

2013 ELECTRICITY DISTRIBUTION RATES
Whitby Hydro Electric Corporation
Application for Disposition and Recovery of
Costs Related to Smart Meter Deployment

EB-2012-0479

STAFF SUBMISSION

March 14, 2013

INTRODUCTION

Whitby Hydro Electric Corporation (“WHEC”) is a licensed electricity distributor serving customers in the Town of Whitby. WHEC filed a stand-alone application (the “Application”) on December 27, 2012, seeking Board approval for the disposition and recovery of costs related to smart meter deployment to December 31, 2012, offset by Smart Meter Funding Adder (“SMFA”) revenues collected from May 1, 2006 to April 30, 2012. WHEC requested approval of proposed Smart Meter Disposition Riders (“SMDRs”) and Smart Meter Incremental Revenue Requirement Rate Riders (“SMIRRs”) effective May 1, 2013. 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 January 11, 2013. The Vulnerable Energy Consumers’ Coalition (“VECC”) requested and was granted intervenor status and cost award eligibility. Five letters of comment were received, and WHEC indicated that it had responded to four of the five. One letter of comment was not responded to due to lack of contact information.² The Notice of Application and Hearing established that the Board would consider the Application by way of a written hearing and set timelines for discovery and submissions.

Board staff and VECC filed interrogatories on February 12 and 13, 2013, respectively. WHEC filed its responses to all interrogatories on February, 28, 2013.

This submission reflects observations and concerns which arise from Board staff’s review of the record of the proceeding, including the original Application and updates as provided in response to interrogatories.

¹ On December 15, 2011, the Board issued *Guideline -2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition* (“Guideline G-2011-0001”). In preparing its Application, KWHI used Smart Meter Model, Version 2.21, issued in April 2012 for 2013 applications, along with Guideline G-2011-0001, and prepared its Application considering recent Board decisions on smart meter cost disposition and recovery.

² Response to Board staff interrogatory # 1

THE APPLICATION

Approvals Sought

In the Application filed on December 27, 2012, WHEC applied for the following approvals:

- A SMDR of (\$.67) per month for residential customers and \$12.60 per month for GS<50kW customers, to dispose of the deferred revenue requirement related to smart meters installed through December 31, 2012, net of the Smart Meter Funding Adder ("SMFA") revenues collected to April 30, 2012. The SMDR would be in place for a period of 1 year, from May 1, 2013 until April 30, 2014;³ and
- A SMIRR of \$2.21 per month for residential customers and \$7.21 per month for GS<50kW customers, to recover the annual revenue requirement associated with smart meters installed from the inception of the Smart Meter program through to December 31, 2012 including forecasted costs for 2013. The SMIRR would be in place from May 1, 2013 until December 31, 2014, the expected effective date for new rates as determined in WHEC's next cost of service Application, expected to be for January 1, 2015.⁴

Smart Meter Model Version 3.01WH

Board staff notes that WHEC used a customized version of the Smart Meter Model, Version 3.01WH, in its Application. Version 3.00 of the Smart Meter Model was prepared by Board staff and issued in June 2012 to distributors making cost of service applications for January 1, 2013 rates. Version 3.00 was designed to calculate the SMDR to recover smart meter costs to December 31, 2012, with the SMIRR then being based on the incremental revenue requirement for 2013, including forecasted 2013 capital and operational costs related to installed smart meters.⁵

³ Application, page 12

⁴ Application, page 15

⁵ Version 2.21 has subsequently been replaced by Version 3.00 of the Smart Meter Model, posted on the Board's website on June 28, 2012. Version 3.00 has been upgraded for Excel

Prior to filing its Application, WHEC was in contact with Board staff to discuss certain modifications needed for its circumstances. Board staff provided to WHEC the customized version 3.01WH to provide the necessary flexibility required by the utility, specifically to allow for the cost of capital to be adjusted to reflect the impacts arising from the delayed implementation of WHEC's 2010 cost of service rates application EB-2009-0274. All changes made by Board staff for this customized version for WHEC are documented in notes in the Excel model. Board staff notes that the calculations of the deferred and ongoing revenue requirement based on the smart meter costs, and the SMDRs and SMIRRs to recover the revenue requirement, are unaltered as compared to the standard Smart Meter Model. It is Board staff's submission that the calculations are consistent with the methodology employed in other applications for smart meter cost recovery and approved by the Board to date. As such, Board staff submits that WHEC's use of this customized version of the Smart Meter Model in this Application is appropriate.

