



ONTARIO ENERGY BOARD

STAFF SUBMISSION

2010 ELECTRICITY DISTRIBUTION RATES

PowerStream Inc.

EB-2010-0209

October 1, 2010

INTRODUCTION

PowerStream is a licensed electricity distributor serving customers in Alliston, Aurora, Barrie, Beeton, Bradford West Gwillimbury, Markham, Penetanguishene, Richmond Hill, Thornton, Tottenham and Vaughan. PowerStream was one of the thirteen licensed electricity distributors that were authorized by regulation in 2006 to conduct smart meter activities, and was party to the Ontario Energy Board's (the "Board's") combined proceeding in relation to smart meters (EB-2007-0063).

PowerStream operates two separate rate zones following its amalgamation with Barrie Hydro Distribution Inc. in December 2008. The PowerStream South rate zone includes the communities of Aurora, Markham, Richmond Hill and Vaughan. The PowerStream North rate zone includes the communities of Alliston, Barrie, Beeton, Bradford West Gwillimbury, Penetanguishene, Thornton and Tottenham. The application for disposition of smart meter costs covers only smart meters deployed in the South zone and would, if approved, only be recovered from customers in PowerStream's South zone.

The Vulnerable Energy Consumers' Coalition ("VECC") was granted intervenor status. The Board received four letters of comment.

In Procedural Order No. 1, issued on July 27, 2010, the Board stated its intention that it would proceed by way of a written hearing. The Board issued a Decision on Confidentiality on August 5, 2010 granting PowerStream's request for confidentiality on purchase, installation and service agreements between PowerStream and its suppliers. In Procedural Order No. 2, issued on September 3, 2010, the Board provided dates for a supplemental round of interrogatories and established timelines for written submissions by the parties.

This submission by Board staff is in accordance with Procedural Order No. 2, and is intended sets out the Board's policy and practice and to offer options for consideration by the Board with respect to issues raised in PowerStream's application. Board staff's submission addresses the following issues:

- Smart Meter Rate Riders and Funding Adders – General;
- Prudence Review of Smart Meters Installed in 2008 and 2009;
- Smart Meter Incremental Revenue Requirement Rate Rider;

- Smart Meter Disposition Rate Rider; and
- Smart Meter Funding Adder.

Smart Meter Rate Riders and Funding Adders – General

Background and Definition

A general element raised in this application, and which has arisen in certain other applications seeking disposition of smart meter costs outside of a cost of service rebasing application, is the number of rate riders and funding adders involved, and the purpose of each of them. The terminology has also changed over time and has differed in individual cases. Board staff offers the following background and definitions to assist the Board and the parties in understanding and addressing the various rate riders and rate adders. All of the described rate adders and rate riders are applicable to PowerStream's application.

Smart Meter Funding Adder

The smart meter funding adder was introduced in the Board's decisions for 2006 electricity distribution rates ("2006 EDR"), through implementation of the Board's decision in the 2006 EDR generic hearing (Board File No. EB-2005-0529). The funding adder was intended to provide "seed funding" for the smart meter deployment as directed by the Provincial Government and to help to smooth rate impacts later on.

Revenues received for the smart meter funding adder are recorded in a sub-account of Deferral/Variance Account 1555 – Smart Meter Costs – Capital. These amounts are used to offset the revenue requirement of installed smart meters when disposition of the smart meter related deferral accounts is sought. Operating costs, used for the calculation of revenue requirement are recorded in Deferral/Variance Account 1556 – Smart Meter Costs – Operating.

A smart meter funding adder can still apply following the approval of the Board to dispose of current smart meter costs. The smart meter funding adder would provide funding for smart meters remaining to be deployed. When a distributor has fully deployed smart meters to residential and small commercial customers in accordance with O.Reg. 425/06, the smart meter funding adder would cease.

Smart Meter Disposition Rider

A distributor may seek cost recovery of installed smart meter costs by requesting the disposition of the balances in accounts 1555 and 1556, on the basis that the costs were necessary and prudent. The revenue requirement associated with smart meters consists of capital-related costs (cost of capital, depreciation and related taxes) and O&M expenses in the applicable period. Pursuant to Guideline G-2008-0002, these costs need to be audited when applying for the recovery of smart meter costs. When a distributor receives approval to dispose of the smart meter deferral account balances, a disposition rider is established to recover or refund the balance of accounts 1555 and 1556 over a specified time period (i.e. with an identified sunset date).

