RETAIL SETTLEMENT CODE

Ontario Energy Board
Staff Draft for Consultation Purposes

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1 GENERAL AND ADMINISTRATIVE PROVISIONS

1.1 Purpose of the Code

This code sets the minimum obligations that a distributor must meet in determining the financial settlement costs of electricity retailers and consumers and in facilitating service transaction requests where a competitive retailer provides service to a consumer. These obligations arise through sections 26 through 31, inclusive, of the *Electricity Act, 1998* and section 17.1 of the Transitional Distribution License.

1.2 Definitions

- "Accounting Procedures Handbook" means the handbook approved by the Board and in effect at the relevant time, which specifies the accounting records, accounting principles and accounting separation standards to be followed by the distributor.
- "Act" means the Ontario Energy Board Act, 1998, S.O. 1998, c.15, Schedule B.
- "Affiliate," with respect to a corporation, has the same meaning as in the *Business Corporations Act*.
- "Affiliate Relationships Code" means the code, approved by the Board and in effect at the relevant time, which among other things, establishes the standards and conditions for the interaction between electricity distributors or transmitters and their respective affiliated companies.
- "Ancillary services" means services necessary to maintain the reliability of the IMO-controlled grid; including frequency control, voltage control, reactive power and operating reserve services.
- "Board" means the Ontario Energy Board.
- "Building" means the building, portion of a building, structure or facility.
- "Competitive electricity service costs" are those charges billed through the IMO or paid to embedded retail generators or neighbouring distributors through load transfer arrangements that cover services that are deemed by the Board to be competitive. Such charges will apply to electricity supply whether such supply is provided via standard supply service or a competitive retailer.
- "Competitive retailer" is a person who retails electricity to consumers who do not take standard supply service.

"Consumer" means a person who uses, for the person's own consumption, electricity that the person did not generate.

"Cycle billing" means the practice of billing a block of consumers whose meters are read according to a common meter-reading cycle as if all meters were read on the same day, even though meter-reading practices result in some meters being read within a couple of days, plus or minus, of the target read date. For example, a certain percentage of a block of consumers whose meters were scheduled to be read on the first day of two consecutive months might in fact be read on the second day of the first month and the third day of the second month. A different percentage of consumers might have had their meters read on the actual target dates.

"Director" means the Director of Licensing appointed under Section 5 of the Act.

"Distribute," with respect to electricity, means to convey electricity at voltages of 50 kilovolts or less

"Distribution losses" are energy losses resulting from the interaction of intrinsic characteristics of the distribution network such as electrical resistance with network voltages and current flows.

"Distribution loss factor" means a factor(s) by which metered loads must be multiplied such that when summed equal the total measured load at the supply point(s) to the distribution system.

"Distribution services," means services related to the distribution of electricity and the services the Board has required distributors to carry out, including the sale of electricity to consumers under section 29 of the *Act*, for which a charge or rate has been established in the Rate Order.

"Distribution system" means a system for distributing electricity at voltages less than 50 kV, and includes any structures, equipment or other things used for that purpose.

"Distribution System Code" means the code, approved by the Board, and in effect at the relevant time, which, among other things, establishes the obligations of the distributor with respect to the services and terms of service to be offered to consumers and retailers and provides minimum technical operating standards of distribution systems.

"Distributor" means a person who owns or operates a distribution system.

"Electricity Act" means the Electricity Act, 1998, S.O. 1998, c.15, Schedule A.

"Electronic Business Transaction (EBT) System" is a computer-based transaction mechanism for transmitting common format data between market participants.

"Embedded retail generator" is a generator who is not a wholesale market participant and whose generation facility is connected at the distribution level.

"Embedded wholesale consumer" is a consumer who is a wholesale market participant whose facility is not directly connected to the IMO control grid but is instead connected at the distribution level.

"Embedded wholesale generator" is a generator who is a wholesale market participant, whose generation facility is not directly connected to the IMO control grid but is instead connected at the distribution level.

"Generate," with respect to electricity, means to produce electricity or provide ancillary services, other than ancillary services provided by a transmitter or distributor through the operation of a transmission or distribution system.

"Generation facility" means a facility for generating electricity or providing ancillary services, other than ancillary services provided by a transmitter or distributor through the operation of a transmission or distribution system, and includes any structures, equipment or other things used for that purpose.

"Generator" means a person who owns or operates a generation facility.

"Holiday" means a Saturday, Sunday, Statutory holiday or any day that the Board's offices are closed.

"IMO" means the Independent Electricity Market Operator established under the *Electricity Act*.

"IMO Controlled Grid" means the transmission systems with respect to which, pursuant to agreements, the IMO has authority to direct operation.

"Interval meter" means a meter that measures and records electricity use on an hourly or subhourly basis.

"Load transfer" means a network supply point of one distributor that is supplied through the distribution network of another distributor and where this supply is not considered a wholesale supply point.

"Lock box arrangement" means an arrangement where a creditworthy institution (typically a bank or some other stable financial institution) is designated by two parties to accept payment from consumers on behalf of the parties and to distribute the collected revenue to the parties according to prescribed rules. For example, under retailer-consolidated billing, a remittance processing institution would accept payment from all parties and pay the distributor for all relevant costs before paying any residual amount (e.g., the retailer's margin) to the retailer.

"Market Rules" means the rules made under section 32 of the *Electricity Act*.

"Meter installation" means the meter and, if so equipped, the instrument transformers, wiring, test links, fuses, lamps, loss of potential alarms, meters, data recorders, telecommunication equipment and spin-off data facilities installed to measure power past a meter point, provide remote access to the metered data and monitor the condition of the installed equipment.

"Minister" means the Ministry of Energy, Science and Technology.

Market rules have "operating agreements" for "agreements" and "operations" for "operation."

"MIST meters" means interval meters from which data are obtained and validated within a designated settlement timeframe; MIST refers to "Metering Inside the Settlement Timeframe."

"MOST meters" means interval meters from which data are only available outside of the designated settlement timeframe; MOST refers to "Metering Outside the Settlement Timeframe."

"Non-competitive electricity costs" include charges from the IMO for services deemed by the Board to be non-competitive services plus charges for distribution services

"Non-interval meter" means a device that measures and records electrical usage cumulatively over the meter reading period.

"Performance standards" means the performance targets for the distribution and connection activities of the distributor as established by the Board pursuant to section 82 of the *Act*.

"Power factor" means a variable equal to the ratio of kW and kVa demand

"Prepaid meters" means meters allow a consumer to purchase a credit for a certain amount of electricity at a fixed price from a distributor or retailer by having the amount posted to the meter at the consumer's location. When the purchased amount of electricity has been used, the meter will automatically interrupt electricity supply to the location.

"Rate" means any rate, charge or other consideration, and includes a penalty for late payment.

"Rate Handbook" refers to the document which outlines the regulatory mechanisms which the OEB will apply to the development and adjustment of electric distribution rates over the first term of Performance Based Regulation (PBR) in the Province of Ontario.

"Registered facility" means a facility registered with the IMO that is capable of supplying physical services and/or capacity reserve.

"Regulations" means the regulations made under the *Electricity Act*, or the *Act*.

"Retail," with respect to electricity means,

- (a) to sell or offer to sell electricity to a consumer,
- (b) to act as agent or broker for a consumer with respect to the sale or offering for sale of electricity or
- (c) to act or offer to act as an agent or broker for a consumer with respect to the sale or offering for sale of electricity.

"Retail Metering Code" means the code approved by the Board and in effect at the relevant time, which, among other things, establishes metering and meter reading standards and rules for providing interval metering.

"Retail Settlements Code" means the code approved by the Board and in effect at the relevant time, which, among other things, establishes a distributor's obligations and responsibilities

associated with financial settlement among retailers and consumers and provides for tracking and facilitating consumer transfers among competitive retailers.

"Retail settlement variance account" or "RSVA" is an account kept by each distributor for the purpose of recording quantifiable variances between billed revenue and costs for competitive and non-competitive wholesale services resulting from the valid application of the rules and procedures identified in this Code.

"Retailer" means a person who retails electricity.

"RSC" means this Retail Settlement Code.

"Service area," with respect to a distributor, means the area in which the distributor is authorised by its licence to distribute electricity.

"Service transaction request" or "STR" means a mechanism that initiates a change from current service provision to alternative service provision.

"Standard Supply Service Code" means the code approved by the Board and in effect at the relevant time, which, among other things, establishes the minimum conditions that a distributor must meet in carrying out its obligations to sell electricity under section 29 of the "*Electricity Act*."

"Time-of-use meter" means a device that measures and records electrical usage during prespecified periods of the day cumulatively over a meter reading period.

"Total losses" means the sum of distribution losses and unaccounted for energy.

"Transmission system" means a system for transmitting electricity, and includes any structures, equipment or other things used for that purpose.

"Transmission System Code" means the code, approved by the Board, that is in force at the relevant time, which regulates the financial and information obligations of the Distributor with respect to its relationship with consumers, as well as establishing the standards for connection of consumers to, and expansion of a transmission system.

"Transmit," with respect to electricity, means to convey electricity at voltages of more than 50 kilovolts.

"Transmitter" means a person who owns or operates a transmission system.

"Unaccounted for energy" means all energy losses that can not be attributed to distribution losses. These include measurement error, errors in estimates of distribution losses and unmetered loads, energy theft and non-attributable billing errors.

"Unmetered loads" means electricity consumption that is not metered and is billed based on estimated usage.

"Wholesale consumer" means a person that purchases electricity or ancillary services in the IMO-administered markets or directly from a generator.

"Wholesale market participant" means a person that sells or purchases electricity or ancillary services through the IMO-administered markets.

"Wholesale settlement cost" means costs for both competitive and non-competitive services as defined by the Board and as calculated according to rules and procedures contained in sections 3 and 4 of the Code.

"Wholesale supplier" means a person who sells electricity or ancillary services through the IMOadministered markets or directly to another person, other than a consumer.

1.3 Interpretations

Unless otherwise defined in this Code, words and phrases shall have the meaning ascribed to them in the *Ontario Energy Board Act*, 1998 or the *Electricity Act*, 1998 as the case may be. Headings are for convenience only and shall not affect the interpretation of this Code. Words importing the singular include the plural and vice versa. A reference to a document or a provision of a document includes any amendment or supplement to or any replacement of that document or that provision of that document. An event that is required under this Code to occur on or by a stipulated day which is not a business day may occur on or by the next business day.

1.4 To Whom This Code Applies

This Code applies to all electricity distributors licensed by the Ontario Energy Board under part V of the *Ontario Energy Board Act*, 1998. This Code also applies to electricity retailers licensed by the Board under part V, subsection 129(1) of the *Ontario Energy Board Act*, 1998. These entities are obligated to comply with the Code as a condition of their license.

1.5 Hierarchy of Codes

The order of hierarchy for the Retail Settlement Code (RSC) in relation to other codes, subject to any specific conditions of license that apply to the distributor, is as follows:

- 1. Affiliate Relationships Code
- 2. Distribution System Code

- 3. Retail Settlement Code
- 4. Standard Supply Code

1.6 Amendments to This Code

This Code may only be amended in accordance with the procedures set out in the licence issued to a distributor.

