



EB-2012-0247

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 Veridian Connections Inc. for an order or orders approving or fixing just and reasonable distribution rates related to Smart Meter deployment, to be effective November 1, 2012.

BEFORE: Ken Quesnelle
Presiding Member

Marika Hare
Member

DECISION AND ORDER
October 25, 2012

Introduction

Veridian Connections Inc. (“Veridian”), a licensed distributor of electricity, filed an application (the “Application”) with the Ontario Energy Board (the “Board”) on May 31, 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 Veridian charges for electricity distribution, to be effective November 1, 2012.

Veridian 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 January 1, 2009 to December 31, 2011. Veridian requested approval of proposed Smart Meter Disposition Riders (“SMDRs”) and Smart Meter Incremental

Revenue Requirement Rate Riders (“SMIRRs”) effective November 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 (the “Notice”) on June 20, 2012. The Vulnerable Energy Consumers’ Coalition (“VECC”) was granted intervenor status and cost award eligibility. Three 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;
- Costs Beyond Minimum Functionality;
- Stranded Meter Costs; and
- Implementation.

Costs Incurred with Respect to Smart Meter Deployment and Operation

In the Application, Veridian sought the following approvals:

- i. Smart Meter Disposition Rider – A SMDR of \$0.97 per Residential customer per month and a SMDR of \$2.45 per General Service Less Than 50 kW (“GS<50 kW”) customer per month. Veridian proposed that these rate riders be effective from November 1, 2012 to April 30, 2014. These SMDRs will recover the difference between the deferred revenue requirement from January 1, 2009 to December 31, 2011 and forecasted 2012 revenue requirement related to smart meters deployed as of December 31, 2011, plus interest on operations, maintenance and administration and depreciation expenses, and offset by SMFA revenues collected from 2009 to April 30, 2012 and corresponding interest on the principal balance of SMFA revenues; and

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

- ii. Smart Meter Incremental Revenue Requirement Rate Rider – A forecasted cost recovery SMIRR of \$0.98 per Residential customer per month and \$2.46 per GS<50 kW customer per month until its next cost of service rate application, scheduled for 2014 rates. These SMIRR rate riders will recover the forecasted 2013 incremental revenue requirement related to the investment in and operation of smart meter for the period from January 1 to December 31, 2013, for installed smart meters.

Veridian's costs in aggregate and on a per meter basis are summarized in the following table:

Cost per installed Smart Meter 2009 to 2011

	Total Cost	Cost per Meter
Overall Capital Costs (including 2012 projected)	\$7,730,561	\$186.35
Overall OM&A Costs (including 2012 forecast)	\$3,304,110	\$79.65
Total Cost Per Smart Meter	\$11,034,671	\$266.00
Overall Capital Costs Beyond Minimum Functionality (including 2012 projected)	\$32,290	\$0.78
Overall OM&A Costs Beyond Minimum Functionality (including 2012 projected)	\$160,469	\$3.87
Total Costs Beyond Minimum Functionality	\$192,759	\$4.65
Number of Smart Meters installed	41,485	
Forecast 2012 Smart Meter Installations	0	
Incremental Capital 2012 Projected	\$0	
Incremental OM&A 2012 Projected	\$727,102	

Source: Smart Meter Model, Sheet 2, as filed on May 31, 2012

Veridian noted that, as part of its 2010 cost of service application (EB-2009-0140), Veridian proposed and the Board approved smart meter capital expenditures up to December 31, 2008 in Veridian's rate base. Veridian also noted that in the same proceeding, the Board approved disposition of the balances in Account 1555 – Smart Meter Capital Variance and Account 1556 – Smart Meter OM&A Variance to December 31, 2008 through a smart meter cost recovery rate rider effective May 1, 2010.

In its current Application, Veridian provided evidence that it had completed smart meter

installations for 99.7% of RPP-eligible residential customers and 99.2% of its GS<50 kW customers as of December 31, 2011. Veridian confirmed that 100% of the costs submitted for disposition are included in its audited financial statements to December 31, 2011. Veridian noted that its average per meter capital costs is \$138.40, during the time period 2007 to 2011, which compares favourably to the per meter capital cost of \$186.76 noted within the Board's Sector Smart Meter Audit Review Report, dated March 31, 2010.

Veridian documented its procurement process and the process to become authorized for smart meter deployment in compliance with O.Reg. 427/06. Veridian was one of the 13 licensed distributors that were authorized by regulation to conduct smart meter activities. Veridian participated in the Board's 2007 Combined Proceeding (EB-2007-0063) with respect to smart meters. Veridian collaborated with the Coalition of Large Distributors ("CLD") to establish vendor selection options, which then led to a joint procurement process for key components of the Advanced Metering Infrastructure². Veridian joined other CLD members to jointly negotiate smart meter supply contracts based on aggregate meter volumes in order to achieve the most favourable pricing.

