



ONTARIO ENERGY BOARD

Smart Sub-Metering Code

January 08, 2008

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1 GENERAL PROVISIONS

1.1 The Purpose of this Code

1.1.1 The purpose of this Smart Sub-Metering Code (the "Code") is to set out the minimum conditions and standards that a licensed smart sub-metering provider must meet when providing smart sub-metering services on behalf of exempt distributors.

1.2 Definitions

1.2.1 In this Code:

“Act” means the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Schedule B;

“affiliate” has the same meaning as in the *Business Corporations Act* (Ontario);

“Board” means the Ontario Energy Board;

"business day" means any day that is not a Saturday, a Sunday, or a legal holiday in the Province of Ontario;

"Conditions of Services" means the document developed by smart sub-metering providers in accordance with section 3.2.1 of this Code that describes the operating practices and connection rules for the smart sub-metering provider;

“condominium corporation or developer” means the person authorized to contract for smart sub-metering services on behalf of a prescribed location;

“consumer” means either the condominium corporation or the person who requires an account with the smart sub-metering provider in order to receive metering and billing services;

“Electricity Act” means the *Electricity Act, 1998*, S.O. 1998, c. 15, Schedule A;

“exempt distributor” means a distributor as defined under section 56 of the Act who is exempted from various requirements in the Act by Ontario Regulation 161/99—*Definitions and Exemptions* (made under the Act);

“IESO” means the Independent Electricity System Operator continued under the Electricity Act;

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“interval meter” means a meter that measures and records electricity use on an hourly or sub-hourly basis;

“licensed distributor” means the distributor in whose licensed service area the prescribed location is located;

“master bill” means the bill issued by the licensed distributor to the master consumer;

“master consumer” means the condominium corporation or the developer for the prescribed location being served by the licensed distributor;

“master meter” means the meter controlled by the licensed distributor and used for settlement of the master bill with the master consumer;

"metering services" means installation, testing, reading, and maintenance of meters;

“prescribed activity” means one of the activities prescribed by Ontario Regulation 443/07;

“prescribed location” means one of the classes of property prescribed by Ontario Regulation 442/07;

“regulation” means a regulation made under the Act or the Electricity Act;

"Smart Metering Entity" means the smart metering entity established under Part IV.2 of the Electricity Act, or more specifically, the IESO as prescribed by Ontario Regulation 393/07;

“smart sub-metering provider” means a person licensed by the Board to provide a prescribed activity in a prescribed location;

“smart sub-metering system” means a system, equipment and technology and any associated equipment, systems and technologies used to smart sub-meter a prescribed location;

“third party” with respect to a smart sub-metering provider, means any person other than the smart sub-metering provider;

“validating, estimating and editing” (“VEE”) means the process used to validate, estimate and edit raw metering data to produce final metering data or to replicate metering data for settlement purposes.

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1.3 Interpretations

1.3.1 Unless otherwise defined in this Code, words and phrases shall have the meanings ascribed to them in the Act or the Electricity Act, as the case may be. Where a word or phrase is defined in this Code, the Act or the Electricity Act, other parts of speech and grammatical forms of the word or phrase have a corresponding meaning. Headings are for convenience only and shall not affect the interpretation of this Code. Words importing the singular include the plural and vice versa. Words importing a gender include any gender. Words importing a person include: (i) an individual; (ii) a company, sole proprietorship, partnership, trust, joint venture, association, corporation or other private or public body corporate; and (iii) any government, government agency or body, regulatory agency or body or other body politic or collegiate. A reference to a person includes that person's successors and permitted assigns. A reference to a body, whether statutory or not, that ceases to exist or whose functions are transferred to another body is a reference to the body that replaces it or that substantially succeeds to its powers or functions. A reference to a document (including a statutory instrument) or a provision of a document includes any amendment or supplement to, or any replacement of, that document or that provision. The expression "including" means including without limitation.

1.4 To Whom this Code Applies

1.4.1 This Code applies to all persons licensed as smart sub-metering providers under section 57(i) of the Act to provide prescribed activities.

