

**Ontario Energy Board**



**G-2008-0002**

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# **Guideline**

**Smart Meter Funding and Cost Recovery**

October 22, 2008

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## Purpose

This guideline sets out the Board's filing instructions in relation to the funding of, and the recovery of costs associated with, smart meter activities conducted by electricity distributors. It reflects amendments to a number of smart metering regulations that were enacted on June 25, 2008 as well as the direction provided by the Board in its combined proceeding on smart meter costs (proceeding EB-2007-0063). It also includes a synthesis of the practices that have emerged from recent decisions of the Board.

This guideline supersedes the January 29, 2007 *Report of the Board on 2<sup>nd</sup> Generation Incentive Regulation for Ontario's Electricity Distributors: Addendum for Smart Metering Rates*.

## Background

### 1.1 Regulations Enacted June 25, 2008

On June 25, 2008, the Government of Ontario enacted regulations under the *Electricity Act, 1998* (O. Reg. 233/08 and O. Reg. 235/08) and the *Ontario Energy Board Act, 1998* (O. Reg. 234/08) with respect to smart meter activity. These regulations amended pre-existing regulations pertaining to smart metering, and the key elements can be summarized as follows:

**Table 1: Smart Meter Regulations**

Regulation	Description
O. Reg. 233/08	Amends O. Reg. 393/07, <i>Smart Metering Entity</i> , to identify the activities that the Smart Metering Entity ("SME") has the exclusive authority to carry out.
O. Reg. 234/08	Amends O. Reg. 426/06, <i>Smart Meters: Cost Recovery</i> , to require the Board to determine the economic prudence and cost effectiveness of agreements entered into for the acquisition of smart meters. Also amends O. Reg. 426/06 to extend the

	general prohibition on cost recovery to activities that are within the exclusive authority of the SME as set out in O. Reg. 393/07.
O. Reg 235/08	Amends O. Reg. 427/06, <i>Smart Meters: Discretionary Metering Activity and Procurement Principles</i> , to add a new category of distributors that are authorized to undertake smart meter activities. This new category is comprised of distributors that acquire their smart meters pursuant to and in compliance with a specified Request for Proposal issued by London Hydro Inc. Also amends O. Reg. 427/06 to confirm that six named distributors may continue their smart metering activities.

The Board anticipates that more distributors will seek to procure and deploy smart meters, and hence they may be seeking funding for, and the recovery of costs associated with, smart meter activities in 2009 rate applications and beyond.

## 1.2 The EB-2007-0063 Board Decision on Smart Meters

In mid-2007, the Board conducted a combined proceeding in relation to smart meter costs for the thirteen distributors that were at that time authorized by regulation to conduct smart meter activities (proceeding EB-2007-0063). In its Decision with Reasons issued on August 8, 2007, the Board addressed the following, as summarized further below:

- the interpretation of minimum functionality
- the smart meter procurement process
- smart meter costs
- dealing with stranded meter costs
- accounting procedures related to smart meter costs
- the methodology for recovery of smart meter costs through rates

It is noted that, since issuance of the Board's Decision in proceeding EB-2007-0063, a number of developments have occurred in relation to smart meter activities. For

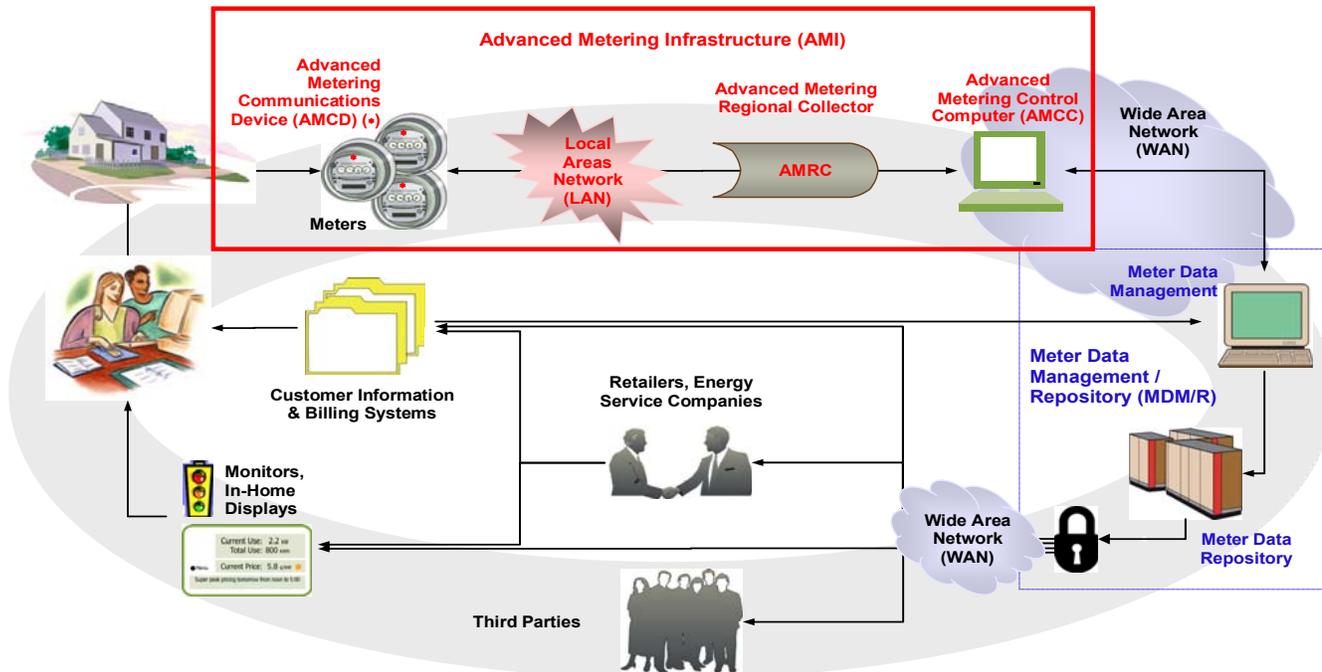
example, additional distributors have become authorized by regulation (O. Reg. 427/06) to conduct smart meter activities, conditional on their meters being acquired pursuant to and in compliance with a Request for Proposal issued by London Hydro Inc. In addition, O. Reg. 426/06 now confirms that certain stranded meter costs can be recovered. These developments can in certain cases affect the application of the principles set out in the Board's Decision on a going forward basis, and are where applicable reflected in the filing instructions set out in section 4 below.