In its submission, Board staff agreed that Veridian has acted in accordance with the regulations in 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 considered that the documented historical costs and forecasted costs were prudent, with certain exceptions, as noted below.

VECC submitted that it is reasonable to conclude that Veridian realized some operational efficiencies and benefits as a result of its collaboration with other utilities. Veridian documented that avoided costs due to manual meter reading being replaced by automated meter reading were taken into account in reducing OM&A expenses and revenue requirement in its 2010 cost of service application.³ However, in response to VECC interrogatory #5, Veridian indicated that it has not yet realized any additional operational efficiencies or cost savings but further investment may yield additional opportunities. VECC submitted that Veridian's costs are reasonable, subject to the Board's consideration of Board staff's submission on costs related to meter base repairs and Operating Maintenance and Administration ("OM&A") costs for maintenance of advanced metering communications.

² Application, page 7

³ Application, page 16

Meter Base Repairs

In its Application, Veridian included an amount of \$35,000 for meter base repairs in 2012, in addition to \$122,000 during the initial deployment from 2009 to 2011. In response to Board staff interrogatory #2, Veridian explained that this amount is an amortization of \$70,000 over the period for which the SMIRR is supposed to cover (i.e. until Veridian's next expected cost of service rate application for 2014 rates).

In its submission, Board staff noted that it is not clear what the estimate for the meter base repairs/retrofits includes. Board staff submitted that if the meter base repairs/retrofits are solely for the purpose of the initial installation, then the amounts should be recoverable as an expensed amount in accordance with the Board's EB-2007-0063 Decision. However, for repairs to the meter bases after the smart meters were installed and functioning properly, Board staff noted that the meter base is the property and the responsibility of the customer and is therefore not recoverable. Board staff also questioned the quantum estimated by Veridian, as Veridian has documented \$122,000 for meter base repairs and retrofits for the period 2009 to 2011, when it was actively deploying smart meters, but \$70,000 for 2012 when only a small number of smart meter conversions remain. Board staff submitted that the Board may wish to consider the disallowance of the meter base repair and retrofit amount of \$35,000 estimated as an amortized 2012 expense.

In its reply submission, Veridian stated that the meter base repairs are for remaining smart meters to be deployed and not for meters bases for customers for which smart meters were installed but which might have encountered a problem subsequently. Veridian further submitted that the meter base repair costs are incremental to Veridian's current Board approved revenue requirement and that the estimated costs for 2012 and 2013 are reasonable and should be approved for recovery.

OM&A Costs for Maintenance of Advanced Metering Communications Device

In its Application, Veridian included an estimated amount of \$99,246 for OM&A expenses for 2012, related to maintenance of Advanced Metering Communications Devices. In response to Board staff interrogatory #3, Veridian explained that these expenses are related to the investigation and resolution of meter trouble reports. Veridian explained that the number and complexity of these trouble reports has increased as the number of meters deployed has increased. Veridian documented the following number of such reports:

Year	Meter Trouble Reports
2009	87
2010	139
2011	373
2012 (Jan. 1 to Jun. 30)	336

Board staff submitted that while it understands some of these issues are related to technology and increased functionality afforded by a more intelligent metering and communications system, Board staff expressed concerns about the trend for the increasing number of trouble reports. Board staff noted that with electronic technology, and a new system like smart meters and the AMI communications systems, it would not be unexpected for troubles and failures to occur initially, but the failure rate should diminish until the devices approach end of life. Board staff submitted that the incidence of possible troubles should decrease as initial troubles are resolved and experience is gained. Board staff further submitted that Veridian's estimates of \$99,246 for 2012 as an ongoing operating expense for smart meter trouble reports is not adequately supported by the evidence and that an annual allowance of \$50,000 may be adequate.

In its reply submission, Veridian submitted that it is the very nature of the intelligent metering and communications system which results in high numbers of trouble reports. The nature of the smart meter technology generates more frequent and accurate status information and reporting of trouble conditions. Veridian also submitted that the reliance on the smart meter data for on and off peak billing determinants requires utilities to investigate and resolve all meter trouble reports in a timely and thorough manner, resulting in higher costs for such trouble meter situations. Veridian further submitted that its estimate of \$99,246 for costs associated with maintenance of advanced metering communications device is appropriate and should be approved within the 2012 OM&A.

