Ontario Energy Board

Commission de l'énergie de l'Ontario

EB-2012-0015

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

AND IN THE MATTER OF an application by Thunder Bay Hydro Distribution Inc. for an order approving or fixing just and reasonable distribution rates related to Smart Meter deployment, to be effective May 1, 2012.

BEFORE: Ken Quesnelle
Presiding Member

Marika Hare
Member

DECISION AND ORDER
June 21, 2012

Thunder Bay Hydro Distribution Inc. ("TBHDI"), a licensed electricity distributor, filed an application (the "Application") with the Ontario Energy Board (the "Board"), received on January 13, 2012, under section 78 of the *Ontario Energy Board Act, 1998,* S.O 1998, c. 15, (Schedule B), seeking approval for changes to the rates that TBHDI charges for electricity distribution, to be effective May 1, 2012.

TBHDI, in its Application, sought Board approval for the disposition and recovery of costs related to smart meter deployment, offset by Smart Meter Funding Adder ("SMFA") revenues collected from May 1, 2006 to April 30, 2012. TBHDI requested approval of proposed Smart Meter Disposition Riders ("SMDRs") and Smart Meter

Incremental Revenue Requirement Rate Riders ("SMIRRs") effective May 1, 2012. The Application is based on the Board's policy and practice with respect to recovery of smart meter costs.[1]

The Board issued a Letter of Direction and Notice of Application and Hearing (the "Notice") on February 16, 2012. The Vulnerable Energy Consumers' Coalition ("VECC") requested and was granted intervenor status and cost award eligibility. No letters of comment were received. The Notice established that the Board would consider the Application by way of a written hearing and established timelines for discovery and submissions.

While the Board has considered the entire record in this proceeding, it has made reference only to such evidence as is necessary to provide context to its findings. The following issues are addressed in this Decision and Order:

- Costs incurred with respect to Smart Meter deployment and operation;
- Cost of Debt;
- PILs;
- Cost Allocation; and
- Implementation.

Costs Incurred with Respect to Smart Meter Deployment and Operation

In its Application, TBHDI sought the following approvals:

- An SMDR for two years effective May 1, 2012 of ($0.97) for both the Residential and General Service <50 kW customers. The SMDR reflects the Net Deferred Revenue Requirement of ($1,151,560) being the difference between the Deferred Incremental Revenue Requirement from 2006 to December 31, 2011 and SMFA revenues collected from 2006 to April 30, 2012, plus associated interest on the principal balances of SMFA revenues and OM&A and depreciation expenses; and

[1] *Guideline G-2008-0002: Smart Meter Funding and Cost Recovery*, issued October 22, 2008. On December 15, 2011, the Board issued *Guideline -2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition* Thunder Bay Hydro Distribution Inc. used Smart Meter Model, Version 2.17, and prepared its application considering recent Board decisions on smart meter cost disposition and recovery.

- A SMIRR for one year effective May 1, 2012 in the amount of $2.28 for both the Residential and General Service <50 kW customers. This SMIRR reflects the Incremental Revenue Requirement associated with installed smart meters for the period May 1, 2012 to April 30, 2013 in the amount of $1,354,378.

In responses to interrogatories, TBHDI updated its evidence for the following:

- A reduction of $25,730 in reported smart meter capital expenditures to reflect actual 2011 year end balances;
- A reduction of $5,565 in reported operating, maintenance and administration smart meter expenses to reflect actual 2011 year end balances;
- Revisions of the aggregate Federal and Provincial corporate tax rate for 2009 through to 2012; and
- A revision of the estimated SMFA revenues for 2012.

TBHDI filed a revised Smart Meter Model (the “SM Model”) and SMDR and SMIRR to reflect the above updated evidence and in response to an interrogatory from VECC.

Board staff submitted that it was satisfied with the updates to the December 31, 2011 balances in Accounts 1556 and 1556. However Board staff submitted that it was unable to reconcile the updated December 31, 2011 balances with the response to Board staff Interrogatory 2 c. Board staff also submitted that it was unclear on whether the December 31, 2011 year end balances were based on actual or forecast data. In its Reply, TBDHI provided the requested reconciliation, and stated that 2011 year end actuals were used.