### **Minimum Functionality**

The minimum functionality for advanced metering infrastructure for residential and small general service customers is set out in O. Reg. 425/06, *Criteria and Requirements for Meters and Metering Equipment, Systems and Technology*.

The Board accepted that minimum functionality is as shown in the "Advanced Metering Infrastructure" area in the diagram below. That includes an advanced metering communication device, a local area network, an advanced regional collector, and an advanced metering central computer.

# Smart Metering System



## Procurement Process

In terms of the procurement process, the Board noted that its assessment of prudence relates to both the price paid for goods and services and the procurement process itself. In its review, the Board noted that the procurement process with respect to the original 13 distributors authorized to undertake smart metering activities was unique, and that the Government had been extensively involved. The Board was satisfied that, at a high level, the evidence demonstrated that the distributors acted in a professional manner, exercised the necessary due diligence and maximized buying economies through buying groups.

## Smart Meter Costs

The Board identified the categories of capital and operation, maintenance and administration costs that relate to smart meter minimum functionality.

The Board accepted that different situations can affect the cost. Installation costs in rural areas can be more expensive than in urban areas. Installation costs are also more expensive in areas characterized by older construction as opposed to newer construction. Other factors that can also affect costs include the number of meters installed and the degree to which costs are incurred upfront. The table below identifies the costs of each of the distributors involved in the proceeding as approved by the Board.

**Table 2: Smart Meter Costs for Authorized Distributors in Proceeding EB-2007-0063**

	Distributor	CAPITAL COST (\$ Millions)		OM&A COST (\$ Millions)	TOTAL COST (\$ Millions)	Total Cost per meter (\$)
		\$	Qty			
1	TORONTO HYDRO	23.90	192,294	0.40	24.29	\$126.34
2	HYDRO ONE NETWORKS	21.80	62,914	8.37	30.17	\$479.47
3	HYDRO ONE BRAMPTON	0.94	6,401	0.01	0.95	\$148.04
4	HYDRO OTTAWA	15.29	114,432	0.22	15.51	\$135.58
5	HORIZON	0.82	0	0.24	1.06	n/a
6	POWERSTREAM	0.07	0	0.00	0.07	n/a
7	VERIDIAN	0.04	0	0.00	0.04	n/a
8	ENERSOURCE	1.51	12,528	0.29	1.81	\$144.20
9	CHATHAM-KENT	2.86	17,052	0.37	3.23	\$189.34
10	MIDDLESEX	0.56	3,063	0.02	0.58	\$189.96
11	MILTON	0.70	5,494	0.00	0.70	\$126.83
12	NEWMARKET	2.11	19,000	0.24	2.35	\$123.59
13	TAY	0.00	0	0.00	0.00	n/a

Costs associated with the repair and replacement of customer owned equipment were also considered in the proceeding. The Board determined that all labour and associated costs incurred, with the exception of material and parts costs for customer owned equipment, should be capitalized and tracked in a sub account of the Smart Meter Capital and Recovery Offset Variance Account 1555. The actual material costs to repair or replace any customer owned equipment should be expensed and also tracked separately in a different sub account of the Smart Meter OM&A Variance

Account 1556 until disposition is ordered by the Board following a prudence review. As the meter base remains the property of the customer, the Board determined that it would not be appropriate to have it form part of the distributor's rate base.

### **Stranded Costs**

The Board noted that the installation of smart meters means that older meters will be retired earlier than planned and that the costs associated with retired meters will not have been fully depreciated. Therefore, distributors would be at risk of not recovering the costs of stranded meters.

The Board accepted that stranded costs would be recoverable. The Board's direction for the 13 authorized distributors was to leave the older meters in rate base and to continue to track the costs associated with the stranded meters. The Board deferred a decision on stranded meter costs for several reasons, but noted that distributors can if they choose bring forward applications for the recovery of stranded meter costs in their rates.

### **Accounting Procedures and Methodology for Cost Recovery in Rates**

Although the Decision in proceeding EB-2007-0063 provided direction or guidance in relation to accounting procedures and cost recovery through rates, the Board's view on these matters has evolved since that time as reflected in more recent accounting documents and rate decisions. Distributors should therefore be guided by the detailed sections that follow in this guideline as to how they should manage accounting matters and make application for cost recovery.