The balances in accounts 1555 and 1556 can then be used to track ongoing smart meter costs related to smart meters installed in future periods, and funding adder revenues, until such time as an application is made for disposition for these newly deployed smart meters.

Smart Meter Incremental Revenue Requirement Rate Rider

When smart meter disposition occurs as part of a cost of service application, the recovery of ongoing costs is addressed by means of including the approved smart meter capital costs and accumulated depreciation along with OM&A expenses, into the revenue requirement.

When an application for smart meter disposition is made outside of a cost of service application, a separate rate rider is established to provide a proxy for how the revenue requirement would be determined in a cost of service proceeding. This incremental revenue requirement rate rider is to remain in effect until the time of rebasing where the approved smart meter costs will be included in the revenue requirement. At that point, the incremental revenue requirement rate rider for the subject set of installed smart meters would cease.

The terminology has changed over time. This rider has been referred to as a “permanent smart meter rate rider”, “smart meter disposition rider (2)”, and “proxy rate rider”. Board staff has used the term “smart meter incremental revenue requirement rate rider” in this case, a more lengthy term but one which may more accurately describe its derivation and purpose.

Prudence Review of Smart Meter Installed in 2008 and 2009

Background

O.Reg. 426/06: Smart Meters: Cost Recovery was issued by the Provincial Government to provide guidance to the Board in approving costs that distributors have incurred to deploy smart meters and associated infrastructure. In part, O.Reg. 426/06 states:

Cost recovery, general

1. (1) In relation to the acquisition of smart meters, a distributor may recover its costs relating to functionality that does not exceed the minimum functionality adopted in Ontario Regulation 425/06 (Criteria and Requirements for Meters and Metering Equipment, Systems and Technology) made under the *Electricity Act, 1998*, subject to final approval by the Board and the Board's review and determination that the agreement entered into for the acquisition is economically prudent and cost effective. O. Reg. 234/08, s. 1 (1).

(1.01) In determining whether an agreement referred to in subsection (1) is economically prudent and cost effective, the Board's review shall take into consideration, but not be limited to,

- (a) all costs associated with the agreement; and
- (b) the costs of the agreement relative to any agreements entered into by the distributor and other distributors for comparable acquisitions. O. Reg. 234/08, s. 1 (1).¹

Due to recent technological developments and the costs for the adopted technology, the approach has largely been an exercise of benchmarking costs per installed meter against costs seen in prior smart meter applications for the distributor or for similar distributors. This approach was first used by the Board in its review of smart meter costs for named distributors (which includes PowerStream) in the combined smart meter proceeding conducted under Board File No. EB-2007-0063. This approach has been continued in subsequent applications for disposition of smart meter costs.

¹ O.Reg. 426/06, as amended by O.Reg. 234/08, s. 1 (part)

Submission

In Table 2: Comparison of Estimated to Actual Capital Costs on page 16 of its application, PowerStream has documented actual smart meter installation costs of \$121.63 for 2008 and \$147.43 for 2009, for an average capital cost per installed smart meter of \$137.43. Table 3: Comparison of Estimated to Actual OM&A Costs documents \$20.98 per meter for 2008 and \$13.18 per meter for 2009, for an average of \$16.21. On a combined basis of capital and OM&A costs, this works out to \$142.67 for 2008 and \$160.58 for 2009, averaging \$153.63 over the two year period.

The following table summarizes the comparable cost (capital and OM&A) per meter for urban distributors named as applicants to the combined smart meter proceeding in mid-2007 (Board File No. EB-2007-0063). These distributors serve as comparators for assessing the PowerStream's smart meter costs. While PowerStream participated in the combined smart meter proceeding as well, it had not installed smart meters for the period for which costs were reviewed, and so no cost per installed meter could be calculated.

Table 1: Cost per Installed Smart Meter for Urban Distributors²

Distributor	Capital and Operating Cost per Installed Smart Meter
Toronto Hydro-Electric System Limited	\$126.34
Hydro One Brampton Networks Inc.	\$148.04
Hydro Ottawa	\$135.58
Enersource Hydro Mississauga	\$144.20
Milton Hydro	\$126.83
Newmarket Hydro (now Newmarket-Tay Hydro)	\$123.59

Costs may be expected to potentially go down as production costs and operating efficiencies are realized. However, there can also be inflationary pressures on the costs of production (i.e. cost of labour). Distributors may also find that costs may increase as they deploy smart meters to locations harder to reach, or where rework (i.e. changing the meter base) may involve more time, labour and material. Installation of more expensive meters for small commercial customers, as PowerStream is now focussing on, is a major factor on increasing per meter installation costs.

