

ONTARIO ENERGY BOARD

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

AND IN THE MATTER OF an application under section 74 of the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Schedule B for a licence amendment by Enersource Hydro Mississauga Inc. seeking an exemption from their Time-Of-Use Pricing date for Regulated Price Plan Consumers;

**WRITTEN SUBMISSIONS OF THE INDEPENDENT
ELECTRICITY SYSTEM OPERATOR**

June 1, 2011

STIKEMAN ELLIOTT LLP
Barristers & Solicitors
5300 Commerce Court West
199 Bay Street
Toronto, Canada M5L 1B9

Patrick G. Duffy
Tel: (416) 869-5257
Fax: (416) 947-0866

Counsel for the IESO

A. OVERVIEW

1. These are the written submissions of the Independent Electricity System Operator ("IESO") in respect of the application filed by Enersource Hydro Mississauga Inc., ("Enersource") for a licence amendment that would indefinitely exempt Enersource from its mandated date for implementation of time-of-use ("TOU") pricing for Regulated Price Plan consumers.

2. The IESO is designated and licenced as the Smart Metering Entity ("SME") under the *Electricity Act, 1998*. In its role as the SME, the IESO is managing the development of the meter data management/repository (the "MDM/R") to collect, manage, store and retrieve information related to the metering of customers' use of electricity in Ontario. As the SME, the IESO is responsible for managing the registration and enrolment of the province's distributors in the MDM/R, which is a necessary step in the implementation of TOU pricing.

3. The purpose of these submissions is to provide additional information for the Board on the "three prerequisite conditions to the implementation of TOU rates" identified by Enersource in its amended application dated March 16, 2011:

- (a) the implementation of recent MDM/R upgrades;
- (b) the execution of an agreement approved by the Board under section 5.4.1 of the Distribution System Code; and
- (c) a solution that ensures Enersource is in compliance with Measurement Canada regulations.

4. The IESO takes no position on Enersource's request for an exemption from its mandatory TOU implementation date. The IESO is committed to working with Enersource to assist in the implementation of TOU pricing. The IESO and the MDM/R

are ready to support Enersource's completion of unit, enrolment testing and transition to production when Enersource is ready to do so.

B. SUBMISSIONS

(a) The implementation of recent MDM/R upgrades

5. As the SME has detailed in its monthly reports to the Board, the MDM/R is performing reliably and is processing the steadily increasing number of LDC submitted files accurately and completely. While the MDM/R has experienced production incidents as is to be expected in the implementation of any large complex system (including server memory issues in January 2011 and a recent disk read error), the overall performance of the MDM/R has been positive.

6. The MDM/R is currently supporting 38 local distribution companies ("LDCs") in production, over 3.1 million enrolled smart meters, and processing meter reads from over 2.4 million meters daily. This includes 18 LDCs that are utilizing the Advanced Metering Infrastructure ("AMI") technology employed by Enersource (which amounts to over 1.2 million enrolled smart meters and the processing of meter reads from over 500,000 smart meters).

7. Over the last 18 months, the SME has made a number of hardware and software changes to the MDM/R to provide the processing capacity required, including the successful deployment of EnergyIP R7.0 ("Release 7.0") between March 5 and 7, 2011. Release 7.0 delivered performance improvements, defect corrections, and other minor new functions. There were no material changes to the interfaces and reports in this release from the previous Release 6.3, enabling most LDCs to continue to submitting and processing files from the MDM/R largely unchanged.

8. Enersource undertook unit testing in a sandbox environment for Release 7.0 starting in August 2010. On October 7, 2010 Enersource submitted a System Integration

Testing ("SIT") self-certification form to the IESO. The SME requested evidence of successful testing from Enersource on October 26, 2010. To date, the SME has not accepted Enersource's SIT self-certification as this is pending receipt and review of Enersource's unit testing results. Enersource cannot advance to enrolment testing until its certification has been accepted by the SME.

9. In November 2010, the SME provided LDCs who were ready to start enrolment testing with the option of executing enrolment testing under either Release 6.3 in the quality assurance system or a sandbox environment for Release 7.0. The sandbox test environment for Release 7.0 was stable throughout enrolment testing and was updated with defects during enrolment testing and prior to promoting Release 7.0 to production. Release 6.3 was kept on the quality assurance test environment for LDCs that wanted to maintain their enrolment and cutover schedules.

10. Between November 2010 and February 2011, fourteen LDCs that had conducted unit testing under Release 6.3 were able to successfully complete their enrolment testing in the sandbox environment for Release 7.0 and cut-over to production under Release 6.3. An additional ten LDCs scheduled to cut-over to production under Release 7.0 also conducted testing in the sandbox environment for Release 7.0.

11. As noted above, Release 7.0 was implemented to production between March 5 and 7, 2011. The IESO is confident that using Release 7.0 the MDM/R will continue to offer a stable system to support the ramp up of LDCs and meters to full provincial volumes. After the successful implementation of Release 7.0 into production, the quality assurance environment was upgraded to Release 7.0 and made available for enrolment testing on April 1, 2011.

12. Enersource is scheduled to begin enrolment testing using Release 7.0 on June 20, 2011.

(b) Execution of the SME/LDC Agreement

13. As described in the SME licence application (EB-2007-0750), the IESO consulted LDCs on the contents of the SME/LDC Agreement and the associated Terms of Service in a variety of forums, including direct negotiations with a representative group of LDCs throughout 2007-08 and discussions with the Electricity Distributors Association ("EDA") commencing in 2009. The IESO and the EDA finalized the SME/LDC Agreement and supporting Terms of Service in February 2010.

14. Each LDC that is operating in the MDM/R production environment can enter into a Memorandum of Understanding with the IESO that incorporates the SME/LDC Agreement and Terms of Service. The Memorandum of Understanding is a transitional substitute until such time as the SME/LDC Agreement has been approved by the Board under section 5.4.1 of the Distribution System Code. A copy of the SME's submissions in its licence application, including a generic Memorandum of Understanding with the draft SME/LDC Agreement and Terms of Service, is enclosed as Appendix "A" for the Board's information.

15. The IESO believes the SME/LDC Agreement and Terms of Service adequately define the rights and responsibilities of the SME and the executing LDC. To date, no LDC that has completed enrolment in the MDM/R has delayed its entry into production because of the lack of an approved agreement under section 5.4.1 of the Distribution System Code.

(c) Compliance with Measurement Canada regulations

16. Measurement Canada requires that cumulative register reads appear on the customer's bill and that the total billed energy consumption align with and match the difference between the meter's cumulative register reads at the beginning and end of the billing period. The IESO has been working together with LDCs, Measurement Canada and the provincial government to facilitate a sector approach that achieves


compliance with Measurement Canada's TOU billing requirements. The Cumulative Register Read Working Group ("CRRWG") was formed for this purpose.

17. After extensive consultations, the LDC members of the CRRWG agreed on September 15, 2010 that an MDM/R based solution was the best means of meeting Measurement Canada's requirements. The solution requires both modifications to the MDM/R and to the distributors' systems and business processes. On October 5, 2010 Measurement Canada confirmed that the proposed solution was satisfactory for addressing its concerns.

18. The proposed solution is designed to work for all the AMI technologies deployed in the province, including the AMI technology utilized by Enersource. The IESO is working to implement the changes to the MDM/R as part of the solution by January 1, 2012. The next release of EnergyIP (Release 7.2) and the software for the remaining portions of the Measurement Canada solution were delivered at the end of January and May 2011 respectively and are currently under testing by the IESO. Based on the testing conducted to date, the early delivery of the final software components of the Measurement Canada solution, and efforts being made to test and implement the solution, the IESO expects that the MDM/R changes will be implemented to support LDC compliance with Measurement Canada's requirements by January 2012.

19. The IESO recognizes that additional time may be needed to adapt the solution for Enersource's AMI technology. During that period, the IESO will provide support to Enersource and Measurement Canada for reconciliation and dispute resolution, including the establishment of an off-bill process to respond to requests for data needed to reconcile any variances between the total billed energy consumption and the meter's cumulative register reads. The IESO is confident that it can work with Enersource and Measurement Canada to find a solution that will allow Enersource to implement TOU rates in a manner that complies with Measurement Canada's requirements.

ALL OF WHICH IS RESPECTFULLY SUBMITTED



Patrick G. Duffy

APPENDIX "A"

STIKEMAN ELLIOTT

Stikeman Elliott LLP Barristers & Solicitors

5300 Commerce Court West, 199 Bay Street, Toronto, Canada M5L 1B9
Tel: (416) 869-5500 Fax: (416) 947-0866 www.stikeman.com

BY E-MAIL AND COURIER

November 30, 2010
File No. 101926.1050

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

Dear Ms. Walli:

Re: *Application for the Smart Metering Entity Licence*
EB-2007-0750

On behalf of the Independent Electricity System Operator ("IESO"), we are providing written submissions in accordance with the Board's Procedural Order No. 1 dated November 15, 2010.

These submissions respond to the concerns expressed by the Board in its Decision and Order of September 29, 2010 and provide greater detail as to why the IESO is not, at this time, proceeding with its application for a permanent Smart Metering Entity ("SME") licence or seeking approval for a standard form agreement with local distributor companies ("LDCs") under section 5.4.1 of the Distribution System Code (the "SME/LDC Agreement").

The Permanent SME Licence

The IESO has been performing its role as SME under the interim SME licence initially issued by the Board on September 14, 2007, with extensions of various lengths granted since that date. As set out in the IESO's prior extension requests, the IESO has been engaged in ongoing stakeholder consultations with the LDCs, both directly and under the auspices of the Electricity Distributors Association ("EDA"), since the issuance of the interim SME licence.

Amongst other things, the consultations undertaken by the IESO have involved extensive discussions related to the governance and control of the Meter Data Management/Repository ("MDM/R"). The IESO's role as the SME was conceived as a transitional one; it was assigned to the IESO so that

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the IESO could leverage its expertise to bring the MDM/R into operation and support the provincial government's Smart Metering Implementation Plan ("SMIP") by managing enrolment of the province's LDCs in the MDM/R. Because the MDM/R is integrated into and forms a critical part of an LDC's "meter-to-bill" process, the LDCs have been and continue to be fully engaged in the implementation of the SMIP. It will also be necessary to provide the LDCs with long-term control over the operation of the MDM/R if the provincial government's smart metering initiative is to succeed.

The IESO's consultations with LDCs culminated with the signing of a Memorandum of Understanding ("MOU") around SME governance with the EDA in September 2010. The MOU incorporates a transition plan that provides for LDC representation in MDM/R governance during the SMIP and a structure to transition the SME role to LDC control once the SMIP is complete. The transition of the SME function to LDC control is subject to government concurrence and cannot occur until the provincial government issues a regulation naming the new entity as SME.

Based on further consultations since the signing of the MOU, the IESO believes that the appropriate time for a transition of the SME role to occur is when substantially all of the province's LDCs are receiving service from the MDM/R. The IESO continues to work on bringing LDCs onto the MDM/R and expects that this task will be substantially complete by the end of 2011, at which time the MDM/R will be processing the metering data from approximately 4 million of the province's 4.6 million residential and general service consumers. At that time, the IESO and EDA will jointly request that the provincial government approve the transition of the SME role and issue a regulation naming a new SME.

In light of these transitional arrangements and the timeframe for completion of the SMIP, the IESO submits it is appropriate for the IESO to continue operating under an interim SME licence until the transition to the permanent SME entity is achieved, in the course of which the new SME can apply for a permanent licence. In the IESO's view, the designation of the current license as interim is consistent with the IESO role and the plan to implement governance changes as soon as that interim role is completed. Accordingly, it would be inefficient to proceed with the application for a permanent SME licence at this time given the fundamental changes in the structure of the SME that are anticipated to occur in 2011.