## **Accounting for Smart Meter Revenues and Costs**

Distributors should continue to use the established accounts 1555 and 1556 to track smart meter related capital and operating costs, respectively. Revenues from smart meter funding adders (see section 4 below), should be recorded in account 1555. The

detailed accounting entries are described in the Board's letter of June 13, 2006, relevant portions of which are reproduced in Appendix A to this guideline.

Investments in smart meters should be recorded in the 1555 capital variance account. Distributors should use sub-accounts to segregate costs by type for future fixed asset accounting required under GAAP. The distributor's normal capitalization policies should be followed.

The Board has provided guidance in relation to accounting for stranded meter costs related to the installation of smart meters in a letter to distributors dated January 16, 2007. Specifically, distributors are to record stranded meter costs in a new sub account of account 1555. The Board's January 16, 2007 letter is reproduced in Appendix B to this guideline.

The Board has provided guidance on a number of issues related to accounting for smart meters in the August 2008 release of the Accounting Procedures Handbook "Frequently Asked Questions" (specifically, in questions 8 through 11). This material provides examples of accounting treatment for:

- distributors in receipt of Board approval for recovery of smart meter investment costs
- distributors whose rates have been set using the incentive regulation mechanism
- distributors that acquire additional smart meters
- recording stranded meter costs

These questions and answers are reproduced in Appendix C to this guideline.

## Applying for a Smart Meter Funding Adder

The Board has revised the term “rate adder” to be “funding adder”. This more clearly communicates that the adder is a tool designed to provide advance funding and thus to mitigate the anticipated rate impact of smart meter costs when recovery of those costs is approved by the Board. This may be distinguished from the cost recovery tool (i.e., the disposition rider) discussed in section 5.

Any distributor may apply for a smart meter funding adder. Approval of a smart meter funding adder does not constitute regulatory approval of any costs actually incurred to conduct smart meter activities. The prudence of such costs will be examined, and the costs will be approved (or denied), at the time at which the distributor applies to recover them (see section 5 below).

To date, the practice of the Board has been to make provision for a standard funding adder of 30 cents per metered customer for non-implementing distributors and a standard funding adder of one dollar per metered customer for implementing distributors. The Board has also approved utility-specific funding adders for implementing distributors.

### 1.3 Non-Implementing Distributors

In the past, the Board has approved a 30 cent smart meter funding adder for any distributor that is not planning to implement a smart meter program in its rate test year (the year which rates are being applied for). Any distributor that is not planning to start a smart meter program in a rate test year should note this in its rate application for that year.

The Board encourages non-implementing distributors to apply for the standard 30 cent funding adder. When the distributor files a rate application it should:

- provide a statement that the distributor is not planning to start a smart meter program in the rate test year
- indicate the steps it intends to take in order to mitigate future rate impacts related to the implementation of smart meters in its service area

## **1.4 Distributors Implementing Smart Meters**

The Board has also, in the past, approved smart meter funding adders in excess of 30 cents per metered customer for distributors that filed a plan to implement smart meters in the rate test year.

An implementing distributor that applies for an “implementation” funding adder should include, as part of the application, evidence that the distributor is authorized to conduct smart meter activities in accordance with applicable law. The thirteen “named” distributors (those identified in paragraphs 3 and 5 or covered by paragraph 6 of section 1(1) of O. Reg. 427/06 and those whose service areas are identified as priority installations by O. Reg. 428/06) are not required to provide further evidence of authorization. Distributors that are authorized by virtue of paragraph 8 of section 1(1) of O. Reg. 427/06 will need to provide evidence demonstrating that their smart meters were procured pursuant to and in compliance with the August 14, 2007 Request for Proposal issued by London Hydro Inc.

The level of detail required in relation to the additional material that should be filed in support of an application varies depending on whether the distributor is seeking the standard \$1.00 funding adder or a utility-specific one.

### **Requesting the Standard \$1.00 Smart Meter Funding Adder**

The standard \$1.00 funding adder provides funding for distributors that are authorized and clearly intend to install smart meters in the rate test year. The Board has made provision for a standard funding adder in recognition of the fact that some distributors

may be in the early stages of planning and may not yet have sufficient cost information to request a utility-specific rate adder.

An application for the standard \$1.00 smart meter funding adder should include:

- the estimated number of meters to be installed in the rate test year
- the actual or estimated costs per installed meter and in total
- a statement as to whether the distributor has purchased, or expects to purchase, smart meters or advanced metering infrastructure (“AMI”) whose functionality exceeds the minimum functionality adopted in O. Reg. 425/06, and an estimate of those costs
- a statement as to whether the distributor has incurred, or expects to incur, costs associated with functions for which the SME has the exclusive authority to carry out pursuant to O. Reg. 393/07, and an estimate of those costs

### **Requesting a Utility-Specific Smart Meter Funding Adder**

A distributor that is authorized and clearly intends to install smart meters in the rate test year may request a utility-specific smart meter funding adder. The application should be supported by:

- a detailed smart meter plan which includes the number of meters proposed to be installed and an installation schedule for each month during which the proposed smart meter funding adder is expected to be in effect
- the actual or estimated costs in total and on a per meter basis for:
  - procurement and installation of the components of the AMI system
  - customer information system
  - incremental operating and maintenance activities
  - changes to ancillary systems
  - stranded meters

- a business plan justification for any smart meter or AMI costs that are incurred to support functionality that exceeds the minimum functionality adopted in O. Reg. 425/06, and an estimate of those costs
- a statement as to whether the distributor has incurred, or expects to incur, costs associated with functions for which the SME has the exclusive authority to carry out pursuant to O. Reg. 393/07, and an estimate of those costs

## Applying for Recovery of Smart Meter Costs

Smart meter capital and operating costs are normally approved (or denied) in the process of adjusting a distributor's rate base or revenue requirement, respectively, during a cost of service proceeding to set rates.