Board Findings

The Board finds that Veridian's documented costs, as revised in response to interrogatories, related to smart meter procurement, installation and operation are reasonable. As such the Board approves the recovery of the costs for smart meter deployment and operation as of December 31, 2011.

Costs Beyond Minimum Functionality

Veridian's Application includes \$192,759 for costs beyond minimum functionality, which includes \$32,290 of capital costs and \$160,469 of OM&A costs. In response to Board staff interrogatory #11, Veridian noted that the costs were associated with modifications related to CIS integration with the MDM/R and to facilitate web presentment of smart meter data. Veridian also noted that the costs for the synchronization program totalled \$24,690 and not the original amount of \$23,300. Veridian confirmed the correct amount has been used to calculate revenue requirement and rate riders.

Board Findings

Board staff and VECC took no issue with Veridian's costs beyond minimum functionality. The Board approves Veridian's costs beyond minimum functionality as proposed.

Cost Allocation

In its Application, Veridian 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 Accounts 1555 and 1556. Further, in recent decisions, the Board has reviewed and approved a series of successive approaches that have evolved for calculating class-specific rate riders.

In its reply submission, Veridian noted that it had calculated the revenue requirement to each customer class based on the following:

- Return (deemed interest plus return on equity) and amortization were allocated based on the number of smart meters installed by rate class;
- Amortization was allocated based on the smart meter costs per rate class;

- OM&A expenses were allocated based on the number of meters installed for each rate class; and
- Payments in lieu of taxes (“PILs”) were allocated based on the revenue requirement allocated to each class before PILs.

In response to Board staff interrogatory #13a, Veridian indicated that no allocation of the SMFA revenues and interest by rate class was done as part of calculating class-specific SMDRs. Veridian explained that it calculated class-specific SMDRs from the total residual true-up amount after deducting all of the SMFA revenues and interest from the total revenue requirement calculated for 2009 through to October 31, 2012. In response to Board staff interrogatory #13b, Veridian recalculated class specific SMDRs using a direct allocation of SMFA revenues as summarized below:

Class	SMDR (\$/month for 18 months)		SMIRR (\$/month for 18 months)	
	As Filed	Board Staff #13	As Filed	
Residential	\$0.97	\$0.83	\$0.98	No Change
GS<50 kW	\$2.45	\$4.15	\$2.46	No Change

Board staff indicated in its submission that it had no issues with the rate riders calculated in response to Board staff interrogatory #13.

In interrogatory #9, VECC sought the calculation of class specific rate riders based on full cost causality. More specifically, VECC sought separate smart meter revenue requirement models for reach customer class to recalculate the rate riders using the class specific revenue requirements. In its response, Veridian did not calculate rate riders based on full cost causality, but instead referred to its response to Board staff interrogatory #13b using the methodology for allocating smart meter costs and SMFA revenues as approved by the Board in other applications. Given that the average meter cost for a GS < 50 kW customer is greater than the average meter cost for a residential customer, VECC submitted the only way to avoid undue cross subsidy is to calculate class specific rate riders based on VECC’s proposed cost allocation methodology to reflect the full costs for each customer class. In VECC’s view, Veridian has the appropriate level of data and should provide, in its reply submissions, the information requested in VECC interrogatory #9.

In reply, Veridian agreed with VECC that capital costs for installed meters were tracked separately by rate class. However, Veridian disagreed with VECC's view that the appropriate level of data by rate class is available for the development of accurate class specific revenue requirement models. Veridian noted that capital costs for capital items other than the meters, such as hardware and software, were not and cannot be tracked separately by rate class since those investments support all of the smart meters installed. Veridian also noted that OM&A costs were not tracked separately by rate class as these costs are largely non-class specific.

Also in its reply submission, Veridian submitted that in order to produce class specific revenue requirement models, some form of allocation of non-meter capital costs and all OM&A costs to the rate classes would be required. Veridian submitted that its proposed methodology has effectively resulted in class-specific revenue requirements on a full cost basis using the best cost information available. Veridian further submitted that VECC's proposed methodology would not result in class specific revenue requirements that would be materially more accurate than its proposed methodology.

Veridian proposed its own methodology for the calculation of the SMDRs and the SMIRRs taking into account the stub period between May 1 to October 31, 2012. In its submission, Board staff noted that Veridian's approach seems reasonable in principle, but it deviates from what the Board previously approved with respect to the foregone SMIRR revenues from May 1, 2012 until the effective date of rates in other stand-alone smart meter applications.