The SME/LDC Agreement

Consultations between the IESO and the LDCs on the contents of the SME/LDC agreement have taken a number of forms, including direct

negotiations with a representative group of LDCs throughout 2007-08 and discussions with the EDA commencing in 2009. Agreement on the terms of the SME/LDC Agreement was reached between the IESO and the EDA in the spring of 2010, as part of the plan to transition the SME to LDC control.

However, in light of the transitional arrangements for the SME role discussed above, and anticipating that experience over the implementation period could suggest further refinement of that agreement, the IESO has elected not to seek approval of the SME/LDC under section 5.4.1 of the Distribution System Code at this time. As a transitional substitute for a Board-approved SME-LDC Agreement, each LDC receiving service from the MDM/R has the option to enter into a Memorandum of Understanding with the IESO that references the SME/LDC Agreement (and the associated Terms of Service) and remains in force until a Board-approved agreement is in place. A copy of a generic Memorandum of Understanding with the draft SME/LDC Agreement and Terms of Service is enclosed for the Board's information. The IESO has also implemented measures to ensure the interests of MDM/R service recipients are represented by way of an MDM/R Operations Working Group.

On a related matter, the IESO's September 24, 2010 submission indicated that there remained some uncertainty as to the MDM/R changes needed to support LDC compliance with Measurement Canada requirements. The required changes have largely been confirmed and are now in the review and approval process.

* * * *

We trust the foregoing satisfies the concerns expressed by the Board in its Decision and Order of September 29, 2010. If the Board believes it is necessary, the IESO would be willing to attend before the Board to provide further information of the transitional arrangements discussed in these submissions.

Yours truly,

A handwritten signature in black ink, appearing to read 'P. Duffy', written over a horizontal line.

Patrick G. Duffy
Counsel for the Independent
Electricity System Operator

Encl.

cc: Helen Lainis, Independent Electricity System Operator
Gord Potter, Just Energy Ontario L.P.
Anne-Marie Reilly, Hydro One Networks Inc.
Paul Hughes, Coalition of Large Distributors
Dev Pasumarty, Electricity Distributors Association
Ric Forster, Direct Energy Marketing Inc.

SMART METERING MEMORANDUM OF UNDERSTANDING

THIS MEMORANDUM OF UNDERSTANDING dated this xx day of xxxxx, 2010.

BETWEEN:

_____, a distributor licensed by the Ontario Energy Board under the *Ontario Energy Board Act, 1998* (Ontario)

(the “Distributor”)

- and -

INDEPENDENT ELECTRICITY SYSTEM OPERATOR, a statutory corporation established and continued under the *Electricity Act, 1998* (Ontario) and designated as the Smart Metering Entity

(the “IESO” or “SME”)

This Memorandum of Understanding (“MOU”) between the Distributor and the SME (collectively, the “Parties”) sets forth mutual understandings of each of the Parties in relation to IESO’s role as Smart Metering Entity in Ontario, the testing and commissioning of the Meter Data Management and Repository (the “MDM/R”) developed by the SME, and other matters related to the Government of Ontario’s smart metering initiative.

1. The Distributor will be enrolled in the MDM/R and will participate in the testing of the MDM/R by the SME with the Distributor’s associated internal systems. The Parties will agree to a date on which the Distributor will begin using the MDM/R for production operations.
2. The Parties agree to comply with:
 - (a) the terms of the draft Smart Metering Agreement for Distributors attached as Appendix “A” with the exception of Article 3 and section 11.1;
 - (b) the draft MDM/R Terms of Service attached as Appendix “B” with the exception of Article 1; and
 - (c) any technical documentation, manuals and procedures governing the testing or operation of the MDM/R specified by the SME and published by the SME on its website www.smi-ieso.ca from time to time.

3. This MOU will be in effect until such time as the Parties enter into a Smart Metering Agreement for Distributors approved by the Ontario Energy Board under section 5.4.1 of the Distribution System Code.
4. This MOU represents the complete agreement between the Parties and supersedes all prior communications, understandings and agreements between the Parties, whether written, oral, expressed or implied.
5. This MOU may be executed by the Parties by facsimile or electronic signature and in separate counterparts, each of which when so executed and delivered will be an original, but all such counterparts will together constitute one and the same instrument.

IN WITNESS WHEREOF the Parties have, by their duly appointed and authorized representatives, executed this MOU as the date listed above.

By: _____
Name:
Title:

**INDEPENDENT ELECTRICITY
SYSTEM OPERATOR**

By: _____
Name: Bill Limbrick
Title: Vice-President,
Organizational Development and
Chief Information Officer

APPENDIX A

SMART METERING AGREEMENT FOR DISTRIBUTORS

THIS AGREEMENT dated this • day of •, 20•.

BETWEEN :

[INSERT DISTRIBUTOR NAME], a distributor licensed by the Ontario Energy Board under the *Ontario Energy Board Act, 1998* (Ontario)

(the “**Distributor**”)

and

[INSERT NAME OF ORGANIZATION DESIGNATED AS THE SMART METERING ENTITY], designated as the Smart Metering Entity under the *Electricity Act, 1998* (Ontario)

(the “**SME**”)

WHEREAS:

- A. The **[INSERT NAME]** has been designated as the Smart Metering Entity under the *Electricity Act, 1998* (Ontario) for the purpose of co-ordinating the implementation of the Government of Ontario’s Smart Metering Initiative, a key component of which is the MDM/R.
 - B. The functions required for the MDM/R were established by the Ministry of Energy and set out in the “Meter Data Management and Repository, Functional Specification, Issue 2.0, November 29, 2006”.
 - C. The MDM/R will be utilized to collect, manage, store and retrieve information related to consumers’ use of electricity in Ontario and the SME will, subject to any requirements prescribed by regulation and the protection of privacy, provide and promote non-discriminatory access to that information.
 - D. Pursuant to the procurement process managed by the Independent Electricity System Operator, IBM Canada Limited was engaged on December 5, 2006, as an Operational Service Provider for the design, engineering, delivery, installation, configuration, integration, implementation and operation of the MDM/R.
 - E. The MDM/R Agreement between the SME and IBM Canada Limited establishes the service levels and certain other terms and conditions under which MDM/R services are provided to distributors.
 - F. The OEB’s Distribution System Code provides that a distributor shall, upon being requested to do so, enter into an agreement with the SME, in a form approved by the OEB, which sets out the respective roles and responsibilities of the distributor and the SME in relation to smart metering and the information required to be exchanged to allow for the conduct of their respective roles and responsibilities.
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- G. The roles and responsibilities of the SME and the Distributor set out under this Agreement reflect the regulatory framework under which the Smart Metering Initiative is being implemented, including the role of the SME in administering the provision of services to distributors pursuant to all MDM/R Agreements.

NOW THEREFORE, in consideration of the mutual covenants set forth herein and of other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the Parties agree as follows:

ARTICLE 1

INTERPRETATION

- 1.1 Definitions:** In this Agreement, the following terms and expressions shall have the meanings set out below unless the context otherwise requires:
- 1.1.1 **“Agreement”** means this Agreement, including the Schedules to this Agreement.
 - 1.1.2 **“AMI”** means the Distributor’s advanced metering infrastructure, including the smart meter, Advanced Metering Communication Device (AMCD), Local Area Network (LAN), Advanced Metering Regional Collector (AMRC), Advanced Metering Control Computer (AMCC), Wide Area Network (WAN), and related hardware, software, and connectivity required for a fully functioning data collection system.
 - 1.1.3 **“Authorized Agent”** has the meaning ascribed to it in section 2.7.
 - 1.1.4 **“Billing Quantity Data”** means smart metering data that is ready for use in billing consumers for their consumption or use of electricity based on the time of day when the electricity was consumed or used;
 - 1.1.5 **“Distributor”** has the meaning ascribed to it above and includes the Distributor’s directors, officers, employees, contractors, agents, advisors and consultants.
 - 1.1.6 **“Market Rules”** means the Market Rules for the Ontario Electricity Market.
 - 1.1.7 **“MDM/R”** means the Meter Data Management and Repository developed by the SME within which Smart Metering Data is processed to produce Billing Quantity Data and such data is stored for future use.
 - 1.1.8 **“MDM/R Agreements”** means the Meter Data Management and Repository Development, Hosting and Support Agreement dated December 5, 2006 between the SME and IBM Canada Limited, and all other agreements between the SME and an Operational Service Provider.
 - 1.1.9 **“OEB”** means the Ontario Energy Board or its successor.
 - 1.1.10 **“Operational Service Provider”** means IBM Canada Limited and any other party engaged by the SME, excluding the Independent Electricity System Operator, to assist with the development and operation of the MDM/R.
 - 1.1.11 **“Party”** means a party to this Agreement.

- 1.1.12 **“Smart Metering Charge”** means any fee payable to the SME in respect of its role and responsibilities in respect of the Smart Metering Initiative and approved by the OEB or otherwise required by law.
- 1.1.13 **“Smart Metering Data”** means data derived from smart meters, including data related to the consumers’ consumption of electricity.
- 1.1.14 **“Smart Metering Initiative”** means those policies of the Government of Ontario related to its decision to ensure Ontario electricity consumers are provided, over time, with smart meters.
- 1.1.15 **“SME”** has the meaning ascribed to it above and includes the SME’s directors, officers, employees, contractors, agents, advisors and consultants.
- 1.1.16 **“SME Steering Committee”** means the forum to represent the interests of the MDM/R service recipients to be established by the SME under section 3.2.
- 1.1.17 **“Terms of Service”** means the terms and conditions made under section 3.1.
- 1.1.18 **“VEE”** means those validation, estimating and editing services, as specified by the SME, that are performed on Smart Metering Data to identify and account for missed or inaccurate Smart Metering Data.

1.2 Interpretation: In this Agreement, unless the context otherwise requires:

- 1.2.1 words importing the singular include the plural and vice versa;
- 1.2.2 words importing a gender include any gender;
- 1.2.3 other parts of speech and grammatical forms of a word or phrase defined in this Agreement have a corresponding meaning;
- 1.2.4 the expression “person” includes a natural person, any company, partnership, trust, joint venture, association, corporation or other private or public body corporate, and any government agency or body politic or collegiate;
- 1.2.5 a reference to a thing includes a part of that thing;
- 1.2.6 a reference to an article, section, provision or schedule is to an article, section, provision or schedule of this Agreement;
- 1.2.7 a reference to any statute, regulation, proclamation, order in council, ordinance, by-law, resolution, rule, order or directive includes all statutes, regulations, proclamations, orders in council, ordinances, by-laws or resolutions, rules, orders or directives varying, consolidating, re-enacting, extending or replacing it and a reference to a statute includes all regulations, proclamations, orders in council, rules and by-laws of a legislative nature issued under that statute;
- 1.2.8 a reference to a document or provision of a document, including this Agreement and any externally referenced documents, includes an amendment or supplement to, or replacement or novation of, that document or that provision of that document, as well as any exhibit, schedule, appendix or other annexure thereto;
- 1.2.9 a reference to sections of this Agreement or of any externally referenced documents separated by the word “to” (i.e., “sections 1.1 to 1.4”) shall be a reference to the sections inclusively; and

1.2.10 the expression “including” means including without limitation, the expression “includes” means includes without limitation and the expression “included” means included without limitation.

