

September 6, 2012

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Ms. Kirsten Walli Board Secretary Ontario Energy Board P.O. Box 2319 27th Floor 2300 Yonge Street Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: Veridian Connections Inc., Final Disposition of Accounts 1555 and 1556 – Smart Meters Reply Submission, Board File No. EB-2012-0247

Veridian Connections Inc. is pleased to submit the enclosed reply to the submissions received from Board staff on August 20th, 2012, and the Vulnerable Energy Consumers Coalition ("VECC") on August 23rd, 2012.

Please do not hesitate to contact me if you require further information. I can be reached at (905) 427-9870, extension 2202 or by email at <a href="mailto:garmstrong@veridian.on.ca">garmstrong@veridian.on.ca</a>.

Yours truly,

Original signed by

George Armstrong Vice President, Corporate Services

cc Mr. Michael Janigan, VECC Ms. Laurie McLorg, Veridian Connections Inc.

# VERIDIAN CONNECTIONS INC.

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

EB-2012-0247

## APPLICANT'S REPLY SUBMISSION

September 6<sup>th</sup>, 2012

#### Introduction

Veridian Connections Inc. (Veridian) as a licensed electricity distributor filed an application (the "Application") with the Ontario Energy Board (the "Board" or the "OEB) on May 31, 2012, seeking approval for the disposition and recovery of costs related to smart meter activities from January 1<sup>st</sup>, 2009 to December 31, 2011. Within its 2010 Cost of Service rate application (EB-2009-0140) Veridian applied for and the Board approved recovery of costs related to smart meter activities from January 1<sup>st</sup>, 2007 to December 31<sup>st</sup>, 2008.

Veridian is seeking approval and recovery of \$7,730,561 in capital expenditures and operating costs ("OM&A") of \$3,304,110.

To this effect, Veridian requested approval of a proposed Smart Meter Disposition Rider ("SMDR")to recover smart meter expenditures up to October 31, 2012 that had been partially offset by Smart Meter Funding Adder ("SMFA") revenues. Veridian also requested approval of a proposed Smart Meter Incremental Revenue Requirement Rate Rider ("SMIRR") effective November 1<sup>st</sup>, 2012 to recover smart meter expenditures for the period of November 1<sup>st</sup>, 2012 until the implementation date for new rates as determined in Veridian's next Cost of Service Application, currently planned for May 1<sup>st</sup>, 2014.

The Application was filed in accordance with the Board's Guideline – Smart Meter Funding and Cost Recovery – Final Disposition (G-2011-0001) dated December 15, 2011 (the "Guideline").

The Board issued its Notice of Application and Hearing on June 20<sup>th</sup>, 2012. The Notice stated the Board would consider the Application by way of a written hearing. The Vulnerable Energy Consumers Coalition ("VECC") received intervenor status and cost award eligibility.

Board staff and VECC filed interrogatories on July 20, 2012 and Veridian filed its responses on August 3<sup>rd</sup>, 2012. Board staff filed its Submission on August 20<sup>th</sup>, 2012; VECC filed its Submission on August 23<sup>rd</sup>, 2012. This Reply Submission by Veridian summarizes the evidence on record, responds to issues raised by Board Staff and VECC in their respective submissions, confirms the prudence of the claimed costs and seeks Board approval of the resulting SMDR and SMIRR rate riders.

## **Approvals Sought**

In the Application Veridian originally applied for approval of class specific SMDR and SMIRR amounts as follows:

Rider	Rate Class	Amount
SMDR	Residential	\$0.97 / month
	GS < 50 kW	\$2.45 / month
SMIRR	Residential	\$0.98 / month
	GS < 50 kW	\$2.46 / month

Originally Veridian 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<sup>st</sup>, 2012. No allocation of the SMFA revenues and interest by rate class was done as part of calculating class-specific SMDRs.

Veridian updated its proposed class-specific SMDRs in response to Board Staff interrogatory #13 based on class-specific allocations of SMFA revenues and interest, as follows:.

