Ontario Energy Board

Commission de l'énergie de l'Ontario

EB-2012-0036

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15 (Schedule B);

AND IN THE MATTER OF an application by Niagara-on-the-Lake Hydro Inc. for an order or orders approving or fixing just and reasonable distribution rates related to Smart Meter deployment, to be effective May 1, 2012.

BEFORE: Ken Quesnelle
Presiding Member

Marika Hare
Member

DECISION AND ORDER
June 7, 2012

Introduction

Niagara-on-the-Lake Hydro Inc. ("NOTL"), a licensed distributor of electricity, filed an application (the "Application") with the Ontario Energy Board (the "Board") on January 30, 2012 under section 78 of the *Ontario Energy Board Act*, *1998*, S.O. 1998, c. 15, (Schedule B), seeking approval for changes to the rates that NOTL charges for electricity distribution, to be effective May 1, 2012.

NOTL is 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. NOTL 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]

On February 4, 2012, NOTL filed an amendment to its Application updating a quoted capital cost for the installation of a collector by a vendor with an invoiced amount obtained after the Application was filed. The Board issued its Letter of Direction and Notice of Application and Hearing (the "Notice") on February 17, 2012. The Vulnerable Energy Consumers' Coalition ("VECC") was granted intervenor status and cost award eligibility. No letters of comment were received. The Notice established that the Board would consider the Application by way of a written hearing and established timelines for discovery and submissions.

While the Board has considered the entire record in this proceeding, it has made reference only to such evidence as is necessary to provide context to its findings. The following issues are addressed in this Decision and Order:

- Costs incurred with respect to Smart Meter Deployment and Operation;
- Cost Allocation;
- Stranded Meter Costs; and
- Implementation.

Costs Incurred with Respect to Smart Meter Deployment and Operation

In the Application and subsequent amendment, NOTL sought the following approvals:

a. Smart Meter Disposition Rider – An actual cost recovery rate of $1.07 per Residential customer per month and $1.20 per General Service less than 50kW customer per month. NOTL proposed that this rate rider be effective for two years (May 1, 2012 to April 30, 2014). This rate rider will collect the difference between the 2006 to December 31, 2011 revenue requirement related to smart meters deployed as of December 31, 2011 (plus interest on operations, maintenance and administration and depreciation expenses) and the smart meter funding adder collected from 2006 to April 30, 2012 (and corresponding interest on the principal balance of SMFA revenues).

[1] On December 15, 2011, the Board issued *Guideline G -2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition*.

b. Smart Meter Incremental Revenue Requirement Rate Rider – A forecasted cost recovery rate rider of $3.07 per Residential customer per month and $3.66 per General Service less than 50kW customer per month for the period May 1, 2012 to April 30, 2013. This rate rider will collect the 2012 incremental revenue requirement related to smart meter costs to be incurred from January 1, 2012 to December 31, 2012.

In responses to interrogatories, NOTL made corrections to various data in the Smart Meter Model and revised its proposed rate riders for smart meter cost recovery. NOTL's costs in aggregate and on a per meter basis are summarized in the following table, as confirmed by NOTL in its response to a Board staff interrogatory:

Description	**Total Cost**	**Cost per Meter**
Smart Meter and AMI Capital Costs	$1,619,172	$200.44
Capital Costs Above Minimum Functionality	$268,479	$33.24
Total Capital Costs	**$1,887,651**	**$233.68**
Smart Meter and AMI OM&A Costs	$119,558	$14.80
OM&A Costs Above Minimum Functionality (includes 2012 projected)	$45,733	$5.66
Total OM&A Costs	**$165,291**	**$20.46**
Number of Smart Meters installed	8,078	
Incremental OM&A 2012 projected	$39,667	$4.91
Total Cost per installed Smart Meter		**$254.14**

Source: Application Amendment, Table 3, February 4, 2012
Smart Meter Model, Sheet 2, April 30, 2012

In response to Board staff interrogatory #8b, NOTL noted that its service territory contains a large rural area containing farm-related operations that are supplied with a central metering arrangement. NOTL further noted that the town of Niagara-on-the-Lake is a small tourist-based town with a disproportionately large number of small commercial accounts compared to the residential class. NOTL also noted that GS < 50 kW class customers typically have more expensive meter configurations and that it has completed virtually all of the more difficult and expensive meter installations in its service territory.