- 1.3 Headings:** The division of this Agreement into articles and sections and the insertion of headings are for convenience of reference only and shall not affect the interpretation of this Agreement, nor shall they be construed as indicating that all of the provisions of this Agreement relating to any particular topic are to be found in any particular article, section, subsection, clause, provision, part or schedule.

ARTICLE 2

ROLES AND RESPONSIBILITIES

- 2.1 Compliance with Applicable Law:** The Parties shall comply with the provisions of all applicable laws and any codes issued by the OEB that relate to the Smart Metering Initiative.

- 2.2 Roles and Responsibilities of the SME:** The SME shall:

- 2.2.1 administer the ongoing development of the MDM/R and any associated SME infrastructure required to fulfill the Smart Metering Initiative;
- 2.2.2 co-ordinate with other bodies having regulatory functions with respect to the Smart Metering Initiative, including the OEB and the Ministry of Energy and Infrastructure, as appropriate;
- 2.2.3 conduct such testing as the SME determines appropriate of the MDM/R and the interfaces between the MDM/R and the Distributor’s systems prior to authorizing the Distributor to operate using the MDM/R and in advance of a modification to the MDM/R;
- 2.2.4 cooperate with reasonable testing by the Distributor of the interfaces between the MDM/R and the Distributor’s systems requested by the Distributor, including reasonable testing by the Distributor of the interoperation of the Distributor’s systems with the MDM/R;
- 2.2.5 provide reasonable and effective training to staff of the Distributor and the Distributor’s Authorized Agent on the MDM/R and any associated infrastructure provided by the SME to support the interoperation of the Distributor’s systems with the MDM/R;
- 2.2.6 subject to any requirements prescribed by regulation, receive Smart Metering Data, and such other information required by the SME to fulfill its obligations in respect of the Smart Metering Initiative, from the Distributor or the Distributor’s Authorized Agent, conduct the applicable VEE processes for such information, and transmit Billing Quantity Data to the Distributor or the Distributor’s Authorized Agent in a form that allows the Distributor to bill in accordance with an OEB approved tariff;
- 2.2.7 provide the Distributor with remote access to the MDM/R on a non-discriminatory basis for the purposes of:

- 2.2.7.1 retrieving and reviewing the Distributor's Smart Metering Data and Billing Quantity Data for any business purpose of the Distributor; or
- 2.2.7.2 editing the Distributor's Smart Metering Data and other information the Distributor is authorized to edit;

provided that the SME may establish reasonable restrictions on remote access to safeguard the operational integrity of the MDM/R, ensure performance of the MDM/R in accordance with the applicable service levels prescribed in the Terms of Service, perform maintenance on the MDM/R, or resolve an outage of the MDM/R;

- 2.2.8 provide ongoing technical support to the Distributor in relation to the MDM/R and any associated SME infrastructure required to fulfill the Smart Metering Initiative;
- 2.2.9 ensure that Smart Metering Data transmitted to the SME by the Distributor is stored in the MDM/R for 26 months and available to the Distributor for 10 years in an archived format, or as otherwise required by law;
- 2.2.10 perform its obligations under the Terms of Service and make best efforts to ensure that the MDM/R services meet the applicable service levels prescribed in the Terms of Service;
- 2.2.11 work with stakeholders to achieve continuous service through any transition to any subsequent agreement or agreements relating to MDM/R operations;
- 2.2.12 carry out such other roles and responsibilities as are required to fulfill the Smart Metering Initiative.

2.3 Smart Metering Charge: The SME shall invoice the Distributor for and collect the Smart Metering Charge in accordance with settlement procedures identical to those set forth in sections 6.1 to 6.15 of Chapter 9 of the Market Rules *mutatis mutandis*. In any application to the OEB to set the Smart Metering Charge, the SME shall request that the OEB permit the Distributor to pass through the Smart Metering Charge to consumers.

2.4 Audit of the MDM/R: The SME shall cause independent audits of the MDM/R and the MDM/R internal control environment, including relevant controls performed by the SME and the MDM/R Operational Service Providers, to be conducted annually by a nationally recognized audit firm, the scope and objectives of such audits to be relevant to a user organization's internal control as it relates to an audit of financial statements. The audit shall be conducted in accordance with the standards or equivalent standards to those established by the Canadian Institute of Chartered Accountants for audits of controls at a service organization. The audit period shall be at minimum six months in duration, concluding not more than 3 months from the end of the calendar year. The audit report shall be made available to users of the report no later than November 15 of each calendar year. This report shall hereinafter be referred to as the "first audit report". As early as possible and no later than January 15 of the following calendar year, the SME shall issue a management representation letter from the SME Chief Financial Officer stating that controls continue to be in place and working effectively and that there is no change in the control environment between the date of the audit

report and December 31, or, at the SME's option in lieu of the representation letter, a second audit report covering the eight month period up to and including November 30 (hereinafter referred to as the "second audit report").

In the event of any qualification or significant exception in an audit report, at the request of the Distributor and subject to the approval of an officer of the SME or a committee of the SME Board or the SME Board, the SME shall cause to have specified procedures performed by a nationally recognized audit firm. The approval of this request shall not be unreasonably withheld. The Distributor's request shall include the specified procedures requested by their external auditor to be performed by the SME's auditor. Notwithstanding the SME's requirement for approval by an officer of the SME or a committee of the SME Board or the SME Board, the SME shall (a) respond to the Distributor's request in writing within 5 business days of receipt of their request with the specified procedures that the SME shall cause to have performed and (b) advise when the results of the specified procedures will be provided to the Distributor. The SME will use commercially reasonable efforts to have the results of the specified procedures provided to the Distributor within 5 weeks of the approval of the request for specified procedures pertaining to the first audit report and within 2 weeks of the approval of the request for specified procedures pertaining to the second audit report, if applicable, or as otherwise agreed between the Distributor and the SME. The SME may consolidate similar requests from multiple Distributors, provided that such consolidation does not negatively impact on the timing of any of the approvals or the delivery of the results of the specified procedures.

In the event of any qualification or significant exception in the audit report, and where all reasonable means have been exhausted with specified procedures to meet Distributors' financial reporting requirements, Distributors required by law to file audited financial statements with a securities commission and comply with National Instrument 52-109 or equivalent shall have the right to have their financial statement auditor conduct audit procedures of the MDM/R and MDM/R internal control environment, subject to all of the following:

- The scope and objectives of the audit are limited to supporting the audit of and/or certification of Distributor's financial statements;
- Reasonable costs of the audit, including costs of the SME and the MDM/R Operational Service Providers to support the audit, shall be borne by the Distributor; and
- Distributor's external auditor agrees to the SME and MDM/R Operational Service Providers' non-disclosure and information confidentiality terms and conditions.

The SME shall develop and execute a remediation plan to address significant exceptions on a timely basis.

- 2.5 Interactions with Customers:** The Distributor shall be solely responsible for interacting with its customers in respect of individual customer data originating from the MDM/R or any individual customer information derived from the MDM/R regardless of whether such data is presented to the customer by the Distributor, the SME or their respective agents.
- 2.6 Roles and Responsibilities of the Distributor:** The Distributor shall:
- 2.6.1 ensure that its AMI complies with all of the applicable functional and technical specifications published by the SME with respect to the Smart Metering Initiative and conduct such testing of its AMI as required by the SME to demonstrate such compliance;
 - 2.6.2 participate in any testing of the MDM/R and the interfaces between the MDM/R and the Distributor's systems as required by the SME;
 - 2.6.3 certify to the SME, in a form acceptable to the SME, that the Distributor has completed any testing required by the SME and is ready to operate using the MDM/R, its AMI and any associated infrastructure required to fulfill the Smart Metering Initiative;
 - 2.6.4 transmit to the SME Smart Metering Data and any other information required by the SME under section 2.2.6, retain such information for a minimum of 5 days, and re-transmit such information to the SME upon request;
 - 2.6.5 perform its obligations under the Terms of Service as an MDM/R service recipient; and
 - 2.6.6 carry out such other roles and responsibilities as are required to fulfill the Smart Metering Initiative.
- 2.7 Authorized Agent Permitted:** On written notice to the SME, the Distributor may authorize one or more persons to act on the Distributor's behalf as an agent ("**Authorized Agent**") in any or all of the matters related to the Smart Metering Initiative and this Agreement. The authorization shall be in the form specified by the SME. The Distributor is responsible for ensuring that its Authorized Agent is aware of and complies with the terms and conditions of this Agreement.

ARTICLE 3

TERMS OF SERVICE

- 3.1 Terms of Service:** The SME shall make Terms of Service for the management and operations of the MDM/R under this Agreement and shall publish the Terms of Service on its website.
- 3.2 SME Steering Committee:** The SME shall establish the SME Steering Committee as a forum to represent the interests of stakeholders. The SME Steering Committee shall have up to 13 representatives where:
- 3.2.1 a majority of the members shall represent local distribution companies that are receiving service from the MDM/R or otherwise eligible to receive service from the MDM/R;

- 3.2.2 following a date to be established by the SME in consultation with the Ministry of Energy and Infrastructure, up to three members shall represent retail companies that are receiving service from the MDM/R or otherwise eligible to receive service from the MDM/R;
- 3.2.3 up to two members will be members-at large; and
- 3.2.4 one member shall represent the interests of the SME.
- 3.3 Appointment of the SME Steering Committee:** Except for the members-at-large and the member representing the SME, members of the SME Steering Committee shall be appointed by the Board of Directors of the *SME* from among nominations made by persons that are receiving service from the MDM/R or otherwise eligible to receive service from the MDM/R. Distributor representatives may also be appointed from nominations submitted by the Board of Directors of the Electricity Distributors Association or any successor organization.
- 3.4 Amendment to the Terms of Service:** The SME may amend the Terms of Service at any time provided that the SME establishes and follows a process by which the SME Steering Committee may first provide advice and recommendations to the SME on the amendment. When amending the Terms of Service, the SME shall consider the overall cost and schedule impacts of the proposed amendment to the SME and any parties receiving service from the MDM/R, and any anticipated impact on electricity consumers.
- 3.5 Amendment Proposals:** The SME shall establish a process under which any party receiving service from the MDM/R may propose an amendment to the Terms of Service.
- 3.6 Manuals and Procedures:** The SME may make and amend manuals and procedures to provide more detailed descriptions of the requirements under the Terms of Service, including any forms required under this Agreement or the Terms of Service, and shall publish any manuals and procedures made under the Terms of Service on its website.

ARTICLE 4

REPRESENTATIONS AND WARRANTIES

- 4.1 Mutual Representations and Warranties:** Each Party represents and warrants to and covenants with the other Party as follows:
- 4.1.1 it has all the necessary corporate power to enter into and perform its obligations under this Agreement;
- 4.1.2 the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental action and does not (or would not with the giving of notice, the lapse of time or the happening of any other event or condition) result in a violation or a breach of or a default under or give rise to a right of termination, greater rights or increased costs, amendment or cancellation or the acceleration of any obligation under (i) any charter or by-law instruments of that Party; (ii) any contracts or instruments to which it is a party or by which it is bound; or (iii) any laws applicable to it;

- 4.1.3 the individual(s) executing this Agreement, and any document in connection with this Agreement, on its behalf has been duly authorized to execute this Agreement and has the full power and authority to bind the Party;
 - 4.1.4 this Agreement constitutes a legal and binding obligation of the Party, enforceable against the Party in accordance with its terms; and
 - 4.1.5 it holds all permits, licences and other authorizations that may be necessary to enable it to carry on the business and perform its roles and responsibilities under the Smart Metering Initiative and this Agreement.
- 4.2 Representations and Warranties of the SME:** The SME represents and warrants to the Distributor that it and any Operational Service Provider have adequate qualified employees and other personnel and organizational and other arrangements that are sufficient to enable it to perform all of its roles and responsibilities under the Smart Metering Initiative and this Agreement.
- 4.3 Representations and Warranties of the Distributor:** The Distributor represents and warrants to the SME that:
- 4.3.1 the Distributor is a **[INSERT FORM OF BUSINESS ORGANIZATION]** duly **[INCORPORATED/ FORMED/REGISTERED]** and existing under the laws of **[JURISDICTION]**;
 - 4.3.2 the Distributor and any Authorized Agent has the authority under any applicable laws to provide Smart Metering Data and any other information required under section 2.2.6 to the SME; and
 - 4.3.3 the Distributor or its Authorized Agent have adequate qualified employees and other personnel and organizational and other arrangements that are sufficient to enable it to perform all of its roles and responsibilities under the Smart Metering Initiative and this Agreement.