1.7 Coming into Force

This Code comes into force on (date to be added).

2 SUMMARY OF SETTLEMENT OBLIGATIONS

All distributors bound by the RSC must provide the services summarised in sections 2.2 through 2.8 according to the detailed rules and procedures outlined in sections 3 through 12. These services shall be provided to all consumers connected to a distributor's wires and located within a distributor's licensed territory and to all retailers serving such consumers.

2.1 Equal Access to Settlement Services

All services described in this Code must be provided without discrimination or preference to any retailer, generator or consumer who requests such services.

2.2 Determine Wholesale Settlement Costs

A distributor is obligated to determine the wholesale settlement cost for all electricity supplied to retail consumers connected to the distributor's wires, regardless of whether a consumer is served under Standard Supply Service (SSS) or by a competitive retailer. Wholesale settlement costs include costs for both competitive and non-competitive services. The determination of costs shall be according to the definitions and procedures outlined in sections 3 through 4. A distributor does not have any obligation to determine commodity settlement costs for wholesale market participants.

2.3 Determine Distribution Charges

A distributor shall determine the charge for distribution services associated with electricity delivery as defined in section 4 below for all retail consumers and wholesale market participants connected to the distributor's distribution system, regardless of whether a consumer is served under SSS or by a competitive retailer.

2.4 Implement Service Transaction Requests Involving Retailers

A distributor shall accept and process service transaction requests (STRs) according to the rules and procedures described in section 10. This Code prescribes rules associated with STRs when some portion of a consumer's service is already provided by a competitive retailer, or when service will be provided by a competitive retailer once the STR has been processed. Specific services covered by the RSC are listed in section 10.1.

2.5 Maintain Consumer Records

A distributor shall maintain records for all consumers connected to its distribution system identifying whether or not the consumer receives electricity supply services from a competitive retailer as long as the retailer, licensed by the board, is registered with and receives settlement services from the distributor.

2.6 Provide Access to Current Meter and Price Data

A distributor shall make available to a consumer or to a competitive retailer designated by a consumer validated meter usage information according to the standards and schedule delineated in sections 5.2, 11.1 and 11.2. If requested to do so by a retailer, a distributor also shall make available competitive electricity price data for the billing period over which a consumer is billed and hourly price information from the IMO and net system load data for each calendar day.

2.7 Provide Access to Historical Consumer-Specific Information

A distributor shall maintain and be able to provide selected historical consumer-specific information to consumers or to any party designated by a consumer, regardless of whether a consumer is served under SSS or by a competitive retailer. Information that must be maintained and provided as directed by a consumer is delineated in section 11.3 and includes information on electricity use, regulated rates under which a consumer is served, meter characteristics and payment information.

2.8 Establish Service Arrangements With Competitive Retailers

A distributor shall enter into a service agreement with any qualified retailer who wishes to provide electricity services to consumers connected to the distributor's distribution system and to utilise retail settlement services offered by the distributor. A qualified competitive retailer is one that has a valid retailer's licence issued by the Board and maintains the security arrangements with a distributor as prescribed in section 8.

3 DETERMINING SETTLEMENT COSTS FOR COMPETITIVE ELECTRICITY SERVICES

A distributor shall determine the cost of competitive electricity services purchased by a consumer connected to the distributor's distribution system according to the rules and procedures described in sections 3.1 through 3.10.

3.1 Competitive Electricity Service Costs

Distributors will be billed by the IMO for electricity delivered to the distributor at prices determined in the IMO-administered wholesale market. The IMO also will charge distributors for ancillary generation services, transmission services, IMO administrative costs and other services required to support the IMO-administered wholesale market. A specific set of services, which could change as the market evolves, will be deemed by the Board to be competitive electricity services. Distributors must use the billing information provided by the IMO for services deemed to be competitive in determining settlement charges for competitive electricity services for consumers and retailers. These charges must be combined with the cost of supply

from embedded retail generators and from load transfer arrangements as indicated in section 3.3.1, equation 3.3.1(b).

While some charges for competitive electricity services will vary hourly, it is possible that other services will be priced based on kilowatt-hour usage according to prices that vary monthly. In this event, when calculating a bill for a consumer or retailer, a distributor shall use the service price from the previous bill received from the IMO prior to the time that a consumer's or retailer's bill is calculated. The fact that the period of time covered by a specific meter-read cycle differs from the period of time for which monthly prices are determined by the IMO will produce a discrepancy between the amount billed by the IMO to a distributor and the amount billed by a distributor to consumers and retailers. At any given time, this discrepancy may be positive or negative. To the extent that it can be quantified, any discrepancy shall be accumulated in the retail settlement variance account (RSVA) and collected from or credited to consumers or retailers in accordance with rules and procedures that will be determined by the Board as described in section 6.

3.2 Distribution Losses and Unaccounted for Energy

When determining retail settlement costs, measured consumption at a consumer's meter must be adjusted for distribution losses (L) and unaccounted for energy (UFE). The sum of distribution losses and unaccounted for energy for a distribution system equals the difference between wholesale energy delivered to a distributor (including supply from embedded retail generators) and the total energy measured at all retail and wholesale consumers' meters connected to the distribution system. Specifically, the sum of losses and unaccounted for energy can be calculated using the following equation:

$$L + UFE = E_{in} - [(1 - PAF)E_p + E_s + UM]$$

where E_{in} = total supply delivered to a distributor measured at all registered wholesale supply meters connected to the distributor's system and read by the IMO, including meters for embedded wholesale generators, plus all supply provided by embedded retail generators connected to the distributor's distribution system

 E_p = total load for all primary-metered consumers in a distributor's licence area measured at the consumer's meter

 E_s = total load for all secondary-metered consumers in a distributor's licence area measured at the consumer's meter

PAF = primary adjustment factor, which equals either 1 percent or a distributor-specific value approved by the Board

UM = estimated consumption for unmetered load billed by a distributor

This calculation includes network losses associated with the transformation from primary to utilisation voltage. An alternative approach would be to calculate losses up to the primary transformation level. This is acceptable so long as it is mathematically equivalent to equation 3.2(a).

A distribution loss factor (DLF) is equal to the value by which the sum of end-use metered loads must be multiplied to equal $E_{\rm in}$. For secondary-metered consumers, the DLF equals:

Equation 3.2(b)

$$DLF_{s} = 1 + \left[\frac{\left(L + UFE\right)}{\left[\left(1 - PAF\right)E_{p} + E_{s} + UM\right]} \right]$$

where DLF_s = distribution loss factor for secondary consumers

Adjustments for primary-metered consumers are made using PAF. The DLF for primary-metered consumers can be calculated using equation 3.2(c).

Equation 3.2(c)

$$DLF_p = DLF_s \bullet (1 - PAF)$$

where DLF_p = distribution loss factor for primary consumers

For certain secondary metered consumers such as those who own their own transformation equipment or who have additional stages of transformation prior to loads being metered (i.e., some individual metered apartments), a site-specific loss factor (SSL) may be more accurate than that assumed in PAF. Where data are available, the DLF adjusted for site-specific losses can be calculated using equation 3.2(d)

Equation 3.2(d)

$$DLF_{SSL} = DLF_{s} \bullet \begin{bmatrix} (1 - PAF) / \\ / (1 - SSL) \end{bmatrix}$$

The values in equations 3.2(a) through 3.2(d) shall be calculated in accordance with the Rate Handbook. Unless stated otherwise in the Rate Handbook, the DLF is not intended to be calculated as a rolling, five-year average but rather as a value held constant in between rate proceedings or over some other period of time specified in the Rate Handbook. The appropriate (e.g., secondary or primary) DLF will be applied to all consumers, whether wholesale or retail and regardless of meter type. If a distributor wishes to estimate losses and UFE separately, the distributor must apply to the Board for approval. If separate estimates are approved, it may be appropriate to apply different factors to consumers according to their meter type. Distributors also may apply to the Board for approval of alternative DLF estimates that vary across time or across consumer segments based on factors such as total system load, power factor, consumer class and voltage level. The Board may proceed to determine the application without a hearing or by way of an oral, written or electronic hearing.

3.3 Methodology for Determining Settlement Costs for Competitive Electricity Services

The methodology a distributor shall use to determine settlement costs for competitive electricity services differs depending upon whether a consumer has an interval meter or a non-interval meter.

3.3.1 Consumers With Interval Meters

A distributor shall determine settlement costs for consumers with interval meters in a manner mathematically equivalent to equation 3.3.1(a) for both remotely and manually read interval meters.

Equation 3.3.1(a)

$$CEC^{i} = \left[\sum_{h=1}^{H} P_{h}^{d} \bullet E_{h}^{i} + \left(\sum_{h=1}^{H} E_{h}^{i}\right) \bullet O_{m}\right] \bullet DLF$$

where CEC^{i} = competitive electricity service costs for interval-metered consumer i (\$)

 E_h^i = energy use in hour h measured by an interval meter at consumer i's location (kWh/h)

 P_h^d = hourly electricity price for distributor d (\$/kWh/h) as calculated according to equation 3.3.1(b)

DLF = distribution loss factor (will vary in value depending upon whether a consumer is primary or secondary metered)

Om = the price charged for any other IMO-administered services determined by the Board to be competitive electricity services that are billed on a monthly basis rather than on an hourly basis. When calculating a consumer's or retailer's settlement bill, a distributor shall use the relevant value from the most recent bill received from the IMO prior to the time that the consumer's or retailer's bill is calculated (\$/kWh)

H = the number of hours in the current billing period for consumer i

For purposes of this calculation, a distributor shall calculate the price for its interval-metered consumers in a manner mathematically equivalent to equation 3.3.1(b).

Equation 3.3.1(b)

$$P_h^d = \left[\left(P_h^{\mathit{IMO}} + O_h^{\mathit{IMO}} \right) \bullet E_h^{\mathit{d},\mathit{IMO}} + P_h^{\mathit{IMO}} \bullet E_h^{\mathit{d},\mathit{ERG}} + P_h^{\mathit{d},\mathit{LT}} \bullet E_h^{\mathit{d},\mathit{LT}} \right] \div \left(E_h^{\mathit{d},\mathit{IMO}} + E_h^{\mathit{d},\mathit{ERG}} + E_h^{\mathit{d},\mathit{LT}} \right)$$

where P_h^d = the hourly electricity price for distributor d which equals a supply-weighted average of the cost of supply from the IMO-administered market, from embedded retail generators and from load transfer arrangements as defined at the distribution boundary

 P_h^{IMO} = hourly electricity price determined in the IMO-administered wholesale market adjusted to reflect the cost at the defined distribution meter point

 O_h^{IMO} = hourly price for any other IMO-administered services determined by the Board to be competitive electricity services adjusted to reflect the cost at the defined distribution meter point

 $P_h^{d,LT}$ = the hourly electricity price charged by the distributor supplying electricity to distributor d through a load transfer arrangement²

 $E_h^{d,IMO}$ = total supply in hour h to distributor d from the IMO-administered wholesale market as measured at the defined distribution meter point

 $E_h^{d,ERG}$ = total supply in hour h to distributor d from embedded retail generators measured at their supply point as negotiated with distributors

 $E_h^{d,LT}$ = total supply in hour h to distributor d provided through load transfers as measured at the boundary between the relevant distributors

3.3.2 Consumers With Kilowatt-Hour Meters

A distributor shall determine settlement costs for consumers with kilowatt-hour meters in a manner mathematically equivalent to equation 3.3.2(a). All variable definitions are the same as for equation 3.3.1(a) except where otherwise stated.