When rates are adjusted using either the 2<sup>nd</sup> or 3<sup>rd</sup> generation incentive regulation mechanism ("IRM"), there is no re-evaluation of rate base or of the revenue requirement for the purpose of setting distribution rates. Where the Board approves smart meter capital and operating costs outside of a cost of service proceeding, a smart meter disposition rider is calculated. The smart meter disposition rider differs from a smart meter funding adder in that it is designed to recover Board-approved costs of smart meter implementation when they cannot yet be incorporated into a distributor's rate base or revenue requirement.

### 1.5 Evidence to be Filed in Support of Smart Meter Cost Recovery

An application for smart meter cost recovery must be based on costs already expensed (i.e. not forecast), and should include the following information:

- a report on the status of implementation of smart meters (i.e., how many have been installed and when 100% completion is expected)

- a copy of the agreement(s) under which the smart meter assets have been procured
- calculation of the revenue requirement related to smart meter costs
- capital and operating unit cost per installed smart meter and in total for:
  - procurement and installation of the components of the AMI system
  - customer information system
  - incremental operating and maintenance activities
  - changes to ancillary systems
  - stranded meters
- a variance analysis comparing actual costs to previously filed costs
- justification for any smart meter or AMI costs incurred to support functionality that exceeds the minimum functionality adopted in O. Reg. 425/06
- for any costs incurred that are associated with functions for which the SME has the exclusive authority to carry out pursuant to O. Reg. 393/07, the basis on which recovery of those costs is allowed under applicable law

The Board expects that a distributor will normally file for inclusion of smart meter costs into ongoing operations and rate base when it files for a cost of service rate adjustment. When applying for recovery of smart meter costs, a distributor should ensure that all cost information has been audited, including the smart meter related deferral account balances.

The Board also expects that only two applications will need to be made for the recovery of smart meter costs. The first is when the distributor achieves at least 50% penetration of smart meters within its service area. The second is when the distributor installs 100% of the meters. The 50% threshold will assist in managing the workload of interested parties and will help ensure that the distributor has sufficient experience with its smart meter activities to enable it to provide detailed cost information.

## **1.6 Additional Evidence to be Filed when Cost Recovery is Requested in a non-Cost of Service Proceeding**

The Board recognizes that significant smart meter related costs may accrue during the term of an IRM plan. A distributor that has achieved at least 50% penetration of smart meters within its service area may seek cost recovery by way of the disposition of the balances in its smart meter related deferral accounts. Disposition of the balances in the deferral accounts does not affect the distributor's rate base or revenue requirement, which can only be adjusted during a cost of service proceeding.

When a distributor applies for and receives an order of the Board providing disposition of the smart meter deferral accounts in a non-cost of service proceeding, a disposition rider will be approved to provide recovery. The smart meter disposition rider provides a proxy for how the revenue requirement would be determined in a cost of service proceeding.

In an application made for smart meter cost recovery in a non-cost of service proceeding, a distributor will need to file the following information in relation to the smart meter disposition rider in addition to the information listed in section 5.1 above:

- calculation of the disposition rider for recovery of capital and ongoing operating costs
- the methodology for allocating the disposition rider to different customer classes

A distributor can rely on the order obtained in the non-cost of service proceeding in subsequent rate proceedings as evidence that the Board has reviewed and approved the underlying costs. In its next cost of service application, the distributor should include the approved smart meter capital and operating costs in its application and seek approval for the discontinuation of the smart meter disposition rider.

## Further Information

This guideline has been issued to provide guidance to electricity distributors seeking a funding adder to fund and mitigate the rate impacts of smart meter implementation or applying for the recovery of smart meter costs. It is intended to facilitate the filing of timely applications and thereby support the government's policy regarding smart meter deployment in Ontario.

Questions related to this guideline should be addressed to:

Ontario Energy Board

Market Operations Hotline

Telephone: 416-440-7604

E-Mail: [market.operations@oeb.gov.on.ca](mailto:market.operations@oeb.gov.on.ca)

## **Appendix A:**

### **Excerpt from OEB letter of June 13 2006 – Instructions for Smart Meter Accounting**

**Ontario Energy Board**  
P.O. Box 2319  
27th. Floor  
2300 Yonge Street  
Toronto ON M4P 1E4  
Telephone: 416- 481-1967  
Facsimile: 416- 440-7656  
Toll free: 1-888-632-6273

**Commission de l'Énergie de l'Ontario**  
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27e étage  
2300, rue Yonge  
Toronto ON M4P 1E4  
Téléphone; 416- 481-1967  
Télécopieur: 416- 440-7656  
Numéro sans frais: 1-888-632-6273



**BY E-MAIL ONLY**

June 13, 2006

To all electricity local distribution companies

**Re: Smart Meters ... Accounting Matters arising from the Board's 2006 EDR  
Decision on Common or Generic Issues  
EB-2006-0136**

On March 21, 2006, the Board issued its decision on certain generic 2006 EDR issues (RP-2005-0020/EB-2005-0529). This decision referred to two areas where accounting guidance would be provided. One matter concerns smart meters and the other concerns .... This letter identifies the accounts, under the Uniform System of Accounts (USoA), which are approved for [this] subject. Appendix A ... contains the specific account information and related guidance.