ARTICLE 5

ACCESS TO MDM/R DATA

- 5.1 Disclosure of MDM/R Data:** Subject to its OEB licence, the SME may disclose, use or reproduce any data contained in the MDM/R, including Smart Metering Data and Billing Quantity Data, for any purpose; provided that in making data available to any third party, the data shall be presented in a manner that prevents the specific data of an individual customer of the Distributor being identified with that customer or premises. If the SME is compelled by law, regulation or order of court or tribunal to disclose any data contained in the MDM/R to a third party in a manner other than as provided for under this section 5.1, the SME shall, to the extent permitted by law, provide the Distributor with reasonable notice and the Distributor may seek a protective order or other appropriate remedy to prevent disclosure of the data.
- 5.2 Protocol for Access to MDM/R Data:** The SME shall consult with the SME Steering Committee and develop and publish a protocol setting out the procedures it will follow in providing access to MDM/R data while preventing identification of the specific data associated with an individual customer or premises.

- 5.3 Freedom of Information and Protection of Privacy Act:** The Distributor acknowledges that SME is bound by the provisions of the *Freedom of Information and Protection of Privacy Act* (Ontario) and may be required by order of a court or tribunal to disclose information provided by the Distributor to SME. The SME acknowledges that the Distributor may be bound by the provisions of the *Freedom of Information and Protection of Privacy Act* (Ontario), the *Municipal Freedom of Information and Protection of Privacy Act* (Ontario) or other such legislation and may be required by order of a court or tribunal to disclose information provided by the SME to the Distributor.

ARTICLE 6

INTELLECTUAL PROPERTY

- 6.1 Intellectual Property Rights:** The Distributor shall not acquire any title, beneficial ownership interests or any intellectual property rights, including any proprietary rights provided under (i) patent law, (ii) copyright law (including moral rights), (iii) trademark law, (iv) design patent or industrial design law, (v) semi-conductor chip, integrated circuit topography or mask work law, or (vi) any other statutory provision or common law principle regarding intellectual or industrial property, including trade secret law, in the MDM/R or any associated infrastructure used by the SME to fulfill the Smart Metering Initiative. Similarly, the SME shall not acquire any such title, interests or rights in respect of the Distributor's AMI, customer information systems, billing systems or any associated infrastructure used by the Distributor to fulfill those objectives.
- 6.2 Survival:** Article 6 of this Agreement shall survive the assignment, transfer or termination of this Agreement.

ARTICLE 7

LIABILITY AND INDEMNIFICATION

- 7.1 Limitation of Liability of the SME:** Except as provided in sections 7.5, 7.6 and 7.7, the Distributor shall have no recourse against the SME in respect of any breach of this Agreement, or any loss or damage to the Distributor, which in either case is attributable to an act or omission of any Operational Service Provider. The SME's liability to the Distributor attributable to an act or omission of the SME shall be limited to:
- 7.1.1 actual direct damages and in no event shall the SME be liable to the Distributor in respect of punitive, consequential or indirect damages or loss of profit, loss of data or loss of revenue; and
 - 7.1.2 the cumulative liability of the SME to all MDM/R service recipients (including the Distributor) in connection with an act or omission of the SME under this Agreement shall not exceed an aggregate amount of \$1,000;
- except as provided for in section 7.3 or to the extent that any such damages are recovered by the SME from an Operational Service Provider under section 7.6.
- 7.2 Limitation of Liability of the Distributor:** The Distributor's liability to the SME attributable to an act or omission of the Distributor shall be limited to actual direct damages and in no event shall the Distributor be liable to the SME in respect of

punitive, consequential or indirect damages or loss of profit, loss of data or loss of revenue. The liability of the Distributor to the SME in connection with an act or omission of the Distributor shall not exceed \$1,000.

7.3 Indemnification: The SME shall indemnify and hold harmless the Distributor from any and all claims, losses, liabilities, obligations, actions, judgments, suits, costs, expenses, disbursements and damages incurred, suffered, sustained or required to be paid, directly or indirectly, by, or sought to be imposed upon, the Distributor to the extent that such claims, losses, liabilities, actions, judgments, suits, costs, expenses, disbursements or damages arise out of a breach of Article 5 of this Agreement.

7.4 Duty to Mitigate: A Party has a duty to mitigate damages, losses, liabilities, expenses or costs relating to any claims that may be made under this Agreement.

7.5 Cost Recovery: The SME shall cooperate with the Distributor (acting individually or in concert with other licenced distributors that are parties to an agreement with the SME) in:

7.5.1 any proceeding before the OEB; and

7.5.2 any initiative to make a submission to, or obtain a legislative or regulatory amendment from, the Province of Ontario;

in which the Distributor seeks a change to any of its rates or charges or other appropriate relief for any of its losses or incremental costs related to any act or omission of the SME, the Operational Service Provider or a service provider of the SME. The SME shall assist in the coordination of the claim or initiative being put forward by the Distributor. Such cooperation by the SME shall include, but not be limited to, promptly providing to the Distributor and the OEB, at the request of the Distributor but at the SME's cost, accurate information, analysis, documents, and evidence. For greater certainty, the SME's obligation to provide assistance under this section shall not be limited to a cost of \$1000 by section 7.1.2.

7.6 Reduction of Smart Metering Charge: If an Operational Service Provider fails to meet the required service levels under an MDM/R Agreement, or otherwise breaches an MDM/R Agreement, and that failure or breach results in a reduction of the fees payable to the Operational Service Provider by the SME, or if any amount is recovered from the Operational Service Provider in respect of any such failure or breach, then an amount equal to the reduction or recovered amount will be:

7.6.1 set aside by the SME as an amount owing to MDM/R service recipients;

7.6.2 reported to the SME Steering Committee along with any pertinent information in the possession of the SME which may assist the SME Steering Committee in determining which MDM/R service recipients were affected by the MDM/R failure or breach; and,

7.6.3 subsequently distributed to MDM/R service recipients by the SME in the manner directed by SME Steering Committee.

The SME Steering Committee shall allocate such funds using any methodology it considers appropriate and resolve any disputes between the Distributor and any other MDM/R service recipient with respect to the allocation of such funds. The Distributor

and the SME agree to adhere to all decisions made by the SME Steering Committee with respect to the allocation of such funds.

- 7.7 Monitoring of the Operational Service Provider:** The SME will use commercially reasonable efforts to monitor each Operational Service Provider's performance under, and to enforce the provisions of, its MDM/R Agreement (which shall include, for greater certainty, the diligent pursuit, through legal proceedings if necessary, of any appropriate reductions of fees or recovery of any amounts owing as damages, penalties or otherwise). The Distributor may seek an order of specific performance requiring the SME to take commercially reasonable actions to enforce the provisions of an MDM/R Agreement at the SME's cost.

ARTICLE 8

DISPUTE RESOLUTION

- 8.1 Dispute Resolution:** Subject to section 8.3, the Parties shall attempt to settle any dispute in connection with this Agreement or the Smart Metering Initiative through good faith negotiations. If the Parties are unable to resolve the dispute through good faith negotiation, either Party may apply to the OEB for determination of the dispute. A Party shall provide written notice to the other Party of its intention to apply to the OEB for determination of the dispute at least ten (10) business days before filing any application materials with the OEB.
- 8.2 Limitation Period:** Subject to section 8.3, a Party shall commence any proceeding in respect of a dispute under this Agreement or related to the Smart Metering Initiative within two years of the earlier of:
- 8.2.1 the date on which the claim is discovered; or
 - 8.2.2 the date on which this Agreement is terminated under section 11.1.
- 8.3 Smart Metering Charge:** Any dispute between the Parties in respect of the calculation of the Smart Metering Charge shall be determined in accordance with a dispute resolution procedure identical to that set forth in section 2 of Chapter 3 of the Market Rules *mutatis mutandis*. The Distributor shall commence any proceeding in respect of the calculation of the Smart Metering Charge invoiced to it by the SME within the applicable limitation period set forth in section 2.5.1A.3 or 2.5.1A.4 of Chapter 3 of the Market Rules.

ARTICLE 9

FORCE MAJEURE

- 9.1 Force Majeure:** If either Party is unable to satisfy any of its obligations under this Agreement due to causes beyond the Party's reasonable control, provided that the Party makes all reasonable efforts to avoid, or if unavoidable, to correct the reason for such delay or failure and gives the other Party prompt notice of such delay or failure, then such Party shall be excused and relieved from its obligation to satisfy such obligation for so long as the event continues and for such reasonable period of time thereafter as may be necessary for the Party to resume performance of the obligation. For the

avoidance of doubt, “causes beyond the Party’s reasonable control” include an event of fire, flood, earthquake, element of nature, explosions, acts of God, acts of war, terrorism, riots, civil or public disorders or disobedience, strikes, lock-outs, labour disruptions, acts of vandalism, sabotage, or other unlawful acts, and any other similar event beyond the commercially reasonable control of the Party.

ARTICLE 10

AMENDMENT AND ASSIGNMENT

- 10.1 Amendment Generally:** Except as otherwise provided in this Agreement, no amendment to this Agreement will be effective until approved by the OEB. A Party may apply to the OEB to amend this Agreement at any time provided that the Party has first consulted with the SME Steering Committee on the merits of the proposed amendment.
- 10.2 Amendment to Section 4.3:** The Distributor may amend the Distributor’s corporate information provided under section 4.3 at any time without the approval of the OEB.
- 10.3 Amendment to Schedule “A”:** The Distributor or the SME may amend their respective nominated representatives for official notifications listed in Schedule “A” at any time without the approval of the OEB.
- 10.4 Assignment Generally:** Except as provided for in section 11.2, neither Party may assign its rights and obligations under or transfer any of its interest in this Agreement without the prior consent of the other Party, which consent shall not be unreasonably withheld. An assignment under this section does not require the approval of the OEB.

ARTICLE 11

TERM AND TERMINATION

- 11.1 Term:** Unless otherwise extended by order of the OEB, this Agreement shall terminate on March 31, 2012.
- 11.2 Termination of the Smart Metering Entity Role:** If during the term of this Agreement, the SME is no longer designated under the *Electricity Act, 1998* (Ontario) as the Smart Metering Entity, this Agreement shall be assigned to and assumed by the successor Smart Metering Entity.
- 11.3 Delivery of Historical Data:** In the event that MDM/R services are no longer being provided under either this Agreement or any subsequent agreement or agreements relating to MDM/R operations, the SME shall, at the request of the Distributor, obtain and deliver to the Distributor the Distributor’s Smart Metering Data and Billing Quantity Data stored in the MDM/R. This section 11.3 shall survive the assignment, transfer or termination of this Agreement.
- 11.4 Deemed Release of the SME:** Subject to section 6.2, the Distributor will be deemed to release the SME from all obligations, liabilities, claims and demands against SME in respect of the Smart Metering Initiative and this Agreement, whether known or unknown, upon the earlier of:
 - 11.4.1 two years after termination of this Agreement; or

- 11.4.2 the assumption of any obligations, liabilities, claims and demands against SME in respect of the Smart Metering Initiative and this Agreement by another entity in accordance with section 11.2.