Based on TBHDI’s updated SM Model, the total costs for smart meter installations and operations to December 31, 2012, and related unit costs are as follows:[2]

[2] Response to Board staff Interrogatory 10

Table 1
Unit Cost Calculation

	Cost	Meter Count	Unit Cost
Smart Meter CAPEX	$8,131,640	49,485	$164.33
Smart Meter OPEX	$2,371,374	49,485	
Total OPEX & CAPEX	$10,503,014	49,485	$212.25

VECC noted that Appendix A of the Combined Proceeding Decision compares data for 9 out of 13 utilities and shows the total cost per meter ranged from $123.59 to $189.96, with Hydro One Networks Inc. being the main exception at $479.47.[3] VECC also noted that the average capital cost per meter, based on data reported by all utilities to September 30, 2009, was $186.76, and the total cost per meter, which includes capital an operating costs for the same period was 207.37. [4] VECC submitted that in adjusting TBHDC's average unit cost of $212.25 for costs beyond minimal functionality, the average unit cost is $209.

Board staff submitted that the Fairness Commissioner issued a letter stating the TBHDI had made a fair (objective and competent) determination of smart meter suppliers in compliance with the London Hydro RFP approach allowed for in O.Reg. 427/06.

Given these points, Board staff submitted that the documented costs were prudently incurred. VECC relied on Board staff's determination that the costs were prudently incurred.

The Board finds that TBHDI's documented costs related to smart meter procurement, installation and operation are appropriate, subject to findings set out below on the cost of debt and PILs. The Board approves the recovery of the costs for smart meter deployment and operation based on the methodology set out below.

Cost of Debt

TBHDI funded its smart meter program with 100% debt and has filed a customized SM Model to account for its method of financing the smart meter project.[5] The debt is $8

[3] VECC, Submission, April 26, 2012, page 3, referencing the Board's Decision in the Combined Proceeding EB-2007-0063, September 21, 2007

[4] VECC, Submission, April 26, 2012, page 4, referencing the Board's *Sector Smart Meter Audit Review Report*, dated March 31, 2010.

[5] The Application, p. 2

million at 5.27%.[6] Board staff submitted that this reflects the actual funding for the smart meter project, but it does not reflect the Board's Decision on TBHDI's cost of capital in its 2009 COS application, EB-2008-0245.

TBHDI submitted in Reply that the SM Model filed in EB-2008-0245 assumed 100% debt and was the basis for the approved $1.97 for the SMFA.[7] TBDHI also stated that it operates on a "Rate Minimization Model" which is based on the shareholder foregoing its return on equity and foregoing the payment of interest or principal on long term debt.[8]

As part of its interrogatories, Board staff asked TBHDI to provide a SM Model that calculated PILs based on the capital structure and related interest and return on equity as approved in TBHDI's 2009 COS application.[9] In its response, TDHDI did not provide the requested SM Model, but rather stated that incorporating the capital structure and related interest and return on equity as approved in its 2009 COS application leaves TBHDI in a materially underfunded position. TBHI argued that its customers have benefitted from lower distribution rates over the years since market opening in 2002 as a result of the "Rate Minimization Model". TBHDI also stated that this Application best reflects the treatment of smart meters if they had been included in rate base.[10] In its submission, Board staff stated that it could not comment as to whether TBHDI's proposal based on incremental financing, or the Board's established approach of employing the Applicant's approved cost of capital, is the optimal approach, and therefore the response to the interrogatory was needed.[11]

In Reply, TBHDI provided the requested SM Model based on the approved 2009 costs of capital, and submitted that the debt for smart meters was not included in the cost of capital in EB-2008-0245. Rather, the debt for smart meters was included in the costs used in the SM Model used to determine the SMFA. TBHDI also submitted that had the

