2012 ELECTRICITY DISTRIBUTION RATES St. Thomas Energy Inc. Application for Disposition and Recovery of Costs Related to Smart Meter Deployment

EB-2012-0348

STAFF SUBMISSION

October 30, 2012

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Board Staff Submission

St. Thomas Energy Inc. Smart Meter Cost Recovery Application EB-2012-0348

Introduction

St. Thomas Energy Inc. ("STEI") is an electricity distributor licensed by the Ontario Energy Board (the "Board") that serves the city of St. Thomas. On August 9, 2012, STEI filed a stand-alone Smart Meter Cost Recovery application (the "Application") requesting Smart Meter Disposition Riders ("SMDRs") and Smart Meter Incremental Revenue Requirement Riders ("SMIRRs"). The proposed effective date for the SMDRs is May 1, 2012 and STEI is requesting that they remain in effect for a term of two years. The proposed effective date for the SMIRR is May 1, 2012 and STEI is requesting that it remain in effect until its next cost of service application, which is planned for 2015. 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 September 10, 2012. The Vulnerable Energy Consumers' Coalition ("VECC") requested and was granted intervenor status and cost award eligibility. The Board received one letter of comment.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 STEI on October 10, 2012. STEI filed its responses to the interrogatories on October 19, 2012.

¹ On December 15, 2011, the Board issued *Guideline -2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition* (the "Guideline"). STEI used Smart Meter Model, Version 2.17 and prepared its application considering recent Board decisions on smart meter cost disposition and recovery.

² Response to Board staff Interrogatory 1.

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.

The Application

Approvals Sought

STEI is requesting approval for the following:

- SMDRs of (\$0.42) per metered customer per month for Residential customers, \$1.24 per metered customer per month for General Service < 50 kW customers and \$4.12 per metered customer per month for General Service > 50 kW customers for a 24 month period from May 1, 2012 to April 30, 2014.
- SMIRRs of \$2.02 per metered customer per month for Residential customers, \$4.65 per metered customer per month for General Service < 50 kW customers and \$9.12 per metered customer per month for General Service > 50 kW customers for the period May 1, 2012 to April 30, 2015; and
- The stranded meter costs of approximately \$590,000 continue to be included in rate base, as recommended by the Board in its Decision with Reasons in the Smart Meter Combined Proceeding (EB-2007-0063).

Updated Evidence

Through the interrogatory process the Application was updated to:

• Correct Tab 3 *Cost of Capital Parameters* for the "2011" and "2012 and Later" debt and equity rates to reflect the findings of the Board in STEI's 2011 cost of service application;³

³ St. Thomas Energy Inc. Decision and Order EB-2010-0141, June 28, 2011

- Reclassify the capital costs for a 3-phase analyser from "smart meters" to "tools and equipment"; and
- Reclassify \$49,306 for business process redesign and CIS changes from line "2.6.2 Costs for deployment of smart meters customers other than residential and small general service" to line "2.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDR etc.".

The reclassifications resulted in the correct depreciation being calculated on the 3-phase analyzer, and for the business process redesign and CIS changes to be allocated to all classes, and not just the GS>50 kW class.

STEI filed revised Models and SMDRs and SMIRRs to reflect the updated evidence in response to interrogatories from Board staff and VECC.⁴

Board staff submits that it has no issues with the updated evidence set out above.

Smart Meter Costs

<u>Costs</u>

STEI stated that the total cost for the smart meter project was \$3,485,033 as of December 31, 2011.⁵ STEI also stated that this amount represents 100% of the costs for the project.⁶

STEI stated that it has benefitted from economies of scale.⁷ In response to an interrogatory it stated that this was achieved by:⁸

• Participating in the Ontario Utilities Smart Meter working group;

⁴ ibid

⁵ Application page 3

⁶ Response to Board staff Interrogatory 2

⁷ Application page 3

⁸ Response to VECC Interrogatory 3 a.