Updated Rider	Rate Class	Amount
SMDR	Residential	\$0.83 / month
	GS < 50 kW	\$4.15 / month

Veridian notes that in its Submission, Board Staff states that "Board staff takes no issue with Veridian's approach for allocating the SMFA revenues and interest by rate class as revised in response to Board staff IR#13".

Based on this update, Veridian respectfully requests Board approval for:

- SMDR A rate rider of \$0.83 per month for Residential customers and a rate rider of \$4.15 per month for General Service less than 50 kW customers for an 18 month period effective from November 1<sup>st</sup>, 2012 to April 30<sup>th</sup>, 2014
- SMIRR A rate rider of \$0.98 per month for Residential customers and a rate rider of \$2.46 per month for General Service less than 50 kW customers for an 18 month period effective from November 1<sup>st</sup>, 2012 to April 30<sup>th</sup>, 2014

#### **SMDR and SMIRR Calculations**

Veridian has proposed effective dates of November 1<sup>st</sup>, 2012 for both the SMDR and the SMIRR. On this basis, Veridian has calculated the amounts to be recovered through the SMDR by including 10/12ths (the period of January 1<sup>st</sup>, 2012 to October 31<sup>st</sup>, 2012) of the 2012 annual revenue requirement in the total amount to be recovered through the SMDR and then calculating the rate rider on an 18 month (November 1<sup>st</sup>, 2012 to April 30, 2014) recovery period.

The amount then to be recovered through the SMIRR would include 2/12ths (November 1<sup>st</sup>, 2012 to December 31<sup>st</sup>, 2012) of the 2012 annual revenue requirement and the full 2013 annual revenue requirement. The SMIRR rate rider has then been calculated on an 18 month (November 1<sup>st</sup>, 2012 to April 30, 2014) recovery period on the basis that Veridian's next Cost of Service application is currently planned to be filed for rates effective May 1<sup>st</sup>, 2014. At that time, capital costs approved through this Application will be included within rate base and ongoing OM&A costs from smart metering will be included within revenue requirement.

In the Application and within its response to Board Staff interrogatory #12 Veridian provided evidence and a reconciliation of the total recovery of both the SMDR and SMIRR for the period proposed to illustrate that its proposed approach would not result in an over-recovery of costs.

In its Submission Board staff states "Veridian's approach seems reasonable in principle ...".

Board Staff goes on to state "but Board staff notes that Veridian's methodology deviates from

that which the Board 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 explains that in other applications, the SMIRR has been calculated to include full annualized revenue requirements and then the 'foregone' revenues that would have been received had the SMIRR been in place from May 1, 2012 to the effective date (in the case of Veridian's Application the six month period from May1st 2012 to November 1<sup>st</sup>, 2012) has been included as an additional amount to be recovered in the SMDR.

Board staff further states that the methodology described above is preferable as the SMIRR remains as a proxy for the monthly charge in the base monthly fixed charge to recover the annualized revenue requirement.

In its Submission, VECC states "VECC agrees with Board Staff that the methodology approved by the Board in other smart meter applications is preferable."

Veridian submits that with rates rebased under a Cost of Service proceeding effective May 1<sup>st</sup>, 2014 both methodologies result in the required recovery of revenue requirement. Veridian submits that either approach is acceptable and defers to the Board in deciding which methodology is most acceptable.

#### **Prudence of Smart Meter Costs**

In its Application, Veridian documented its total and average per smart meter capital costs as follows:

Time Period	<b>Total Capital Costs</b>	Total Installs	Per Meter Capital
			Costs
2007 -1008	\$7,819,148	70,869	\$110.33
2009 -2011	\$7,730,561	41, 485	\$186.35
2007 – 2011	\$15,549,709	112,354	\$138.40

Veridian's average per meter capital cost of \$138.40 compares favourably to the per meter capital cost of \$186.76 noted within the Board's Sector Smart Meter Audit Review Report. The corresponding average total cost per meter (capital and OM&A costs) from that report is \$207.37.

