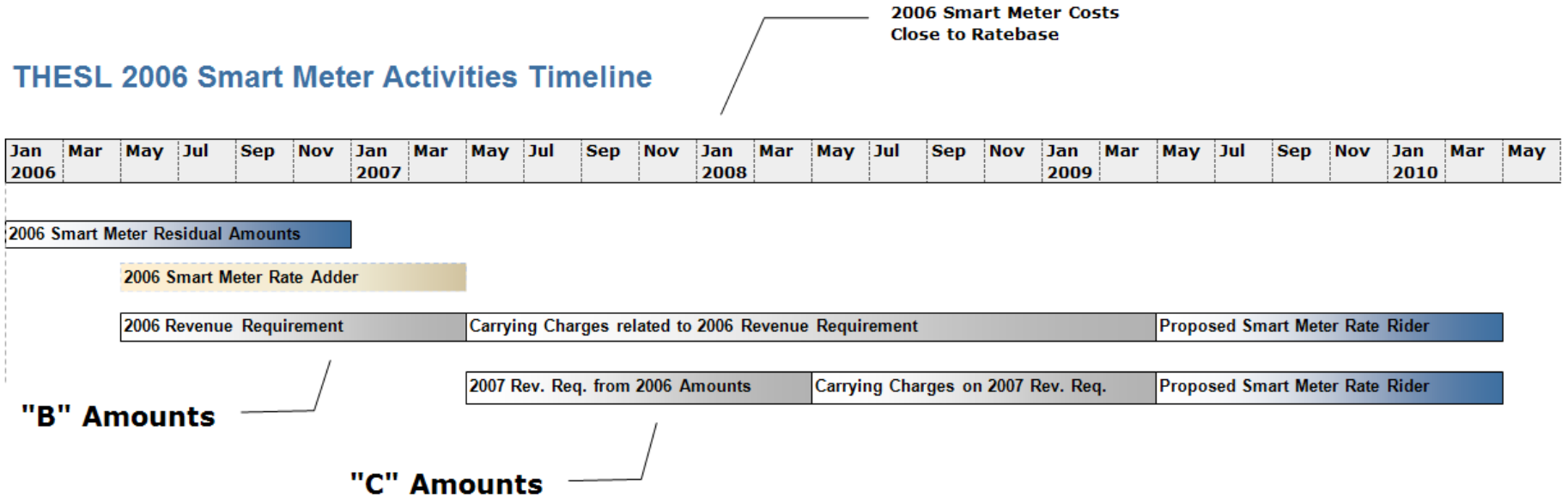


Exhibit 2

Consolidated Bill Impacts

Smart Meter Rate Rider Bill Impact (Distribution Only)

	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11
				Existing			Proposed			Increase	
1	kWh	kW	kVA	Distribution ($)	Rate Rider ($)	Total ($)	Distribution ($)	Rate Rider ($)	Total ($)	$	%
2	**Residential**										
3	100			16.40	1.36	17.76	16.40	1.27	17.67	-0.090	-0.5%
4	250			18.73	1.23	19.95	18.73	1.14	19.86	-0.090	-0.5%
5	500			22.60	1.00	23.60	22.60	0.91	23.51	-0.090	-0.4%
6	750			26.48	0.78	27.25	26.48	0.69	27.16	-0.090	-0.3%
7	1,000			30.35	0.55	30.90	30.35	0.46	30.81	-0.090	-0.3%
8	1,500			38.10	0.10	38.20	38.10	0.01	38.11	-0.090	-0.2%
9	2,000			45.85	-0.35	45.50	45.85	-0.44	45.41	-0.090	-0.2%
10											
11	**GS<50**										
12	1,000			39.27	1.25	40.52	39.27	1.20	40.47	-0.050	-0.1%
13	5,000			118.87	-0.75	118.12	118.87	-0.80	118.07	-0.050	0.0%
14	10,000			218.37	-3.25	215.12	218.37	-3.30	215.07	-0.050	0.0%
15	20,000			417.37	-8.25	409.12	417.37	-8.30	409.07	-0.050	0.0%
16											
17	**GS 50-1000**										
18	30,000	100	100	555.78	-25.00	530.78	555.78	-25.21	530.57	-0.210	0.0%
19	40,000	100	100	555.78	-25.00	530.78	555.78	-25.21	530.57	-0.210	0.0%
20	150,000	500	556	2,952.00	-148.00	2,804.00	2,952.00	-148.21	2,803.79	-0.210	0.0%
21	200,000	500	556	2,952.00	-148.00	2,804.00	2,952.00	-148.21	2,803.79	-0.210	0.0%
22	270,000	900	1,000	5,289.78	-268.00	5,021.78	5,289.78	-268.21	5,021.57	-0.210	0.0%
23	360,000	900	1,000	5,289.78	-268.00	5,021.78	5,289.78	-268.21	5,021.57	-0.210	0.0%
32	450,000	900	1,000	5,289.78	-268.00	5,021.78	5,289.78	-268.21	5,021.57	-0.210	0.0%
33											

