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BY E-MAIL

March 20, 2012

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, Suite 2700
Toronto ON M4P 1E4

Dear Ms. Walli:

**Re: Horizon Utilities Corporation
Application for Disposition and Recovery of Costs Related to Smart Meter
Deployment
Board File Number EB-2011-0417**

Pursuant to the process documented in the Notice of Application and Hearing, please find attached Board staff's submission on the rate application for the disposition and recovery of costs related to smart meter deployment filed by Hydro Utilities Corporation on December 13, 2011.

Please forward the attached to Horizon Utilities Corporation, its legal counsel and to registered parties to this proceeding.

Yours truly,

Original signed by

Keith C. Ritchie
Project Advisor, Applications & Regulatory Audit

2012 ELECTRICITY DISTRIBUTION RATES

Horizon Utilities Corporation

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

EB-2011-0417

STAFF SUBMISSION

March 20, 2012

INTRODUCTION

Horizon Utilities Corporation (“Horizon”) is a licensed electricity distributor serving customers in the Cities of Hamilton and St. Catharines. Horizon filed a stand-alone application (the “Application”) with the Board on December 13, 2011, seeking 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. Horizon 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 its Letter of Direction and Notice of Application and Hearing on January 23, 2012, and issued a letter confirming a correction on January 27, 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 set timelines for discovery and submissions.

Board staff and VECC posed interrogatories to Horizon on February 22, 2012. Horizon filed its responses to all interrogatories on March 7, 2012.

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 *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*. While Horizon’s Application was filed prior to the issuance of *Guideline G-2011-0001*, Horizon’s Application is compliant with it. In preparing its Application, Horizon 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 IR #1.

THE APPLICATION

Approvals Sought

In the Application as filed on December 13, 2011, Horizon applied for the following approvals:

- The Board's determination that all Smart Meter capital (\$27,343,350) and operating expenditures (\$5,265,133) to December 31, 2011 are prudent;
- Smart Meter Disposition Riders ("SMDR") to recover the deferred revenue requirement through April 30, 2012 related to Smart Meters installed through December 31, 2011, net of Smart Meter Funding Adder revenue collected to April 30, 2012;
- Smart Meter Incremental Rate Riders ("SMIRR") to recover the annual revenue requirement associated with Smart Meters installed from the inception of the Smart Meter program through to December 31, 2011. The SMIRR will include: OM&A expenses; depreciation; cost of debt consistent with the Board approved debt rate in the last cost of service application (EB-2010-0131), PILs, and the return on equity ("ROE") consistent with the Board approved ROE in the last cost of service application. The SMIRR will be in place from May 1, 2012 until the implementation date for new rates as determined in Horizon Utilities next cost of service application; and
- A new deferral account to record the revenue requirement on new Smart Meter expenditures for Residential and General Service ("GS") < 50 kW customer classes in 2012 and future years until the next rebasing in 2015. This deferral account will record the revenue requirement associated with new capital expenditures after December 31, 2011. These costs are not included in the above SMDR and SMIRR recoveries.³

Board staff notes that approval for the termination of Horizon's current SMFA is not required in this Application. In Horizon's smart meter funding application filed

³ Application, page 4

in late 2010 (EB-2010-0292), the Board approved the current SMFA of \$2.14 with a sunset date of April 30, 2012.⁴

Updated Evidence

Horizon has not revised its proposed SMDRs and SMIRRs in responses to interrogatories, although it did provide alternative model analyses in response to VECC IR# 5. In response to Board staff IR # 6, Horizon confirmed the aggregate federal and provincial corporate income tax rates to correspond to the rate for taxes/PILs actually paid by Horizon in each year.

The proposed class-specific SMDRs and SMIRRs and those calculated in response to VECC IR # 5 are summarized below:

Table 1: Original and Revised SMDRs and SMIRRs

Class	SMDR (\$/month, for 12 months)		SMIRR (\$/month)	
	Original	Revised	Original	Revised
		VECC IR # 5		VECC IR # 5
Residential	\$0.11	(\$0.61)	\$1.48	\$1.47
GS < 50 kW	\$0.26	\$7.61	\$3.59	\$3.62
GS > 50 kW	\$0.38	\$10.63	\$5.13	\$5.40

Board staff submits that the class-specific SMDRs and SMIRRs as provided in the Application have been calculated appropriately and in accordance with the methodology approved by the Board for PowerStream's 2011 application in EB-2011-0128. Board staff acknowledges that the approach documented in VECC IR # 5 is reasonable, but is also dependent on assumptions about the quality of the data recorded at a customer class level. Board staff observes that Horizon is proposing to retain the class-specific SMDRs and SMIRRs as proposed in its December 15, 2011 Application.

⁴ Decision and Order EB-2010-0096, issued March 17, 2011, pp. 4-5.