In its Submission, VECC provides a table which calculates Veridian's average cost per meter on a total cost basis (capital and OM&A costs) to be \$165.00.

Since the issue of that report in March 2010, the Board has required all distributors to provide information on their smart meter investments on a quarterly basis. The first quarterly update which included life-to-date smart meter investments references an average total cost per meter for reporting Ontario LDCs of \$226.92. On this basis, Veridian's average per meter capital cost is 61% of the industry average.

In its Submission, Board Staff states "Veridian's per meter costs are below the average, and within the range, seen for distributors of similar sizes and largely serving urbanized areas in these reports and in applications for smart meter cost recovery that have been made to the Board for approval." It goes on to state "As such, Board staff considers that the documented historical costs and the forecasted costs are prudent, with certain exceptions." Board staff has submitted

that the Board should consider disallowance of some amounts claimed by Veridian related to forecasted costs for meter base repairs and OM&A costs for maintenance of advanced metering communications device.

In its Submission, VECC states "VECC submits that Veridian's costs are reasonable, subject to the Board's consideration of Board staff's submissions on costs related to meter base repairs and OM&A costs for Maintenance of Advanced Metering Communications."

#### Meter Base Repairs

Veridian has included an amount of \$35,000 for meter base repairs in the annual 2012 revenue requirement. As explained on Page 6 of the Manager's Summary and further explained in its response to Board Staff interrogatory #2, at the end of 2011 there were approximately 72 customers for which meter base repairs and/or retrofits were required and Veridian forecasted the costs for these repairs to be \$70,000. Veridian considered this a 'one-time' expense, rather than an ongoing OM&A cost and as such amortized the total cost of \$70,000 over the two year period revenue requirement period of 2013 and 2014.

In its Submission, Board staff states, "It is not clear whether these meter base repairs/retrofits estimated are solely related to the remaining smart meters to be deployed, or whether this also includes repairs and retrofits for meter bases for customers for which smart meters were installed but which might have encountered a problem subsequently. "

In the Application, on page 6 of the Manager's Summary, Veridian states "Within the remaining installations to be completed there are some installations that require repairs and/or upgrades to customer meter bases or other equipment in order to complete the installations. Veridian has estimated the cost for these repairs and/or modifications to be \$70,000 and this cost has been included in the calculation of the 2012 revenue requirement." Veridian submits that the information provided in the Manager's Summary clearly states that these meter base repairs are for remaining smart meters to be deployed and not for meter bases for customers for which smart meters were installed but which might have encountered a problem subsequently.

In its Submission, Board staff goes on to state "If the meter base repairs/retrofits are solely for the purposes of the initial installation, then the amounts should be recoverable as an expensed amount, in accordance with the Board's Decision EB-2007-0063.".

Board staff questions the quantum estimated by Veridian and submits that the Board consider disallowance of the meter base repair/retrofit amount of \$35,000.

As explained in response to Board staff interrogatory #2, Veridian based its estimate of \$70,000 or approximately \$970 per meter on quotes obtained by contractors and Veridian's experience with similar previous repairs. Veridian submits that the complexity of meter base repairs can vary widely from premise to premise and some repairs can be very minor in effort and costs. Veridian notes that the approximately 70 repairs to be completed have been deferred until the latter stages of its smart meter deployment as they are of the greatest complexity and that the estimated per meter repair cost is reasonable.

Furthermore, Veridian submits that a disallowance by the Board of Veridian's 2012 and 2013 meter base repair costs is inappropriate as these costs are entirely incremental to Veridian's current Board approved revenue requirement. It is further submitted that as the repairs are for customer owned equipment, the repairs would not be undertaken by Veridian, nor the costs incurred if Veridian were not compelled to carry out this work as part of its smart meter deployment. Finally, Veridian submits that if these meter base repairs are not completed, Veridian will be unable to install smart meters for these remaining customers.

Veridian submits that the estimated costs for meter base repairs in 2012 and 2013 are reasonable and should be approved for recovery.