Equation 3.3.2(a)

$$CEC^{k} = \left[\sum_{h=1}^{H} P_{h}^{d} \bullet NSLS_{h} + O_{m}\right] \bullet DLF \bullet E_{b}^{k}$$

where CEC^k = competitive electricity service costs for kilowatt-hour-metered consumer k served by distributor d

 E_b^k = cumulative energy use by consumer k in billing period b

 $NSLS_h$ = the share of the cumulative net system load in billing period b attributable to hour h. The method for determining the net system load shape and hourly shares is described in section 3.4.

If a distributor has more than one load transfer arrangement, there would be separate terms in equation 3.3.1(b) for each load transfer arrangement

3.4 Determining the Net System Load Shape

As indicated in sections 3.3.1 and 3.3.2, determining competitive electricity settlement costs requires weighting hourly wholesale prices by hourly usage for individual consumers. For interval-metered consumers, hourly usage data are obtained from a consumer's meter. For non-interval-metered consumers, hourly weights must be estimated. A distributor shall use the net system load shape to compute hourly shares of consumption for no-interval-metered consumers.

Determining the net system load shape for a specific period of time involves calculating the net system load for each hour in the period of time covered. For a specific settlement area, the net system load for any hour equals the total system load minus the sum of loads recorded on all MIST-capable interval-meters and estimated usage for unmetered streetlights.

On each business day, the IMO will provide each distributor with hourly values equal to the sum of total supply measured by the IMO at all grid supply point meters through which electricity is supplied to a registered facility plus supply from embedded wholesale generators, whose meters are also read by the IMO.³ The IMO will subtract from the supply total described above the load used by embedded wholesale consumers, adjusted for distribution losses. All hourly values provided by the IMO pertain to a trading day or trading days, in accordance with the IMO settlement schedule and payments calendar.

To the hourly values provided by the IMO, a distributor shall add any supply provided by load transfers and by embedded retail generators properly adjusted for losses. The sum of the IMO-provided hourly supply as determined above, the loss-adjusted supply from embedded retail generators and load transfers constitute the total system load for which each distributor has settlement responsibility.

The net system load for each hour equals the total system load less the sum of all intervalmetered load from MIST-capable meters and estimated load for unmetered street lighting.

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If a distributor's licensed area is comprised of more than one registered facility, the distributor will need to add up the relevant values for each registered facility in order to determine the proper values for the distribution territory.

Two or more distributors holding separate licences may use a common NSLS so long as the annual average price based on the common load shape differs by less than 1 percent from the annual average price that would result from using the net system load shape representing each individual distributor's licensed territory. In assessing the difference between the common NSLS and the individual NSLS price, a distributor shall calculate the load-weighted average wholesale price for the most recent year for which relevant data are available using the net system load shape for its licence area and the combined net system load shape for the multiple distributors with which it is considering combining.⁴ A distributor shall include these two calculations in its notification to the Board that it plans to adopt a common NSLS. If the difference in average prices exceeds 1 percent, a distributor shall obtain approval from the Board before using a common net system load shape across multiple distributors.

Equations 3.4(a) and 3.4(b) summarise the method distributors shall use for determining the NSLS when multiple distributors combine to use a single load shape. A distributor that does not combine with other distributors shall use equation 3.4(a) to calculate its net system load by dropping the initial summation across distributors.

Equation 3.4(a)

$$NSL_{h}^{D} = \sum_{d=1}^{D} \left[\underbrace{\sum_{GSP_{d}}^{Provided by IMO}}_{Provided by IMO} + \sum_{h}^{EWG_{d}} \underbrace{E^{EWG_{d}}_{h}}_{E^{EWG_{d}}} + \sum_{h}^{EWG_{d}} \underbrace{E^{EWG_{d}}_{h}}_{E^{EWG_{d}}} + \sum_{h}^{ERG_{d}} \underbrace{E^{ERG_{d}}_{h}}_{E^{ERG_{d}}} + \sum_{h}^{LT} \underbrace{E^{LT}_{h}}_{h} - \sum_{h}^{MIST_{d}} \underbrace{E^{RC}_{h}}_{h} - \underbrace{SL_{h}^{d}}_{h} \right]$$

 NSL_h^D = the net system load in hour h for distribution area D, which is a compilation of several licensed distribution areas, d

D= the number of licensed distributors, d, in area D

GSP= grid supply point meters

= the number of grid supply point meters measuring supply to distributor d GSP_d from the IMO-administered wholesale market

= electricity supplied through a GSP meter in hour h

= embedded wholesale generators EWG

If data are not available for a one-year period, a distributor should seek advice from the Board regarding which price information to use

 EWG_d = the number of embedded wholesale generators in licensed distribution area d

 $E_h^{\scriptscriptstyle EWG}=$ loss-adjusted electricity supplied by an embedded wholesale generator in hour h

EWC = an embedded wholesale consumer

 E_h^{EWC} = electricity used by an embedded wholesale consumer in hour h

 EWC_d = the number of embedded wholesale consumers in licensed distribution area d

ERG = an embedded retail generator

 $E_h^{ERG} = \underset{h}{\text{loss-adjusted electricity supplied by an embedded retail generator in hour}}$

 ERG_d = the number of embedded retail generators in licensed distribution area d

 E_h^{LT} = electricity supplied through interval-metered load transfer arrangements that are not settled through the IMO

LT = the number of interval-metered load transfer supply points that are settled through the IMO

RC = the number of retail consumers with MIST meters

 \mathbf{F}_{\perp}^{RC} = electricity used by retail consumers with MIST meters

 $MIST_d$ = the number of MIST meters in licensed distribution area d

 SL_h^d = street lighting load in hour h for licensed distribution area d

For any selected billing period, the hourly net system load shape weight for each hour (NSLS_h used in equation 3.3.2(a)) is calculated by dividing the hourly load by the sum of all hourly loads in the billing period.⁵ That is,

Equation 3.4(b)

$$NSLS_h^D = \frac{NSL_h^D}{\sum_{h=1}^b NSL_h^D}$$

[.]

A mathematically equivalent approach would be to calculate daily average prices based on a load-weighted average price for the day and then weight the daily averages for a billing period by the share of total usage during the period that occurs on each day. This approach may be more efficient from a data processing standpoint.

where $NSLS_h^D$ = the share of the cumulative net system load in settlement area D for billing period b attributable to hour h

3.5 Variations Due to Differences in Meter Reading Practices and Billing Cycles

The average price paid for competitive electricity services will vary across billing periods due to the hourly variation in prices and usage weights. This variation requires minor differences in the manner in which settlement costs for competitive electricity supply are calculated, depending on whether costs are based on actual or estimated usage.

3.5.1 Settlement Based on Actual Meter Reads

A distributor shall calculate settlement costs based on usage amounts determined from actual meter reads at both the start and end of a billing period according to equations 3.3.2(a) and 3.4(b) (or any mathematically equivalent approach). When performing this calculation, a distributor shall assume that the starting and ending meter reads for the period occurred at 12:00:01 a.m. on the day of the actual meter read.

3.5.2 Settlement Based on Cycle Billing

Distributors who use cycle billing may, when calculating the load-weighted average price for a billing period, treat all consumers whose meters are read according to the same meter reading cycle as if all of their meters were read on the same day, as long as the difference between the actual read date and assumed read date is less than or equal to four days.

3.5.3 Settlement Based on Estimated Usage

There are two common situations in which distributors issue bills based on estimated rather than actual metered usage:

1. A distributor regularly may bill consumers on a cycle that differs from the consumer's meter reading cycle.⁶

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The two most common scenarios are distributors who bill monthly but read meters either bimonthly or once every three months. Another scenario involves the practice of billing owners of vacation and cottage homes monthly or bimonthly but only reading meters once a year.

2. A distributor may be unable to read a meter during the normal meter reading cycle.

In both situations, distributors estimate electricity use and treat the estimate as if it were an actual read when calculating the consumer's electricity bill. When the next actual read is obtained, the amount of energy used to calculate the current bill is determined by computing total usage since the last actual meter read less all estimated usage billed since the last actual meter read. As long as average electricity prices are the same for both billing periods, the sum of the two bills will exactly equal the product of price times consumption for the entire period. However, if prices change over time, there will be a slight difference between the sum of the two estimated bills calculated using the net-system-load-shape-weighted average price for each period and a bill amount calculated using the net system load shape weighted average price for the entire period.

The preferred method for determining costs when usage is based on an estimated meter read followed by an actual read is to calculate a bill using the net-system-load-shape-weighted average price for the entire period between actual meter reads and then deduct any dollar amounts previously billed based on estimated usage amounts. This calculation is shown in equations 3.5.3(a) and (b) below. However, a distributor may use the alternative approach depicted in equations 3.5.3(c) and (d). These alternative equations calculate costs incurred since the date of the prior estimated value based on the net-system-load-shape-weighted average price for the period between the date the estimate was made and the date the meter was read.

Equation 3.5.3

Option 1—Preferred

(a)
$$CEC_{t,t+1} = (EMR_{t+1} - AMR_t) \cdot AP_{t,t+1}$$

(b)
$$CEC_{t+1,t+2} = (AMR_{t+2} - AMR_t) \cdot AP_{t,t+2} - CEC_{t,t+1}$$

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For some distributors, the incidence of missed reads is quite low. However, for others, who have a large percentage of their meter stock indoors, the percent of missed reads can be quite high.

For example, if total usage for a two-month period based on actual meter reads equaled 2,500 kWh and a distributor estimated that usage in the first month equaled 1,500 kWh, the consumer would be billed in the second month for 1,000 kWh of usage.

Option 2

(c)
$$CEC_{t,t+1} = (EMR_{t+1} - AMR_t) \cdot AP_{t,t+1}$$

(d)
$$CEC_{t+1,t+2} = (AMR_{t+2} - EMR_{t+1}) \cdot AP_{t+1,t+2}$$

where $CEC_{t, t+1}$ = Competitive electricity source costs covering the billing period from date t to date t+1

 $AP_{t, t+1}$ = net-system-load-weighted average price during the billing period from

 AMR_t = usage based on an actual meter read on date t

 EMR_{t+1} = Estimated usage on date t+1

When determining settlement costs based on estimated usage, a distributor shall make available, upon request from a retailer or consumer, a description of the estimation method used.

3.6 Consumers With Time-of-Use Meters

Distributors are not obligated to determine settlement costs differently for consumers with time-of-use (TOU) meters than for consumers with kilowatt-hour meters. Upon request by a retailer or consumer, a distributor shall make a good faith offer to develop the capability to calculate settlement costs according to equation 3.6(a) for consumers with TOU meters and shall recover the incremental cost of providing such services from the requesting party.