² Compiled from Appendix A of the Board's Decision with Reasons, Board File No. EB-2007-0063, August 8, 2007.

In light of the above, Board staff takes no issue with PowerStream’s documented costs for smart meters installed in 2008 and 2009.

Smart Meter Incremental Revenue Requirement Rate Rider

(i) Revenue Requirement

Background

PowerStream proposes that a smart meter incremental revenue requirement rate rider (referred to by PowerStream as the “smart meter disposition rate rider”) be in effect from November 1, 2010 until the time of its next rebasing application in order to prospectively recover the revenue requirement associated with smart meters deployed in 2008 and 2009.

This smart meter incremental revenue requirement rate rider is derived from the 2010 revenue requirement of \$4,131,557 as calculated using a model based on the Board’s 2007 EDR Smart Meter Rate Adder Calculation Model including projected OM&A costs of \$1,198,300, as documented in Table 2 below.

Table 2: Revenue Requirement Calculation for 2010

Rate Base	Amount
Net Fixed Assets	\$ 16,941,365
Working Capital Allowance	\$ 179,745
Total	\$ 17,121,110
Revenue Requirement	
Short Term Interest	\$ 14,176
Long Term Interest	\$ 564,723
Return on Equity	\$ 674,572
OM&A	\$ 1,198,300
Amortization	\$ 1,416,245
Grossed-up PILs	\$ 263,541
Total	\$ 4,131,557

In response to Board staff interrogatory # 1(b), PowerStream stated that the incremental operating costs consist mainly of: i) the monthly cost of operating the advanced metering infrastructure (“AMI”) that collects data from the smart meters and communicates this to the MDM/R, less any savings realized on conventional meter readings; ii) monthly charges from the Provincial MDM/R (although there are no amounts in actual costs for 2008 and 2009, but estimated costs included for 2010); and iii) communications costs, including information packages and handling of customer calls regarding smart meters and time-of-use (“TOU”) billing.

Submission

Guideline G-2008-0002, and other documents issued by the Board, do not to date provide specific guidance on the calculation of the incremental revenue requirement to recover current period costs for approved, installed smart meters. To date, distributors have used a model based on the Board’s 2007 EDR Smart Meter Rate Adder Calculation Model.

Board staff has no concerns with the smart meter revenue requirement of \$4,131,557 used to calculate a rate rider to recover the incremental revenue requirement associated with smart meters installed in 2008 and 2009.

(ii) Cost Allocation

Background

Guideline G-2008-0002 states that in an application made for smart meter cost recovery in a non-cost of service proceeding, a distributor will need to file the following information in relation to the smart meter incremental revenue requirement rate rider:

- calculation of the disposition rate rider for recovery of capital and ongoing operating costs; and
- the methodology for allocating the disposition rider to different customer classes.

Guideline G-2008-0002 also states that the smart meter disposition rate rider provides a proxy for how the revenue requirement would be determined in a cost of service proceeding.

Submission

PowerStream proposes to allocate the smart meter incremental revenue requirement to the Residential and General Service less than 50 kW customer rate classes. In response to Board staff IR #8, PowerStream provided the rationale for the allocation basis used to apportion the revenue requirement to the Residential and General Service less than 50 kW customer rate classes. In response to VECC IR #8(a), PowerStream indicated that its proposal applies the “principles of cost causality; matching of costs and benefits; and avoidance of undue cross subsidization”. The following summarizes PowerStream’s proposed approach:

- Return (deemed interest plus return on equity) and Amortization have been allocated between the customer classes based on the capital costs of the meters installed for each class;
- OM&A has been allocated based on the number of meters installed for each class;
- PILs have been allocated based on the revenue requirement allocated to each class before PILs.

Board staff submits that PowerStream’s cost allocation methodology is reflective of cost causality and provides a reasonable proxy for how the revenue requirement would be determined in a cost of service application.

Smart Meter Disposition Rate Rider (Recovery of Actual Costs for Installed Smart Meters)

(i) Revenue Requirement

Background

PowerStream also proposed that a rate rider be established to recover the revenue requirement over the January 1, 2008 to October 31, 2010 period of smart meters installed in 2008 and 2009. The rate rider would take into account the value of the smart meter funding adder collected over the January 1 ,2008 to April 30, 2010

period. The net result is a smart meter true-up amount of \$549,068 that would be recovered over the November 1, 2010 to April 30, 2011.