#### OM&A Costs for Maintenance of Advanced Metering Communications Device

Veridian has estimated an amount of \$99,246 for OM&A expenses in 2012 related to the maintenance of Advanced Metering Communications Devices. In its submission, Board staff submits that an annual allowance of \$50,000 may be adequate.

In its response to Board staff interrogatory #3, Veridian explained that the amount of \$99,426 was the total cost for investigation and resolution of Meter Trouble Reports and provided

information on types of trouble or problem conditions the investigation and resolution activities related to. Veridian also provided volumes of such reports from the period of 2009 to June 30, 2012 as follows.

Year	Meter Trouble
	Reports
2009	87
2010	139
2011	373
2012	336
(to June 30 <sup>th</sup> )	

Veridian notes that at the end of 2011 it had installed 112,354 meters which communicate data through a combination of wireless devices over a Wide Area Network and through land telephone lines every hour of every day. At an annualized forecast of 672 meter trouble reports for 2012, assuming that each report was for a different meter, the %age of meters reporting trouble calls for an entire year would be 0.6% or less than 1.0%.

In its Submission, Board staff states "Board staff appreciates that some of these troubles are related to the technology employed and the increased functionality afforded by a more intelligent metering and communications system." Veridian submits that it is the very nature of the intelligent metering and communications system which results in high numbers of trouble reports. With the previous technology employed for metering, data received from the meter indicating 'trouble' occurred only when the meter was visited every 60 days for regular readings or when prompted by a call from a customer. The very immediate nature of the smart meter technology generates more frequent and accurate status information and reporting of trouble conditions. As well, Veridian submits 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.

Board staff has stated that it is unclear to them if all the conditions are fully incremental to existing OM&A and give the example of a reverse energy flow situation which could occur regardless of the metering technology employed. However, Board staff go on to state that "the daily communication of a customer's usage makes the identification of such incidents more likely due to smart metering technology." This acknowledgement of enhanced and more timely data reporting by the meter itself through trouble reports and through daily communication of usage supports Veridian's assertion that the number and immediacy of meter trouble conditions is expected to increase with the implementation of smart metering.

Veridian submits that its estimate of \$99,426 for costs associated with maintenance of advanced metering communications device is appropriate and should be approved within the 2012 OM&A costs.

## **Costs Beyond Minimum Functionality**

In its Application Veridian applied for recovery of \$32,290 in capital and \$160,469 OM&A costs beyond minimum functionality. These costs were for CIS integration with the MDM/R, synchronization with Veridian's internal AMCC systems, web presentment, and implementation of TOU rates. Veridian notes that the Guideline indicates that a distributor may incur costs that are beyond minimum functionality as defined in O.Reg. 425/06.

In its Submission, Board staff states "Board staff takes no issue with the documented costs related to "beyond minimum functionality" aspects of Veridian's smart meter program based on the documentation provided in response to Board staff interrogatories."

In its Submission, VECC states that "Veridian's average meter cost for costs beyond minimum functionality is approximately \$1.72 per meter which is well below the average costs in other applications before the Board to date. VECC takes no issue with Veridian's costs beyond minimum functionality."

Veridian submits that its capital and OM&A expenditures for costs beyond minimum functionality have been prudently incurred and requests the Board's approval of these costs within this Application.

#### **Cost Allocation**

In its Application, Veridian proposed class-specific SMDR and SMIRR rate riders for the residential and  $GS < 50 \, \mathrm{kW}$  customer classes.

Veridian calculated the revenue requirement to each customer class based on the following cost allocation methodology:

- Return and amortization allocated on each class's percentage share of the total capital costs (76.1% residential and 23.9% GS < 50 kW)
- OM&A costs allocated on the basis of the total number of meters installed for each class (92.3% residential and 7.7% GS < 50 kW)</li>
- PILs allocated on the basis of the revenue requirement derived for each class before PILs (82.9% residential and 17.1% Gs < 50 kW)

Veridian, in response to Board staff interrogatory #13 recalculated class-specific SMDRs to include class-specific allocation of SMFA revenues plus carrying charges. In its response to VECC's interrogatory #9 requesting separate smart meter revenue requirement models for each customer class, Veridian referenced its response to Board staff interrogatory #13 as, in its opinion, the allocations resulted in the most accurate class allocation possible given the class specific cost information available from Veridian's records.