ARTICLE 12

MISCELLANEOUS

- 12.1 No Agency or Partnership:** The Parties do not intend that any agency or partnership be created between them by this Agreement.
- 12.2 No Warranty:** Except as specifically set forth in this Agreement, there are no representations, warranties, or conditions of either Party, express, implied, statutory or otherwise, regarding any matter, including warranties or conditions of merchantable quality or fitness for a particular purpose.
- 12.3 Successors and Assigns:** This Agreement shall enure to the benefit of, and be binding on, the Parties and their respective successors and permitted assigns.
- 12.4 Severability:** Any provision of this Agreement that is invalid or unenforceable shall be ineffective to the extent of that invalidity or unenforceability and shall be deemed severed from the remainder of this Agreement, all without affecting the validity or enforceability of the remaining provisions of this Agreement or affecting the validity or enforceability of such provision in any other jurisdiction.
- 12.5 Notices:** Any notice or other communication required or permitted to be given or made under this Agreement shall be sent by courier or other form of personal delivery, by prepaid first class mail, by facsimile or electronic mail and be addressed to the other Party in accordance with the contact information listed in Schedule "A" of this Agreement.
- 12.6 Governing Law:** This Agreement shall be governed by and construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein. The Parties irrevocably attorn to the exclusive jurisdiction of the courts of the Province of Ontario.
- 12.7 Conflict or Inconsistency:** In the event of a conflict or inconsistency between this Agreement and the provisions of the Terms of Service, this Agreement shall prevail. In the event of a conflict or inconsistency between this Agreement and any code issued by the OEB under section 70.1 of the *Ontario Energy Board Act* (Ontario), the code shall prevail.
- 12.8 Amendment to the Market Rules:** If the SME proposes to or receives a proposal to amend any provision of the Market Rules incorporated in this Agreement by reference, the SME shall provide the Distributor with reasonable notice of the proposed amendment and identify what impact the amendment will have upon this Agreement.
- 12.9 Waiver:** No failure or delay by a Party in exercising any right, power or privilege under this Agreement shall operate as a waiver thereof. No provision of this Agreement may be waived except in writing by a Party at its sole discretion, and a waiver on any occasion shall not act as a waiver or bar to the enforcement of the rights of a Party with respect to any other breach or the same breach on any other occasion.

12.10 Entire Agreement: This Agreement represents the complete agreement between the Parties and supersedes all prior communications, understandings and agreements between the Parties, whether written, oral, expressed or implied.

12.11 Counterparts: This Agreement may be executed by the Parties by facsimile or electronic signature and in separate counterparts, each of which when so executed and delivered will be an original, but all such counterparts will together constitute one and the same instrument.

IN WITNESS WHEREOF the Parties have, by their duly appointed and authorized representatives, executed this Agreement.

[INSERT DISTRIBUTOR NAME]

By: _____

Name:

Title:

**[INSERT NAME OF SMART METERING
ENTITY]**

By: _____

Name:

Title:

SCHEDULE “A”
NOMINATED REPRESENTATIVES FOR OFFICIAL NOTIFICATIONS

SME

Name of SME Representative:	
Title:	
Address:	
City/Province/Postal Code	
Email address:	
Phone:	
Fax:	

Distributor

Name of Distributor Representative:	
Title:	
Address:	
City/Province/Postal Code	
Email address:	
Phone:	
Fax:	

APPENDIX B

Meter Data Management and Repository

Terms of Service

Library Record No.	SME_AGR_0002
Document Name	MDM/R Terms of Service
Issue	Issue 1.0
Reason for Issue	
Effective Date	February 23, 2010

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1. MDM/R Governance

1.1 Contractual Force

- 1.1.1 The *terms of service* are given contractual force and effect as between each *MDM/R service recipient* and the *SME* by virtue of the execution of the *smart metering agreement* under which each *MDM/R service recipient* and the *SME* agreed to perform its respective obligations under the *terms of service*.
- 1.1.2 The *terms of service* set out the principles regarding the administration and operational framework of the *MDM/R* and any other infrastructure required to fulfill the obligations set out in the *smart metering agreement* between the *SME* and an *MDM/R service recipient*.

1.2 SME Steering Committee

- 1.2.1 The *SME* shall establish the *SME steering committee* as a forum to represent the interests of the *MDM/R service recipients*. The *SME steering committee* will be provided with an opportunity to:
- provide input in the ongoing development of the *terms of service* and the *MDM/R manuals and procedures*;
 - provide input on the *SME*'s provision of *MDM/R* services and the adherence to the committed service levels as prescribed in the *terms of service*;
 - consider *amendment proposals* forwarded by the *SME*, *MDM/R service recipients*, or initiated by the *SME steering committee*; and
 - participate in the consultations, when requested by the *SME*, on amendments to the *MDM/R manuals and procedures*.
- 1.2.2 The *SME* may request members of the *SME steering committee* to provide feedback on particular topics and/or respond to various surveys from time to time.
- 1.2.3 The composition of the *SME steering committee* shall be as set out in the *smart metering agreement*.
- 1.2.4 Except for the members-at-large and the member representing the *SME*, members of the *SME steering committee* shall be appointed by the Board of Directors of the *SME* from among nominations made by *MDM/R service recipients* or entities eligible to become *MDM/R service recipients*. Distributor representatives may

also be appointed from nominations submitted by the Board of Directors of the Electricity Distributors Association or any successor organization.

- 1.2.5 The Board of Directors of the *SME* may solicit nominations to encourage a broad selection of qualified candidates for the various representative and at-large positions. Expertise in MDM/R, AMI and *CIS* technologies and associated business processes will be a factor in making appointments.
- 1.2.6 Subject to section 1.2.7, members of the *SME steering committee* shall serve for a term of two years.
- 1.2.7 The Board of Directors of the *SME* may appoint members of the *SME steering committee* for a term of one year to ensure regular rotation of membership of the *SME steering committee*.
- 1.2.8 When selecting members to represent distributors, the Board of Directors of the *SME* may consider such factors as providing representation from a range of *AMI* and *CIS* technologies as well as a range of utility size, geographic location, and demographics.
- 1.2.9 The following persons are disqualified from being a member of the *SME steering committee*:
- a person who is less than eighteen years of age;
 - a person who is of unsound mind and has been so found by a court in Canada or elsewhere;
 - a person who is not an individual;
 - a person who has the status of bankrupt; or
 - a person who is an employee of or has a material interest in any company or organization providing goods or services to the *SME* while acting in its capacity as the *SME*.
- 1.2.10 In the event that a member's position on the *SME steering committee* becomes vacant prior to the end of the member's term, the Board of Directors of the *SME* may appoint a new member in accordance with the procedure outlined in section 1.2.4 to fill the position for the remainder of that term.
- 1.2.11 A majority of the members of the *SME steering committee* shall be considered a quorum.

- 1.2.12 The *SME steering committee* may establish its own procedures, including provisions relating to:
- the frequency, format, location and scheduling of meetings;
 - attendance requirements for members of the *SME steering committee*;
 - procedures that govern the conduct of meetings;
 - method of selecting a Chair of the *SME steering committee*, who shall not be the *SME* member; and
 - any administrative matters that are not otherwise stipulated by the *terms of service*.
- 1.2.13 The *SME steering committee* may recommend that the *SME* form working groups or standing committees to consider topics in specific areas.
- 1.2.14 Material submitted to or discussed at meetings of the *SME steering committee* will not normally be confidential. If confidential material is necessary for the consideration of a matter, the *SME steering committee* will establish appropriate confidentiality safeguards prior to receipt of that material.

1.3 Amending the Terms of Service

- 1.3.1 An *MDM/R service recipient* or any other interested person may propose an amendment to the *terms of service* and shall file with the *SME* an amendment submission in a form specified by the *SME* and a statement of the reason for which such amendment may be necessary or desirable. The *SME* shall publish the amendment submission and the accompanying statement.
- 1.3.2 The *SME* may at any time propose on its own initiative to amend the *terms of service* as may be necessary or desirable. The *SME* shall publish an amendment submission in a form specified by the *SME* and a statement of the reason for which such amendment may be necessary or desirable.
- 1.3.3 Any *amendment proposal* to the *terms of service* from the *SME* or other parties shall be referred to the *SME steering committee* for consideration unless the *SME* determines that the amendment is an *urgent amendment*, in which case, the *SME* shall file a statement with the *SME steering committee* indicating that, in its opinion, an amendment to the *terms of service* is urgently required for one or more of the following reasons:

- To avoid, reduce the risk of or mitigate the effects of conditions that affect the ability of the *MDM/R* to function within defined service levels.
 - To avoid, reduce the risk of or mitigate the effects of the abuse of *MDM/R* services by an *MDM/R service recipient* or any other party.
 - To implement regulations or other any applicable law which requires immediate compliance by the *SME* or an *MDM/R service recipient*.
 - To avoid, reduce the risk of or mitigate the effects of an unintended adverse effect of a provision or provisions in the *terms of service*
- 1.3.4 The *SME steering committee* shall report to the *SME* its recommendation on each *amendment proposal* in a form specified by the *SME*. The *SME steering committee's* report shall include its recommendation on the *amendment proposal* and highlight any further additions, deletions or changes to the original *amendment proposal* recommended by the *SME steering committee* and the reasons for each recommended change.
- 1.3.5 In its report to the *SME*, the *SME steering committee* shall recommend a schedule for the implementation of an amendment to permit *MDM/R service recipients* a reasonable time to modify their systems and procedures to accommodate the change.
- 1.3.6 The *SME* shall consider any recommendations received from the *SME steering committee* but is not be obligated to accept the recommendations when approving or rejecting the *amendment proposal* and shall publish its decision and provide a statement of the reason for any additions, deletions or changes to the *amendment proposal*.
- 1.3.7 The *SME* may approve or reject any *amendment proposal* and make any additions, deletions or changes to the *amendment proposal* that it deems necessary. The *SME* shall publish its decision and provide a statement of the reason for any additions, deletions or changes to the *amendment proposal*.
- 1.3.8 The *SME* shall implement any amendment to the *terms of service* in accordance with section 2.5 of the *terms of service*.
- 1.3.9 If in the judgment of the *SME*, an amendment to the *terms of service* would require a material increase in the *smart metering charge*, the *SME* may delay implementation of the amendment until a corresponding increase in the *smart metering charge* is approved by the OEB.