Both Board staff and VECC noted that NOTL's costs per meter, both for capital and on a combined capital and operating basis are beyond the ranges that have been observed for other applications that the Board has seen to date. Board staff submitted that NOTL's explanation of its higher than average total cost per meter is reasonable and

took no issue with documented overall cost per smart meter installed. In its submission, VECC accepted NOTL's explanations for the higher than average cost per meter.

NOTL's Application included a request to recover $268,479 in capital costs and $45,733 in OM&A costs above minimum functionality, as defined in the combined proceeding related to smart meters conducted by the Board in 2007 (EB-2007-0063). These costs include: CIS system upgrades; MDM/R integration; TOU implementation; customer education; and web presentment. NOTL noted that it participated in group RFPs through the Niagara Erie Power Alliance ("NEPA") group of LDCs.

In the Application, NOTL noted that it had originally received an estimate of $170,000 from its then CIS vendor, COS Computer Systems, to make its CIS system ready for time of use pricing. NOTL later noted that it had selected the Harris Northstar CIS system, through a group RFP with nine other distributors in the Utility Combined Services ("UCS") consortium, at a cost in excess of the estimate provided by COS Computer Systems. In response to Board staff interrogatory #5b, NOTL provided the following explanation for selecting the more expensive CIS option:

> One of our primary reasons for migrating to UCS systems was the fact that we had concerns with the long-term viability of our then current CIS vendor in the utility market. With only one other LDC client and the owner and programmer nearing retirement with no succession plan in place, we were at great risk of not meeting our regulatory requirements. Based on the company's previous track record, we had little faith that the necessary functionality changes could be completed on schedule and on budget. Our new vendor (Harris) supports as much as half the Ontario market and the UCS group consists of 10 members.

In its submission, Board staff questioned whether smart meter deployment could be defined as the sole driver for the CIS system change, given NOTL's concerns with its CIS vendor. Board staff submitted that costs for a new CIS system should not be funded by a smart meter deployment program unless it can be clearly demonstrated that the costs are exclusively related to the smart meter program. Board staff noted that costs for a new CIS system would typically be addressed at a distributor's next cost of service application. Board staff suggested that NOTL address whether or not the CIS system upgrade costs documented in the Application are incremental to and non-duplicative of costs currently recovered in approved distribution rates, in its reply submission. Board

staff submitted that it would take no issue with the nature or quantum of NOTL's documented costs above minimum functionality if it could demonstrate that its CIS changeover costs are incremental to and non-duplicative of costs currently approved in its distribution rates. VECC did not comment on NOTL's CIS system upgrade costs in its reply submissions.

NOTL submitted that the CIS upgrade costs to accommodate the smart meter project were incremental to and non-duplicative of costs currently recovered in rates. NOTL noted that its existing CIS system was functioning adequately in a non-time-of-use environment and, if it had not been for the need to implement time-of-use billing, NOTL would not have planned to replace its existing system but attempted to have support for the system strengthened, moving forward.

The Board finds NOTL's explanation of the higher than typical range of smart meter costs to be reasonable given its service territory and customer composition. The costs are therefore accepted for the purpose of calculating the SMDR and SMIRR.

The Board takes no issue with NOTL's decision to move to a higher cost CIS system vendor, given the concerns expressed with the existing vendor and the participation in the UCS consortium RFP process. Indeed, the Board encourages distributors to participate in such activities in order to achieve efficiencies. Further, the Board is satisfied with NOTL's explanation that the cost of the new CIS system was the result of a need to implement time-of-use pricing and is incremental and non-duplicative of costs currently recovered in rates.

Level of Unaudited Costs

Board staff noted that NOTL's unaudited 2011 costs and forecasted 2012 costs represent approximately 21% of the total costs sought for recovery. Based on the capital and OM&A expenditures related to minimum functionality that NOTL had provided in the smart meter model for 2011, Board staff estimated an average total cost per meter of $819.60 for meters installed in 2011. Board staff suggested that NOTL address, in its reply submission, whether or not its unaudited costs for the purchase and installation for smart meters in 2011 and forecasted for 2012 show any significant variation from the cost levels established in years where audited costs are available.