1.5 Coming into Force

1.5.1 This Code shall come into force on the date that the Board publishes the Code by placing it on the Board's website after it has been made by the Board.

1.6 Requirements for Board Approvals

1.6.1 Any matter under this Code requiring a determination of the Board may be determined by the Board without a hearing or through an oral, written or electronic hearing, at the Board's discretion.

1.7 Contract with a Prescribed Location

1.7.1 A smart sub-metering provider shall not undertake any prescribed activity in a prescribed location unless the smart sub-metering provider has a contract with the condominium corporation or developer to do so.

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2 METERING

2.1 Technical Requirements for a Smart Sub-Metering System

2.1.1 A licensed smart sub-metering provider shall comply with the requirements set out in the Functional Specification document referred to in Ontario Regulation 425/06 (Criteria and Requirements for Meters and Metering Equipment, Systems and Technology) made under the Electricity Act with the following modifications:

- (a) for the purposes of this Code, the definitions of "distributor" and "MDM/R" will be deemed to be as follows:
 - (i) "distributor" has the meaning provided in the Act or means a person licensed under subsection 57(i) of the Act for the purpose of engaging in a prescribed activity under section 1(2) of Ontario Regulation 443/07 (Licensing Sub-Metering Activities) made under the Act; and
 - (ii) "MDM/R" means the meter data management and meter data repository functions, within which Meter Reads are processed to produce rate-ready data and are stored for future use, as selected by the person licensed under subsection 57(i) of the Act. There is no requirement for the metering and billing system of a person licensed under subsection 57(i) to interface and/or integrate with the Smart Metering Entity's system; nor is there a requirement for meter data functions to be performed by the Smart Metering Entity, unless the person licensed under subsection 57(i) chooses to interface and integrate its metering and billing system with the Smart Metering Entity's system. If the person licensed under subsection 57(i) does not choose to interface and integrate its metering and billing system with the Smart Metering Entity's system, the person shall perform meter data functions. Meter data functions include the verification, validation and editing of meter data, the processing of meter data into data that is ready for billing purposes, the aggregation of meter data into rate periods and the storing and managing of meter data; and
- (b) for the purposes of this Code, the following definition of "Smart Metering Entity" will be deemed to be added as follows:
 - (i) "Smart Metering Entity" means the smart metering entity established under Part IV.2 of the Electricity Act.

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2.2 Technical Requirements for the Master Meter

2.2.1 A smart sub-metering provider shall ensure that the master meter is an interval meter.

2.3 Validating, Estimating and Editing Process

2.3.1 Metering data collected by a smart sub-metering provider shall be subjected to a validating, estimating and editing (“VEE”) process if it is to be used for billing purposes.

2.3.2 A smart sub-metering provider shall establish a VEE process that is fair and reasonable and provides assurance that correct data is submitted for the billing process. The VEE process shall do the following:

- (a) convert raw metering data into validated, corrected or estimated “bill-ready” metering data suitable for use in determining billing amounts;
- (b) detect errors in metering data introduced as a result of improper operational conditions and/or hardware/software malfunctions, including failures of or errors in metering or communication hardware, and metering data exceeding pre-defined variances or tolerances; and
- (c) use operational system data, including historical load patterns and data collected by the smart sub-metering provider, as appropriate, for validating raw metering data, and for editing, estimating and correcting metering data found to be erroneous or missing.

2.3.3 A smart sub-metering provider’s VEE process for data from the smart sub-metering system shall consider industry standards specified by the SME in its VEE process for smart meters.

2.3.4 A smart sub-metering provider shall document and make available its VEE process and criteria, and allow scrutiny of its process by consumers, retailers, the Board and Measurement Canada.

2.4 Metering Services

2.4.1 A smart sub-metering provider shall comply with Measurement Canada standards as a minimum metering installation and measurement standard, and may apply any other practices that exceed those standards.

2.4.2 A smart sub-metering provider shall ensure that persons involved in metering services have competency in performing these services. Competency may be based on recognized qualification requirements that include a training course that meets the requirements of the tasks to be performed. Metering services provided

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by a person that does not have the recognized qualification requirements shall be reviewed, affirmed and documented by a person with exhibited competency.

