2012 ELECTRICITY DISTRIBUTION RATES

Thunder Bay Hydro Electric Distribution Inc.

Application for Disposition and Recovery of Costs Related to Smart Meter Deployment

EB-2012-0015

STAFF SUBMISSION

April 20, 2012

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Thunder Bay Hydro Electric Distribution Inc.
Smart Meter Cost Recovery Application
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Board Staff Submission

Introduction

Thunder Bay Hydro Electric Distribution Inc. ("Thunder Bay") is the electricity distributor licensed by the Ontario Energy Board (the "Board") to serve the City of Thunder Bay. On January 13, 2012, Thunder Bay filed a stand-alone Smart Meter Cost Recovery application (the "Application"), requesting a Smart Meter Disposition Rider ("SMDR") and a Smart Meter Incremental Revenue Requirement Rider ("SMIRR"). The proposed effective date for the SMDR is May 1, 2012, and is proposed to remain in effect for 24 months. The proposed effective date for the SMIRR is May 1, 2012 and is proposed to remain in effect for 12 months. The Application is based on the Board's policy and practice with respect to recovery of smart meter costs.[1]

The Board issued its Letter of Direction and Notice of Application and Hearing 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.[2] The Notice of Application and Hearing established that the Board would consider the Application by way of a written hearing and established timelines for interrogatories and submissions.

Board staff and VECC submitted interrogatories to Thunder Bay on March 27, 2012. Thunder Bay filed its responses to the interrogatories on April 11, 2012.

The following submission reflects observations and concerns arising from Board staff's review of the record of the proceeding, which includes the original Application and updates as provided in response to interrogatories.

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[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 used Smart Meter Model, Version 2.17TB, modified to allow for adjusting the capital structure and cost of capital unique to the utility's circumstances, and prepared its application considering recent Board decisions on smart meter cost disposition and recovery.

[2] Response to Board staff IR #1.

The Application

Approvals Sought

Thunder Bay has requested the Board to approve:

- An SMDR for all capital and operating, maintenance, and administrative expense for meters installed up to December 31, 2011 of ($0.97) per metered customer per month for 24 months commencing May 1, 2012; and
- An SMIRR for the revenue requirement for smart meters installed up to December 31, 2011 of $2.28 per metered customer per month for 12 months commencing May 1, 2012.

Thunder Bay, in its 2012 IRM application EB-2011-0197 requested that its Smart Meter Funding Adder ("SMFA") of $1.97 per metered customer per month be allowed to continue to November 1, 2012 in case this Application is not completed in time for a May 1, 2012 implementation date. The Board, in that IRM application, turned down the request stating;

> "The Board is of the view that the relevant metric to consider in determining whether it is appropriate to extend the continuation of the SMFA is the date at which smart meter deployment was or will be substantially completed."[3]

Thunder Bay is not proposing to dispose of the net book value of stranded conventional meters replaced by smart meters in this Application. Thunder Bay has stated that it continues to recover the stranded meter costs in rate base.[4] The net book value on December 31, 2012 for stranded meters will be $1,567,441.[5] Board staff submits that this is compliant with the Board's Guideline G-2011-0001, *Smart Meter Funding and Cost Recovery – Final Disposition.*

Updated Evidence

Through the interrogatory process the original Application, including the Smart Meter Model, Version 2.17TB modified to allow for adjusting the capital structure (the "Model") and the proposed rate riders were updated for the following changes:

- A reduction of $25,730 in reported smart meter capital expenditures to reflect actual 2011 year end balances;

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[3] Thunder Bay 2012 IRM Decision EB-2011-0197, April 4, 2012, p. 18

[4] The Application p. 13

[5] Response to Board staff Interrogatory 12

- A reduction of $5,565 in reported operating, maintenance and administration smart meter expenses to reflect actual 2011 year end balances; and
- 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.

Thunder Bay filed a revised smart meter model and SMDR and SMIRR to reflect the above updated evidence and in response to an interrogatory from VECC.[6]

With the exceptions stated below, Board staff has no concerns with the above changes.

Prudence of Smart Meter Costs

Smart Meter Installation Costs

Thunder Bay updated its costs to reflect actual expenditures to December 31, 2011, and provided explanations for these costs. Board staff is satisfied with the explanations for the variances in the costs between the budget and actual costs for its smart meters project. However, Board staff is of the view that the response to Board staff Interrogatory 2 c. is unclear. Board staff was unable to reconcile the Incremental “O&M and Admin Costs” for 2010 of $587,269 with the “Total Smart Meter OM&A Costs” in Tab 2 Smart Meter Costs Operating of the Model provided in the Application of $600,081. It is also unclear as to whether the 2011 Forecast & Unaudited balances presented in Column B of the response represents the 2011 balances in the Application, or the 2011 year end balances that have now been audited, but are yet to be approved by the Board of Directors. Board staff was unable to reconcile either.