Updated Evidence

WHEC revised its proposed SMDRs and SMIRRs in responses to interrogatories, with respect to the following, as documented in the response to Board staff interrogatory #14:

1. Inclusion of 2012 meters related to growth (updated number of meters and related capital and depreciation expenses) as per Board Staff IRR#2.
2. Updates to tax rates 2008-2010 (per Board Staff IRR#11).
3. Revision to incorporate the allocation of \$787 of SMFA interest charges between Residential and GS<50kW customers classes (per Board Staff IRR#13).
4. Revised classification of AMI maintenance expenses in 2013 to align with prior year costs (per VECC IRR#7(h)).

2010, and includes functionality to calculate class-specific SMDRs and SMIRRs, but the basic revenue requirement derivation is unchanged.

5. Revised classification of customer communication expenses to more appropriately match the nature of the costs incurred (per VECC IRR#7(k)).

The inclusion of 2012 growth-related smart meters was to ensure that WHEC be held whole with respect to the recovery of the 2012 revenue requirement of these smart meters. While the SMIRR would recover the revenue requirement from all customers with smart meters going forward until WHEC next rebases rates through a cost of service application, it would not recover the deferred revenue requirement for new 2012 growth for the period January 1 to December 31, 2012. Inclusion of these costs ensures that they are reflected in the deferred revenue requirement and recovered in the SMDR. Board staff considers this update to be appropriate.

Board staff takes no issue with the changes that WHEC has made in response to interrogatories from Board staff and VECC.

The proposed class-specific SMDRs and SMIRRs and the updated ones calculated in the response to Board staff interrogatory # 14 are summarized below:

Table 1: Original and Revised SMDRs and SMIRRs

Class	SMDR (\$/month, effective May 1, 2013 for 8 months)		SMIRR (\$/month, effective May 1, 2013 until the effective date of WHEC's next cost of service rebased rates)	
	Original	Revised	Original	Revised
		Board staff IR # 14		Board staff IR # 14)
Residential	(\$0.67)	(\$0.55)	\$2.21	\$2.20
GS < 50 kW	\$12.60	\$12.51	\$7.21	\$7.11

WHEC notes that its rate year aligns with the calendar year from January 1 to December 31. With the proposed effective date of May 1, 2013, WHEC notes that its proposed recovery for the SMDRs is eight months. It has shown calculations for the recovery of foregone SMDR and SMIRR revenues for the period January 1, 2013 to April 30, 2013 in the derivation of the SMDRs. Board staff takes no issue with this methodology and submits that it is appropriate to keep the utility whole with respect to deferred and ongoing cost recovery until the

utility next rebases. As such, Board staff takes no issue with the revised proposed SMDRs and SMIRRs.

Prudence of Smart Meter Costs

At Least 90% of Smart Meter Costs are Audited

In its Application, WHEC has sought recovery of costs related to smart meter deployment for existing customers up to December 31, 2012. WHEC documents that the majority of conversions occurred before 2011.⁶ Table 5 of the Application shows that 95.1% of the smart meter costs for which recovery is being sought are audited as of December 31, 2011. Even when growth-related 2012 capital expenditures of \$95,223,⁷ currently unaudited, are included, over 90% of the claimed costs are audited. Board staff submits that WHEC's Application complies with Guideline G-2011-0001 with regard to the expectation that at least 90% of the smart meter costs be audited actuals.

Aggregate Smart Meter Costs

In its Application, WHEC documented \$6,108,148 for capital and \$951,194 for OM&A expenses related to the deployment and operation of smart meters.⁸ These were updated to \$6,201,371 capital and \$951,194 OM&A as a response to interrogatories. As discussed earlier, the change in capital is primarily to reflect growth-related smart meters in 2012.

WHEC documented \$225,732 for materials and parts expensed for the repair and replacement of customer-owned equipment incurred during smart meter deployment. In accordance with the Board's policy, these costs were separately tracked in a sub-account of Account 1556.⁹

⁶ Application, page 6: "WHEC installed a total of 39,976 smart meters as December 2011 which represented 99.9% of its Residential and 99.0% of its GS < 50 kW rate classes."

⁷ See response to Board staff IR # 2 and discussion under "2012 and 2013 Smart Meter Costs" later in this Submission.

⁸ Application, page 7, Table 6

⁹ Application, pages 8-9, Table 9

WHEC had noted two incremental positions for a Systems Analyst and a Settlement Analyst position. In response to interrogatories, WHEC clarified that this was actually one incremental staff position (System/Settlement Analyst) and provided further explanation of the need for, roles and responsibilities of the staff position.¹⁰ The function of an additional position for a Sync Operator, provided under a service agreement with Util-Assist, is also explained in response to a Board staff interrogatory.¹¹ With the additional explanations provided in responses to interrogatories, Board staff takes no issue with the need for these positions and that they are incremental costs related to WHEC's smart meter program, including operationalization of TOU rates.