**Background concerning smart meters**

In its decision on the generic 2006 EDR issues, the Board adopted the recommendation in the Board's earlier report to the government on smart meters with regard to cost recovery during the phase-in period. The Board stated its view that given the increased need for electricity and the importance of conservation, specific funding for smart meters should be included in 2006 rates by all Ontario electric LDCs.

A few LDCs applied for specific smart meter programs, and rates were approved based on the evidence and forecasts submitted. For the majority of LDCs, the Board decided

that year-one expenditures equivalent to \$0.30 per residential customer per month would be appropriate to be included in rates for the rate year beginning May 1, 2006. The Board also approved that two separate variance accounts should be established (one for capital and one for operating expenses) to track differences between the amount funded in rates and actual costs.

### **Accounts and procedures for smart meters**

The Board will implement accounting procedures for smart meters in two stages. First is the issuance of the approved variance accounts and general accounting guidance provided through this letter. The second stage will be guidance to address specific accounting issues which will be informed through a staff-led consultation.

The \$0.30 per month equivalent is considered to be seed money to help to fund the start-up phase. For the majority of LDCs, the recoveries from customers will likely exceed their investments in smart meters in the beginning. While the Board views the funding approved in rates for smart meters to be for the purposes of this specific initiative, there will be no need to segregate the funds in a separate bank account. The variance accounts will track the amounts.

For now, revenue will be reduced by the amount for smart meters funded in rates on a monthly basis, and the capital variance account 1555 will be used to record this seed funding. Investments in smart meters will be recorded in the capital variance account, and LDCs should use sub-accounts to segregate costs by type for future fixed asset accounting required under GAAP. The LDC's normal capitalization policies should be followed in identifying fixed asset expenditures. The LDC should isolate the approved rate recovery in a separate capital variance sub-account to facilitate calculation.

Incremental operating, maintenance, amortization and administrative expenses directly related to smart meters will be recorded in the operating expense variance account 1556. At present, avoid allocating general expenses that are not specifically related to smart meters. After consultation with the utilities and interested parties, the Board may establish criteria to follow for allocating indirect costs and expenses.

Please see **Appendix** for guidance on the accounting entries for the two variance accounts. The overall effect of this accounting is to remove the monthly amounts collected from customers from revenue and the direct costs otherwise included as current period charges from the income statement of the LDC.

Accounts 1555 and 1556 will be added to the list of accounts to be reported under 2.1.1 of the Electricity Reporting and Record Keeping Requirements (RRR) effective for the quarter-ended September 30, 2006 (which will be due by October 31, 2006).

Within the next few months the Board intends to consult with LDCs about more detailed accounting matters that are necessary to clarify the contents of the variance accounts. Therefore, note that the accounts' definitions have not been fully developed at this time.

As part of stage two of this process, the Board will issue a staff paper on accounting for smart meters. It will address such matters as return on the investment in smart meters, taxes on income associated with smart meters and the process for clearing the variance accounts.

Questions regarding the smart meter variance accounts should be directed to Duncan Skinner at 416-440-8127 and .... The Board's toll free number is 1-888-632-6273.

Yours truly,

*Original Signed by*

Peter O'Dell  
Assistant Board Secretary

## APPENDIX

### Accounting Guidance for the Smart Meter Variance Accounts

#### **Account 1555, Smart Meter Capital and Recovery Offset Variance Account**

Debit: Revenue 4080

Credit: Variance Account 1555

To record the recoveries of smart meter funding included in the fixed charge rate for each class of customer.

Debit: Variance Account 1555

Credit: Bank/Accounts Payable XXXX

To record capitalized direct costs related to the smart meter program.

Appropriate sub-accounts shall be used in account 1555 to segregate costs into various categories of cost.

Carrying charges will apply to the monthly opening principal balance in the variance account at a rate of interest prescribed by the Board. A sub-account shall be used to separately record these carrying charges.

Records shall be maintained at an appropriate level to permit Board review and verification of amounts recorded therein.

Disposition of the variance account balance will not be considered in the Board's annual reviews of electricity non-commodity accounts under Bill 23.

**Account 1556, Smart Meter OM&A Variance Account**

Debit: Variance Account 1556

Credit: OM&A contra account 5695

To record incremental OM&A expenses and amortization related to the smart meter program.

Separate sub-accounts within the OM&A contra account shall be created for the following categories of expenses: operating, maintenance, administration and depreciation or amortization.

Carrying charges will apply to the monthly opening principal balance in the variance account at a rate of interest prescribed by the Board. A sub-account shall be used to separately record these carrying charges.

Records shall be maintained at an appropriate level to permit Board review and verification of amounts recorded therein.