- 2.4.3 A smart sub-metering provider shall exercise appropriate diligence in detecting and acting upon instances of tampering with metering equipment. Upon identification of possible meter tampering, the smart sub-metering provider should notify, as appropriate, Measurement Canada, police officials, the Electrical Safety Authority, or other entities.
- 2.4.4 Nothing in this Code shall affect the obligation of a smart sub-metering provider to comply with all Measurement Canada requirements provided that, where this Code or other conditions of licence prescribe a higher standard than that prescribed in those requirements, the smart sub-metering provider shall comply with the higher standard.
- 2.4.5 A smart sub-metering provider shall respond to consumer metering disputes, and shall establish a fair and reasonable charge for costs associated with resolution of these disputes. If the complaint is substantiated, the charge shall not be applied. In resolving the dispute, a smart sub-metering provider may use a qualified, independent organization at anytime during the dispute resolution process.

3 STANDARDS OF BUSINESS PRACTICE AND CONDUCT

3.1 Disclosure of Agreements and Disclosure in Agreements

- 3.1.1 Upon creation of a condominium corporation for a prescribed location, the smart sub-metering provider shall disclose to the condominium corporation all agreements between itself or its affiliate and the developer of the condominium or an affiliate of the developer.
- 3.1.2 A smart sub-metering provider shall provide a copy of the agreements referred to in section 3.1.1 to each consumer.
- 3.1.3 Every contract a smart sub-metering provider has with a consumer, exempt distributor, or developer, shall include the following information:

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- (a) the smart sub-metering provider's capital investment and a description of all types of costs that can be included in the capital investment;
- (b) the depreciation method used to depreciate the capital investment if there are to be undepreciated capital costs recovered upon termination of the contract;
- (c) a description of, and whenever possible, the actual amount for, all fees and charges related to the provision of the smart sub-metering service; and
- (d) a description of, and whenever possible, the actual amount for, all fees and charges related to the termination of the contract including:
 - (i) any fees or charges for the disconnection and removal of the installed smart sub-metering systems;
 - (ii) any fees and charges related to the repayment of the undepreciated capital cost of the smart sub-metering provider's capital investment; and
 - (iii) the length of time allowed to repay the amount in section (ii) above.

3.2 Conditions of Service

- 3.2.1 A smart sub-metering provider shall document its operating practices and connection policies in a document to be entitled Conditions of Service. Subject to this Code and other applicable laws, a smart sub-metering provider shall comply with its Conditions of Service but may waive a provision of its Conditions of Service in favour of a consumer or potential consumer.
- 3.2.2 A smart sub-metering provider shall make its Conditions of Service publicly available and provide a copy to any person requesting it.
- 3.2.3 A smart sub-metering provider shall provide a copy of its Conditions of Service to each of its consumers.
- 3.2.4 A smart sub-metering provider shall provide advance notice to its consumers of any changes to its Conditions of Service. Notice shall be, at a minimum, provided to each consumer by means of a note on, or included with, the consumer's bill. The notice shall include a proposed timeline for implementation of the new Conditions of Service and a means by which consumers' comments may be provided.
- 3.2.5 If a smart sub-metering provider amends its Conditions of Service, it shall provide one copy of the amended Conditions of Service for each of its consumers. The copy of the amended document shall include a cover letter that outlines the changes from the prior document, as well as a summary of any consumer comments on the changes.

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3.2.6 A smart sub-metering provider's Conditions of Service shall include, at a minimum, a description of the following:

- (a) its billing cycle period and payment requirements;
- (b) its security deposit procedure;
- (c) its dispute resolution procedure;
- (d) its business process for disconnecting and reconnecting consumers, including means of notification and timing;
- (e) conditions under which it may disconnect a consumer; and
- (f) the smart sub-metering provider's rights and obligations with respect to a consumer.

3.2.7 The Conditions of Service must be consistent with the provisions of this Code and all other applicable legislation and regulatory requirements.