- Participating in the London Hydro Automated Meter Infrastructure RFP; and
- Membership in the Utility Collaborative Service ("UCS") group.

Through these groups STEI stated that it was provided with a significant degree of cost control, best possible pricing and efficient problem solutions through cooperation.

STEI also stated that it applied for, and received, a \$30,000 Scientific Research and Experimental Development tax refund which it credited to the project.

Customer Repairs

In response to an interrogatory, STEI stated that it repaired 39 meter bases and incurred \$9,030 in total for repairs to customer-owned equipment.⁹ The costs were not recorded in a separate sub-account of Account 1556 – Smart Meter OM&A Variance Account, in accordance with the Board's direction arising from its Decision on the Combined Smart Meter Proceeding.¹⁰ STEI did separately track the costs in a separate Excel spreadsheet. It is not clear to Board staff as to whether the costs have already been expensed to operations in a prior year, or whether they are being deferred to be collected in future revenues. Board staff submits that, if the costs have been expensed in prior years, then the amount is not significant enough for an out of period adjustment. However, if the costs are deferred, Board staff submits that the costs should be included in a separate subaccount of Account 1556 and included in the calculation of the SMDRs.

Costs Beyond Minimum Functionality

STEI incurred costs for beyond minimum functionality. STEI stated that it invested \$28,110 for a 3-phase analyzer which was required to replace the existing analyzers. The existing analyzers would not work on smart meters. Board staff agrees with STEI and takes the position that this is an appropriate and justified incremental cost due to the conversion to smart meters.

⁹ Response to Board staff Interrogatory 6

¹⁰ Combined Proceedings Decision with Reasons EB-2007-0063, August 8, 2007, page 17

The remainder of the costs beyond minimum functionality is \$49,207 in OM&A. These are costs associated with CIS System changes and Business Process Redesign. The CIS changes were to handle the mass introduction of smart meters, TOU billings, and web presentment. In response to an interrogatory, STEI stated that the costs for web presentment were \$16,135.¹¹

STEI also installed 172 Smart meters in the GS>50 kW class at an investment of \$126,253.

Board staff submits that the expenses incurred for TOU implementation and MDM/R integration were required to complete the smart meter program. The Board has allowed these expenses and web presentment expenses in the past in other smart meter applications.¹²

Board staff notes that the Board has approved costs for smart meters for GS>50 kW in other applications and points out that the unit cost for the GS>50 kW class is \$734.03.^{13 14} This is lower than the unit cost that Board staff has reviewed in the Elenchus application.

Board staff has prepared the following from the record:

| Costs Beyond Minimum Functionality | | | | |
|------------------------------------|-----------|--|--|--|
| Capital | \$420,157 | | | |
| OM&A | \$49,306 | | | |
| Total | \$469,463 | | | |
| Meters | 16,459 | | | |
| Unit Cost (\$/Meter) | \$28.52 | | | |

Board staff submits that this amount is influenced by the investments in smart meters for GS>50 kW. When considered overall with the costs for minimum functionality, as shown below in the **Smart Meter Unit Costs** table, the net result

¹⁴ Response to VECC Interrogatory 5; (\$126,253 ÷ 172 = \$734.03)

¹¹ Response to VEC Interrogatory 6

¹² Midland Power Utility Corporation, EB-2011-0434; Thunder Bay Hydro Electricity Distribution Inc. EB-2012-0015

¹³ Horizon Utilities Corp. EB-2011-0417; Burlington Hydro Inc. EB-2012-0081; and PUC Distribution Inc. EB-2012-0084

is a unit cost Board staff finds reasonable. Board staff submits that the costs beyond minimum functionality are appropriate, having been invested in functionality the Board has previously approved, and because the total unit costs are in line with unit costs approved for other distributors.