Table 3 below summarizes the revenue requirement associated with these installed smart meters and the value of the smart meter funding adder collected on the 2008 and 2009 meters over the period January 1, 2008 to April 30, 2010.

Table 3: Actual Smart Meter Cost Recovery Model

Rate Rider to Recover Actual Smart Meter Costs to December 31, 2009

Revenue Requirement 2008	\$1,650,030
Revenue Requirement 2009	\$3,004,081
Revenue Requirement 2010 (to Oct 31/10)	\$3,442,964
Revenue Requirement Total	\$8,097,075
Smart Meter Rate Adder	(\$7,509,327)
Carrying Cost	(\$38,680)
Smart Meter True-up	\$549,067

Metered Customers 249,715

Rate Rider to Recover Smart Meter Costs \$ 0.37

Recovery period November 1, 2010 to April 30, 2011

This revenue requirement calculation includes OM&A costs for 2010 associated with smart meters installed in 2008 and 2009. PowerStream states that smart meter capital and OM&A costs, with the exception of the projected 2010 OM&A costs of \$1,198,300 related to 2008 and 2009 smart meters, for which disposition and recovery is being sought, are actual costs taken from PowerStream’s financial records as at December 31, 2009. The December 31, 2009 balances in the smart meter deferral accounts have been audited by PowerStream’s external auditors.

Submission

Board staff notes that the 2010 OM&A costs included in the calculation of the Smart Meter Disposition Rider are forecasts rather than actuals and have therefore not been audited by an external auditor.

In response to Board staff interrogatory #1 a), PowerStream stated that Guideline G-2008-0002 indicates that the calculation of the smart meter rate rider, referred to as the disposition rider is intended to be similar to the calculation of the revenue

requirement related to smart meter costs that would occur in a cost of service application. Guideline G-2008-0002 states:

When a distributor applies for and receives an order of the Board providing disposition of the smart meter deferral accounts in a non-cost of service proceeding, a disposition rider will be approved to provide recovery. The smart meter disposition rider provides a proxy for how the revenue requirement would be determined in a cost of service proceeding...

A distributor can rely on the order obtained in the non-cost of service proceeding in subsequent rate proceedings as evidence that the Board has reviewed and approved the underlying costs. In its next cost of service application, the distributor should include the approved smart meter capital and operating costs in its application and seek approval for the discontinuation of the smart meter disposition rider.³

Board staff notes that the smart meter disposition rate rider referenced by the applicant relates to the smart meter disposition rate rider that acts as a proxy for how the revenue requirement would be determined in a cost of service proceeding (i.e. what Board staff has defined as the “smart meter incremental revenue requirement rate rider”). For that rate rider, PowerStream is correct in assuming that projected ongoing OM&A costs for the installed smart meters are included in the calculation of the incremental revenue requirement.

However, regarding the disposition of the balances in PowerStream’s smart meter related deferral account balances through a smart meter disposition rate rider, Guideline G-2008-0002 states:

When applying for recovery of smart meter costs, a distributor should ensure that all cost information has been audited, including the smart meter related deferral account balances.⁴

In response to Board Staff interrogatory #2(b) the Applicant provided an updated smart meter disposition rate rider calculation, excluding projected 2010 OM&A costs

³ Guideline G-2008-0002: Smart Meter Funding and Cost Recovery, October 22, 2008, page 13

⁴ *Ibid*, page 12

as well as offsetting smart meter funding received through a smart meter funding adder from January 1, 2008 to December 31, 2009. This is summarized in Table 4 below.

Table 4: Smart Meter Disposition Rate Rider

	Per Application	Per Board Staff IRR #2(b)	Variance
Revenue Requirement 2008 (a)	1,650,030	1,650,030	0
Revenue Requirement 2009 (b)	3,004,081	3,004,081	0
Revenue Requirement 2010 (to Oct 31/20)(c)	3,442,964	2,430,763	-1,012,201
Revenue Requirement Total (d)=(a)+(b)+(c)	8,097,075	7,084,874	-1,012,201
Smart Meter Rate Adder (e)	-7,509,327	-6,480,690	1,028,637
Carrying cost (f)	-38,680	-37,227	1,453
Smart Meter True-up (g)=(d)-(e)-(f)	549,068	566,957	17,889
			0
Metered Customers (h)	249,715	249,715	0
Rate Rider to Recover Smart Meter Costs ((g)/(h))/6	0.37	0.38	0.01
<i>Recovery period November 1, 2010 to April 20, 2011</i>			

PowerStream submitted that it is more appropriate to use smart meter funding adder revenues up to April 20, 2010, rather than using December 31, 2009, even though the use of December 31, 2009 would be consistent with the approach used by the Board in PowerStream's 2009 EDR proceeding.