3.3 Provision of Information to Consumers and Consumer Complaints

3.3.1 A smart sub-metering provider shall communicate general market and educational information to consumers to whom it provides a bill as required by the Board.

3.3.2 A smart sub-metering provider shall provide its address and telephone number to its consumers in all written communications between the smart sub-metering provider and the consumer. The smart sub-metering provider's telephone number must be a local number or one that is capable of being reached without charge to the consumer.

3.3.3 If any consumer makes a complaint to a smart sub-metering provider regarding its services, the smart sub-metering provider shall expeditiously investigate the complaint and take all appropriate and necessary steps to resolve the complaint. If the complaint is not resolved to the satisfaction of the consumer, the smart sub-metering provider shall provide to the consumer the telephone number of the Board's Consumer Relations Centre.

3.3.4 In cases where a consumer complaint has been referred to the smart sub-metering provider from the Board and resolution of the complaint is reached, the smart sub-metering provider shall implement the resolution immediately and shall confirm this, in writing, to the Board.

3.4 Transfer and Assignment of Contracts

3.4.1 A smart sub-metering provider shall not sell, transfer, or assign a contract with a consumer to another person who is not a licensed smart sub-metering provider.

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- 3.4.2 Prior to the sale, transfer, or assignment of a contract, the smart sub-metering provider shall ensure that all relevant consumer information including, but not limited to, information regarding security deposits and consumption, is properly transferred to the new smart sub-metering provider to allow for the continuous billing of consumers.
- 3.4.3 Prior to the termination of a contract, the smart sub-metering provider shall ensure that all relevant consumer information including, but not limited to, information regarding security deposits and consumption, is properly transferred to the exempt distributor to allow for the continuous billing of consumers.
- 3.4.4 A smart sub-metering provider must notify the Board of any sale, transfer, or assignment of contracts within 10 days of the sale, transfer, or assignment.
- 3.4.5 Within 60 days of any sale, transfer, or assignment of a contract to another smart sub-metering provider, the new smart sub-metering provider must notify the affected consumers of the new smart sub-metering provider's address and telephone number.

4 BILLING AND COLLECTION

4.1 Security Deposits

- 4.1.1 A smart sub-metering provider who is contracted to collect security deposits on behalf of the condominium corporation or developer shall ensure that its Conditions of Service include the smart sub-metering provider's security deposit policy which shall be consistent with the provisions of this Code. A smart sub-metering provider's security deposit policy shall include at a minimum the following:
 - (a) a list of all potential types/forms of security accepted;
 - (b) a detailed description of how the amount of security is calculated;
 - (c) limits on the amount of security required;
 - (d) the planned frequency, process and timing for updating security deposits;
 - (e) criteria consumers must meet to have security deposit waived and/or returned; and
 - (f) methods of enforcement where a security deposit is not paid.

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- 4.1.2 In managing consumers' non-payment risk, a smart sub-metering provider shall not discriminate among consumers with similar risk profiles or risk related factors except where expressly permitted under this Code.
- 4.1.3 A smart sub-metering provider may require a security deposit from a consumer unless the consumer has a good payment history of 1 year. The time period that makes up the good payment history must be the most recent period of time and some of the time period must have occurred in the previous 24 months. A smart sub-metering provider shall provide a consumer with the specific reasons for requiring a security deposit from the consumer.
- 4.1.4 For the purposes of section 4.1.3, a consumer is deemed to have a good payment history unless, during the relevant time period set out in section 4.1.3, the consumer has received more than one disconnection notice from the smart sub-metering provider, more than one cheque given to the smart sub-metering provider by the consumer has been returned for insufficient funds, more than one pre-authorized payment to the smart sub-metering provider has been returned for insufficient funds or a disconnect / collect trip has occurred. If any of the preceding events occur due to an error by the smart sub-metering provider, the consumer's good payment history shall not be affected.
- 4.1.5 For the purposes of section 4.1.3, a smart sub-metering provider shall deem a consumer to have a good payment history if the consumer provides a letter from a licensed electricity distributor or gas distributor in Canada confirming a good payment history with that distributor for the most recent relevant time period set out in section 4.1.3 where some of the time period which makes up the good payment history has occurred in the previous 24 months.
- 4.1.6 The maximum amount of a security deposit which a smart sub-metering provider may require a consumer to pay shall be calculated by multiplying the smart sub-metering provider's billing cycle factor and the consumer's estimated bill (which shall be based on the consumer's average monthly load with the smart sub-metering provider during the most recent 12 consecutive months within the past two years). Where relevant usage information is not available for the consumer for 12 consecutive months within the past two years or where the smart sub-metering provider does not have systems capable of making the above calculation, the consumer's average monthly load shall be based on a reasonable estimate made by the smart sub-metering provider.
- 4.1.7 For the purposes of sections 4.1.6, the billing cycle factor is 2.5 if the consumer is billed monthly, 1.75 if the consumer is billed bi-monthly and 1.5 if the consumer is billed quarterly.
- 4.1.8 Where a consumer has a payment history which discloses more than one disconnection notice in a relevant 12 month period, the smart sub-metering provider may use that consumer's highest actual or estimated monthly load for