Total Unit Costs

In the Application STEI provided a table showing the total unit cost for its smart meter programme of \$211.74.¹⁵ Based on the details in the Model and an interrogatory response, Board staff has produced the following table:¹⁶

| Smart Meter Unit Costs | | | | |
|------------------------|----------------|-------------------|--|--|
| 1 | CAPEX | \$2,847,619 | | |
| 2 | OPEX | \$167,951 | | |
| 3 | Sub Total | \$3,015,570 | | |
| 4 | Meters | 16,287 | | |
| 5 | Min \$/meter | \$185.15 | | |
| | | | | |
| 6 | Beyond CAPEX | \$420,157 | | |
| 7 | Beyond OPEX | \$49 <i>,</i> 307 | | |
| 8 | Total Beyond | \$469,464 | | |
| 9 | Total | \$3,485,034 | | |
| 10 | Meters | 16,459 | | |
| 11 | Total \$/Meter | \$211.74 | | |

Lines 1 - 3 are from the Model and are the costs for minimum functionality as set out by the Board in the Combined Hearing.¹⁷ Lines 6 - 8 are the costs beyond minimum functionality from the Model. Installing smart meters on customers in the GS>50 kW class is defined as a cost beyond minimum functionality, and therefore the meter count in line 10 is greater than the meter count in line 4 by the 172 GS>50 kW installations.

¹⁵ Application page 24

¹⁶ Response to VECC Interrogatory 5

¹⁷ Combined Proceedings Decision with Reasons EB-2007-0063, August 8, 2007

For comparison purposes, Board staff observes that the Board provided updated unit costs in its report, "*Sector Smart Meter Audit Review Report*", dated March 31, 2010, in which the review period was January 1, 2006 to September 30, 2009. The average total cost per meter (capital and OM&A) is \$207.37 (based on 3,053,931 meters (64% complete) with a total cost of \$633,294,140 as at September 30, 2009).

The Board followed up on this review on October 26, 2010 and issued a letter to all distributors requiring them to provide information on their smart meter investments on a quarterly basis. The first distributors' quarterly update represented life-to-date investments in smart meter implementation as of September 30, 2010. As of this date, the average total cost per meter was \$226.92.

Based on the industry total averages and trend, Board staff does not take issue with the total average cost claimed by STEI.

Rate Riders

Cost Allocation

STEI filed a cost allocation of its historical costs supporting its proposed SMDRs by rate class. It also filed an allocation of its forecast 2012 cost which underpinned the calculation of the proposed SMIRRs by class. STEI stated that its calculations are based on a similar calculation approved by the Board in Power Stream's smart meter application EB-2010-0209.¹⁸ STEI stated that the:

- Allocation of interest and equity return, and depreciation is based on the direct meter costs by class;
- Allocation of OM&A is based on the number of meters by class;
- Allocation of PILs is based on the revenue requirement before PILs by class; and
- Allocation of revenues is on a class specific basis.

¹⁸ Application page 20

Board staff submits that the allocations are appropriate and have been accepted by the Board in other Applications.¹⁹

Implementation

STEI has proposed that the SMDRs be in effect for a 24 month period; May 1, 2012 to April 30, 2014. STEI has also proposed that the SMIRR be implemented on May 1, 2012 and remain in place until new rates are established in its next cost of service application scheduled for 2015. In response to interrogatories, STEI updated its proposal for alternative effective and implementation dates.²⁰

STEI provided 2 sets of updated SMDRs; the first was based on an implementation date for the SMDRs of December 1, 2012, and collection over 17 months. The second set was for an implementation date for the SMDRs of January 1, 2012, and collection over 16 months. STEI calculated these riders to include the updates to the evidence mentioned above.