Equation
$$3.6(a)$$

$$CEC^{k} = \left[\sum_{h=1}^{T1} P_{h}^{T1} \cdot NSLS_{h}^{T1} \cdot E_{h}^{k,T1} + \sum_{h=T1}^{T2} P_{h}^{T2} \cdot NSLS_{h}^{T2} \cdot E_{h}^{k,T2} + \sum_{h=Tn-1}^{Tn} P_{h}^{Tn} \cdot NSLS_{h}^{Tn} \cdot E_{h}^{k,Tn}\right] \cdot DLF$$

$$+ O_{m} \cdot DLF \cdot \left(E_{h}^{k,T1} + E_{h}^{k,T2} + \dots + E_{h}^{k,Tn}\right)$$

where T_i represents "time-of-use period i" and all other variables are as defined in equation 3.3.1(a) except that each variable with a T_i superscript pertains to values only in TOU period i.

3.7 Consumers With Demand Meters

It is not anticipated that the IMO-administered wholesale market will have a separate, explicit charge for capacity reserves. Therefore, a distributor shall determine competitive electricity service costs for demand-metered consumers in the same way as for non-demand-metered consumers.⁹

3.8 Consumers With Controlled Loads

A distributor shall determine settlement costs for loads that are constrained through either centralised or decentralised load control procedures only if those loads are individually metered with an interval meter. Otherwise, settlement costs shall be calculated in the same manner as if the load was uncontrolled.

3.9 Consumers With Prepaid Meters

For SSS consumers with prepaid meters, a distributor shall use the SSS price approved by the Board when a consumer purchases electricity.

If a retailer offers prepaid meter service, a distributor shall continue to read the consumer's meter as if it were not a prepaid meter and shall determine the retailer's settlement costs in the same manner as for a normal non-interval-metered consumer.

3.10 Unmetered Loads

With the exception of street-lighting loads on public roadways, a distributor shall determine settlement costs for unmetered loads based on distributor-specified usage estimates and the net-system-load-weighted average electricity price for the relevant billing period. For street-lighting

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As seen in section 4, transmission charges may be based in part on demand data, in which case demand-metered consumers may require different treatment when determining settlement costs for noncompetitive services such as transmission.

loads, a distributor shall determine settlement costs using a load-weighted-average price for the billing period based on a load profile that will be approved by the Board in accordance with the Rate Handbook.

4 DETERMINING SETTLEMENT COSTS FOR NONCOMPETITIVE ELECTRICITY SERVICE

4.1 Services Provided Through the IMO

In addition to charges for electricity computed based on prices in the IMO-administered wholesale market, invoices from the IMO to distributors will include charges for ancillary generation services, transmission services, IMO administrative costs and perhaps other services required to support the wholesale market. Some charges from the IMO will be designated by the Board to be competitive electricity service costs while others will be non-competitive electricity service costs. This section focuses on settlement for non-competitive electricity services billed through the IMO.

Distributors are responsible for compensating the IMO for all charges associated with non-competitive electricity services billed to a distributor by the IMO and for settling with consumers and retailers for these costs. The basis for charges by the IMO to distributors may vary by type of service and could include energy use, peak demand, fixed charges or transaction-based charges. The IMO will bill distributors for these charges as they are incurred and the average price a distributor pays for some services may vary by month. Distributors must pay all charges to the IMO as billed based on the IMO-determined payment schedule for wholesale market participants.

A distributor shall settle non-competitive wholesale service costs based on charges determined by the Board under section 78 of the *Act* that are fixed for a designated period of time. These fixed charges may vary by type of service (e.g., ancillary services, transmission services, administrative costs, etc.) and may be based on different billing determinants (e.g., energy use,

peak demand, fixed charge per customer, etc.). The Board will also designate which service charges must be separately posted on either consumers' or retailers' bills.¹⁰

A distributor shall account for the difference between the amount billed by the IMO to distributors for non-competitive electricity services and the amount billed by distributors to consumers and retailers, in aggregate, for the same set of services. A distributor shall accumulate these differences in the RSVA in accordance with rules and procedures that will be determined by the Board as described in section 6.

4.2 Distribution Services

Each distributor shall charge for the cost of distribution services associated with electricity delivery in accordance with distribution rates approved by the Board under section 78 of the *Act*. Charges for distribution services will apply to all retail and wholesale consumers connected to a distributor's system, regardless of whether the consumer is served under SSS or by a competitive retailer. The Board will also designate which service charges must be separately posted on either consumers' or retailers' bills.

5 Settlement Time Line

5.1 Timing of Information From the IMO

The determination of settlement costs for a consumer or retailer is dependent upon receipt of hourly price and usage data from the IMO. Hourly price and usage data for a trading day are provided on a preliminary basis ten business days after a trading day and on a final basis twenty business days after a trading day. A distributor may not hold up settlement invoicing while awaiting delivery of all final data from the IMO required for a complete billing cycle. A distributor shall issue settlement invoices to retailers as soon as practical following receipt of preliminary price and usage data¹¹ provided by the IMO ten business days following the last trading day in the billing period covered by the settlement invoice. Consequently, each invoice

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For example, the Board may wish to have transmission charges posted separately from all other IMOadministered services on a consumer or retailer's bill.

will be based on a combination of preliminary IMO data and the final data available from the IMO for earlier days in the billing cycle.¹² A distributor shall allocate any quantifiable errors in aggregate settlement costs resulting from differences in preliminary and final data to the RSVA in accordance with rules and procedures that will be determined by the Board as described in section 6.

5.2 Timing and Availability of Valid Meter Information

A distributor shall read all MIST meters at least once during a weekly interval. By noon on the fourth business day after the meter-reading day, 100 percent of the hourly interval data for the prior week shall have undergone the complete validation, editing and estimation (VEE) process and have been delivered to the mandatory EBT system.¹³

A distributor shall read all MOST meters according to a meter-reading cycle established by the distributor. For all consumers served by retailers, by noon on the fourth business day after the scheduled meter-reading day, 100 percent of the meter-usage data shall have undergone the complete VEE process and be delivered to the mandatory EBT system.

The specific information that a distributor shall make available to retailers according to the schedule outlined above is described in section 11.1.

5.3 Timing of Settlement Invoices to Retailers

A distributor may issue settlement statements to retailers according to the same meter reading and billing cycles as if the consumers served by the retailer were served under SSS. For instance, if an SSS consumer who is typically billed by a distributor every 60 days contracts for supply from a retailer under retailer-consolidated billing, a distributor must redirect the consumer's bill to the retailer and may issue the bill on the same 60-day cycle. The impact of

The IMO will issue data in several stages. The data that are issued ten business days following a trading day have been through all VEE procedures and have been reviewed by market participants.

For example, on a 30-day billing cycle, ten business days after a meter read for that billing cycle, a distributor would have available roughly ten days' worth of preliminary information from the IMO and 20 days of final data.

this rule is that a distributor will issue settlement statements to a retailer on a daily basis for a portion of the consumers served by the retailer, based on the consumer's standard meter reading and billing cycles. A distributor may not impose different billing or payment cycles on a retailer than those imposed on the consumers served by the retailer unless the retailer agrees to such terms or unless the differences are due solely to differences in timing between the ability to bill consumers more rapidly under fixed-price standard supply than to compute settlement costs for retailers.

5.4 Payment by Distributors to Retailers

Under distributor-consolidated billing (see section 7.2), a distributor will collect revenue from consumers on behalf of a retailer. A distributor shall pay relevant amounts to a retailer on the same date that payment is due to the distributor from a consumer.

6 RETAIL SETTLEMENT VARIANCE ACCOUNT

A distributor is required to establish a RSVA for the purpose of recording variances created by the settlement process required under the Code.¹⁴ The manner and timing of disposition of the balances in the RSVA shall be determined by the Board as part of the Rates Handbook.

7 SETTLEMENT AND BILLING OPTIONS

A distributor shall have the ability to accommodate three billing options:

- 1. Retailer-consolidated billing,
- 2. Distributor-consolidated billing and
- 3. Split billing.

Note the distinction between data that has undergone preliminary validation (e.g., range checks) and must be made available two business days after the meter-reading day and data that has undergone all VEE procedures. Mandatory VEE procedures are described in the Distribution System Code.

The RSVA must be separated from and is unrelated to any purchase power variance account (PPVA) that may be established by the Board in order to track differences between amounts billed to fixed price standard supply consumers and settlement costs attributable to those consumers.

7.1 Retailer-Consolidated Billing

If a consumer, or a retailer acting as an agent of a consumer, selects retailer-consolidated billing, a distributor shall bill the designated retailer for all competitive and non-competitive electricity service costs incurred on behalf of the consumer calculated in accordance with the rules outlined in sections 3 and 4. A distributor shall not issue a bill to a consumer who has, or whose agent has, selected retailer-consolidated billing.

7.1.1 Information Flow From Distributor to Retailer

A distributor shall deliver settlement invoices to retailers using the mandatory EBT system.

Unless other arrangements are agreed to between the parties, a distributor shall itemise the costs attributable to each individual consumer served by a retailer. Costs for each consumer shall, at a minimum, be unbundled in the following manner:

- Competitive electricity service charge
- Transmission charge itemised in terms of the billing determinants used to calculate it (e.g., a fixed charge, usage charge, and/or demand charge)
- Distribution charge itemised in terms of the billing determinants used to calculate it (e.g., a fixed charge, usage charge, and/or demand charge)
- Competition transition charge
- Rural rate protection charges or credits
- Market power mitigation credit (may only be an occasional entry)
- G.S.T itemised according to each of the above components
- Avoided cost credits (e.g., for metering or billing services not provided by the distributor).

A distributor shall also provide retailers with the following information:

- Individual consumer usage for the billing period for all consumers,
- Individual consumer peak demand for demand-metered consumers,

• The net-system-load-weighted average price used to calculate commodity costs for each individual consumer,

- Summary of the net amount owed to the distributor by the retailer for the entire invoice and
- Payment due date.

A distributor shall also bill retailers periodically for transaction fees and other administrative costs incurred by the distributor on behalf of the retailer. Some of these costs will be consumer-specific (e.g., customer transfer costs, final meter read costs, etc.) while others may apply only to the retailer in aggregate (e.g., account set-up charges). Where appropriate, these fees will be itemised by consumer account number and by type of service. A distributor may invoice these charges according to a different schedule (e.g., monthly) rather than according to the schedule associated with settlement for services that are billed based on usage and, therefore, depend upon a distributor's meter-reading and billing cycle.

In all cases, the specific payment and billing schedule for settlement processing with retailers shall be clearly delineated in the service agreement that is required between distributors and retailers.

7.1.2 Consumer Nonpayment Risk

Under retailer-consolidated billing, the retailer is solely responsible for consumer nonpayment risk. Any retailer providing services to consumers under retailer-consolidated billing shall pay the consumer's distributor for all of the competitive and non-competitive service costs incurred by the consumer regardless of whether or not the retailer is paid by the consumer. In the event that a retailer is not paid by a consumer served under this billing option, the retailer may submit an STR to a distributor to return the consumer to SSS. A distributor shall process this request in the same manner and according to the same schedule as any other STR according to the rules and procedures outlined in section 10. A retailer shall be responsible to the distributor for all costs that the non-paying consumer incurs before the transfer process has been completed. A distributor may collect payment from the retailer even if the non-paying consumer is disconnected or no longer receives services from the retailer. A retailer may not order a distributor to disconnect a consumer for nonpayment of a retailer's bill.