Board staff submitted that the methodology employed in all other smart meter applications to date have the foregone SMIRR revenues, in this case from May 1, 2012 to October 31, 2012, calculated and added onto the net deferred revenue requirement to be recovered from an "adjusted" SMDR. The SMIRR as calculated via the Smart Meter Model and allocated to applicable customer classes remains unchanged.

Board staff submitted that the methodology approved by the Board in other smart meter applications to date is preferable, insofar that the SMIRR remains as a proxy for the monthly change in the base monthly fixed charge for each applicable metered customer to recover the annualized revenue requirement. Board staff submitted that this approach, while conceptually equivalent to Veridian's approach, is flexible in the event that Veridian has a sunset date other than April 30, 2014. Board staff noted that if Veridian's effective date for rebased rates is other than May 1, 2014, the utility will over or under-recover via the SMIRR.

Board staff submitted that Veridian should calculate adjusted SMDRs, taking into account the stub period SMIRR revenues for the period May 1, 2012 to October 31, 2012, and also calculate the SMIRRs per the model and any class cost allocation, in accordance with the approach approved in other applications.

VECC, in its submission, agreed with Board staff that the methodology approved by the Board in other smart meter applications is preferable.

Board Findings

The Board considers the cost causality approach of class-specific models proposed by VECC to be more exacting and principled, and will accept it where the utility has calculated it and is reasonably confident with the underlying data at the customer class level. However, in this Application, Veridian has stated that it does not have data of sufficient quality to enable it, with confidence, to calculate class-specific models.

The Board notes that the approach for allocating capital and operating costs to determine class-specific SMDRs and SMIRRs from the single Smart Meter Model uses allocators that would be generally used to allocate costs for class-specific models. VECC has not supported its statement that class-specific models could give rise to materially different rate riders. The Board observes that in applications where both approaches have been on the record, differences are not generally material. Therefore, the Board accepts the cost allocation methodology as employed by Veridian in its response to Board staff interrogatory #13b.

The Board finds that it is preferable that the SMDR be set in such manner that it will not over or under collect if the anticipated date for the establishment of new rates is not used. The Board therefore requires Veridian to use the Board staff proposed methodology to accommodate the foregone SMIRR revenues from May 1, 2012 to Oct. 31, 2012, in the SMDR in the preparation of the draft Rate Order.

Stranded Meter Costs

In its Application, Veridian proposed to deal with disposition of stranded meters in its next rebasing application, scheduled for 2014 rates. Veridian estimated the net book value of stranded meters as of December 31, 2013 will be \$4,420,000.

VECC had no issue with Veridian's proposal. Board staff submitted that Veridian's proposal is compliant with Guideline G-2011-0001, but that, in its next cost of service application for 2014 rates, Veridian should make a proposal for the recovery of stranded meter costs through class-specific stranded meter rate riders.

Board Findings

The Board agrees with Veridian's proposed treatment and expects Veridian to address the recovery of the residual net book value of stranded meters in its next cost of service application.

Implementation

The Board will approve an effective date of November 1, 2012 as proposed by Veridian. In developing its draft Rate Order, Veridian is directed to establish the SMDRs based on an 18-month recovery period to April 30, 2014, and to accommodate within the SMDR the applicable revenue requirement (SMIRR) amount related to the period from May 1, 2012 to October 31, 2012.

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 of service rate order, at which point the capital and operating costs are directly incorporated into the rate base and revenue requirement. As Veridian is scheduled to rebase its rates for 2014, the Board notes that the SMIRR may be in effect from November 1, 2012 until April 30, 2014.

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

Accounting Matters

In granting its approval for the historically incurred costs and the costs projected for 2012, the Board considers Veridian to have completed its smart meter deployment. Going forward, no capital and operating costs for new smart meters and the operations of smart meters shall be tracked in Accounts 1555 and 1556. Instead, costs shall be recorded in regular capital and operating expense accounts (e.g. Account 1860 for meter capital costs) as is the case with other regular distribution assets and costs.

Veridian 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 Veridian's next cost of service application.

THE BOARD ORDERS THAT:

1. Veridian 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 6 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 Veridian within 5 days of the date of filing of the draft Rate Order.
3. Veridian shall file with the Board and forward to VECC responses to any comments on its draft Rate Order within 3 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. Veridian 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 Veridian any responses to any objections for cost claims within **21 days** from the date of issuance of the final Rate Order.
7. Veridian 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-2012-0247**, be made through the Board's web portal at, <https://www.pes.ontarioenergyboard.ca/eservice/> 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, October 25, 2012

ONTARIO ENERGY BOARD

Original signed by

Kirsten Walli
Board Secretary