STEI also provided updated SMIRRs based on the same updates to the evidence. STEI is not changing the requested effective date, and expects to implement the rates concurrently with the SMDRs. The resulting riders are:

| Updated Rate Riders | | | | | |
|---------------------|---|--|--|---|--|
| | December 1, 2012 | | Janua | rry 1 2013 | |
| Class | \$/Mtr/Mth | Period | \$/Mtr/Mth | Period | |
| <u>1DR</u> | | | | | |
| Residential | 0.28 | 17 months | 0.42 | 16 months | |
| GS<50 kW | 3.71 | 17 months | 4.24 | 16 months | |
| GS>50 kW | 9.62 | 17 months | 10.80 | 16 months | |
| <u>1IRR</u> | | | | | |
| Residential | 2.02 | to 2015-04-30 | 2.02 | to 2015-04-30 | |
| GS<50 kW | 4.66 | to 2015-04-30 | 4.65 | to 2015-04-30 | |
| GS>50 kW | 9.14 | to 2015-04-30 | 9.12 | to 2015-04-30 | |
| | <u>IDR</u> Residential GS<50 kW GS>50 kW <u>IIRR</u> Residential GS<50 kW | Class Decemb Class \$/Mtr/Mth IDR Residential 0.28 GS<50 kW 3.71 GS>50 kW 9.62 IIRR Residential 2.02 GS<50 kW 4.66 | December 1, 2012 Class \$/Mtr/Mth Period IDR 0.28 17 months GS<50 kW | Class \$/Mtr/Mth Period \$/Mtr/Mth 1DR 0.28 17 months 0.42 GS<50 kW | |

Updated Rate Riders

¹⁹ Peterborough Distribution In.c EB-2012-0008

²⁰ Responses to Board staff Interrogatory 9 and VECC Interrogatory 12

In calculating the SMDRs, STEI included the foregone SMIRR revenues for the period from its proposed effective date of May 1, 2012 up to and including the month prior to the implementation date for the recalculated SMDRs. Board staff points out that the Board has, in recent decisions, established mechanisms for distributors to recover the foregone revenues from the SMIRR where the SMDR and SMIRR could not be implemented on the May 1, 2012 date.²¹ Board staff submits that STEI's proposal for updated riders is consistent with this accepted methodology.

Determining the appropriate implementation date depends on the timing of the issuance of the Decision in this proceeding and the last date on which STEI can update its billing system in order to bill for the first of the month. Board staff submits that STEI address this matter in its Reply Submission.

Stranded Meters

STEI is not seeking disposition of its stranded meters in this Application, stating that the assets continue to be accounted for in rate base. ²² In response to an interrogatory, STEI confirmed that stranded meters continue to be depreciated until disposition.²³ STEI stated that its stranded meter costs are estimated to be \$590,000 at December 31, 2014. This would be addressed for disposition in its next cost of service application expected for 2015 rates. STEI also stated that it has included the proceeds from the scrapped meters in account 1555 as an offset to the capital costs of the meters, in accordance with the Board's Guidelines G-2011-0001. Board staff submits that this is an appropriate treatment for stranded meters.

²¹ For example, Decision and Order EB-2012-0039, regarding Orangeville Hydro, issued May 24, 2012; Decision and Order EB-2012-0260, regarding Festival Hydro Inc., issued August 13, 2012; Decision and Order EB-2012-0086, regarding Cambridge and North Dumfries Hydro, issued July 26, 2012; and Decision and Order EB-2012-0187, regarding London Hydro, issued July 26, 2012.

²² Application, page19

²³ Response to Board staff interrogatory #7

Operational Efficiencies and Cost Savings

STEI has identified annual efficiencies of \$15,000 as a result of changing from manual meter reads.²⁴ STEI has stated that it did not include these savings in its Application.²⁵ Board staff suggests that with full deployment of smart meters and a few years of experience operating the meters, further efficiencies might be found. STEI is not expected to file its next cost of service application until 2015. By that time, it is possible that more operational efficiencies would have been found. Board staff submits that STEI should be prepared to address any operational efficiencies due to smart meter and TOU implementation in its next cost of service rebasing application.

STEI did apply for, and received, a \$30,000 Scientific Research and Experimental Development tax refund which it credited to the project. This is a onetime tax refund applied in the time period in which it was incurred. Board staff submits STEI has appropriately applied this tax refund to reduce the SMDR.

Subject to the above comments, Board staff submits that STEI's Application is consistent 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 -

²⁴ ibid

²⁵ Response to VECC Interrogatory 7