In its Submission, VECC states that "Veridian indicates installed smart meter costs were tracked separately by rate class and hence were directly identifiable." VECC also states that "In VECC's view, Veridian has the appropriate level of data and should provide in its reply submissions, the information requested in VECC IR#9, i.e. class specific revenue requirement

models and revised SMDR and SMIRR rate riders based on the proposed VECC cost allocation methodology, and that the Board should adopt these values."

Veridian agrees with VECC that capital costs for installed smart meters were tracked separately by rate class. Veridian also submits that as outlined on page 23 of the Manager's Summary, Veridian used these installed meter capital costs by rate class when allocating capital costs by rate class.

Veridian disagrees with VECCs premise that the appropriate level of data by rate class is available for the development of accurate class specific revenue requirement models. Capital costs for capital items other than the meters, such as hardware and software, were not and cannot be tracked separately by rate class as those investments support all of the smart meters installed. OM&A costs also were not tracked separately by rate class as these costs are largely non class specific and again, support all of the smart meters installed.

As VECC noted in its Submission, Section 3.5 of the Guideline states "In the Board's decision with respect to Powerstream's 2011 Smart Meter Disposition Application (EB-2011-0128), the Board approved an allocation methodology based on a class-specific revenue requirement, offset by class-specific revenues. The Board noted that this approach may not be appropriate or feasible for all distributors as the necessary data may not be readily available."

Veridian submits 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's methodology as outlined above where directly assignable capital costs were used in allocating those costs and by using the total number of meters installed by class to assign the return and amortization, have effectively resulted in class-specific revenue requirements on a full cost basis using the best cost information available.

Veridian submits that VECCs proposed methodology would not result in class specific revenue requirements that would be materially more accurate than use of Veridian's methodology.

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#### **Other Matters**

#### Stranded Meters

In its Submission, Board staff noted that Veridian is proposing not to dispose of stranded meters at this time and continues to include these costs in its rate base for rate-making purposes, including the continued to amortization of these assets.

Board staff states that Veridian's proposal is in accordance with the Guideline and submits that Veridian should make a proposal for the recovery of stranded meter costs in its next cost of service application for 2014 rates. Veridian confirms its intention to do so.

#### **Operational Efficiencies**

Veridian confirmed in the Application that the avoided costs of manual meter reading were removed from total operating costs within Veridian's Board approved 2010 COS revenue requirement. In response to VECC interrogatory #5, Veridian stated that it has not identified any realized operational efficiencies or cost savings beyond the avoided costs of manual meter reading.

In its Submission Board staff stated that Veridian and other Ontario LDCs may be able to realize longer term productivity gains over time as they gain experience with smart meters and TOU data. Board staff's assertion is consistent with Veridian's response to VECC interrogatory #5 in which it identifies that further investments beyond minimum functionality may yield additional opportunities for operational efficiencies.

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**Conclusion and Submission** 

In concluding its Submission, Board staff stated:

"Subject to the above comments, Board staff submits that Veridian's Application is in accordance 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."

As stated earlier, VECC in its Submission stated:

"VECC observes that Veridian's total average smart meter cost (Capital & OM&A) of \$165 (excluding including costs beyond minimum functionality) is within the Board's range in EB-2007-0063 and well below the recent sector averages. VECC also notes that when costs beyond minimum functionality are included, the total average costs (\$166.72) are also below the recent sector averages."

Veridian, in response and conclusion, respectfully submits that the costs for recovery within the Application have been prudently incurred in accordance with the Board's guidelines, have been necessary for Veridian to complete its obligations under the Smart Meter Initiative and that the proposed rate riders are just and reasonable. Veridian respectfully requests the Board approval of these costs and approval of the proposed rate riders.