1.4 MDM/R Manuals and Procedures

- 1.4.1 The *SME* may create *MDM/R manuals and procedures* to provide further detail on the implementation of the *terms of service* and shall *publish* any *MDM/R manuals and procedures*. The *MDM/R manuals and procedures* will address three main categories of activities:
- registration and enrolment with the *MDM/R*;
 - steady state operations of the *MDM/R*; and
 - managing changes.
- 1.4.2 An *MDM/R service recipient* or any other interested person may propose an amendment to the *MDM/R manuals and procedures* and shall file with the *SME* an amendment submission in a form specified by the *SME* and a statement of the reason for which such amendment may be necessary or desirable. The *SME* shall publish the amendment submission and the accompanying statement.
- 1.4.3 The *SME* may at any time determine on its own initiative or amend the *MDM/R manuals and procedures* as may be necessary or desirable. The *SME* shall publish an amendment submission in a form specified by the *SME* and a statement of the reason for which such amendment may be necessary or desirable.
- 1.4.4 The *SME* shall establish a process for reviewing and considering *amendment proposals* to *MDM/R manuals and procedures*. Other than in the case of *urgent amendments*, the *SME* shall engage *MDM/R service recipients* in the development of amendments to the *MDM/R manuals and procedures*. Changes to forms and other supporting documentation referenced within the procedure will not be subject to a stakeholder process.
- 1.4.5 The *SME* may approve or reject *amendment proposals* to the *MDM/R manuals and procedures*. The *SME* shall report its decisions on such matters to *MDM/R service recipients* giving its reasons for the decision, including any further changes made to the *amendment proposal* by the *SME*.
- 1.4.6 The *SME* shall implement any amendment to *MDM/R manuals and procedures* in accordance with section 2.5 of the *terms of service*.

1.5 Urgent Amendments

- 1.5.1 In urgent situations meeting one or more of the criteria set out in section 1.3.3 where the normal course of stakeholder engagement with *MDM/R service recipients* is not practicable, the *SME* may amend the *terms of service* or the

MDM/R manuals and procedures by *urgent amendment* and shall provide *MDM/R service recipients* with the best information concerning the change as soon as possible.

2. Administration

2.1 Administration of the Terms of Service

- 2.1.1 The *SME* is responsible for the administration of the *terms of service* and the *MDM/R manuals and procedures*.

2.2 SME Compliance

- 2.2.1 The *SME* shall comply with, observe and perform any duties and obligations imposed on the *SME* by the *terms of service* and the *MDM/R manuals and procedures*.

2.3 Obligations of the SME

- 2.3.1 The *SME* shall provide access to the *MDM/R* for any *AMI* technology requested by *MDM/R service recipients*, provided that:
- the *AMI* technology is compliant with the *Functional Specification for an Advanced Metering Infrastructure*, (Ontario Regulation 425/06 – as amended by Ontario Regulation 440/07);
 - the *AMI* technology is compliant with all other applicable laws and regulations governing its use in the province of Ontario;
 - the *AMI* technology is compliant with all of the applicable functional and technical specifications required by the *SME* and has successfully completed such testing of the *AMI* as required by the *SME* to demonstrate such compliance;
 - the cost for implementing new interfaces to new *AMI* technologies shall be borne by the *SME* and recovered through the *MDM/R Fee*; and
 - the *SME* shall have authority over the implementation schedule for new *AMI* technologies and in the course of planning its implementation activities, shall consult with the *SME Steering Committee* to determine such matters as priority, scheduling and costing of such implementation, while the technical

aspects of implementation shall be governed by the change management and release management processes described in sections 2.4 and 2.5 respectively.

2.3.2 The *SME* shall monitor the operational performance of the *MDM/R* to ensure that the service levels in Appendix 'A' are met by the *OSP* on a continual basis.

2.3.3 An *MDM/R service recipient* shall provide any information required by the *SME*:

- during the course of the *MDM/R* registration and enrollment process set out in section 3.3 to produce a forecast of future transactional volumes and shall communicate to the *SME* material changes to forecasts as soon as practical. The forecast is required to ensure that the hardware and systems used by the *OSP* to provide the *MDM/R* services will meet the forecasted volumes;
- at any time to produce a forecast of future transactional volumes for the purposes of assessing the impact of any proposed material change to the *smart metering initiative*. The *SME* shall consult with the *SME Steering Committee* prior to making any request under this provision; or
- at any time to produce a forecast of future transactional volumes for the purposes of assessing the impact of a material change in the circumstances of the *MDM/R service recipient*. The *SME* shall consult with the *SME Steering Committee* prior to making any request under this provision.

2.3.4 The *SME* shall ensure the continuity of *MDM/R* services provided under the *terms of service*. This may include the completion a formal procurement process upon the expiry of the contract with the *OSP*.

2.3.5 Subject to applicable law, the *SME* shall include *MDM/R service recipients* in the procurement process referred to in section 2.3.4 to the extent that such inclusion does not infringe upon the integrity of the procurement process itself. The *SME* shall have the right to make the final procurement decision.

2.3.6 The *SME* shall provide reasonable notice to an *MDM/R service recipient*, and its agents when required, should an event occur that may materially impact the *MDM/R service recipient's* use of the *MDM/R*. These events, the resulting notification process, and reporting mechanism will be detailed in the *MDM/R manuals and procedures*.

2.4 Change Management

- 2.4.1 Subject to section 2.4.2, the *SME* shall establish and publish a change management process that will facilitate the evaluation of amendment proposals to the *terms of service*, the *MDM/R manuals and procedures*, the *MDM/R* or the specific configuration parameters for an *MDM/R service recipient*.
- 2.4.2 The transition to a new *OSP* or a new *MDM/R* may be subject to special release calendars and activities determined by the *SME*. The *SME* shall provide reasonable notice to all affected *MDM/R service recipients* prior to the commencement of any such transition activities.
- 2.4.3 The purpose of the change management process shall be to provide reasonable assurance that changes to the *terms of service*, the *MDM/R manuals and procedures*, the *MDM/R* or the specific configuration parameters of an *MDM/R service recipient* are identified, logged, communicated, assessed, prioritized, approved, designed and implemented in a controlled manner and in consultation with *MDM/R service recipients*.
- 2.4.4 For greater certainty, the change management process shall apply to any release of the *MDM/R* or the *MDM/R manuals and procedures* affecting:
- the functionality of the *MDM/R*;
 - the delivery of an *MDM/R* service;
 - the *MDM/R* technical interface design set out in section 4.2;
 - any *MDM/R* standard falling under the provisions of section 4.3; or
 - a target *MDM/R* service level falling under the provisions of Appendix 'A'.

2.5 MDM/R Change and Release Management

- 2.5.1 The *SME* shall establish and publish a change and release management process by which changes to the *MDM/R* will be implemented.
- 2.5.2 The purpose of the change and release management process shall be to provide reasonable assurance that changes to the *MDM/R* and are authorized, tested, and implemented in a controlled manner. The process shall include procedures for communicating, prioritizing and scheduling changes in consultation with *MDM/R service recipients*.

- 2.5.3 The *MDM/R* change and release management process shall be governed by a baseline calendar that communicates the steps and timelines regarding the lifecycle of each scheduled release of the *MDM/R*.
- 2.5.4 The *MDM/R* change and release management process shall allow for interim changes to the *MDM/R* outside of the baseline calendar.

2.6 MDM/R Configuration Change Management

- 2.6.1 The *SME* shall establish and publish an “MDM/R Configuration Change Management” process by which changes to *MDM/R* parameters or configuration settings that are configured for individual *MDM/R service recipients* are authorized and implemented.
- 2.6.2 The purpose of the “MDM/R Configuration Change Management” process shall be to provide reasonable assurance that changes to the *MDM/R* parameters or configurations that apply to individual *MDM/R service recipients* are authorized by *MDM/R service recipients* and implemented in a controlled manner. The process shall include procedures for scheduling and communicating implementation status of changes with affected *MDM/R service recipients*.

3. Preparation, Registration and Enrolment

3.1 Preparation and Registration

- 3.1.1 An *MDM/R service recipient* shall complete the preparation and registration process defined by the *SME* prior to utilizing the *MDM/R*. The *MDM/R service recipient* shall provide the *SME* with the information required by the *SME* for *MDM/R* administration and operation purposes.

3.2 Enrolment

- 3.2.1 An *MDM/R service recipient* shall complete an enrolment process defined by the *SME* prior to utilizing the *MDM/R*, which shall include the analysis, development and testing of the system and business process changes required for the *MDM/R service recipient* to integrate with the *MDM/R* and utilize the *MDM/R* services.
- 3.2.2 During the enrolment process, an *MDM/R service recipient* shall complete a self-certification assessment and provide a statement of readiness in the form specified

by the *SME* at various stages of the preparation, registration and enrolment processes.

3.3 Status Reporting

- 3.3.1 The *SME* has the authority to require an *MDM/R service recipient* proceeding through the preparation, registration and enrolment process to provide status reports as required by the *SME*.
- 3.3.2 The *SME* may, at its discretion, delay the progression of an *MDM/R service recipient* through the preparation, registration and enrolment processes if that party fails to comply with the *SME*'s status reporting requirements.

4. Operation of the MDM/R

4.1 MDM/R Functional Design

- 4.1.1 Subject to applicable law, the *SME* shall establish and maintain operational services in accordance with the functional design of the *MDM/R* documented in the "Meter Data Management and Repository Detailed Design Document" as amended from time to time.
- 4.1.2 The *SME* shall make the "Meter Data Management and Repository Detailed Design Document" available to a local distribution company that is an *MDM/R service recipient* or its agent during the preparation, registration and enrollment process for *MDM/R* operation upon the execution by the *MDM/R service recipient* of a confidentiality agreement that is satisfactory to the *SME*.

4.2 MDM/R Technical Interface Design

- 4.2.1 The *SME* shall specify the interface to be used for the transfer of files between *the MDM/R service recipient* and the *MDM/R*. These interfaces will be required to support any *MDM/R* service as may be defined by the *SME* or applicable regulatory authority from time to time.
- 4.2.2 The *SME* shall document the technical interface design in the "Meter Data Management and Repository Technical Interface Specifications" and the "Meter Data Management and Repository Reports Technical Specifications". The *SME* shall *publish* these documents.

4.3 MDM/R Standards

- 4.3.1 The *SME* shall establish and publish standards, where required, regarding operational aspects of the *MDM/R*.

4.4 MDM/R Incident Management

- 4.4.1 The *SME* shall *publish* an “MDM/R Incident Management Framework” to identify, track, mitigate and address incidents involving the failure to provide an MDM/R service in the manner described in the applicable *MDM/R manuals and procedures*, or in accordance with the service levels outlined in Appendix ‘A’. The “MDM/R Incident Management Framework” shall be detailed in the applicable *MDM/R manuals and procedures*, and include:
- 4.4.1.1 a means for *MDM/R service recipients* to notify the *SME* of any incidents regarding the provision of an MDM/R service;
 - 4.4.1.2 a means for the *SME* to notify *MDM/R service recipients* of any incidents regarding the provision of an MDM/R service and any applicable interim steps being undertaken by the *SME* to mitigate such incidents;
 - 4.4.1.3 where applicable, a means for the *SME* to communicate the status of incidents and known errors to *MDM/R service recipients* and any interim arrangements that should be observed by *MDM/R service recipients* until such time as a permanent solution to them is implemented;
 - 4.4.1.4 a means for the *SME* to inform *MDM/R service recipients* of status updates of incidents including estimated time to resolution of incidents; and
 - 4.4.1.5 a means for the *SME* to declare the resolution of problems and known errors to all affected *MDM/R service recipients* - including the implementation details involving the cutover from any interim arrangements that were put in place while the incident was in effect.
- 4.4.2 *MDM/R service recipients* shall make reasonable efforts to follow any direction from the *SME* to mitigate a known problem and to bring problems to the attention of the *SME* in a timely manner.
- 4.4.3 The *SME* shall establish and *publish* the procedures to manage operational incidents and problems encountered by organizations utilizing the services of the *MDM/R*.

4.4.4 The *SME* shall categorize reported incidents into different severity levels, and prioritize and respond to the incident based upon these categorizations. The *SME* shall publish the criteria used to categorize incidents.