Board staff submits that Thunder Bay should clarify the table in the response to Board staff Interrogatory 2 c. in relation to data entries in the Model.

PILs

Thunder Bay Hydro has documented that its smart meter project was funded by debt and has filed a customized Smart Meter Model to account for its method of financing for its smart meter project.[7] While this reflects the actual funding for the smart meter project, it does not reflect the Board’s Decision on Thunder Bay’s cost of capital in its 2009 COS application, EB-2008-0248 which Board staff has provided in Table 2 below. It also does not comply with the Board’s practice to use the Applicant’s most recently approved cost of capital.

[6] Response to VECC Interrogatory 7

[7] The Application, p. 2

Table 2

Cost of Capital[1]

	Structure	Rate
Long Term Debt	52.70%	0.21%
Short Term Debt	0.40%	1.33%
Equity	73.30%	3.75%
WACoC		**1.79%**

1 Thunder Bay COS Decision EB-2008-0145

Thunder Bay has pointed out that it operates on the rate minimization model and as it does not have equity producing earnings that could be used to finance a project of the magnitude that the smart meter has imposed on it. [8] Therefore the smart meter project is financed by debt. Thunder Bay's allowed rate of return is 1.79%, as seen in Table 2. This return is considerably below commercial lending rates. Consequently, Thunder Bay has proposed using the actual cost of debt in the Model to calculate its SMDR and SMIRR.

The customized Model reflects the fact that no equity was used, and allows for the inclusion of actual interest paid. In calculating PILs, the 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 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 Model calculates a negative income before taxes and hence a negative income taxes/PILs.

The PILs implication of Thunder Bay's use of 100% debt financing is seen in the table below, which was created from the PILs line on Tab 7; Taxes PILs of the Model:

Table 1

Calculated PILs[1]

	($)
2009	(28,554)
2010	(52,559)
2011	(16,395)
2012	(10,931)

1 Board Staff IR 10

The effect of the negative PILs on the revenue requirement for smart meters is to reduce the revenue requirement. This could have a detrimental impact on Thunder Bay's recovery of costs, as it cannot claim for negative income taxes.

[8] ibid

Board staff asked Thunder Bay whether the tax/PILs treatment as factored in the Model is a reasonable proxy of the tax treatment it received from 2009 to 2011.[9] In response, Thunder Bay stated that it believed that the Model would reflect a fair proxy.[10] However, Thunder Bay also stated that:

> "The PILs reflected in the model does not reflect the tax treatment from 2009 through to 2011 given that the funding adder and the Revenue Requirement do not match."[11]

Board staff interprets this statement to mean that the revenues from the SMFA were collected prior to expenses being incurred for acquisition, installation and operation of the smart meter system. Board staff submits that Thunder Bay should confirm whether Board staff's interpretation is correct, and if not, Thunder Bay clarify what the statement means.

Board staff in the same interrogatory asked Thunder Bay to provide a Model that calculated PILs based on the capital structure and related interest and return on equity as approved in Thunder Bay's 2009 COS application. Board staff wanted to provide a Model to the Board based on the Board's practices to use the most recent approved cost of capital. Thunder Bay did not file the requested Model stating that it believed that the Model as filed calculates the proxy for distribution revenues that would have occurred if the assets and operating costs were incorporated into rate base and distribution revenue requirement.

In addition, Board staff was interested in seeing the after tax cash position Thunder Bay would be in, and to see if that cash flow was reasonable from the position of covering costs, including PILs and interest. Thunder Bay commented that the Model which it provided calculates the proxy for the distribution revenues that would have occurred if the asset and operating costs were included in its full distribution revenue requirement.

Board staff cannot make a submission as to whether Thunder Bay's proposal or using the Board's approach is the optimal approach. It lacks proof that the proposal Thunder Bay has made in its Application is the most appropriate determination of the SMDR and SMIRR. Board staff submits that Thunder Bay should answer Board staff Interrogatory 8 to the extent that it provides the requested version of the Model, and provide comparisons and contrasts to support its position in its Reply Argument. Responding to this interrogatory is particularly important because the response would be consistent with the Board's established practice of employing the Applicant's approved cost of capital.

Board staff submits that the matter at hand is whether the Board should set aside its past practice in this Application because Thunder Bay's proposal is unique

[9] Board staff Interrogatory 8

[10] Response to Board staff Interrogatory 8

[11] ibid

and provides sufficient recovery of costs, or whether the Board should continue its past practice of using approved cost of capital. Board staff submits, lacking the compelling evidence Board staff was looking for in its Interrogatory 8 b., the Board should continue past practice and direct Thunder Bay to employ its approved cost of capital.