Prudence of Smart Meter Costs

In response to VECC IR #3, Horizon provided a table showing the average cost per installed meter, according to meter type and customer class. Residential meters average \$98.79, while GS < 50 kW and GS > 50 kW smart meters range from \$161.05 to \$722.41. Board staff considers that these per meter costs are reasonable and supported by the documentation, and are well within the ranges that the Board has seen for most utilities serving urbanized areas.⁵

In its response to VECC IR # 1, Horizon documented its smart meter costs as filed in various applications from 2007 to this Application. Horizon has provided detailed explanations of the variances in the estimates, and the underlying reasons for these variances, over time. Board staff takes no issue with the amounts and supporting documentation provided. Smart meter technology and deployment was relatively new in 2006, and both capital and operating costs have varied as the technology has improved and as both manufacturers and the industry have gained experience. While this Application entails the final review and disposition of these costs, the Board has reviewed the previous estimates in earlier applications. Horizon has documented both increases and decreases in certain costs, and Board staff views that the utility has prudently managed these costs overall through six years of smart meter deployment.

Further, Board staff observes that the proposed SMIRR is \$1.48/month for Residential customers. The SMIRR is, by design, a proxy for the incremental

⁵ 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, while Hydro One Networks' costs were estimated at \$479.47. Hydro One Networks' higher per meter costs reflected, in part, the need for more communications infrastructure and increased costs to install smart meters for customers over a larger and less dense service area. The cost information in the combined smart meter proceeding is informative, but reflects an early stage of smart meter deployment, and so must be used with caution. However, 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 considered.

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 (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.⁶

Finally, Board staff observes that Horizon was authorized to deploy smart meters through being specifically named in O. Reg. 427/06. As reviewed by the Board in the combined smart meter proceeding EB-2007-0063, previous rate applications (EB-2007-0538 and EB-2009-0518) and in its smart meter funding adder application (EB-2010-0292), Board staff submits that Horizon has complied 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 for 2012 are prudent.

Exclusion of 2012 Costs and Demand for Customer Growth

Board staff notes that Horizon has not included costs for smart meters to be forecasted to be deployed in 2012 due to customer growth.

This approach 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 2011. In Kenora Hydro's 2011 cost of service application (EB-2010-0135), smart meter costs to the end of the 2010 test year were included in the SMDR, and capital and operating costs for 2011 were included in the test year rate base and revenue requirement. Similarly, in Hydro Ottawa's 2012 cost of service application (EB-2011-0054), only costs to the end of 2011 were included in the determination of the SMDR.

⁶ *Smart Meter Implementation Plan - Report of the Board To the Minister*, January 26, 2005, pg. vi, http://www.ontarioenergyboard.ca/documents/communications/pressreleases/2005/press_release_sm_implementationplan_260105.pdf

In other smart meter stand-alone applications currently before the Board, other distributors have included both the capital costs and forecasted number of new smart meters installed due to customer growth in the determination of the SMIRR. In these cases, utilities have generally also documented capital and one-time operating expenses due to, for example, TOU implementation in 2012.

Board staff submits that both approaches set out above are acceptable, so long as the costs and the demand (number of customers) are for the same period and the unaudited costs for both 2011 and 2012 are less than 10% of the total costs of the program. In the long run, both approaches should be equivalent. As discussed below, Board staff submits that Horizon will be compensated through the SMIRR for smart meter costs associated with customer growth.

Request for a New Deferral and Variance Account to Track Costs for Smart Meters Installed from 2012 to 2014

As noted above, Horizon has requested approval of a new deferral and variance account (or, alternatively, approval to continue to use the existing accounts 1555 and 1556) to track costs related to smart meters installed past December 31, 2011 until December 31, 2014, at which time Horizon expects to receive its next cost of service rate order, to be effective January 1, 2015. These costs would be considered for disposition in Horizon's 2015 cost of service rebasing application.

Horizon states "... in the absence of the requested deferral and variance account, its business risk is adversely impacted as new 2012 to 2014 Smart Meter costs will not be recovered."⁷ Horizon further states:

Horizon Utilities' request for a deferral account or the continuation of the existing deferral and variance accounts is consistent with the approach taken by other distributors that have made or are making two applications for Smart Meter cost recovery, as discussed in Horizon Utilities' response to Board staff 2 c) below. In their initial applications, those distributors would seek recovery of the revenue

⁷ Board staff IR # 2 b)

requirement related to Smart Meters to a certain date, and would continue to track costs related to subsequent Smart Meters in Accounts 1555 and 1556. Horizon Utilities' approach is similar, the only difference being that Horizon Utilities is seeking to establish a deferral account to deal with the subsequent expenditures.⁸

Board staff submits that Horizon's proposal is inconsistent with the Board's Smart Meter Guidelines⁹, and even with the Board's general policy and practice for rate setting generally.