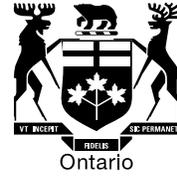
Disposition of the variance account balance will not be considered in the Board's annual reviews of electricity non-commodity accounts under Bill 23.

## **Appendix B:**

### **OEB Letter of January 16, 2007 – Instructions for Stranded Cost Accounting**

**Ontario Energy Board**  
P.O. Box 2319  
27th Floor  
2300 Yonge Street  
Toronto ON M4P 1E4  
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Facsimile: 416- 440-7656  
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**Commission de l'Énergie de l'Ontario**  
C.P. 2319  
27e étage  
2300, rue Yonge  
Toronto ON M4P 1E4  
Téléphone; 416- 481-1967  
Télécopieur: 416- 440-7656  
Numéro sans frais: 1-888-632-6273



January 16, 2007

**To: All Electricity Local Distribution Companies**

**Re: Stranded Meter Costs Related to the Installation of Smart Meters**

On June 13, 2006 the Board issued instructions for the use of variance accounts 1555 and 1556 related to smart meter capital costs and operating expenses. Stranded meter costs were not discussed in that earlier guidance since the smart metering initiative regulations were not issued at the time.

The Board reminds distributors that the functional specification for the advance metering infrastructure ("smart meters") is referenced in O.Reg 425/06 under the *Electricity Act, 1998*, and therefore, the smart metering initiative applies to residential and small general service consumers where the metering of demand is not required.

The Board has approved the use of a new account to record the stranded costs associated with conventional or accumulation meters removed at the time of installation of smart meters. The distributor must have owned these stranded meters prior to January 1, 2006 in accordance with s.28.4 of the *Ontario Energy Board Act, 1998*. Distributors that are currently part of the government's smart metering initiative as referenced in O.Reg. 427/06 and O.Reg. 428/06 under the *Electricity Act, 1998*, will be allowed to record stranded meter costs in this account.

Distributors will report the stranded meter costs in a new sub-account: Smart Meter Capital and Recovery Offset Variance Account 1555, sub-account Stranded Meter Costs. Stranded meter costs are defined as the pooled residual net book value cost of removed meters, less any net sale proceeds when received. Disposition of these costs-will be determined in a future

proceeding of the Board. Records must also be kept of the type and number of each meter to support the stranded meter costs.

The Board reminds distributors that a return on these assets, or stranded costs, is already embedded in current rates and will continue until the distributor's rates are rebased. Therefore, it would be inappropriate that an interest carrying charge would apply for 2006 or 2007 on this sub-account.

Questions regarding the smart meter accounts should be directed to Duncan Skinner at 416-440-8127. The Board's toll free number is 1-888-632-6273.

Yours truly,

*Original signed by*

Kirsten Walli  
Board Secretary

## **Appendix C:**

# **Accounting Procedures Handbook – Excerpt of Frequently Asked Questions August 2008**

**Ontario Energy Board**  
**Accounting Procedures Handbook**  
**Frequently Asked Questions**  
**August 2008**

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.....

**Additional accounting guidance provided for smart meters variance accounts:**

- Q.8 Illustrative example of the accounting treatment for smart meters approval and associated revenue requirement in a rate order
- Q.9 Accounting treatment for smart meters approval and associated revenue requirement in a rate order as part of the IRM process
- Q.10 Accounting treatment for additional smart meter installations after the issuance of a rate order approving initial/previous smart meters
- Q.11 The use of Sub-account of 1555, Smart Meter Capital and Recovery Offset Variance Account, to record stranded costs

.....

**Additional accounting guidance provided for smart meters variance accounts:**

**Q.8 Please provide an example for smart meter accounting where the distributor has received Board approval for its smart meters investment and the associated revenue requirement in a rate order.**

A.8 The following example is provided to illustrate the accounting treatment applicable to the smart meters variance accounts upon the Board's review of a distributor's in-service smart meters, which results in the issuance of a rate order to the distributor. The information in this illustrative example is not precedent setting and does not imply Board approval of any smart meter policy matter. The specific approval of these matters in the individual decision and order of a distributor apply.

Assume a distributor filed an application with the Board in 2008. In the application, it shows that as of December 31, 2007, the distributor installed 15,000 smart meters in service for residential customers in 2007. At an average cost of \$200, the investment in smart meters was \$3,000,000 (15,000 × \$200). As well, assume for simplicity, 15 years useful life and the half-rule for the in-service smart meters apply for amortization purposes. Note on an actual basis GAAP accounting treatment may differ. In addition, assume funding received for the smart meter initiative through a smart meter rate adder in the 2006 to 2007 period was \$214,000. For simplicity, this illustration assumes there are no other concurrent smart meter investments or funding activities for the distributor. Based on the revenue requirement calculation of \$250,000 shown below, assume the Board issued a rate order, which included a rate adder effective May 1, 2008 for one year to recover the net revenue requirement amount of \$36,000 from residential customers (\$250,000 - \$214,000). The journal entries for the variance and other related accounts are separately shown below in three sections: A. the initial recordings in the variance accounts; B. the reclassification to various accounts on issuance of rate order and; C. a summary of the account balances.

The accounting illustrated below in **Section A**, conforms to the Board's instructions outlined in a letter of June 13, 2006 to distributors in the period prior to Board review and approval of smart meters.