7.1.3 Retailer Nonpayment Risk

The risk of retailer payment default is covered by security arrangements between a distributor and a retailer. The magnitude and nature of security may vary with the magnitude of receivables and the creditworthiness of the retailer. Section 8 describes the acceptable forms of security and the guidelines to use in calculating the magnitude of receivables associated with a specific retailer.

7.1.4 Distributor/Consumer Communication

For consumers served under retailer-consolidated billing, a distributor shall refer all billing inquiries to the consumer's retailer, including inquiries about distribution costs on a consumer's bill. A distributor shall address any inquiries about meter accuracy (in the absence of competitive metering service), distribution rates (as opposed to costs) and safety and reliability. Inquiries about usage, including how usage might be modified to lower bills, may be addressed either by the distributor or referred to a consumer's retailer.

7.2 Distributor-Consolidated Billing

If a consumer, or a retailer acting as an agent of a consumer, selects distributor-consolidated billing, a distributor shall issue a bill to the consumer that includes the full cost of delivered electricity with the portion of the bill attributable to competitive electricity services based on the contract terms between the consumer and their retailer. Under this option a distributor shall bill and collect from consumers on behalf of retailers. The charge for such billing services will be approved by the Board under section 78 of the *Act*.

Two forms of distributor consolidated billing are possible, bill-ready and rate-ready. Under bill-ready billing, the portion of the bill covering competitive electricity services for each consumer is calculated by a retailer and the information is transmitted to the distributor for inclusion on the consumer's bill. Under rate-ready billing, a distributor calculates the portion of the bill covering competitive services based on the price and contract terms negotiated between the retailer and the consumer. In both cases, a distributor is responsible for calculating the portion of the bill covering non-competitive services. Also in both cases, a distributor must still determine settlement costs attributable to the competitive electricity service portion of the bill according to

the rules and procedures outlined in section 3. The distributor will bill or credit the retailer for the difference in settlement costs calculated according to the rules in section 3 and according to the retailer's contract terms.

A distributor shall provide bill-ready billing as a mandatory service upon request by a retailer. A distributor may provide rate-ready billing as an optional service, and upon request from a retailer, shall make a good faith offer to provide rate-ready billing.

7.2.1 Information Flow From Distributor to Retailer

A distributor shall provide retailers with timely access to meter data according to the terms described in section 11.1. A distributor shall issue settlement statements to retailers covering the difference between the cost of electricity supply calculated according to the rules in section 3 and the amount billed to consumers on behalf of the retailer. Settlement statements will include charges for any additional services provided by a distributor to a retailer as described in section 4.2. A distributor shall issue settlement statements on each business day in accordance with the meter-reading and billing cycle associated with the consumers being billed and the availability of necessary information from the IMO. Settlement statements shall be communicated according to the mandatory EBT system.

7.2.2 Information Flow From Retailer to Distributor

Under bill-ready, distributor-consolidated billing, a distributor shall accept a maximum of two separate bill amounts from a retailer for each individual consumer for each billing cycle. The two amounts will be posted on the consolidated bill, along with a brief description of the services to which each amount pertains (e.g., electricity supply, other services). Each description must fit within a single line on the bill using the distributor's standard bill format.

Retailers shall provide distributors with bill amounts for each of the retailer's customers connected to the distributor's distribution system in a timely manner so that billing to the consumer is not delayed. A data delivery schedule shall be negotiated between a distributor and retailer and documented in the service agreement between the parties. All bill information

provided by a retailer to a distributor must be communicated according to the mandatory EBT system.

7.2.3 Consumer Nonpayment Risk

In the event that a retailer elects distributor-consolidated billing, a distributor shall offer to assume consumer nonpayment risk for bill amounts associated with the competitive and non-competitive electricity service costs. Distributors shall not assume nonpayment risk for any non-electricity-related services that may be included in a retailer's bill (e.g., for home security, demand-side management services, etc.).

A distributor shall charge a fee for the assumption of consumer nonpayment risk in accordance with a Board-approved rate. Distributors may use whatever means are available under the law to mitigate consumer nonpayment risk, including the threat of or implementation of disconnection for nonpayment of wires charges according to procedures described in section 7.4.4. In the event of partial payment by a consumer, a distributor shall allocate that payment to the portions of the bill covering competitive and non-competitive electricity services based on the ratio of the amounts billed for competitive and non-competitive services.

A retailer may or may not accept a distributor's offer to assume consumer nonpayment risk. In the event that a retailer does not accept a distributor's offer, a distributor shall pass through to the retailer any actual bad debt costs and any costs for reasonably incurred collections procedures for charges posted on the distributor-consolidated bill on behalf of the retailer.

7.2.4 Retailer Nonpayment Risk

The risk of retailer payment default is covered by security arrangements between a distributor and a retailer. The magnitude and nature of security may vary with the magnitude of receivables and the creditworthiness of the retailer. Section 8 describes the acceptable forms of security and the guidelines to use in calculating the magnitude of receivables associated with a specific retailer.

7.2.5 Distributor/Consumer Communication

A distributor shall handle consumer bill inquiries concerning distribution service, meter accuracy and potential bill calculation errors. A distributor shall refer all inquiries pertaining to retailer pricing or contract terms to the relevant retailer. Inquiries about usage, including how usage might be modified to lower bills, may be addressed either by the distributor or referred to the relevant retailer.

7.3 Split Billing

A distributor shall offer split billing. If a consumer, or a retailer acting as an agent of a consumer, selects split billing, the consumer will receive two bills. The consumer's distributor shall issue one bill that covers all costs for services that are deemed by the Board to be non-competitive electricity services, less any administrative costs that are paid by the retailer. The consumer's retailer shall issue the other bill that covers the cost of competitive electricity services (and perhaps other services provided by the retailer) based on the price and other contractual terms agreed to between the consumer and the retailer.

Under split billing, a distributor shall issue settlement statements to the consumer's retailer that cover the cost of competitive electricity services calculated as described in section 3, as well as any other relevant administrative costs or credits as described in section 4.

7.3.1 Information Flow From Distributor to Retailer

A distributor shall provide retailers with timely access to meter data according to the terms described in section 11.1. A distributor shall issue settlement statements to retailers covering the cost of competitive electricity services and other relevant costs and credits calculated as described in sections 3 and 4. A distributor shall issue settlement statements on each business day according to the meter reading and billing cycle associated with the consumers being billed. Settlement statements shall be communicated according to the mandatory EBT system.

7.3.2 Consumer Nonpayment Risk

Under split billing, a distributor and a retailer each shall be responsible for consumer nonpayment risk for the bills that each issues to consumers. Any retailer providing services to consumers under split billing shall pay the consumer's distributor for all competitive electricity service costs incurred by the consumers regardless of whether or not the retailer is paid by the consumer. In the event that a retailer is not paid by a consumer served under this billing option, the retailer may submit an STR to a distributor to return the consumer to SSS. A distributor shall process this request in the same manner and according to the same schedule as any other STR. A retailer shall be responsible to the distributor for all costs that the non-paying consumer incurs before the transfer process has been completed. A retailer may not order a distributor to disconnect a consumer for nonpayment of a retailer's bill.

A distributor may use whatever means are available under the law to mitigate consumer nonpayment risk, including the threat of or implementation of disconnection for nonpayment of wires charges according to procedures described in section 7.4.4.

7.3.3 Retailer Nonpayment Risk

The risk of retailer payment default is covered by security arrangements between a distributor and a retailer. The magnitude and nature of security may vary with the magnitude of receivables and the creditworthiness of the retailer. Section 8 describes the acceptable forms of security and the guidelines to use in calculating the magnitude of receivables associated with a specific retailer.

7.3.4 Distributor/Consumer Communication

A distributor shall handle consumer bill inquiries concerning distribution service, meter accuracy, usage amounts and potential bill calculation errors. A distributor shall refer all inquiries pertaining to retailer pricing or contract terms to the relevant retailer.

7.4 Billing to Standard Supply Service Consumers

Sections 7.1 through 7.3 addressed billing and settlement invoicing in circumstances where a consumer takes electricity supply from a retailer. Distributors also must issue bills to consumers being provided with electricity under SSS. This section describes the relevant rules and procedures for SSS billing.

7.4.1 SSS Billing and Settlement Processing Are Not the Same

A distributor's obligation to bill for SSS and the obligation to determine settlement costs for competitive electricity service are not the same thing. SSS will be billed according to a rate established by the Board under section 78 of the *Act*. Regardless of the SSS rate, settlement cost calculations will be done according to the rules and procedures outlined in this code.

7.4.2 Billing and Payment Schedule

A distributor has a right to establish its own schedule for billing and payment for SSS consumers. In setting this schedule, a distributor must keep in mind that settlement invoicing to and payment from retailers must be done in accordance with the schedule applied to SSS consumers, except for timing differences resulting from the ability to bill consumers more rapidly under fixed price standard supply service than to bill retailers for settlement changes.

7.4.3 Consumer Nonpayment Risk Mitigation

A distributor may use any risk mitigation options available under the law to manage consumer nonpayment risk. A distributor may impose an amount and type of security requirement on a consumer depending upon the distributor's assessment of the consumer's likely risk of nonpayment. A distributor shall not discriminate among consumers with similar risk profiles or risk-related factors.

If a distributor is in possession of a consumer deposit when a consumer changes retailers or changes billing options from distributor-consolidated billing to either split billing or retailer-consolidated billing, the deposit should be applied to the consumer's final bill. A distributor shall return any excess deposit amount to the consumer according to the terms specified by the

distributor at the time the deposit was originally collected. A distributor shall not redirect any portion of a consumer's deposit to a retailer. In the event that split billing is chosen by a consumer or retailer, a distributor may retain a portion of the deposit amount that reflects the nonpayment risk associated with the new billing option.

7.4.4 Disconnection

A distributor may disconnect a property from the distributor's distribution system if any amounts payable by a consumer to the distributor for non-competitive electricity services costs are overdue.

A distributor may disconnect a property from the distributor's distribution system if any amounts payable by a consumer to the distributor for competitive electricity services costs provided under SSS are overdue.

A distributor shall not disconnect a property from the distributor's distribution system at the direction of a retailer or if an amount payable by a consumer to a retailer is overdue.

7.4.5 Reconnection

A distributor may refuse to reconnect a consumer as long as the consumer remains in arrears on payment for competitive electricity services provided under SSS or for non-competitive electricity services. A distributor's right to refuse re-connection may be exercised regardless of whether a consumer requests service under SSS or from a retailer.¹⁵

7.5 Billing Errors

Where a billing error, from any cause, has resulted in a consumer or retailer being over billed, and where Measurement Canada has not become involved in the dispute, a distributor will credit a consumer or retailer with the amount erroneously billed. The credit a distributor remits to the appropriate parties shall be the amount erroneously billed for up to a six-year period.

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In other words, a distributor's right to withhold service in lieu of full payment supersedes either a retailer's right to supply electricity to a consumer or a consumer's right to receive electricity.