The establishment of the form of initial funding through the SMFA, and of the deferral and variance accounts 1555 and 1556 to track capital and operating expenses and SMFA revenues for disposition at a later time was, in early 2006, a means of addressing the uncertainty of the smart meter program and associated costs at the time. It was done to enable smart meter deployment to occur when Government policy became known through regulation, and in a way that would keep both the utilities and ratepayers whole and avoid unintended rate shock due to the significant costs incurred in deploying smart meters to Residential and GS < 50 kW customers throughout Ontario.

However, it was envisioned that once smart meter deployment was completed, any new smart meters installed would become part of the regular rate base and the capital-related and operating expenses should be recovered through existing rates, just as is the case for traditional distribution assets (e.g., poles, wires, transformers, vehicles). The Board issued Guideline G-2011-0001 to provide guidance to utilities on how to apply for approval of smart meter costs; the guidance therein reflects the Board's evolution of its policies for dealing with the recovery of smart meter costs upon disposition.

In particular, the SMIRR is assumed to be compensatory during the IRM term until the utility next rebases its rates, as discussed in Guideline G-2011-0001.¹⁰

⁸ *Ibid.*

⁹ *Guideline -2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition*. December 15, 2011

¹⁰ *Ibid*, page 20, Footnote 13 on that page provides further elaboration on this:

Horizon contends that the SMIRR will not be compensatory as its calculation does not include new smart meters, including those due to customer growth, in its derivation. Board staff submits that costs for new smart meters should be considered just like any other expenditure going forward.

In terms of Horizon's argument that the SMIRR does not factor in costs for smart meters due to growth, Board staff notes that added customers will pay approved rates – including the SMIRR. In other words, as customers are added, Horizon will be collecting more revenues from the SMIRR than are factored into its derivation.

Board staff also notes that the SMIRR overstates the revenue requirement in subsequent years for reasons of practicality. This is because the SMIRR does not change during the course of the IRM term to reflect a declining net book value of the assets, and by extension, a declining rate of return and associated taxes. It would not be efficient to adjust the SMIRR annually for every distributor that has yet to include smart meters in rate base, thereby complicating the IRM process.

Horizon also suggests that the new deferral and variance account, or continuation of the existing ones, is needed to address business risk. The firm and its investors are compensated for business risk by the cost of capital factored into rates – in this case, Horizon's cost of capital as approved in its 2011 cost of service application is factored into both base distribution rates and the SMIRR.

The intention is that, once smart meter deployment is complete, smart meters should be treated like other (traditional) distribution assets, and the utility should

"The incremental revenue requirement would actually change over time, due to amortization/depreciation of the assets, and also due to inflation less productivity impacts on operating costs, changes in the Cost of Capital and possibly tax rates. However, it is assumed that the differences are immaterial for the few years until the distributor's next rebasing. As such, the SMIRR will be held constant until rebasing. Upon rebasing, assets and costs will be explicitly reflected in the rate base and revenue requirement, and the SMIRR will no longer be needed."

manage its investments and operations to service the realized demand. If it manages its costs and operations prudently, it will have the opportunity to earn a market-based rate of return on its investments.

Board staff submits that Horizon's proposal for a new deferral and variance account to track smart meter investments until its next rebasing is contrary to both Guideline G-2011-0001 and to the Board's practice and policy of rate regulation, and should be denied.

Completion of Smart Meter Deployment

In its Application and in responses to interrogatories, Horizon has noted that there are a number (approximately 300) of hard-to-reach smart meter deployments that need to be completed.¹¹ Further, in response to Board staff IR # 3, Horizon documents that the majority of remaining installations (estimated at 4,425 for 2012) are for GS < 50 kW customers with polyphase meters. Horizon has documented that these installations are more costly than standard installations, both for the equipment involved and for increased labour to do the installations. Board staff notes that 2012 installations represent about 2.0% of total metered customers for the Residential, GS < 50 kW and GS > 50 kW classes.

Horizon proposes that the costs for these hard-to-reach deployments and conversions in 2012 be tracked in the requested deferral and variance account. Board staff submits that a more proper treatment would be for the estimated costs to be factored into the 2012 capital and operating expenses. In other words, Horizon could, as one option, be allowed to include the associated capital and operating costs in 2012 and to recalculate the class-specific SMIRRs. Board staff notes that some utilities have proposed this treatment in some other stand-alone smart meter applications currently before the Board. Any decision to delay implementation of meters to certain general service customers beyond 2012 is one taken by Horizon.

¹¹ VECC IR # 2d)

Other Matters

Horizon 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.¹²

Board staff submits that this is compliant with Guideline G-2011-0001. The net book value of stranded meters is not documented in this Application, but Horizon states that the stranded conventional meters will continued to be amortized. In its cost of service application for 2015 rates, Horizon should document its net book value as of December 31, 2014 and should propose a stranded meter rate rider to recover this residual amount.

Board staff submits that Horizon should be prepared to address both the stranded meters, and operational efficiencies due to smart meter and TOU implementation in its next cost of service rebasing application.

Subject to the above comments, Board staff submits that Horizon's Application is compliant 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 recovery.

- All of which is respectfully submitted -

¹² Application, page 12