Given that the unaudited and forecasted costs are significantly above the 10% threshold

documented in Guideline G-2011-0001 and appear to be significantly higher on a per meter basis than costs in prior years, Board staff submitted that it would be more appropriate for the Board to approve the disposition of costs to the end of December 31, 2010. Disposition of NOTL's costs for 2011 and 2012 could be deferred to its scheduled cost of service application for 2014 rates, by which time the costs would be audited and the reasons for the increased costs could be more fully tested.

VECC noted that NOTL had not met the Board's expectation that 90% or more of the costs sought for recovery will be audited. VECC supported Board staff's proposal and submitted that the disposition of 2011 and 2012 costs should be deferred to NOTL's next cost of service application.

In its reply submission, NOTL noted that its 2011 external audit results were now available and that the smart meter costs, as reported in the Application, were unchanged. With the updated 2011 audited costs, NOTL estimated that 4.9% of the total costs requested for recovery in the Application were now unaudited. NOTL noted that the mass installation of the primarily less expensive single phase meters was completed in 2010. The more complex installations and a majority of the polyphase meter installations were completed in 2011. NOTL noted that polyphase meters ranged in cost from $400 to $1000 compared to single phase residential meters purchased for approximately $85. NOTL submitted that, on the basis that the 10% threshold is satisfied and the apparent variation in cost levels is explained by the timing of meter installations, it is appropriate to approve the disposition of costs up to and including 2012.

Although the Board's guidelines suggest 90% or more of the costs need to be audited before recovery, the Board notes that NOTL has provided information that with the updated 2011 audited costs almost 95% of the costs requested for recovery have been audited. The Board sees no reason to challenge NOTL's statement that the 2011 audited costs confirm the costs included in the application, and approves the amounts for recovery.

Prudence of incurred Costs

The Board notes that authorization to procure and deploy smart meters has been done in accordance with Government regulations, including successful participation in the London Hydro RFP process, overseen by the Fairness Commissioner, to select (a)

vendor(s) for the procurement and/or installation of smart meters and related systems. There is thus a significant degree of cost control discipline that distributors, including NOTL, are subject to in the procurement and deployment of smart meters.

The Board notes that NOTL has participated as one of the member utilities of the NEPA group.[2] As documented in NOTL's Application, NEPA participation has enabled the member utilities to address common issues and to seek efficient solutions for issues related to smart meter deployment and operations and to Time-of-Use implementation. The Board finds that NOTL's documented costs, as applied for, related to smart meter procurement, installation and operation, and including costs related to TOU rate implementation, are reasonable. As such, the Board approves the disposition for recovery of the costs for smart meter deployment and operation as of December 31, 2011.

Cost Allocation

In its Application, NOTL proposed class-specific SMDRs and SMIRRs. Initial smart meter funding was provided by a uniform SMFA collected from all metered customers, and there was no specific Board direction for recording of costs and revenues by class.

However, it was recognized by the Board that, as there would be differing costs in different customer classes, in large part due to the costs of the meters themselves and, to the extent that accurate data was available from the utility's records, the principle of cost causality would support class-specific cost recovery. To this end, Guideline G-2011-0001 indicates that a utility is expected to address the allocation of costs in its application seeking the disposition of smart meter costs recorded in accounts1555 and 1556. Further, in recent decisions, the Board has reviewed and approved the evolution of approaches for calculating class-specific rate riders.[3]

NOTL proposed to allocate costs to each class on the following basis:

- Return (deemed interest plus return on equity) and amortization were allocated

[2] NEPA is a collaborative initiative by the following utilities to seek synergies in various utility operations, procurement and regulatory processes: Brant County Power Inc., Brantford Power Inc., Canadian Niagara Power Inc., Grimsby Power Incorporated, Haldimand County Hydro Inc., Niagara-on-the-Lake Hydro Inc., Niagara Peninsula Energy Inc., Norfolk Power Distribution Inc. and Welland Hydro Electric System Corp.
[3] The Board's decisions with respect to PowerStream Ltd.'s 2010 and 2011 smart meter applications (respectively, EB-2010-0209 and EB-2011-0128) confirmed approaches for allocating costs and calculating class-specific rate riders for recovery of smart meter costs. The approach approved in Decision EB-2011-0128, or an analogous or improved approach is expected where data of adequate quality at a class level is available.

based on the weighted average of the residential and GS < 50 kW 1860 Weighted Meter Capital ("CWMC") allocators from the 2006 cost allocation review;

- OM&A expenses were allocated based on the number of meters installed for each class;
- Payments in lieu of taxes ("PILs") were allocated based on the revenue requirement allocated to each class before PILs; and
- Smart Meter Funding Adder revenues, including carrying costs, were allocated based on the revenue requirement allocated to each class after PILs.