[6] TBHDI Rely Submission p. 5

[7] TBHDI Rely Submission p. 4

[8] ibid

[9] Board staff Interrogatory 8

[10] TBHDI Rely Submission p. 5

[11] TBDHI Reply p. 5

debt to be incurred for smart meters been included in the Cost of Capital, the revenue requirement would have been higher for 2009.[12]

TBHDI, in Reply, also provided a SM Model that varied the 2009 Board approved capital structure so that the cost of debt would be 6%. This was the cost of incremental debt for 2009 capital funding that was used in EB-2008-0245 to establish the approved 0.21% for long term debt. TBHDI submitted that, if the Board does not approve its proposal of using 5.27% on actual debt, then the approved capital structure should have the long term debt set at the 2009 incremental 6% so as not to double-up on the impact of 0% debt from the City. The following table provides a comparison of the cost of capital and revenue requirement for three different scenarios as set out in TreBHDI's Reply:[13]

Table 2

Thunder Bay Hydro Distribution Inc.

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Comparison of Different Return Scenarios

		Application	**EB-2008-0245 Approved**		**EB-2008-0245 Modified**	
		Col. 1	*Col. 2*	*Col. 3*	*Col. 4*	*Col. 5*
		Burden	**Burden**	**Change**	**Burden**	**Change**
1	Long Term Debt	5.27%	0.21%	-5.06%	6.00%	0.73%
2	Short Term Debt	0.00%	1.33%	1.33%	1.33%	1.33%
3	Equity	0.00%	3.75%	3.75%	3.75%	3.75%
4	Operating Exp.	$1,009,739	$1,009,739	$0	$1,009,739	$0
5	Amortization	$1,981,948	$1,981,948	$0	$1,981,948	$0
6	Return on Equity	$0	$368,084	$368,084	$368,084	$368,084
7	Debt	$1,361,635	$41,141	($1,320,494)	$819,997	($541,638)
8	PILs	($86,576)	$58,863	$145,439	$58,863	$145,439
9	Revenue Requirement	$4,266,746	$3,459,775	($806,971)	$4,238,631	($28,115)

TBHD's capital structure is unique. Its shareholder, the City of Thunder Bay, does not expect a return on the equity it holds. The City is also the holder of the major portion of its debt instruments, and does not charge interest. This results in a very low cost of capital for TBHDI. It is clear to the Board that without earning a return, there was little, if

[12] ibid

[13] Table from TBHDI Reply p. 5

any, retained earnings to fund the smart meter initiative. TBHDI borrowed all of its capital needs at 5.27% from a third party to raise the needed funds for the smart meter program.

It is the Board's typical practice to determine the SMDR and SMIRR using the distributors' current approved cost of capital. That is because distributors work within the framework of using retained earnings, depreciation, and if needed, additional raised funds for its capital needs going forward from a rebasing year. Typically, if funds are needed, a distributor would attempt to raise capital in an optimal manner, given its cost of capital. Any gains or losses resulting from this optimization are part of normal business risk. If a distributor can't work within this framework between rebasing, it can apply to the Board to seek relief under the incremental capital module included in the Board's IRM framework which in turn utilizes the distributor's current approved cost of capital.

With TBHDI, the components of its cost of capital are below market rates, as seen in column 2 of Table 2 above. As a result, the loan at a market rate of 5.27% is above what TBHDI is recovering in rates. A comparison of the application of the Board's typical practice (column 3 of Table 2) and TBDHI's proposal (column 1 of Table 2) indicates that using the 2009 Board approved cost of capital would leave TBHDI considerably short of the actual cost of debt incurred for the smart meter initiative. .

From the outset, TBHDI's Smart Meter implementation initiative has been financially managed in isolation from the rest of its asset base. This was evident at the time that its SMFA and its current cost of capital for its general assets was established. The Board considers it reasonable for TBHDI to expect that it would continue to be managed in such a fashion at least until TBHDI's next rebasing.

The Board considers it appropriate, given the circumstances pertaining to TBHDI's existing cost of capital, to calculate the SMDR SMIRR as per TBHDI's original proposed methodology with the use of 100% debt.