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the most recent 12 consecutive months within the past two years for the purposes of making the calculation of the maximum amount of security deposit under section 4.1.6.

- 4.1.9 Subject to section 4.1.2, a smart sub-metering provider may at its discretion reduce the amount of a security deposit which it requires a consumer to pay for any reason including where the consumer pays under an interim payment arrangement and where the consumer makes pre-authorized payments.
- 4.1.10 The form of payment of a security deposit for a consumer shall be cash or cheque at the discretion of the consumer or such other form as is acceptable to the smart sub-metering provider.
- 4.1.11 A smart sub-metering provider shall permit the consumer to provide a security deposit in equal installments paid over at least four months. A consumer may, in its discretion, choose to pay the security deposit over a shorter time period.
- 4.1.12 Interest shall accrue monthly on security deposits made by way of cash or cheque commencing on receipt of the total deposit required by the smart sub-metering provider. The interest rate shall be at the average over the period of the prime lending rate set by the Bank of Canada less 2 percent. The interest accrued shall be paid out at least once every 12 months or on return of the security deposit or upon the application of the security deposit to the consumer's account or upon the closure of the consumer's account, whichever comes first, and may be paid by crediting the account of the consumer or otherwise.
- 4.1.13 A smart sub-metering provider shall review every consumer's security deposit at least once in a calendar year to determine whether the entire amount of the security deposit is to be returned to the consumer as the consumer is now in a position that it would be exempt from paying a security deposit under section 4.1.3 had it not already paid a security deposit or whether the amount of the security deposit is to be adjusted based on a re-calculation of the maximum amount of the security deposit under section 4.1.6.
- 4.1.14 A consumer may, no earlier than 12 months after the payment of a security deposit or the making of a prior demand for a review, demand in writing that a smart sub-metering provider undertake a review to determine whether the entire amount of the security deposit is to be returned to the consumer as the consumer is now in a position that it would be exempt from paying a security deposit under section 4.1.3 had it not already paid a security deposit or whether the amount of the security deposit is to be adjusted based on a re-calculation of the maximum amount of the security deposit under section 4.1.6.
- 4.1.15 Where the smart sub-metering provider determines in conducting a review under section 4.1.13 or 4.1.14 that some or all of the security deposit is to be returned to

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the consumer, the smart sub-metering provider shall promptly return this amount to the consumer by crediting the consumer's account or otherwise.

4.1.16 A smart sub-metering provider shall promptly return any security deposit received from the consumer upon closure of the consumer's account, subject to the smart sub-metering provider's right to use the security deposit to set off other amounts owing by the consumer to the smart sub-metering provider. The security deposit shall be returned within six weeks of the closure of an account.