Smart Meter Rate Rider Bill Impact (Total)

	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13	Col. 14
					Existing				Proposed				Increase	
1	kWh	kW	kVA		Distribution ($)	Rate Rider ($)	Non-Distribution ($)	Total ($)	Distribution ($)	Rate Rider ($)	Non-Distribution ($)	Total ($)	$	%
2	Residential													
3	100				16.40	1.36	7.81	25.57	16.40	1.27	7.81	25.48	-0.090	-0.35%
4	250				18.73	1.23	19.15	39.10	18.73	1.14	19.15	39.01	-0.090	-0.23%
5	500				22.60	1.00	38.04	61.64	22.60	0.91	38.04	61.55	-0.090	-0.15%
6	750				26.48	0.78	56.94	84.19	26.48	0.69	56.94	84.10	-0.090	-0.11%
7	1,000				30.35	0.55	77.97	108.87	30.35	0.46	77.97	108.78	-0.090	-0.08%
8	1,500				38.10	0.10	120.44	158.64	38.10	0.01	120.44	158.55	-0.090	-0.06%
9	2,000				45.85	-0.35	162.90	208.40	45.85	-0.44	162.90	208.31	-0.090	-0.04%
10														
11	GS<50													
12	1,000				39.27	1.25	77.70	118.22	39.27	1.20	77.70	118.17	-0.050	-0.04%
13	5,000				118.87	-0.75	414.49	532.61	118.87	-0.80	414.49	532.56	-0.050	-0.01%
14	10,000				218.37	-3.25	835.47	1,050.59	218.37	-3.30	835.47	1,050.54	-0.050	0.00%
15	20,000				417.37	-8.25	1,677.45	2,086.57	417.37	-8.30	1,677.45	2,086.52	-0.050	0.00%
16														
17	GS 50-1000													
18	30,000	100	100		555.78	-25.00	2,560.05	3,090.83	555.78	-25.21	2,560.05	3,090.62	-0.210	-0.01%
19	40,000	100	100		555.78	-25.00	3,306.56	3,837.34	555.78	-25.21	3,306.56	3,837.13	-0.210	-0.01%
20	150,000	500	556		2,952.00	-148.00	12,826.23	15,630.23	2,952.00	-148.21	12,826.23	15,630.02	-0.210	0.00%
21	200,000	500	556		2,952.00	-148.00	16,558.80	19,362.81	2,952.00	-148.21	16,558.80	19,362.60	-0.210	0.00%
22	270,000	900	1,000		5,289.78	-268.00	23,092.41	28,114.19	5,289.78	-268.21	23,092.41	28,113.98	-0.210	0.00%
23	360,000	900	1,000		5,289.78	-268.00	29,811.05	34,832.83	5,289.78	-268.21	29,811.05	34,832.62	-0.210	0.00%
24	450,000	900	1,000		5,289.78	-268.00	36,529.68	41,551.46	5,289.78	-268.21	36,529.68	41,551.25	-0.210	0.00%
25														