In response to VECC IR # 4, WHEC explained the process by which it determined that it was more cost effective to purchase its own AMI system and have it operated under service agreement by the AMI vendor. Whether a distributor decides to own and/or operate its AMI system is a matter that the utility's management will decide based on the utility's own situation, and will generally consider the size of the utility, its staff capabilities and the nature of its operating service territory. Board staff takes no issue with WHEC's explanation for purchasing its AMI system but having it operated by the service vendor under contract.

In its Application, WHEC has documented its procurement process and the process to become authorized for smart meter deployment in compliance with O.Reg. 427/06. WHEC documented how its adherence to the London Hydro RFP process. Board staff takes no issue with WHEC's explanations on these matters.

Costs Beyond Minimum Functionality

In its Application, WHEC documented \$237,088 for capital costs and \$295,043 for OM&A expenses "beyond minimum functionality".¹² Board staff observes that OM&A beyond minimum functionality is documented as \$283,977 in the updated

¹⁰ Responses to Board staff IR # 3 and # 4 a) and b).

¹¹ Response to Board staff IR # 4 a) and c)

¹² Application, page 8, Tables 7 and 8.

Smart Meter Model filed in response to Board staff IR # 14. Board staff submits that WHEC may wish to address this inconsistency in reply.

Capital and operating expenses for “beyond minimum functionality” are related to TOU implementation and related systems. Board staff takes no issue with WHEC’s evidence¹³ on the need for and prudence of these costs for beyond minimum functionality, and notes that the Board has considered and approved the recovery of similar costs in other applications for disposition of smart meter costs.

Costs per Smart Meter

In its Application, WHEC provided an analysis documenting that its costs per meter were \$146.59 for capital and \$162.97 for capital and OM&A.¹⁴ WHEC notes that it has omitted costs beyond minimum functionality for comparability to the costs documented in earlier proceedings, including from Appendix A of the Board’s Decision with Reasons EB-2007-0063 from the Combined Smart Meter Proceeding.

Board staff has calculated the following per meter costs, including “beyond minimum functionality” costs, both for the Application and as revised in response to interrogatories.

	Application	Revised (Board staff IR #14)
Smart Meter Capital Costs	\$ 6,108,148	\$ 6,201,371
Smart Meter OM&A Expenses	\$ 951,194	\$ 951,194
Total OM&A and Capital	\$ 7,059,342	\$ 7,152,565
Number of Smart Meters	40,051	40,621
Per Meter Costs		
Capital	\$ 152.51	\$ 152.66

¹³ See also response to VECC IR # 7 e)

¹⁴ Application, page 7

Capital and OM&A	\$	176.26	\$	176.08
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Board staff notes that these costs are well within the ranges that the Board has seen for most utilities serving urbanized areas¹⁵ and considers that these per meter costs are reasonable and supported by the documentation.

Further, Board staff observes that the proposed SMIRR is \$2.20/month for Residential customers and \$7.11/month for GS < 50 kW customers are lower than what the Board has reviewed and approved in many applications to date. The SMIRR is, by design, a proxy for the incremental increase in distribution rates to recover the annualized capital-related and operating costs of smart meters as if they were in rate base and operating expenses. The SMIRR is below the range of \$3 to \$4 that was originally estimated for residential smart meters (albeit on limited and preliminary data) in the Board's Report on smart meters in 2005, reflecting technological improvements and experience gained by manufacturers and the industry over time. Board staff submits that WHEC's proposed SMIRRs are indicative of the utility's efforts to effect the deployment and operation of smart meters to its residential and small general service customers in an efficient and cost effective manner.

Noting that WHEC became authorized to deploy smart meters through compliance with the London Hydro RFP process, as required in subsection 1. (1) 8 of O. Reg. 427/06,¹⁶ Board staff submits that WHEC has acted in accordance with the regulations in its processes for the procurement of smart meters and associated equipment and for services to install and operate the smart meters and associated equipment. As such, Board staff considers that the documented historical costs and the forecasted costs are necessary and reasonable.

¹⁵ In Appendix A of the Board's Decision with Reasons EB-2007-0063, issued August 8, 2007, with respect to the combined smart meter proceeding, the Board documented the per meter cost for the 13 applicant utilities, including Horizon, then authorized for smart meter deployment. For "urban" distributors for which data was available, the per meter costs ranged from \$123.59 to \$189.96. Similar patterns and ranges for utilities serving urban areas as those observed in Appendix A of the Decision with Reasons EB-2007-0063 have been observed in more recent cases in which smart meter costs have been or are being considered by the Board.

¹⁶ Application, page 4. A copy of the letter from the Fairness Commissioner is filed as Appendix A to the Application.