Smart Meter Unit Costs

Board staff has produced Table 3 from the totals found in Tab 2 Smart Meter Costs in the Model, which was revised by Thunder Bay to reflect the changes made through the Interrogatories. Board staff does not consider these unit costs to be out of line when considering the unit costs found in other applications.

Table 3

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

On May 30, 2008 the Fairness Commissioner issued a letter stating that Thunder Bay as part of “Group of the Northern Five LDCs” (Thunder Bay, Atikokan Hydro Inc., Fort Francis Hydro Power Corporation, Kenora Hydro Electric Corporation Ltd, and Sioux Lookout Hydro Inc.) had made fair (objective and competent) determination of smart meter suppliers in compliance of the London Hydro RFP approach allowed for in O.Reg. 427/06.

Given these points, Board staff considers that the documented costs have been prudently incurred.

Costs Incurred for Beyond Minimum Functionality

Thunder Bay has identified a total of $21,362 for Capital expenditures and an estimated total OM&A for 2011 and 2012 of $114,912 for expenditure for functionality that is beyond the defined minimum.[12] These costs are categorized as costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc. Thunder Bay calculated the impact as $2.75 per meter.[13] While these costs are for beyond minimum functionality, Board staff is of the opinion that these are necessary to realize the capabilities of smart meters through the implementation of TOU rates.[14]

In light of the fact that TOU rates have been billed by Thunder Bay since November, 2011, TOU was mandated under Section 1.2.1 of the Standard

[12] Response to Board staff Interrogatory 10

[13] Response to Board staff Interrogatory 5

[14] Determination Under Section 1.2.1 of the Standard Supply Service Code to Mandate Time-of-Use Pricing for Regulated Price Plan Consumers Board File No. EB-2010-0218

Supply Service Code, and $2.75 per meter is a small amount compared to other applications, Board staff has no objections to including these costs in the SMDR and SMIRR.

Rate Rider Calculations

Smart Meter Funding Adder Revenues

In its Application Thunder Bay recorded SMFA revenues and interest in Account 1555 up to and including June, 2012. The sunset date for the SMFA is stated as April 30, 2012. Thunder Bay stated that it has reported its monthly revenues and interest charges based on the time of the receipt of the SMFA revenues.[15] It stated that the majority of its revenues are for bi-monthly billing.

Board staff points out that one of the purposes of collecting the SMFA in a deferral account is to recognize the time value of money. The fact that collection of the SMFA is billed based on bi-monthly billing should not change this fact. Board staff submits that the interest calculation on Account 1555 should include the May and June SMFA revenues for the reasons that Thunder Bay has documented.

Cost Allocation

Thunder Bay applied for a single SMDR and a single SMIRR to be billed to the residential and GS<50 kW customers. It did not do an allocation to determine class specific riders. Thunder Bay stated that sufficient evidence is not available to support an allocation to the classes.[16]

A proper allocation of costs includes allocation or direct assignment of revenues and costs. With respect to determining revenues by class, Thunder Bay has assigned revenues from the SMFA by class.[17]

In regards to costs, Thunder Bay stated that it could not calculate the rate riders based on full cost causality, however it did do an allocation based on the methodology in PowerStream's application EB-2011-0128.[18] Board staff submits that this allocation is reasonable and better reflects the costs for each class, and therefore a more appropriate rate rider by class than an average rider for both classes.

Board staff submits that both the SMDR and SMIRR be calculated on the cost allocation method Thunder Bay provided based on the PowerStream method.

However, it is unclear how the SMDR is calculated for Thunder Bay as it does not set out the determination of the net revenue requirement in the response to VECC Interrogatory 7 d. Board staff submits that the allocation of the revenue

[15] Response to VECC Interrogatory 5 b)
[16] Application, page 3
[17] Response to VECC Interrogatory 7 c)
[18] Response to VECC Interrogatory 7 d)

requirement for the SMDR should be determined using the same allocation approach for costs as in the SMIRR.

Thunder Bay collected revenues from the GS 50-999 kW, and the GS>1000 kW. Board staff submits that there are two approaches that could be used to allocate the total collected 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 basis. This latter approach provides an equal allocation back to the residential and GS<50 kW customer.

Subject to the above comments, Board staff submits that Thunder Bay's Application is compliant with Guideline G-2011-0001, *Smart Meter Funding and Cost Recovery – Final Disposition*, reflects prudently incurred costs and is consistent with Board policy and practice with respect to the disposition and recovery of costs related to smart meter recovery.

- All of which is respectfully submitted -