Where a billing error, from any cause, has resulted in a consumer or retailer being under billed, and where Measurement Canada has not become involved in the dispute, a distributor shall charge a consumer or retailer with the amount that was not previously billed. In the case of an individual residential consumer who is not responsible for the error, the allowable period of time for which the consumer may be charged is two years. For non-residential consumers or for instances of wilful damage, the relevant time period is the duration of the defect.

The entity billing a consumer, whether a distributor or a retailer, is responsible for advising the consumer of any meter error and its magnitude and of their rights and obligations under the *Electricity and Gas Inspection Act* (Canada). The billing party is also responsible for subsequently settling actual payment differences with the consumer or retailer as described above.

8 SECURITY ARRANGEMENTS BETWEEN DISTRIBUTORS AND RETAILERS

A distributor shall enter into a security agreement with retailers to protect against the risk of payment default by the retailer. The amount and type of security required may vary based on estimates of the magnitude of exposure (determined according to the rules described in section 8.1 below) and the creditworthiness of the retailer.

8.1 Estimating the Magnitude of Exposure

The magnitude of exposure a distributor faces will vary with the number of consumers served by a retailer, the average consumption of consumers served by the retailer, the length of the billing cycle (e.g., 30 days, 60 days, etc.) and the type of billing in place (e.g., retailer- or distributor-consolidated billing or split billing). A distributor shall apply the rules described in sections 8.1.1 through 8.1.3 when determining the maximum amount of security that can be required from a retailer. A distributor may choose to require security for a lesser amount than is determined based on these rules.

8.1.1 Retailer-Consolidated Billing

A distributor shall use the following process to determine the maximum allowable amount of security that may be imposed on a retailer who bills consumers using the retailer-consolidated billing option.

- Step 1: Estimate the total bill (e.g., all charges for competitive and non-competitive electricity services settled through the distributor) for an average consumer served by a retailer for the billing period in which the bill for delivered electricity is expected to be highest for the year (with the competitive and non-competitive electricity service costs determined according to the rules in sections 3 and 4). The highest expected total bill will occur in the billing period where the product of electricity usage and costs are highest. The usage estimate used in this calculation shall be based on values for an average consumer served by the retailer. If a retailer serves a heterogeneous group of consumers, a distributor may develop usage estimates for several different consumer segments. The hourly price estimate used in this calculation shall be subject to approval by the Board.
- Step 2: Multiply the estimate of the total for an average consumer served by a retailer determined in Step 1 by the number of consumers served by the retailer. In the event that segment-specific estimates are used, multiply the number of consumers in each segment by the estimate for that segment, and add the segment totals.
- Step 3: If a distributor bills a retailer monthly, double the amount determined in Step 2. If a distributor bills bimonthly, multiply the amount in Step 2 by 1.5. If a distributor bills quarterly, multiply the amount in Step 2 by 1.33. The resulting value is the maximum amount of security that a distributor may impose on a retailer.

8.1.2 Split Billing

For the split-billing option, the same three-step process outlined in section 8.1.1 shall be used to determine the maximum allowable amount of security, except that the magnitude shall be based only on that portion of the bill covering competitive electricity services, not on the entire bill for delivered electricity.

8.1.3 Distributor-Consolidated Billing

Accurately estimating the maximum allowable amount of security for distributor-consolidated billing requires knowing the pricing terms in the contract between the retailer and the consumer.¹⁶

If a retailer wishes to keep its price terms with consumers proprietary, a distributor may require no more security than the maximum amount determined for split billing as described in section 8.1.2 (e.g., based on the full amount of the competitive electricity service portion of the bill).

If a retailer provides price information to a distributor, the distributor shall consider this information in setting the maximum allowable amount of security required from the retailer. The estimation process should parallel the one outlined for retailer-consolidated billing except that the estimate shall be based on the difference between the billed revenue and the combined cost for competitive and non-competitive electricity services incurred by the consumer.

8.2 Updating Security Estimates

Since a retailer's market share may change frequently, a distributor periodically shall update the forecast of aggregate usage based on current estimates of the number and type of consumers served by a retailer. A distributor may update the estimate as frequently as desired, but shall update the estimate at least once every three months using the procedures described in sections 8.1.1 through 8.1.3 and the most recent values for number of consumers served by a retailer. If the maximum allowable amount of security has increased by more than 10 percent over the amount currently in place and a distributor wishes to increase the security requirement, a retailer shall meet the new requirement within 20 business days. If the maximum allowable amount of security has fallen below the amount currently in place by more than 10 percent, a distributor shall notify the retailer immediately. The retailer may modify its security arrangement in light of the lower requirement. In the event that the type of security currently in place is in the form of

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For example, if a retailer's price offer is based on a positive adder to the wholesale spot price, or on a multiplier with a value greater than 1.0, a distributor will never be in a negative cash position vis-à-vis the retailer and, therefore, no security is necessary. If, on the other hand, a retailer's price to a consumer is a constant value for an entire year, there may be periods of time where the cost of supply calculated based on the wholesale spot price exceeds the amount of revenue collected from a consumer based on the retailer's price offer.

cash held by a distributor, the distributor shall return the excess amount to the retailer within 20 business days of the date on which the new estimate was determined.

8.3 Type of Security

A distributor may require a retailer to post security for any amount equal to or less than the maximum amount of security calculated according to the rules described in section 8.1. A distributor shall accept, at the discretion of a retailer, any of the following types of security or combination thereof: an irrevocable letter of credit, surety bond, cash or a "lock box" arrangement.

If retailers organise and become members in a co-operative venture or other institution that is willing to take responsibility for the security requirements of its members, a distributor shall accept security arrangements with this institution in lieu of arrangements with individual retailers as long as the nature of the residual risk to the distributor is comparable.

If a retailer provides security in the form of a cash deposit, a distributor shall pay interest on the deposit. The interest rate payable is negotiable but a distributor may not make money on any spread between the interest paid to retailers and the interest earned by the distributor on cash deposits. A retailer may require that cash deposits be held in specified low-risk, interest-bearing accounts only if a distributor has exclusive access to the funds posted for security.

A distributor may, at its discretion, accept bond ratings or other credit ratings from retailers in lieu of the other types of security described above. In applying this discretion, a distributor shall not discriminate among retailers with comparable risk profiles.

8.4 Default Process

In the event of settlement payment default by a retailer, a distributor shall not access the funds available through the relevant security agreement before a period of five business days has elapsed from the date the settlement payment was due. The day after a settlement payment was due, a distributor immediately shall notify a retailer that payment was not received and work with the retailer to remedy the situation. After five business days, if the account remains unpaid and the parties have not agreed on a remedy, the distributor may notify the retailer's consumers

that they will become SSS consumers according to a schedule dictated by the distributor unless they elect to receive supply from another retailer. If the distributor receives an STR that identifies an alternative retailer, the distributor shall process the STR and switch the consumer to the new retailer rather than back to SSS.

During a default period, a distributor shall not retain any revenues collected by the distributor on behalf of the retailer as security unless the magnitude of security accessible to the distributor is insufficient to cover the amount of the default.

A distributor may charge a retailer interest on any amounts not paid by the payment due date for an invoice. The interest rate shall equal the bank-borrowing rate for the distributor unless the distributor and retailer have mutually agreed to other arrangements.

A distributor may charge a retailer for the cost of final meter reads and other allowable transaction costs based on rates approved by the Board under section 78 of the *Act*.

9 SETTLEMENT DISPUTE PROCEDURES

Any disputes between retailers or consumers and distributors concerning the implementation of a distributor's responsibilities under this Code shall be settled according to the dispute mechanism specified by the Board in Section 23 of the Transitional Distribution Licenses or, once permanent licences are issued, by the relevant section of the permanent licence. Disputes concerning the settlement amount billed by a distributor to a retailer for an individual customer account shall not affect a retailer's obligation to make payment for any other customer accounts or amounts due for other services billed on the same settlement invoice.

10 SERVICE TRANSACTION REQUESTS

A distributor shall accept and process STRs according to the rules and procedures outlined in this section. This Code prescribes rules associated with STRs when some portion of a consumer's service is already provided by a competitive retailer, or when service will be provided by a competitive retailer once the STR has been processed. Specific services covered by the RSC are listed in section 10.1.

10.1 Service Transaction Requests Covered by the Settlement Code

Specific STRs covered by this Code are limited to the following:

• A change from electricity supplied to a consumer through SSS to electricity supplied by a competitive retailer;

- A change in a consumer's supplier of electricity from one competitive retailer to another;
- A change from electricity supplied to a consumer by a competitive retailer to electricity supplied through SSS;
- A change in a consumer's metering or billing options for consumers currently served by a retailer;
- A change in consumer location (either within a distributor's territory or involving a move to another distributor's territory) and
- A request to deliver consumer-specific information (as defined in section 11.3) to a consumer or to one or more retailers.

Any service transaction request not included in the above list is governed by other codes or by a distributor's normal business practices.

10.2 Consumer Authorisation

With the exception noted in the following paragraph, all STRs listed in section 10.1 must be based on a consumer's written authorisation. Written authorisation is defined here as in the *Interpretation Act*, subsection 29(1), which states, in part, that writing, written "or any term of like import, includes words printed, painted, engraved, lithographed, photographed, or represented or reproduced by any other mode in a visible form; . . ." Based on this interpretation, electronic mail is considered a form of written authorisation but a voice recording is not.

The only service transaction request for which verbal authorisation is allowed is a request to deliver historical, consumer-specific information to a consumer's service or billing address. A request to release consumer-specific information to a retailer or to any address other than the service or billing address must be made in writing.

A retailer who submits an STR on behalf of a consumer need not submit to a distributor a physical or electronic copy of the consumer's written authorisation in order for a transaction to take place. However, when obtaining the written authorisation from a consumer to modify service arrangements, a retailer shall also obtain authorisation to act as the consumer's agent for the purpose of advising a distributor that the person wishes to obtain the service being requested. When a retailer submits a service transaction request to a distributor, the retailer shall state explicitly that written authorisation has been obtained from the consumer for both the indicated transaction and for the authority of the retailer to act as the consumer's agent in submitting the STR. A retailer shall retain records to validate these claims and shall submit a copy of the authorisation to a distributor if requested by the distributor to do so. A distributor shall also retain records of the STRs received from retailers or consumers.

10.3 Service Transaction Request Information Requirements

A distributor shall be capable of processing the following information as part of the STR process:

- The consumer's name;
- Service address for which the change in service is requested;
- An indication of whether or not a retailer will accept all accounts operating under the same name at a single address if multiple accounts are found and if the service request does not identify all account numbers at the address;
- Consumer mailing address;
- Distributor account number (or numbers);
- Meter identification number;
- The requesting retailer's consumer account number;
- The requesting retailer's registered account number with the distributor;
- The earliest date after which transfer of the account is acceptable to the retailer and/or consumer;
- The preferred method for finalising the account (e.g., next scheduled read date, special read, or last actual read if allowed). In the absence of such information, a

distributor must check its retailer account set-up file to determine whether or not there is a default position regarding how to handle final reads;

- Identification of the desired meter services (e.g., leave existing meter, change to an interval meter, specific optional meter services, etc.);
- Identification of the preferred billing option and
- Identification of any consumer-specific information desired (e.g., usage history, meter information, credit information).