2012 and 2013 Costs

In the Application as originally filed, WHEC included costs for conversions in 2012, but not for growth-related smart meter installations in 2012 or 2013. WHEC stated:

WHEC has not included any 2012 installations of Smart Meters based on growth of Residential and GS<50 kW customers. Neither the capital cost nor the operating cost of these meters is included for recovery sought in this application. For 2012 and beyond, the capital and operating costs for growth related smart meters will be included in the 2015 Cost of Service Rate Application. WHEC implemented Time of Use (TOU) rates effective December 2011 according to the mandated requirements.¹⁷

In response to Board staff IR # 2 b), WHEC updated its evidence to include \$93,223 for capital expenditures for new (i.e. growth related) Residential (550) and GS < 50 kW (20) customers in 2012. Board staff submits that this is appropriate to ensure that the SMDR and SMIRR appropriately recover the capital-related costs (i.e. depreciation, return on capital and related taxes/PILs) of these smart meters until WHEC next rebases its rates. WHEC noted that no changes were made to OM&A expenses for growth as any incremental OM&A expenses would not be material.

Board staff submits that WHEC's approach, as revised in response to Board staff IR # 2, is consistent with what the Board has approved for final smart meter disposition in recent applications. In PowerStream's 2011 smart meter application (EB-2011-0128), the utility included costs to the end of the bridge year, 2011. The Board has also accepted this treatment in recent cost of service¹⁸ and stand-alone smart meter¹⁹ applications. As discussed earlier in this

¹⁷ Application, page 6

¹⁸ e.g. Decision and Order EB-2010-0135, regarding Kenora Hydro's 2011 cost of service rates application, and Decision and Order EB-2011-0054, regarding Hydro Ottawa Limited's 2012 cost of service rates application.

submission, this inclusion of 2012 growth-related costs has been reflected in the revised Smart Meter Model and the resulting SMDRs and SMIRRs. As WHEC's Application is for a 2013 test year, 2012 is the bridge year. Board staff submits that the inclusion of all costs (non-growth-related and growth-related) for 2012 is analogous to the treatment in PowerStream and other smart meter cost recovery applications, and is appropriate to ensure full recovered of all deferred costs.

WHEC has not included the forecasted growth for 2013 nor the associated capital costs (i.e. procurement and installation of smart meters for new customers). WHEC submits that its smart meter program is now completed. Board staff submits that WHEC's approach is reasonable. WHEC will be compensated for costs for new smart meters related to growth in 2013 (and in future years until WHEC rebases), as new customers will also be paying the SMIRR which recovers the annualized revenue requirement of capital-related and operating expenses. As noted in WHEC's Application, incremental operating expenses for new, growth-related smart meters are not material in WHEC's estimation.

Board staff notes that the Board, in the majority of recent decisions regarding approval for disposition and recovery of smart meter costs, has determined that no future smart meter costs should be recorded in either Account 1555 (capital) or Account 1556 (operating expenses) going forward. Only the sub-account of Account 1555 for recording the stranded meters, including accumulated depreciation recovered until the utility next rebases rates, should continue to be used. Board staff submits that this accounting treatment is also appropriate for WHEC's Application which relates to 100% smart meter deployment.

¹⁹ e.g. Decision and Order EB-2012-0086, regarding Cambridge and North Dumfries Hydro Inc.'s 2012 smart meter cost recovery application.

Other Matters

Stranded Meters

WHEC is proposing not to dispose of stranded meters at this time, but to deal with disposition in its next rebasing application, scheduled for 2015 rates.²⁰ In response to Board staff IR # 5, WHEC stated that it continues to book the accumulated depreciation of stranded meters. However, WHEC stated that it was unable to provide the estimated net book value ("NBV") of stranded meters separately for Residential and GS < 50 kW classes due to its year-end process. This response is concerning to Board staff because utilities have known about the need to have the book value of stranded meters for a considerable time and other utilities have been able to quantify the value. In its reply submission WHEC should provide the Board further explanation of why it is unable to meet this accounting requirement.

Subject to the above comment, Board staff submits that WHEC's proposal is consistent with Guideline G-2011-0001. In WHEC's next cost of service application (possibly for 2015 rates) the utility 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.

Operational Efficiencies Realized due to Smart Meter Deployment

In its Application and response to interrogatories,²¹ WHEC has noted that any cost savings and operational efficiencies have not been reflected in the application. WHEC states that the main saving will be with respect to cost savings from the elimination of manual meter reads for most customers. It further states that, at the time of its next cost of service application, currently scheduled for rates to be effective January 1, 2015, it should be in a better position to address any cost savings and efficiencies from smart metering and TOU pricing.

²⁰ Application, page 3

²¹ Application, page 8 and response to Board staff interrogatory # 6.

Board staff takes no issues with WHEC's initiatives in this regard, but submits that WHEC should be prepared to address any operational efficiencies due to smart meter and TOU implementation in its next cost of service application.

Subject to the above comments, Board staff submits that WHEC's Application is consistent with Guideline G-2011-0001, 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 deployment and operation.

- All of which is respectfully submitted -