PILs

Board staff submitted that the customized SM Model reflects the fact that no equity was used, and allows for the inclusion of actual interest paid.[14] In calculating PILs, the SM Model uses the return on equity as the starting point for net income before taxes, to which depreciation expense is added back and Capital Cost Allowance ("CCA") is deducted. Due to the half-year rule treatment and differences between depreciation and CCA rates, the CCA allowance in some early years is much greater than the depreciation rate. As a result, with no return on equity, the SM Model calculates a negative income before taxes and hence a negative income taxes/PILs.

In response to an interrogatory from Board staff, TBDHI stated that its proposed tax/PILs treatment was a reasonable proxy for the tax treatment it had received for 2009 and 2011.[15] Board staff submitted that TBHDI should clarify this point.

In Reply, TBDHI submitted a table comparing the PILs determined if the capital costs and operating expenses were used to offset the SMFA revenues by year, to the PILs determined in the SM Model.[16] The accumulated difference from 2006 to 2012 between the two methods is $1.00.

The Board is satisfied that the SM Model is a fair proxy for what actually took place. The Board will accept the outcome of the PILs calculation in the SM Model.

Cost Allocation

TBHDI applied for a single SMDR and a single SMIRR applicable to Residential and general Service < 50 kW ("GS<50 kW) classes. TBDHI did not do an allocation to determine class specific riders. TBHDI stated that sufficient evidence is not available to support an allocation to the classes.[17]

In the PowerStream Smart Meter Decision, the Board recognized that, as there would be significant differing costs in different customer classes, the principle of cost causality

[14] Board staff Submission p. 4

[15] Response to Board staff Interrogatory 8 a.

[16] TBDHI Reply p. 6

[17] Application, page 3

would support class-specific cost recovery.[18] This recognition was in large part due to the costs of the meters themselves, and to the extent that accurate data was available from the utility's records. To this end, the Board's guidelines have indicated that a utility is expected to address the allocation of costs in its application seeking the disposition of smart meter costs recorded in accounts1555 and 1556.[19] Further, in recent decisions, the Board has reviewed and approved the evolution of approaches for calculating class-specific rate riders.[20]

TBHDI did provide cost allocations for the SMDR and SMIRR based on the PowerStream methodology.[21] Costs are determined by class in the PowerStream methodology by:

- Allocating the return and depreciation based on customer weighted smart meter costs;
- Allocating the OM&A based on the number of meters; and
- Allocating PILs based on the allocated revenue requirement before PILs. [22]

Board staff and VECC submitted that the determination of the revenue requirement should be based on using class specific revenues from the SMFA, rather than allocating the revenues per the revenue requirement.

Board staff pointed out that TBDHI collected revenues from the GS 50-999 kW, and the GS>1000 kW. Board staff submitted that there are two approaches that could be used to allocate these collected amounts to the residential and GS<50 kW classes. The first is to allocate the revenues from the GS 50-999 kW, and the GS>1000 kW on a 50:50 basis to the residential and GS<50 kW classes. The second method is to allocate the revenues the GS 50-999 kW, and the GS>1000 kW to the residential and GS<50 kW classes based on number of meters, since the SMFA was collected on a per meter

[18] *PowerStream Smart Meter Decision; EB-2011-0128, November 21, 2011*

[19] See footnote 1.

[20] The Board's decisions with respect to PowerStream Ltd.'s 2010 and 2011 smart meter applications (respectively, EB-2010-0209 and EB-2011-0128) confirmed approaches for allocating costs and calculating class-specific rate riders for recovery of smart meter costs. The approach approved in Decision EB-2011-0128, or an analogous or improved approach is expected where data of adequate quality at a class level is available.

[21] Response to VECC Interrogatory 7 d.

[22] PowerStream Decision EB-2011-0128

basis. Board staff submitted that the second approach provides an equal allocation back to the residential and GS<50 kW customer.