The ensuing issuance of the Board order approving the smart meters investment and the associated (net) revenue requirement for the smart meters in rates triggers the accounting recognition of the investment in smart meters as assets and the funding received for the smart meters as revenues. Consequently, this requires the accounting reclassification of these items recorded in the variance accounts to their applicable asset and revenue USoA accounts as shown in **Section B** below.

Following the reclassification clearance of amounts from the variance accounts to their applicable accounts due to the Board order, the balances in the variance accounts should be zero (assuming no other smart meter investment or funding activities) as shown in **Section C** below. Therefore, no true ups of the 1555 and 1556 variance account balances are required or no recordings of the recoverable (or refundable) net revenue requirement amount in account 1595 are required.

In summary, the approved revenue requirement, net of the funding received for the period, results in a net revenue requirement amount of \$36,000 recoverable in rates via an approved rate adder. This amount will be recorded in the distribution revenue account 4080 over the recovery period from May 1, 2008 to April 30, 2009 and not the smart meter variance accounts or account 1595.

**Calculation of Smart Meters Approved Revenue Requirement per Assumptions Provided**

**Smart Meters as of December 31, 2007**

Investment in Smart Meters (recorded in Account 1555) (Assume 15,000 in-service residential meters @ \$200 each)	\$	3,000,000	
Carrying charges at prescribed interest rates (avg. 5%):			
Account 1555 (applied to net of investment and funding)	\$	69,650	
Account 1556 (applied to expenses on average basis)		2,919	
Total Interest (debit)	\$	72,569	
<b>Return Calculation (per assumptions shown):</b>			
Average smart meters in rate base (half-year average)	\$	1,500,000	
Return on rate base (assume 5.25%) deemed debt (60%)	900,000	\$	47,250
Return on rate base (assume 9.00%) deemed equity (40%)	600,000		54,000
<i>Return on smart meters before PILs</i>		\$	101,250
<b>Add:</b>			
OM&A expenses (recorded in Account 1556)			16,754
Amortization expense (recorded in Sub-account of 1556)			100,000
Carrying charges recoverable (recorded in Sub-account of 1556)			2,919
PILs gross-up (for simplicity 35% tax rate used, not actual tax rate)			29,077
<b>Revenue Requirement</b>		\$	250,000
<b>Less:</b>			
Funding collected in rates (recorded in Sub-account of 1555)			214,000
 <b>Approved Net Revenue Requirement</b>		\$	36,000

Notes:

- (1) The Board issued a rate order effective May 1, 2008 for the recovery of the Net Revenue Requirement amount of \$36,000 through a rate adder for the residential rate class.
- (2) There will be no future true-up of the \$36,000 amount in the variance accounts because the residual amount is not recorded in a variance account. Consequently, the rate adder billed to customers will be recorded in distribution revenues (account 4080).

**Illustrative Journal Entries per the Assumptions made for the Smart Meters Above**

No.	Account	Description	Debit	Credit
<b>Section A - Initial Recordings in the Variance Accounts (Up to December 31, 2007)</b>				
		(for simplicity shown on a cumulative basis up to Dec. 31, 2007)		
		<b>Smart Meter Capital Asset</b>		
1	1555	Smart Meter Capital & Recovery, Sub-account Capital	3,000,000	
	2205	Accounts Payable/Bank		3,000,000
		To record smart meter investment in variance account		
2	4080	Distribution Services Revenues-Residential	214,000	
	1555	Smart Meter Capital & Recovery, Sub-account Recovery		214,000
		To record smart meter ("seed money") funding in variance account		
3	1555	Smart Meter Cap. & Recov., Sub-account Carrying Charges	69,650	
	4405	Interest and Dividend Income		69,650
		To record carrying charges net of investments and funding amounts		
		<b>Smart Meters OM&amp;A Expenses</b>		
1	5175	Maintenance of Meters	16,754	
	2205	Accounts Payable		16,754
		To record OM&A expenses (for simplicity one account used)		
2	5695	OM&A Contra Account	16,754	
	5175	Maintenance of Meters		16,754
		To transfer OM&A expenses to smart meter contra account		
3	1556	Smart Meter OM&A	16,754	
	5695	OM&A Contra Account		16,754
		To record OM&A expenses to variance account		
4	1556	Smart Meter OM&A, Sub-account Amortization Expense	100,000	
	1555	Smart Meter Cap. & Recov., Sub-account Accum. Amort.		100,000
		To record smart meter amortization expense		
5	1556	Smart Meter OM&A, Sub-account Carrying Charges	2,919	
	4405	Interest and Dividend Income		2,919
		To record carrying charges		