10.4 Initial Screening of Service Transaction Requests

A distributor shall process STRs in the order in which they are received. A distributor shall complete the initial screening process described in this subsection within five business days of receipt of the STR from a retailer or consumer.

A distributor shall accept an STR from certain parties and through specific communication channels depending upon the type of transaction in accordance with the following rules:

- 1. A request to transfer a consumer from SSS to a competitive retailer, or from one retailer to another, shall be submitted by the retailer who will serve the consumer if the transaction is completed (referred to here as the new retailer). If a request is submitted either by a consumer or the current retailer, a distributor shall notify the requesting party that it is not a valid request unless it is submitted by the new retailer.
- 2. A request to transfer a consumer from supply by a competitive retailer to SSS may come from a consumer or the consumer's current retailer.
- 3. A request to change service location may come from either a consumer or the consumer's current retailer.
- 4. A request to change billing options or meter services when a consumer is currently served by a competitive retailer may only come from the current retailer. If the request is submitted by the consumer, a distributor may, at its discretion, either notify the consumer to have its retailer submit the request or notify the retailer that a request has been received from their customer and inquire as to whether or not the request should be honoured.

Once a distributor has received an STR from the appropriate party, the distributor shall continue processing the request if the STR has a valid entry for the retailer's registered account number, and has valid entries for two out of three of the following: (a) consumer's name, (b) consumer's

service address and (c) consumer's account number with the distributor. In the absence of meeting this requirement, the distributor shall reject the STR and notify the requesting party that the request cannot be processed. A distributor shall treat the initial request as if it were never received. If a new STR is submitted subsequently by the same party, the new STR will be date-stamped and processed in the appropriate order vis-à-vis other submissions based on the date of the subsequent submission.

If an STR has valid entries for the mandatory information identified in the previous paragraph, a distributor shall attempt to identify the consumer to whom the request applies by matching the submitted information with information contained in the distributor's customer information system. If two of the three items identified as a, b and e in section 10.3 match the corresponding information contained in a distributor's customer database, the distributor shall tag the STR as "pending." An STR will remain pending until the transfer request has been completed, has been withdrawn by the requesting party or by the consumer (if different) in response to various notifications and processing steps identified below, or has been terminated by the distributor for valid reasons identified below. If there is no match between two of the three necessary items, a distributor shall notify the requesting party and identify which information is not valid. An STR shall not receive "pending" status until there is a valid match between the information it contains and the corresponding information contained in the distributor's information system.

Once an STR has been tagged as pending, a distributor shall determine whether or not the remaining information required to implement the request is complete. If the information is incomplete, the distributor shall notify the retailer or consumer about the specific deficiencies contained in the request and will await a reply. This process of checking, notification, and rechecking information will continue until the distributor has all of the necessary information to move to subsequent stages of the transfer process.

Initial submission of an STR by a retailer, and all standard communication associated with the process outlined above, must be done using the mandatory EBT system. A distributor shall allow consumers to transmit STRs via the postal system or facsimile transmission. A distributor may allow consumers to transmit information using other methods, such as electronic file transfer via the Internet. Communication from a distributor to a consumer may be handled

through any mutually agreeable method, which could include postal service, telephone, facsimile transmission, or some other electronic means. Regardless of the mode of communication, STRs shall be submitted in a format that will be established in accordance with the mandatory EBT system and will be common throughout the province.

10.5 Rules and Procedures for Processing Service Transactions Involving a Change in Electricity Service Provider

Of the six types of STRs identified in section 10.1, the first three involve a change in electricity service provider. The fifth type, a change in consumer location, may or may not involve a change in service provider. The remaining types either pertain to an information request or involve a change in some specific aspect of service provision but without a change in service provider. This subsection discusses rules and procedures for STRs that involve a change in service provider.

There are five generic activities involved in processing an STR:

- 1. Assessing the nature of a request and determining what activities are required to complete the transaction
- 2. Completing a final meter read
- 3. Notifying selected parties of the status of the transaction under specific circumstances
- 4. Updating databases concerning the new service provider relationships and
- 5. Posting the relevant charges to retailer and or consumer accounts to cover charges for transaction-related activities and issuing a final settlement bill.

Some rules and procedures in these five areas are common across all transactions involving a change in service provider while others are specific to the transaction type. Section 10.5.1 addresses the common rules and procedures. Sections 10.5.2 through 10.5.4 contain the rules and procedures that pertain to a specific transaction type.

10.5.1 General Rules

A distributor may consider two factors when assessing whether or not to process an STR involving a change in a consumer's electricity supply arrangements:

1. Whether or not a retailer has sufficient security in place to indemnify the distributor against retailer default risk, taking into consideration the factors outlined in section 8, and

2. Whether or not a consumer is in arrears on payment to the distributor.

A third factor, whether or not a consumer is currently served by a retailer, shall affect the process timing and notification procedures associated with the transaction as described in sections 10.5.3 and 10.5.4.

Unless otherwise agreed to by all potentially affected parties, a transfer from one electricity supplier to another shall coincide with an actual meter read by a distributor or by a designated meter service provider. A card or phone-in read by a consumer is not considered an actual meter read. A distributor shall allow three options for final, actual meter reads: wait for the next scheduled meter read; request a special meter read; and, in certain instances, base the final settlement bill on a historical meter read. If all potentially affected parties agree, a transfer and final bill may be based on a card or phone-in read or on an estimated read. The potentially affected parties will vary depending upon the type of service transaction being requested, but could include the consumer, the distributor, and one or more retailers. Any agreement for a transfer that does not coincide with an actual meter read must be based on written authorisation by all potentially affected parties. The preferred option for a final meter read will be identified by a distributor based either on information contained in the STR or based on a default option agreement between a distributor and a retailer.

If the service transfer is to occur on the next scheduled meter read date, a distributor shall notify the requesting party of the scheduled date unless the distributor and requesting party previously have agreed that such notification is not necessary.¹⁷ If the requesting party is a retailer, a distributor need not notify the consumer. In response to such notification, a requesting party may modify its initial request.

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For distributors that have monthly meter read cycles, it may be reasonable to expect that retailers would agree that such notification is unnecessary since transfers will occur reasonably soon. However, if a distributor reads meters on a two- or three-month cycle, such notification is likely to be desired by a retailer and, if so, must be provided as indicated in this rule.

If a transfer is to occur on the next scheduled meter-read date, and the meter read is not successful, within five business days following the missed read, a distributor shall undertake a special meter read at no charge to the requesting party unless past meter reading records indicate that the likelihood of a successful meter read is low. A distributor shall also notify the requesting party that the meter read, and therefore the supply transfer, was not successful and inform the requesting party of the steps that will be taken to remedy the situation. In the event that a special meter read is unlikely to be successful, or is attempted and fails, a distributor and the requesting party shall negotiate a mutually agreeable process for completing this task or agree to terminate the transfer. Potential arrangements could include a special meter read outside of normal business hours at an additional charge to the requesting party or processing the transfer based on a card or phone-in read by the consumer or on an estimate if all parties agree in writing to the terms of this arrangement.

If a transfer request involves a special meter read scheduled for a specific date, a distributor shall undertake the meter read on the requested date or notify the requesting party why this is not possible. A special meter read will be paid for by the requesting party based on a rate approved by the Board under section 78 of the *Act*. If a special meter read is unsuccessful, a distributor shall immediately notify the requesting party and agree upon a process for completing or terminating the transfer. If a transfer is terminated because of a failure to complete a special meter read, the requesting party shall not be charged for the failed meter read attempt.

If a transfer request is for a change from SSS to competitive supply, it may be done based on a historical, actual meter read as long as the distributor has not issued an estimated bill to the consumer since the date of the last actual read.

A distributor shall issue notices to various parties as part of the process of implementing service transaction requests. Notices have three purposes:

- 1. To inform current service providers or a consumer that a request to change service arrangements has been received;
- 2. To inform various market participants what actions they must take before a transfer will be implemented (e.g., if they are in arrears or if security arrangements are inadequate); and

3. To keep various market participants apprised of the timing and status of the transfer process.

Mandatory notices vary with the type of transaction and are delineated in subsections 10.5.2 through 10.5.4.

Upon completion of an STR, a distributor shall modify its information databases to reflect the current status of service relationships. Accurate and current information shall be maintained concerning who the electricity service provider is and what billing option is in place.

A distributor shall post relevant charges for service transaction activities to a retailer's or consumer's account and issue the final settlement bill to consumers and/or retailers. The Board will approve rates for transaction activities such as special meter reads and the administrative cost of transfer processing.

Subject to the rules and procedures outlined in this code and payment of relevant transaction fees approved by the Board, there is no limitation on the frequency with which consumers can change electricity suppliers.

10.5.2 Processing a Change From SSS to Competitive Supply

An STR requesting a transfer from SSS to competitive supply shall be submitted by the retailer who will become the new supplier if the STR is implemented. Upon request of the STR, a distributor shall check to see if electricity supply is currently being provided by a competitive retailer or if a request to transfer to another retailer is currently pending. If a consumer is currently served under SSS and no transfer is pending, processing shall proceed. If a consumer is currently served by a competitive retailer or a request is pending, a distributor shall process the new request as described in section 10.5.3.

A service transfer date will coincide with the date of the final meter read based on the option designated in the STR or the default option agreed to between a distributor and retailer. All four options described in section 10.5.1 are allowed for a transfer from SSS to competitive supply. The parties that must agree on the terms of the arrangement if transfer is to be based on an estimate or a consumer read are the consumer, the distributor and retailer.

A distributor has no specific notification requirements associated with a transfer from SSS to competitive supply unless the consumer turns out to be served by a competitive retailer, rather than being an SSS consumer, or unless there is a pending request.

10.5.3 Processing a Change From One Competitive Retailer to Another

An STR involving a transfer from one competitive retailer to another shall be submitted by the retailer to whom the consumer will be transferred if the process is completed. A distributor shall notify the current retailer that a transfer request has been received and wait ten business days before continuing transfer processing. If no response is received from the current retailer, the request will be processed. The current retailer may request an additional delay of ten business days to allow time for the retailer to inform the consumer and/or the new retailer that the consumer has a valid contract with the retailer. Upon receiving a request from the current retailer for an additional ten-business-day delay, the distributor will provide notice to the consumer indicating the reason for the delay. If, at the end of this second ten-business-day period, a distributor has not received notice from any party to cease processing, the transfer request shall be completed. If any party, the new retailer, the consumer or the current retailer (acting upon authorisation by the consumer), notifies the distributor that the transfer request should be terminated, the distributor shall cease transfer processing. Whichever party submits the termination request, the distributor shall notify the other two parties that processing has been terminated.

In the event that an STR is received by a distributor and there exists both a current retailer and a pending STR, the process described above will be implemented first for the situation involving the current retailer and the initial pending request. After that situation has been resolved, the same process will be implemented involving the second request and the retailer who is either the current or pending retailer after the initial process has been completed.