4.1.17 Where all or part of a security deposit has been paid by a third party on behalf of a consumer, the smart sub-metering provider shall return the amount of the security deposit paid by the third party, including interest, where applicable, to the third party. This obligation shall apply where and to the extent that:

- (a) the third party paid all or part (as applicable) of the security deposit directly to the smart sub-metering provider;
- (b) the third party has requested, at the time the security deposit was paid or within a reasonable time thereafter, that the smart sub-metering provider return all or part (as applicable) of the security deposit to it rather than to the consumer; and
- (c) there is not then any amount overdue for payment by the consumer that the smart sub-metering provider is permitted by this Code to off set using the security deposit.

4.2 Disconnection and Reconnection

4.2.1 A smart sub-metering provider shall not disconnect consumers for non-payment of bills unless the condominium corporation or developer has contracted the smart sub-metering provider to do so on its behalf.

4.2.2 A smart sub-metering provider shall establish a process for disconnection and reconnection that specifies the notification policies for disconnection and reconnection as well as the timing of disconnections and reconnections. In developing physical and business processes for reconnection, a smart sub-metering provider shall consider safety and reliability as a primary requirement. A smart sub-metering provider shall document its business process for disconnection and reconnection in its Conditions of Service.

4.2.3 Without limiting the generality of the foregoing, prior to disconnecting a consumer for non-payment, a smart sub-metering provider shall provide to the consumer, and any person that is to receive notice of the disconnection:

- (a) the Fire Safety Notice of the Office of the Fire Marshal; and
- (b) any other public safety notices or information bulletins issued by public safety authorities and provided to the smart sub-metering provider, which

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provide information to consumers respecting dangers associated with the disconnection of electricity service.

- 4.2.4 A smart sub-metering provider shall include a copy of the notices or bulletins referred to in section 4.2.3 with any notice of disconnection that is left at the consumer's property at the time of actual disconnection for non-payment.
- 4.2.5 A smart sub-metering provider shall inform a consumer responsible for an overdue amount that it may be disconnected in accordance with section 31(2) of the Electricity Act.
- 4.2.6 It is recommended that, whenever possible, smart sub-metering providers give no less than seven (7) calendar days notice before disconnecting a consumer for non-payment.
- 4.2.7 A smart sub-metering provider may disconnect a consumer without notice in accordance with a court order or for emergency, safety or system reliability reasons.
- 4.2.8 A smart sub-metering provider may recover from consumer who is disconnected the reasonable costs associated with the disconnection, including overdue amounts payable by the consumer. A smart sub-metering provider may recover from the disconnected consumer the reasonable costs for repairs of the smart sub-metering provider's physical assets in reconnecting the consumer.
- 4.2.9 In establishing its disconnection policy, which will be set out in its Conditions of Service, a smart sub-metering provider may consider the following reasons for disconnection:
- (a) adverse effect on the reliability and safety of the smart sub-metering system or the exempt distributor's distribution system;
 - (b) imposition of an unsafe worker situation beyond normal risks inherent in the operation of the smart sub-metering system or the exempt distributor's distribution system;
 - (c) a material decrease in the efficiency of the smart sub-metering system or the exempt distributor's distribution system;
 - (d) a materially adverse effect on the quality of distribution services received by an existing connection;
 - (e) inability of the smart sub-metering provider to perform planned inspections and maintenance;
 - (f) failure of the consumer to comply with a directive of a smart sub-metering provider that the smart sub-metering provider makes for purposes of meeting its licence obligations; and

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- (g) the consumer owes the exempt distributor money for smart sub-metering services or for a security deposit. The smart sub-metering provider shall give the consumer a reasonable opportunity to provide the security deposit consistent with section 4.1.11.

4.3 Form of the Invoice

- 4.3.1 A smart sub-metering provider who is contracted to bill low-volume consumers on behalf of the condominium corporation or developer shall comply with all applicable regulations regarding information on invoices to low-volume consumers of electricity.

4.4 Payment of the Master Bill

- 4.4.1 If the smart sub-metering provider has assumed responsibility for payment for the master bill, then the amount to be collected from consumers shall not include any penalties assessed by the licensed distributor on the master bill. Penalties include, but are not limited to, late payment charges and disconnect or reconnect charges.