In response to Board staff interrogatory #13, NOTL noted the following, when asked if it was able to provide capital costs for installed smart meters separately for the residential and GS < 50 kW classes:

> NOTL did not track residential and GS costs during the purchase and installation process. We have attempted to estimate the separate costs but are impeded by the fact that the various meter types can generally be found on both rate classes. Our contract mass installer rates varied by meter locations inside, outside, rural and urban which further complicates such a process.

In its submission, Board staff accepted NOTL's explanation. Board staff observed that the 2006 cost allocation review underpinned the cost allocation approved by the Board in the Decision and Order from NOTL's 2009 cost of service application (EB-2008-0237). Board staff noted that, with the exception of the use of the 1860 CWMC allocation, NOTL's cost allocation methodology is consistent with the approach approved by the Board in PowerStream's 2010 smart meter cost recovery application (EB-2010-0209). Board staff noted that the 1860 CWMC cost allocator may no longer be a relevant proxy for allocating meter capital costs to classes with smart meters. Board staff suggested that if NOTL's CIS system is capable of identifying the meter configuration for customers in the Residential and GS < 50 kW classes that it adopt an approach similar to that in Appendix G of Welland Hydro's smart meter cost recovery application (EB-2011-0415) to allocate costs to each class.[4] Board staff suggested that NOTL should address its ability to use this cost allocation approach in its reply

[4] In its Application (EB-2011-0415), Welland Hydro calculated class-specific SMDRs and SMIRs based on an estimate cost per customer class derived from actual meter types installed for customers in each class and the average cost of installation for each meter type.

submission.

In its submission, VECC supported Board staff's proposal that NOTL attempt to allocate capital costs to each class based on meter configurations. VECC submitted that the determination of capital costs as the driver to allocate the revenue requirement to each class is consistent with the methodology proposed by PowerStream in its smart meter cost recovery application (EB-2010-0209) and is more desirable than using the 1860 CWMC allocator. VECC noted its concern in using the 1860 CWMC as an allocator as it is based on the costs of traditional meters and not new types of smart meters.

VECC suggested that NOTL may have a means to determine the accounts that have single-phase and three-phase meters and thus could match meters to account. VECC submitted that this determination for capital costs should be used as the driver to allocate the revenue requirement to each class. VECC submitted that this approach would be consistent with the methodology proposed by PowerStream in its smart meter recovery application and is more desirable than using an out-dated cost allocation model. VECC stated that, in its view, the 1860 CWMC allocator is a poor proxy.

VECC also noted that NOTL's cost allocation methodology allocated the smart meter funding adder ("SMFA") revenues to the Residential and GS < 50 kW classes based on the overall percentage resulting from its cost allocation methodology. VECC submitted than an SMDR that better reflects cost causality is achieved by assigning the actual SMFA revenues collected from each class and allocating the carrying charges on the revenue based on the assigned revenues. VECC submitted that NOTL could attempt to calculate the SMFA revenues collected by customer class based on the number of accounts and allocate it on that basis in the SMDR calculation. VECC submitted that NOTL should address this, as well, in its reply submission.

In its reply submission, NOTL stated that it had reviewed the Welland approach and proposed using a similar approach to allocate capital costs to each class. NOTL agreed with VECC's submission regarding the allocation of SMFA revenues. NOTL noted that the percentages of customers in the Residential/GS < 50 kW classes for the years 2006 to 2011 ranged between 83.7% Residential/16.3% GS < 50 kW and 84.3% Residential/15.7% GS < 50kW. NOTL proposed to allocate 84% of SMFA revenues, including carrying charges, to the Residential class and 16% to the GS < 50 kW class. NOTL provided updated SMDR and SMIRR calculations reflecting the changes in its proposed cost allocation methodology. The resulting SMDRs and SMIRRs, and those

proposed in the original Application, are documented in the following table:

	Application (December 19, 2011)	**NOTL Reply Submission** (Revenue Requirement Allocation)
Residential		
SMDR	$1.07	$0.86
SMIRR	$3.07	$2.48
GS < 50 kW		
SMDR	$1.20	$2.84
SMIRR	$3.66	$4.85

The Board approves NOTL's revised cost allocation methodology. The Board will approve an effective date of May 1, 2012 as proposed by NOTL and will approve an implementation date of July 1, 2012. As a result, recovery of the SMDRs should be derived using a 22 month period from July 1, 2012 to April 30, 2014. The SMIRRs are monthly fixed rates based on the annualized revenue requirement and remain in effect until the effective date of the utility's next cost of service rate order, at which point the capital and operating costs are directly incorporated into the rate base and revenue requirement. As NOTL is scheduled to rebase its rates for 2014, the Board notes that the SMIRR will be in effect from July 1, 2012 until April 30, 2014.

Stranded Meter Costs

In its Application, NOTL proposed not to dispose of stranded meters by way of stranded meter rate riders at this time, but to deal with disposition in its next rebasing application, scheduled for 2014 rates. NOTL estimated the net book value of stranded meters as of December 31, 2013 will be $133,000. Neither VECC nor Board staff took issue with NOTL's proposal. Board staff submitted that NOTL's proposal is also compliant with Guideline G-2011-0001. The Board agrees.

Implementation

The Board expects NOTL to file detailed supporting material, including all relevant calculations showing the impact of this Decision and Order on NOTL's class specific smart meter revenue requirements and the determination of the updated SMDRs and SMIRRs.

As noted above, NOTL requested an implementation date of May 1, 2012 for its new

rates. Given the filing date and the time required to process an application of this nature, the Board has determined that an implementation date of July 1st, 2012 is appropriate. In developing its draft Rate Order, NOTL is directed to establish the SMDRs based on a 22-month recovery period to April 30, 2014 and to accommodate within the SMDR the applicable revenue requirement amounts related to the months of May and June.

The SMIRRs shall be effective and implemented on July 1st, 2012. The Board notes that these riders are based on an annual revenue requirement and will be in effect until the effective date of NOTL's next cost of service rate order.

NOTL is authorized to continue to use the established sub-account Stranded Meter Costs of Account 1555 to record and track remaining costs of the stranded conventional meters replaced by smart meters. The balance of this sub-account should be brought forward for disposition in NOTL's next cost of service application.

THE BOARD ORDERS THAT:

1. NOTL shall file with the Board, and shall also forward to VECC, a draft Rate Order attaching a proposed Tariff of Rates and Charges reflecting the Board's findings in this Decision and Order, within 7 days of the date of this Decision and Order. The draft Rate Order shall also include customer rate impacts and detailed supporting information showing the calculation of the final rates.

2. VECC and Board staff shall file any comments on the draft Rate Order with the Board and forward to NOTL within 7 days of the date of filing of the draft Rate Order.

3. NOTL shall file with the Board and forward to VECC responses to any comments on its draft Rate Order within 7 days of the date of receipt of the submission.

Cost Awards

The Board will issue a separate decision on cost awards once the following steps are completed:

4. VECC shall submit its cost claims no later than **7 days** from the date of issuance of the final Rate Order.

5. NOTL shall file with the Board and forward to VECC any objections to the claimed costs within **14 days** from the date of issuance of the final Rate Order.

6. VECC shall file with the Board and forward to NOTL any responses to any objections for cost claims within **21 days** from the date of issuance of the final Rate Order.

7. NOTL shall pay the Board's costs incidental to this proceeding upon receipt of the Board's invoice.

All filings to the Board must quote file number **EB-2012-0036,** be made through the Board's web portal at, www.errr.ontarioenergyboard.ca and consist of two paper copies and one electronic copy in searchable / unrestricted PDF format. Filings must clearly state the sender's name, postal address and telephone number, fax number and e-mail address. Parties must use the document naming conventions and document submission standards outlined in the RESS Document Guideline found at www.ontarioenergyboard.ca. If the web portal is not available parties may email their document to BoardSec@ontarioenergyboard.ca. Those who do not have internet access are required to submit all filings on a CD in PDF format, along with two paper copies. Those who do not have computer access are required to file 2 paper copies.

DATED at Toronto, June 7, 2012
ONTARIO ENERGY BOARD

Original signed by

Kirsten Walli
Board Secretary