4.4.5 The severity levels are as follows:

Severity	Characteristics
Severity 1 Incident	Severity 1 Incident means an incident that in the reasonable determination of <i>SME</i> results in one or more <i>MDM/R service recipients</i> not being able to receive: <ul style="list-style-type: none"> • a critical <i>MDM/R</i> service as defined in Appendix 'A' • a critical <i>MDM/R</i> service at the Service Level required for that measured service • a Service functioning in accordance with <i>MDM/R</i> specifications and the incident is having a severe impact on the business of <i>MDM/R service recipients</i>
Severity 2 Incident	Severity 2 Incident means an incident that in the reasonable determination of <i>SME</i> , results in the <i>MDM/R</i> not functioning to specifications and demonstrates itself as an intermittent problem with high impact on the business of <i>MDM/R service recipients</i>
Severity 3 Incident	Severity 3 Incident means in the reasonable determination of <i>SME</i> : <ul style="list-style-type: none"> • an incident causing non-critical degradation of performance • a non-critical <i>MDM/R</i> service as defined in Appendix 'A' not being available • an intermittent problem with low impact on the business of <i>MDM/R service recipients</i> • serious deficiencies in documentation
Severity 4 Incident	Severity 4 Incident means in the reasonable determination of <i>SME</i> : <ul style="list-style-type: none"> • a problem with the Services for which a long-term bypass is provided • a minor documentation or cosmetic problem

4.4.6 The *SME* shall not be responsible for incidents originating from a *MDM/R service recipient's* failure to comply with the technical interface specifications outlined in section 4.2.

4.4.7 Notwithstanding sections 4.4.1 to 4.4.4, the *MDM/R incident management framework* may designate a separate incident management processes for specific *MDM/R* services such that:

4.4.7.1 the *SME's* duties to gather and disseminate information relating to

incidents involving those specific *MDM/R* services may be assigned to a third party; and

- 4.4.7.2 the designated third party handling incidents for those specific *MDM/R* services is legally bound to the *SME* to meet all applicable services levels for those specific *MDM/R* services as set out in Appendix 'A'.

4.5 MDM/R Service Levels

- 4.5.1 The *SME* will make best efforts to ensure that *MDM/R* operates in accordance with the applicable service levels for the benefit of all *MDM/R service recipients* prescribed in Appendix 'A', including:
 - 4.5.1.1 work with the *OSP* to monitor service levels and address issues and incidents as they arise;
 - 4.5.1.2 seek voluntary actions from *MDM/R service recipients* regarding the scheduling, frequency and volumetric restrictions of data flows to and from the *MDM/R*; and
 - 4.5.1.3 impose limitations on the frequency and volume of data flows to and from the *MDM/R* where such restrictions are necessary to safeguard the integrity of the *MDM/R* and its associated service levels for the benefit of all *MDM/R service recipients* using the affected *MDM/R* services
- 4.5.2 Before imposing any limitations on the frequency and volume of data flows to and from the *MDM/R* under section 4.5.1.3, the *SME* shall consider the impact of the limitations on *MDM/R service recipients* that will be affected by those limitations.
- 4.5.3 Where the *SME* imposes limitations on the frequency and volume of data flows, it shall, at the first opportunity:
 - 4.5.3.1 advise all affected *MDM/R* service recipients;
 - 4.5.3.2 raise the matter with the *SME steering committee*;
 - 4.5.3.3 propose to the *SME steering committee* remedies to such restrictions, including the potential cost and service implications for each proposed option; and
 - 4.5.3.4 seek input from the *SME steering committee* as to whether or not the service restriction warrants the necessary costs to remedy the situation.

- 4.5.4 The *SME* shall report to *MDM/R service recipients*, the performance of each critical *MDM/R service* and each non-critical *MDM/R service* against the corresponding service level targets set out in Appendix ‘A’ on a schedule agreed to with the *SME Steering Committee*.
- 4.5.5 Notwithstanding section 4.5.4, the *SME* shall report to the *SME Steering Committee* all information relating to the reporting and distribution of Service Level Credits payable by the *OSP* to the *SME*.

4.6 MDM/R Business Continuity

- 4.6.1 The *SME* shall establish business continuity plans for the *SME* and ensure *OSP* establishes disaster recovery plans for the *MDM/R* for operating and recovering from an *MDM/R business interruption event* or an emergency situation requiring the *SME* to evacuate its principal control centre and move to a backup control centre.
- 4.6.2 The *SME* shall establish procedures for *SME, OSP, and MDM/R service recipients* coordination and communication in the event of an *MDM/R business interruption event* or an emergency situation requiring the *SME* to evacuate its principal control centre and move to a backup control centre. The *SME* shall *publish* those procedures in the “MDM/R Business Continuity Manual”.
- 4.6.3 The procedures described in section 4.6.2 shall define the roles and responsibilities of the *SME, OSP* and *MDM/R service recipients* for responding to, recovering from and operating during an *MDM/R business interruption event* or emergency event.:

4.7 [intentionally left blank]

- 4.7.1 [Intentionally left blank]
- 4.7.2 [Intentionally left blank]
- 4.7.3 [Intentionally left blank]
- 4.7.4 [Intentionally left blank]

5. Settlement Invoicing and Payment Process

5.1 Settlement Procedure

- 5.1.1 The *SME* shall report the *smart metering charge* to *MDM/R service recipients* on the *IESO* physical market settlement statements in accordance with section 1.2, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6., 6.7, 6.8 and 6.9 of Chapter 9 of the *market rules*.
- 5.1.2 An *MDM/R service recipient* may access its settlement statements in accordance with the above mentioned *market rules* and the applicable *SME* market manuals, including:
- 5.0 - Overview (MDP_MAN_0005);
 - 5.1 - Settlement Schedule and Payments Calendars (SSPCs) (MDP_PRO_0031);
and
 - 5.5 - Physical Markets Settlement Statements (MDP_PRO_0033).

5.2 Invoicing Procedure

- 5.2.1 The *SME* shall invoice *MDM/R service recipients* for the *smart metering charge* on the *IESO* wholesale market invoices in accordance with sections 1.2, and 6.10 of Chapter 9 of the *market rules*.
- 5.2.2 An *MDM/R service recipient* may access its invoices in accordance with the above mentioned *market rules* and the applicable market manuals, including:
- 5.0 - Overview (MDP_MAN_0005);
 - 5.1 - Settlement Schedule and Payments Calendars (SSPCs) (MDP_PRO_0031);
and
 - 5.6 - Physical Markets Settlement Invoicing (MDP_PRO_0035)
- 5.2.3 Charges for the *smart metering charge* will not be included in the prudential calculations for the distributor under the *market rules*.

5.3 Payment Procedure

5.3.1 *MDM/R service recipients* shall pay the *smart metering charge* reported on their wholesale market invoice issued by the *SME* in accordance with sections 1.2, and 6.11 of Chapter 9 of the *market rules*.

5.3.2 *MDM/R service recipients* shall fulfill their obligation to pay their invoices in accordance with the applicable *IESO* market manuals, including:

5.0 - Overview (MDP_MAN_0005);

5.1 - Settlement Schedule and Payments Calendars (SSPCs) (MDP_PRO_0031);
and

5.9 - Settlement Payment Methods and Schedule (MDP_PRO_0036)

5.4 Payment Default

5.4.1 If the full amount due by an *MDM/R service recipient* has not been remitted by the *MDM/R service recipient* payment date, *default interest* shall accrue on all amount of the *smart metering charge* outstanding.

5.5 Allocation of Payment

5.5.1 If an *MDM/R service recipient* is also a participant in the wholesale market and the *MDM/R service recipient*:

- fails to remit the full invoice amount due by the *MDM/R service recipient* payment date; and
- does not direct the *SME* how to apportion the payment between the *smart metering charge* and all other settlement amounts on the invoice prior to the *IESO* payment date,

the *SME* shall allocate the payment made by the *MDM/R service recipient* first to satisfying any settlement amounts due under the *market rules* before being applied to the *smart metering charge*.

5.6 Settlement Disagreements and Disputes

5.6.1 An *MDM/R service recipient* may register a disagreement concerning the *smart metering charge* with the *SME* in accordance with section 6.6 of Chapter 9 of the *market rules*.

- 5.6.2 An *MDM/R service recipient* may, after having made reasonable efforts to resolve with the *SME* any disagreement, submit the matter to dispute resolution in accordance with section 6.8 of Chapter 9 of the *market rules*.
- 5.6.3 An *MDM/R service recipient* must commence any proceeding in respect of the calculation of the *smart metering charge* invoiced to it by the *SME* within the applicable limitation period set forth in section 2.5.1A.3 or 2.5.1A.4 of Chapter 3 of the *market rules*.

6. Supervision and Dispute Resolution

6.1 Supervision by the *SME*

- 6.1.1 { section deleted }
- 6.1.2 The *SME* may monitor and supervise the use of the *MDM/R* by an *MDM/R service recipient*, including:
- any aspect of usage of the *MDM/R*; and
 - the form and content of information transferred between the *MDM/R* and the *MDM/R service recipient* and/or its designated agent(s).
- 6.1.3 The *SME* shall have the authority to monitor and supervise each *MDM/R service recipient's* compliance with the procedures developed in support of the administration and operation of the *MDM/R*.

6.2 Remedies

- 6.2.1 If an *MDM/R service recipient* fails to comply with the *terms of service* and the *MDM/R manuals and procedures*, the *SME* may utilize any combination of following remedies:
- the issuance of warnings and notices and the subsequent publication of any such notices, including details of any associated disruption to any underlying *MDM/R* service caused by the actions of that *MDM/R service recipient*; and
 - where necessary to safeguard the operational integrity of any *MDM/R* service, limit the *MDM/R service recipient's* access to one or more *MDM/R* services.

- 6.2.2 Nothing in the *terms of service* shall limit the *SME's* legal rights to further remedies for the breach of the *smart metering agreement* or the *terms of service* by any party.

7. Interpretation

7.1 Italicized Expressions

- 7.1.1 Italicized expressions used in the *terms of services* have the meanings ascribed thereto in the definitions set forth in section 7.8.

7.2 General

- 7.2.1 In the *terms of service*, unless the context otherwise requires:
- words importing the singular include the plural and vice versa;
 - words importing a gender include any gender;
 - when italicized, other parts of speech and grammatical forms of a word or phrase defined in the *terms of service* have a corresponding meaning;
 - an expression importing a natural person includes any company, partnership, trust, joint venture, association, corporation or other private or public body corporate, any government agency or body politic or collegiate, and any other entity or body or class of entity or body designated by regulation made pursuant to the *Electricity Act, 1998* as coming within the definition of the word “person”;
 - a reference to a thing includes a part of that thing;
 - a reference to a section, provision, condition, part or appendix is to a section, provision, condition, part or appendix of the *terms of service*;
 - a reference to any statute, regulation, proclamation, order in council, ordinance, by-law, resolution, rule, order or directive includes all statutes, regulations, proclamations, orders in council, ordinances, by-laws or resolutions, rules, orders or directives varying, consolidating, re-enacting, extending or replacing it and a reference to a statute includes all regulations, proclamations, orders in council, rules and by-laws of a legislative nature issued under that statute;

- a reference to a document or provision of a document, including the *terms of service* or a provision of the *terms of service*, includes an amendment or supplement to, or replacement or novation of, that document or that provision of that document, as well as any exhibit, schedule, appendix or other annexure thereto;
- a reference to a person includes that person's executors, administrators, successors, substitutes (including, but not limited to, persons taking by novation) and permitted assigns;
- a reference to a body (including, without limitation, an institute, association or authority), whether statutory or not, which ceases to exist or whose functions are transferred to another body is a reference to the body which replaces it or which substantially succeeds to its powers or functions;
- a reference to sections of the *terms of service* separated by the word "to" (i.e., "sections 1.1 to 1.4") shall be a reference to the sections inclusively;
- a reference to a time:
 - without the qualification "EST" is a reference to eastern time, which is the prevailing eastern standard or eastern daylight time in the Province of Ontario;
 - followed by the qualification "EST" is a reference to eastern standard time in the Province of Ontario; and
 - without the qualification "am", "a.m.", "pm" or "p.m." is a reference to time based on a 24-hour clock; and
- a reference to a month, calendar month, year or calendar year shall mean the period that commences the first hour of the first trading day that starts in such month or year and terminates the last hour of the last trading day that commences in such month or year.