Board staff submits that the smart meter disposition rate rider that allows for the recovery and true-up of smart meter costs incurred by the applicant should be based on cost information that has been audited by an external auditor. Therefore, Board staff submits that the calculation of the smart meter disposition rate rider should be based on a total revenue requirement of \$7,084,874, which excludes unaudited, forecast OM&A cost for 2010. Similarly, Board staff submits that, for consistency, it would be appropriate that funding adder revenues to offset the smart meter actual and audited costs should represent the same period and be audited actuals as well. Funding adder revenues collected in 2010 will be dealt with when disposition of costs for smart meters installed in 2010 is applied for.

Board staff submits that this treatment, whereby funding adder revenues are for the same period as for the smart meter costs for which disposition is sought, would be

consistent with the treatment in PowerStream's 2009 EDR proceeding. As such Board staff submits that PowerStream's calculation of its smart meter disposition rate rider should include costs incurred up to December 31, 2009, offset by revenue received during the corresponding time period.

(ii) Cost Allocation

PowerStream proposed that the "smart meter true up" amount of \$549,068 be recovered from all metered customer rate classes over the November 1, 2010 to April 30, 2011 period. This results in a uniform rate rider of \$0.37 per metered customer per month.

Board staff notes that on the one hand, PowerStream proposes to prospectively recover the revenue requirement of the 2008 and 2009 installed meters on the basis of cost causality. On the other hand, PowerStream proposes that the "smart meter true-up" amount for these same smart meters be recovered uniformly from all metered customers.

Board staff submits that the smart meter revenue requirement for meter installed in 2008 and 2009 should be consistently allocated over time. Accordingly, Board staff submits that smart meter true-up costs up until December 31, 2009 should be allocated using the same cost allocation methodology used to calculate the smart meter incremental revenue requirement rate rider. As previously noted, Board staff is of the view that this approach is reflective of cost causality and provides a reasonable proxy for how the revenue requirement would be determined in a cost of service application.

Smart Meter Funding Adder Calculation

Background

PowerStream currently has a smart meter funding adder of \$1.81 per month per metered customer, approved by the Board in its Decision on PowerStream's 2010 distribution rates application (Board File No. EB-2009-0246). In this application, PowerStream seeks a revised smart meter funding adder of \$0.50 per month per metered customer. The revised smart meter funding adder reflects the removal of costs for smart meters installed in 2008 and 2009 and for which cost recovery will occur by means of the proposed smart meter disposition rate rider and the smart

meter incremental revenue requirement rate rider. The updated smart meter funding adder is based on smart meters to be installed in 2010.

In response to Board staff supplementary IR #2 a), PowerStream documented its costs for smart meters planned to be installed in 2010 for single-phase and three-phase commercial (GS < 50 kW) customers, showing a cost per meter for a single-phase customer of \$220.10 and that for a three-phase customer of \$543.25. The response to part c) of that same interrogatory response documents the reasons for the increased installation costs for both single-phase and three-phase serviced commercial customers. These include: harder access; increased travel time; scheduling work on weekends or early mornings to accommodate customers' schedules, resulting in increased overtime; and use of PowerStream's fully qualified staff to handle more complex situations.

While the costs of smart meters to be installed, particularly for GS < 50 kW customers, are higher than for typical residential smart meters, these are fewer in number.

In response to Board staff Supplementary IR #2 a), PowerStream has proposed a revised smart meter funding adder of \$0.41 per month per metered customer. The reduced smart meter funding adder is due to alternative sourcing and better information on the number of single-phase and three-phase smart meters to be installed.

Submission

Consistent with the Board's Decisions beginning in 2006 EDR and the Board's policy and practice, Board staff submits that it is appropriate that the smart meter funding adder continue to be collected from all metered customers. While over two-thirds of the smart meters to be installed are for GS < 50 kW customers, to date smart meter funding adders have been collected from commercial customers for smart meters that may have largely been installed for residential customers. Symmetry in treatment suggests that all metered customers should help to provide this "seed funding" if even it is now focussed on smart meters for GS < 50 kW customers. When the smart meter installations are completed and costs are both actual and audited, and PowerStream makes application for disposition, the costs for the smart meters being installed in 2010 will be subject to a prudence review.

Board staff submits that PowerStream's proposed revised smart meter funding adder of \$0.41 per month per metered customer is reasonable.

- All of which is respectfully submitted -