A service transfer date will coincide with the date of the final meter read based on the option designated in the STR or the default option agreed to between a distributor and retailer. Final meter read options allowed for in this scenario include all options identified in section 10.5.1. However, the historical meter read option can only be used if all three parties, the two retailers and the consumer, agree in writing. If transfer is to be based on an estimated value or on a

consumer read, all four parties, the distributor, both retailers and the consumer, must agree in writing to the terms of the arrangement.

10.5.4 Processing a Change From a Competitive Retailer to SSS

An STR involving a transfer from a competitive retailer to standard supply service may be submitted either by the current retailer or the consumer.

If the request is submitted by the current retailer, a distributor shall notify the consumer that a transfer is taking place and the scheduled transfer date but the consumer may not unilaterally terminate this request.

If the request is submitted by a consumer, a distributor shall notify the current retailer and delay processing ten business days unless the current retailer responds that no delay is necessary. No additional ten-day waiting period shall be provided. If, during the initial ten-day waiting period, a distributor is notified by either the consumer or the retailer (acting upon authorisation of the consumer) that processing should be terminated, the distributor shall cease transfer processing. A distributor shall notify whoever did not submit the termination request that the transfer will not be completed.

The allowable final meter read options for this type of transfer are the same as for a transfer from one retailer to another. The parties that must agree to an estimated or consumer read are the distributor, the retailer and the consumer.

10.6 Rules and Procedures for Processing Service Transactions Requests That Do Not Involve a Change in Electricity Provider

There are transaction types governed by this Code that do not necessarily involve a change in electricity service provider:

- 1. A move by a consumer to another location either inside or outside a distributor's licensed service territory,
- 2. A change in metering or billing service
- 3. A request for historical customer-specific information.

Rules and procedures governing these transactions are covered in the next three subsections.

10.6.1 Processing a Request for Disconnection or Relocation When a Retailer Provides Service

An STR involving a consumer relocation when electricity is currently supplied by a competitive retailer may be submitted either by the consumer or the retailer. Regardless of who submits the request, a distributor shall contact the consumer in order to schedule the disconnection at the current location and, if relevant, reconnection at the new location. If the consumer submits the transfer request, the distributor shall notify the retailer that the consumer is terminating service at one location and, if relevant, re-instituting service at another location. The retailer will inform the distributor whether the service agreement between the retailer and consumer shall be terminated or shall be retained at the new location.

The only allowable final meter reading option associated with a disconnection or relocation is a special meter read coinciding with the move date.

10.6.2 Processing a Change in Billing or Metering Service

A retailer, or a consumer being served by a retailer, may wish to change their billing or metering option while still retaining the electricity supply relationship between the retailer and consumer. A request for such a change shall be submitted by a retailer. If the request is submitted by the consumer, the distributor may, at its discretion, either notify the consumer to have their retailer submit the request or notify the retailer that a request has been received from their customer and inquire as to whether or not the request should be honoured. A request for a change in meter service must be submitted a minimum of ten business days prior to the desired date of the meter change.

If a change in metering service involves a change in the settlement method (e.g., from NSLS-based settlement to settlement based on interval metering or vice versa), a distributor shall issue a final settlement bill based on a meter read at the time of the change in meter service. If a change in meter service does not involve a change in the settlement method (e.g., a change from standard kilowatt-hour metering to time-of-use or prepaid metering), a distributor is not required to issue a final settlement bill corresponding to the date of the new meter installation.

A request to change from one billing option to another shall coincide with an actual meter read unless otherwise agreed to between the distributor and retailer.

When a billing-option change is made, a change may be necessary in the maximum allowable amount of security required to be posted by a retailer to mitigate retailer nonpayment risk or in the risk mitigation procedures (e.g., customer deposits) used by a distributor to manage consumer nonpayment risk. A distributor may choose not to implement the billing option change until the new risk mitigation requirements have been addressed by the relevant party.

10.6.3 Processing a Request for Historical Consumer Information

Consumers have the right to have historical usage information, information about their meter configuration, and payment information sent to their service address or to any designated retailer or third party. The specific information that distributors must provide is described in section 11.3.

A request to release consumer information may be submitted either by a consumer or a retailer. A retailer's request must be based on written authorisation from the consumer. A retailer need not transmit a physical or electronic copy of the release form in order for a distributor to process the request unless specifically requested to do so by the distributor. A request to deliver information to a consumer's service or billing address may be submitted orally. A request to send information to any other location must be submitted according to the same rules that apply to a request to transfer electricity service provider, as described in section 10.2. A consumer's authorisation to release usage information will be construed to also authorise release of meter data as defined in section 11.3. Release of payment information must be based on separate authorisation.

All consumer-specific information must be provided to the designated party by a retailer in a common format to be developed in accordance with the mandatory EBT system.

Requests to transfer consumer-specific information received via the EBT system must be completed within five business days of receiving the request. All other requests must be completed within ten business days of receiving a valid request.

Provision of consumer-specific information to retailers must be done at no charge. Requests to deliver data directly to consumers, if not delivered electronically through the mandatory EBT system or through previously established links directly with a consumer, must be honoured twice a year at no direct charge to a consumer. Additional requests must also be honoured by a distributor but a distributor may, at its discretion, charge a reasonable fee for this additional service. A request is considered to be data delivered to a single address. Thus, a single request to send information to three locations is considered three requests.

11 ACCESS TO CONSUMER INFORMATION

This section describes the rights of consumers and retailers to access current and historical usage information and related data and the obligations of distributors in providing access to such information.

11.1 Provision of Current Usage Data to Retailers

Upon authorisation by a consumer, a distributor shall make available the following information to a retailer that provides electricity to a consumer connected to the distributor's distribution system:

- The distributor's account number for the consumer,
- The distributor's meter number for the meter or meters located at the consumer's service address.
- The consumer's service address,
- The date of the most recent meter reading,
- The date of the previous meter reading,
- Multiplied kilowatt-hours recorded at the time of the most recent meter reading,
- Multiplied kilowatt-hours recorded at the time of the previous meter reading,
- Multiplied kW for the billing period (if demand metered),
- Multiplied kVa for the billing period (if available),

• Usage (kWhs/h) for each hour during the billing period for interval-metered consumers

- An indicator of the read type (e.g., distributor read, consumer read, distributor estimate, etc.)
- Average distribution loss factor for the billing period.¹⁸

The schedule of meter reading and posting of data to the EBT system for interval and non-interval metered data is described in section 5.2. A distributor shall make data available through the mandatory EBT system. Raw data does not need to be posted by a distributor on the EBT system. A retailer may access raw data through a consumer's right to direct access to the meter as described in section 11.2.

For all kilowatt-hour meters and all non-remotely read interval meters, a distributor shall post usage data pertaining to a single billing period on the EBT system. Such data shall remain accessible to retailers until replaced by data for the next billing period. For remotely read interval meters, a distributor shall maintain usage data on the EBT system for a billing period or for 30 calendar days, whichever is longer.

11.2 Provision of Current Usage Data to Consumers

A consumer with a remotely read or non-remotely read interval meter shall have access to meter usage data under the same terms and conditions as for retailers, as described in section 11.1. A consumer with a manually read kilowatt-hour meter or any other type of non-interval meter shall have access to current usage information either through direct access to the meter, as described below, or in printed form on the bill provided by their billing agent (e.g., either the retailer, the distributor or both, depending upon the billing option in use).

Consumers have a right to interrogate their meter, or to assign this right to others, in accordance with any relevant technical specifications and codes. If a consumer desires regular access to their meter or meter information, a distributor shall provide access under the following conditions:

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¹⁸ If the distribution loss factor is constant across billing periods and consumers, this factor may be provided separately rather than be attached to each customer record.

The timing of consumer access to the meter is negotiable with the distributor. A
distributor has priority when selecting access windows for the purpose of reading the
meter.

- If a distributor's access to the meter is hindered or a consumer's access to the meter corrupts usage information, a distributor may suspend a consumer's right to access until any outstanding problems are resolved.
- A consumer shall bear the cost of any software, hardware or other services required for a consumer to obtain direct access to meter information. This may include installation of a secondary meter access system.
- A consumer shall bear any cost incurred by a distributor to correct problems caused by a consumer's direct access to the meter.
- If a consumer assigns his right to direct meter access to a retailer or third party, the consumer shall remain responsible for the action of the assigned party.

11.3 Providing Historical Information to Designated Parties

Upon authorisation by a consumer, in accordance with the rules in section 10.6.3, a distributor shall provide to the consumer, or to one or more retailers, usage data, meter data and payment information as defined below. For non-interval-metered consumers, historical usage data are comprised of:

- Distributor's customer account number;
- Consumer's service address:
- Consumer's billing address;
- Identification of the current regulated rates that apply to the consumer (e.g., standard supply rate, distribution service rate, etc.);
- Multiplied kilowatt-hours used in each billing period;
- Multiplied kilowatt-hours used in each TOU consumption period for each billing period, if a consumer has a TOU meter;
- Multiplied kW for each billing period (if demand metered);
- Multiplied kVa for each billing period (if relevant);
- Date of actual or estimated meter read for each billing period;

• An indicator of the read type (e.g., distributor read, consumer read, distributor estimate);

- The next scheduled meter read date (or read-cycle date);
- The next scheduled bill date and
- Distribution loss factor for the billing period. 19

For interval-metered consumers, usage data are comprised of the above items except that usage will be reported on an hourly basis for each billing period.

Meter data is comprised of the following:

- Distributor meter number.
- Meter manufacturer,
- Manufacturer's model number,
- Manufacturer's serial number,
- Meter owner (if other than distributor) and
- Last seal date.

A consumer's payment information is comprised of the following:

- An indication of whether or not the consumer is currently in arrears and, if so, for how long;
- Data on the number of checks received from a consumer that had to be returned for insufficient funds over a specific period of time designated by the distributor; and
- Data on the number of times the consumer has been disconnected for nonpayment over a specific period of time designated by the distributor.

For any of the above information that varies by billing period, a distributor shall provide data for 24 billing periods if the distributor's standard business practice is to keep this many billing periods easily accessible (e.g., "online"). If more than 24 billing periods are available, a

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¹⁹ See previous footnote.

distributor may release information for more periods at its discretion. If fewer than 24 billing periods are readily accessible, a distributor shall provide data for no less than one calendar year's worth of information, unless the consumer has only been connected to the current distributor's system for less than one year.

12 RETAILER/DISTRIBUTOR RELATIONSHIP

A distributor shall enter into a service agreement with each qualified competitive retailer who wishes to provide electricity services to consumers connected to the distributor's distribution system and who wishes to utilise retail settlement services offered by the distributor. A qualified competitive retailer is one that has a valid retailer's licence issued by the Board and that maintains the security arrangements with a distributor required under the rules described in section 8.

A standardised service agreement covering common terms and conditions will be developed and approved by the Board and included as an appendix to the code. A distributor shall agree to these common terms and conditions unless a retailer and the distributor mutually agree to alternative terms and conditions. The service agreement also shall contain terms and conditions that cover optional services provided by a distributor to a retailer and mandatory services where there is flexibility in the nature of service provision.²⁰

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 $^{^{20}}$ An example in this category might be mutual agreement on a definitive settlement time line.