7.3 Headings

- 7.3.1 Headings in the *terms of service* are inserted for convenience of reference only and shall not affect the interpretation of the *terms of service*, nor shall they be construed as indicating that all of the provisions of the *terms of service* relating to any particular topic are to be found in any particular section, subsection, clause, provision, part or appendix.

7.4 Shall, Must and May

- 7.4.1 The words “shall” and “must” shall be construed as imperative and the word “may” shall be construed as permissive.

7.5 Explanatory Notes

- 7.5.1 Any provision in this document which is indicated as being an “explanatory note” or a “rule note” shall be deemed not to form a part of the *terms of service*. Such explanatory notes or rule notes are inserted for convenience only and shall not affect the interpretation of the *terms of service* nor be binding on the *SME* or on any *MDM/R service recipient*.

7.6 Computation of Time

- 7.6.1 In the computation of time under the *terms of service*, unless a contrary intention appears, if there is a reference to a number of days between two events, they are counted by excluding the day on which the first event happens and including the day on which the second event happens.

7.7 Currency

- 7.7.1 All references to a monetary amount are expressed in Canadian dollars in:
- the *terms of service*;
 - *MDM/R manuals and procedures*
 - a settlement statement; or
 - an invoice.
- 7.7.2 Any payment required to be made by or to the *SME* or by or to an *MDM/R service recipient* shall be made in Canadian dollars.

7.8 Definitions

- 7.8.1 *AMI* has the meaning ascribed to it in the *smart metering agreement*.
- 7.8.2 *amendment proposal* means a proposal to amend the *terms of service* or an *MDM/R Manual or Procedure*.
- 7.8.3 *authorized agent* has the meaning ascribed to it in the *smart metering agreement*.

- 7.8.4 *CIS* means the customer information system used by an *MDM/R service recipient* for customer support and billing functions.
- 7.8.5 *default interest* means interest charged at the base lending rate that the bank where the *SME* settlement clearing account is maintained charges for commercial loans to its best and most creditworthy commercial customers plus 2%.
- 7.8.6 *IESO* means the Independent Electricity System Operator established and continued under Part II of the *Electricity Act, 1998*.
- 7.8.7 *market rules* means rules made under section 32 of the *Electricity Act, 1998*.
- 7.8.8 *MDM/R* means the Meter Data Management and Repository developed by the *SME* within which meter read data is processed to produce billing quantity data and such data is stored for future use.
- 7.8.9 *MDM/R business interruption event* means an event involving the substantial loss of the *OSP*'s primary *MDM/R* operations site availability that is expected to last longer than 24 hours.
- 7.8.10 *MDM/R fee*, means the *smart metering charge*, or any other allowable fee charged by the *SME* for the use of an *MDM/R* service that may be prescribed by applicable law.
- 7.8.11 *MDM/R manuals and procedures* means a series of documents specified by the *SME*, including the documents referred to in sections 4.1 4.2, 4.3 and 4.4, that describe procedures, standards and other requirements to be followed, met or performed by *MDM/R service recipients*, the *SME* and other persons in fulfilling their respective obligations under the terms of the *smart metering agreement* and the *terms of service*.
- 7.8.12 *MDM/R service recipient* means a party that has entered into a *smart metering agreement* with the *SME*.
- 7.8.13 *OEB* means the Ontario Energy Board or its successor.
- 7.8.14 *OPA* means the Ontario Power Authority or its successor.
- 7.8.15 *OSP* means the operational service provider engaged by the *SME* to assist with the development and operation of the *MDM/R*.
- 7.8.16 *publish* means, in respect of a document or information, to place that document or information on a website designated by the *SME*, and publication shall be interpreted accordingly.

- 7.8.17 *smart metering agreement* means an agreement, including the Schedules to such an agreement, between the *SME* and an *MDM/R service recipient*.
- 7.8.18 *smart metering charge* means any fee for the usage of an *MDM/R* service that may be prescribed by applicable law.
- 7.8.19 *smart metering initiative* means those policies of the Government of Ontario related to its decision to ensure Ontario electricity consumers are provided, over time, with smart meters.
- 7.8.20 *SME* means the *IESO* acting as the Smart Metering Entity designated under the *Electricity Act, 1998* (Ontario) to accomplish the Government of Ontario's *smart metering initiative* and any subsidiary of the *SME*.
- 7.8.21 *SME steering committee* means a consultative body constituted under the provisions of the *terms of service*.
- 7.8.22 *terms of service* means the terms and conditions governing the administration and operation of the *MDM/R* and any other infrastructure required to fulfill the objectives of the *smart metering initiative*, including the interfaces between the *MDM/R* and any external systems.
- 7.8.23 *urgent amendment* means an amendment to the *terms of service* or the *MDM/R manuals and procedures* on an urgent meeting one or more of the criteria set out in section 1.3.3.

Appendix 'A' – MDM/R Service Levels

Service Levels for Critical MDM/R Services:

Explanatory Note: The target service levels contained in this appendix for Critical *MDM/R* Services are commensurate with the target service level set out in an agreement between the *SME* and the *OSP*. In the event that the *OSP* fails to meet the target service levels for Critical *MDM/R* Services set out in this appendix, a service credit payable by the *OSP* to the *SME* may be triggered as per the contractual provisions in that agreement. Those service credits shall in turn be allocated to *MDM/R Service Recipients* as per the provisions of the *smart metering agreement* that is in force between the *MDM/R Service Recipient* and the *SME*. Please see the *smart metering agreement* for further details.

MDM/R Measured Service	Measurement Method	<i>SME</i> and <i>MDM/R Service Recipient</i> Obligations	Service Level Target (across all MDM/R service recipients per calendar month, unless otherwise indicated)
Automatic Meter Read Processing	Meter Read Interface (all adaptors as indicated in <i>MDM/R v 1.0 Technical Interface Specification</i> document) - time to respond to a valid meter reads file received in accordance with the <i>MDM/R v 1.0 Technical Interface Specification</i> document	<p>Meter read data received by the MDM/R received by 05:00 EST on the day immediately following each Daily Read Period</p> <ul style="list-style-type: none"> Exception Reports VE11, VE12, DC16, DC17, DC06, DC07, VE01, and VE02 shall be available by 07:10 EST on the day following the Daily Read Period Meter Read data shall be available by 08:00 EST on the day following the Daily Read Period <p>Meter read Data received by the MDM/R after 05:00 EST on the day immediately following each Daily Read Period</p> <ul style="list-style-type: none"> Meter read data will be processed within 6 hours from time of receipt of data by MDM/R Exception Reports VE11, VE12, DC16, DC17, DC06, DC07, VE01, and VE02 will be available at the normally scheduled time on the second day immediately after the Daily Read Period <p>Note:</p> <ul style="list-style-type: none"> Meter Read data file assumed to conform to all requirements of the <i>MDM/R v1.0 Technical Interface Specification</i> document 	<ul style="list-style-type: none"> Accumulated processing delay <= 240 minutes per calendar month, <p>And</p> <ul style="list-style-type: none"> no more than one single delay > 45 minutes per calendar month
Automatic Billing	Billing Quantity Response – time	Billing Quantity Response File provided within 6 hours from receipt of the corresponding Billing	<ul style="list-style-type: none"> Accumulated processing delay

MDM/R Measured Service	Measurement Method	SME and MDM/R Service Recipient Obligations	Service Level Target (across all MDM/R service recipients per calendar month, unless otherwise indicated)
Quantity Processing	to respond to a valid billing quantity request file received in accordance with the <i>MDM/R v 1.0 Technical Interface Specification</i> document	<p>Quantity Request File ('Pull' method) by the MDM/R for Billing Quantity Request Files received between 06:00 EST and 19:00 EST.</p> <ul style="list-style-type: none"> - Billing Quantity Response File provided by 21:05 EST on Day N+2 for billing quantity Requests initiated via the scheduled 'Push' method <p>Note:</p> <ul style="list-style-type: none"> - Billing Quantity Request File assumed to conform to all requirements of the MDM/R Technical Interface Specification. - Billing Quantity Data must have successfully completed the VEE process no later than the time stamp of each Billing Quantity Request ("Pull" method) or by 15:00 EST on Day N+2 ("Push" method) 	<p><= 240 minutes per calendar month,</p> <p>And</p> <ul style="list-style-type: none"> • no more than one single delay > 45 minutes per calendar month
Automatic MDM/R Master Directory (MMD) incremental synchronization Processing	Processing of Incremental Synchronization files (version 00 or higher as adaptors as indicated in <i>MDM/R v 1.0 Technical Interface Specification</i> document) – response time to apply valid incremental synchronization files to the MMD	<p>For all Incremental Synchronization files received by 16:00 EST on Daily Read Period 'N':</p> <ul style="list-style-type: none"> - MMD Changes applied by 00:00 EST on daily read period 'N + 1' following the day in which the Incremental Synchronization file was received (i.e. by the beginning of the day immediately following daily read period 'N') - The maximum number of daily updates via incremental synchronization that are subject to this target service level is limited to the higher of 5000 or 0.50% of the registered service delivery points for the <i>MDM/R service recipient</i>. 	>99.8% percent Automatic MMD Processing Completion across all <i>MDM/R service recipients</i> per Daily Read Period
MDM/R Graphical User Interface (GUI)	GUI availability rate	Available in the highest availability window (06:00 to 20:00) each calendar day Outside of the highest availability window, this interface may occasionally be subject to discretionary maintenance outages by the <i>OSP</i> , of which <i>MDM/R service recipients</i> will receive reasonable notice from the <i>SME</i> .	>99.8% availability across all MDM/R service recipients per calendar month

Service Level Targets for Non-Critical MDM/R Services:

Explanatory Note: The target service levels contained in this appendix for non-critical *MDM/R* services are commensurate with the target service level set out in an agreement between the *SME* and the *OSP* or any other service provider providing the services listed below under contract with the *SME*. The non-critical MDM/R service level targets listed below do not trigger a service credit or subsequent payments that fall under the provisions of the *smart metering agreement*.

MDM/R Measured Service	Measurement Method	<i>SME</i> Obligations	Service Level Target (across all MDM/R service recipients per calendar month, unless otherwise indicated)
Public Interactive Voice Response (IVR) system	Public IVR availability rate	Public IVR to operate on a 24-hour basis, 7 days per week.	>99.0% availability across all <i>MDM/R service recipients</i> per calendar month
Help Desk	Help Desk hours of availability and response time	Help Desk available to respond to incidents on a 24-hour basis, 7 days per week.	24 hour availability for all <i>MDM/R service recipients</i> – 7 days per week Response time for incidents: Severity 1: 30 minutes (7x24 Mon –Sun, including holidays) Severity 2: 3 hours (06:00 – 23:00 EDT Mon –Sun, including holidays)
MDM/R Web Services Interface	To be determined	To be determined.	