In Reply, TBHDI provided calculations of the SMDR based on the two approaches and concurred with Board staff that the second method best reflects cost causality.

The Board will approve the allocation of costs, which is consistent with the PowerStream Decision. The Board also finds that the SMFA revenues are to be assigned to the residential and GS<50kW classes in the manner that they were collected. The amounts collected from the non-participating smart meter classes is to be allocated to the Residential and GS<50 kWh classes according to the second method proposed by Board staff, which is on a per meter basis, and supported by TBDHI. The interest and any other items that comprise the total balance are to be allocated to the participating classes based on the assigned revenues.

Implementation

TBHDI received new distribution rates with an Effective Date of May 1, 2012 in its IRM application EB-2011-0197 on April 4, 2012. The Board on May 1, 2012 declared those rates interim by way of a letter. The Board will approve an Effective Date of May 1, 2012 as proposed by TBHDI. However since rates will not be implemented as of that date, the Board will approve an Implementation Date of July 1, 2012. As a result, the SMIRRs should be derived using a 10 month period from July 1, 2012 to April 30, 2013 and the SMDR should be derived using a 22 month period from July 1, 2012 to April 30, 2014. Interest to and including June 2012 will be allowed.

In granting its approval for the historically incurred costs and the revenue requirement projected for 2012, the Board considers TBHDI to have completed its smart meter deployment. Going forward, TBHDI is not to record any capital and operating costs for new smart meters and any costs for operations of smart meters in Accounts 1555 and 1556. Instead, the costs shall be recorded in regular capital and operating expense accounts (e.g. Account 1860 for meter capital costs) as is the case with other regular distribution assets and costs.

TBHDI is authorized to continue to include stranded meters in its asset account. The balance for stranded meters should be brought forward for disposition in TBHDI’s next cost of service application.

THE BOARD ORDERS THAT:

1. Thunder Bay Hydro Distribution Inc.'s new distribution rates shall have an Effective Date of May 1, 2012 with an Implementation Date of July 1, 2012.

2. Thunder Bay Hydro Distribution Inc. shall file with the Board, and shall also forward to VECC, a draft Rate Order attaching a proposed Tariff of Rates and Charges reflecting the Board's findings in this Decision and Order within **7 days** of the date of the issuance of this Decision and Order.

3. Board staff and VECC shall file any comments on the draft Rate Order with the Board and forward to Thunder Bay Hydro Distribution Inc. within **4 days** of the date of filing of the draft Rate Order.

4. Thunder Bay Hydro Distribution Inc. shall file with the Board and forward to intervenors responses to any comments on its draft Rate Order within **3 days** of the date of receipt of intervenor comments.

Cost Awards

The Board will issue a separate decision on cost awards once the following steps are completed:

1. VECC shall submit its cost claims no later than **7 days** from the date of issuance of the final Rate Order.

2. Thunder Bay Hydro Distribution Inc. shall file with the Board and forward to VECC any objections to the claimed costs within **14 days** from the date of issuance of the final Rate Order.

3. VECC shall file with the Board and forward to Thunder Bay Hydro Distribution Inc. any responses to any objections for cost claims within **21 days** from the date of issuance of the final Rate Order.

4. Thunder Bay Hydro Distribution Inc.shall pay the Board's costs incidental to this proceeding upon receipt of the Board's invoice.

All filings to the Board must quote file number **EB-2012-0015,** be made through the Board's web portal at, www.errr.ontarioenergyboard.ca and consist of two paper copies and one electronic copy in searchable / unrestricted PDF format. Filings must clearly state the sender's name, postal address and telephone number, fax number and e-mail address. Parties must use the document naming conventions and document submission standards outlined in the RESS Document Guideline found at www.ontarioenergyboard.ca. If the web portal is not available parties may email their document to the address below. Those who do not have internet access are required to submit all filings on a CD in PDF format, along with two paper copies. Those who do not have computer access are required to file 2 paper copies.

DATED at Toronto, June 21, 2012

ONTARIO ENERGY BOARD

Original Signed By

Kirsten Walli
Board Secretary