No.	Account	Description	Debit	Credit
<b>Section B - Reclassification to Various Accounts on Issuance of Rate Order (as of May 1, 2008)</b>				
<b>Smart Meter Capital Asset</b>				
1	1860	Meters, Sub-account Smart Meters - Residential	3,000,000	
	1555	Smart Meter Capital and Recovery, Sub-account Capital		3,000,000
		To transfer approved smart meters to asset account		
2	1555	Smart Meter Cap. & Recov., Sub-account Accum. Amort.	100,000	
	2105	Accumulated Amortization, Sub-account Smart Meters		100,000
		To transfer accumulated amortization to asset account		
3	4405	Interest and Dividend Income	69,650	
	1555	Smart Meter Cap. & Recov., Sub-account Carrying Charges		69,650
		To reverse carrying charges as return on asset provides long-term interest for recovery		
<b>Smart Meters OM&amp;A Expenses</b>				
1	5695	OM&A Contra Account	16,754	
	1556	Smart Meter OM&A		16,754
		To transfer approved OM&A expenses to contra account		
2	5175	Maintenance of Meters	16,754	
	5695	OM&A Contra Account		16,754
		To transfer OM&A expenses to expense account		
3	5705	Amortization Expense, Sub-account Smart Meters	100,000	
	1556	Smart Meter OM&A, Sub-account Amortization Expense		100,000
		To transfer amortization expense to expense account		
4	4405	Interest and Dividend Income	2,919	
	1556	Smart Meter OM&A, Sub-account Carrying Charges		2,919
		To reverse carrying charges, which are included in the revenue reqmt. (Note: Re-recognized as revenue when collected in future rates)		
5	1555	Smart Meter Capital and Recovery, Sub-account Recovery	214,000	
	4080	Distribution Services Revenues - Residential		214,000
		To transfer funds (previously collected) to revenue account		

No.	Account	Description	Debit	Credit
<b>Section C - Summary of Account Balances (As of May 1, 2008)</b>				
	1555	Smart Meter Capital and Recovery	0	
	1556	Smart Meter OM&A	0	
	1860	Meters, Sub-account Smart Meters - Residential	3,000,000	
	2105	Accumulated Amortization, Sub-account Smart Meters	100,000	
	4080	Distribution Services Revenues - Residential		214,000
	4405	Smart Meter Cap. & Recov., Sub-account Carrying Charges	0	
	5175	Maintenance of Meters	16,754	
	5695	OM&A Contra Account	0	
	5705	Amortization Expense, Sub-account Smart Meters		100,000
	NB	The net revenue requirement amount of \$36,000 to be recovered in rates will be recorded in account 4080		

**Pro-forma Partial Income Statement (April 30, 2009 assuming no other transactions)**

Revenues:			
Distribution 4080 (prior rate adder)	214,000		
Distribution 4080 (new adder May 1, 2008 to Apr 30, 2009)	<u>36,000</u>	250,000	
Expenses:			
OM&A	16,754		
Amortization	100,000		
Long-term interest (per return on asset)	47,250		
PILs (for simplicity gross-up and expense assumed same)	<u>29,077</u>	193,081	
<b>Net Income (1)</b>			<b><u>56,919</u></b>
(1) Comprised of return and carrying charges (\$54,000 + \$2,919)			

**Pro-forma Partial Balance Sheet (April 30, 2009 assuming no other transactions)**

Fixed Assets:	
Smart Meters - Residential	<u>2,900,000</u>
Regulatory Assets (Smart Meters):	
Balance in Account 1555	0
Balance in account 1556	<u>0</u>

**Q.9 The distributor received a rate order that included approval of the revenue requirement for smart meters installed up to April 30, 2007, as part of the 2008 IRM application process. The rate order approved a rate adder for the smart meters (net) revenue requirement effective in rates on May 1, 2008. No revenue requirement was approved for these smart meters in the past. How should the distributor account for the smart meters and the rate adder?**

A.9 The distributor should follow the guidance provided above in FAQ #8. Due to the Board's approval of the smart meters and the associated (net) revenue requirement for the smart meters in a rate order, this triggers the accounting recognition criteria for assets and revenues. Accordingly, this requires the reclassifications of items and amounts recorded in the variance accounts 1555 and 1556 to their applicable asset and revenue accounts as shown in Section B of Answer #8 above.

The revenues (or refunds) derived for the net revenue requirement via a rate adder or a permanent rate adder in the approved rate order are recorded in account 4080, as indicated in FAQ #8, not the smart meter variance accounts or account 1595.

**Q.10 How should the distributor account for the additional smart meter installations after receiving approval of the initial/previous smart meter revenue requirement in a rate order (as cited in FAQs 8 and 9 above)?**

A.10 Board review and approval of all smart meters installations, whether initial or additions, are required. Until such time the Board issues an order approving the revenue requirement associated with the additional smart meters, the accounting treatment for the variance accounts should continue in the same manner as cited above in FAQ# 8, Section A, Initial Recordings in Variance Accounts, in accordance with the Board's instructions in a letter of June 13, 2006 to distributors.

When the Board reviews and approves the additional smart meter installations through the approval of the (net) revenue requirement in a rate order, the accounting treatment cited above in FAQ #8, Section B, Reclassification to Various Accounts on Issuance of Rate Order, applies.

**Q.11 By letter of January 16, 2007, the Board issued an accounting instruction related to stranded meter costs. This included the requirement to record in a new sub-account of account 1555 the stranded costs associated with conventional or accumulation meters removed at the time of installation of**

**smart meters. Has this accounting requirement changed in light of Board decisions and orders related to this matter?**

- A.11 This account was provided to allow for the accounting of the impairment of conventional meter assets (or stranded asset costs) to conform to the requirements under GAAP and to allow the Board flexibility to decide how this matter can be dealt with through the review of distributors' applications. Accordingly, where the Board has approved a distributor's proposal for stranded meter costs treatment in a decision and/or order, the distributor should follow the distributor-specific instruction or direction related to the treatment of the stranded meter costs provided in the decision and/or order.