

Attn: Distributed Energy Resource (DER) Applicants

Re: Connection Information Package for a Small, Mid-sized or Large DER

The following document and attachments outline the connection process and requirements for connecting a Small, Mid-sized or Large DER to the PUC distribution system in accordance with the requirements of Section 6.2.3 of the Distribution System Code. Distributed Energy Resources generally include any device to be connected to the distribution system that is capable of storing and/or generating electrical energy (ie. generators, battery storage facilities, flywheels, etc.).

DER Connection Process

PUC Distribution is defined as a distributor in the Electricity Act and as such, is obliged to conduct all of its business in accordance with the Distribution System Code (DSC) administered by the Ontario Energy Board (OEB). The process we are required to follow for connecting DERs to the distribution system is defined in Section 6.2 of the DSC and further supplemented by DER Connection Procedures document. A current copy of those sections are attached for you to use as a guide through the application process however we would urge you to refer to the full document on the OEB website <https://www.oeb.ca/regulatory-rules-and-documents/rules-codes-and-requirements/distribution-system-code-dsc> as it is periodically amended.

PUC has developed standard forms, letters and agreements to reflect the process steps outlined in the DSC. We will provide you with the documentation necessary throughout the application process. Our expectation is that all correspondence between parties will be formal and in writing, using either paper or electronic means. All correspondence must be dated due to the time sensitive nature of the requirements of the DSC.

Approvals

In addition to meeting connection requirements of the PUC, you also have obligations to seek approval for your project from the Electrical Safety Authority (ESA), the Independent Electricity System Operator (IESO), and the Ontario Energy Board (OEB). Depending upon the size of your project, there may also be impacts to the transmission system supplying the PUC distribution system and owned by Hydro One Networks Inc (HONI). You may want to review these requirements and contact the appropriate stakeholders early in the project development process to determine the impacts to you. Preliminary contact information follows:

- ESA <https://www.esasafe.com/>
- IESO <http://www.ieso.ca/>
- OEB <https://www.oeb.ca/>
- HONI <https://www.hydroone.com/>

Technical Requirements for Connection

Connection of large or mid-sized DER projects to the PUC distribution system can generally be made at 34.5kV or 12.47kV. Our system at both voltage levels is solidly grounded, 4 wire, wye connected. Generally, projects larger than 1.5MVA are not permitted on the 12.47kV system and projects less than 1MVA are not permitted on the 34.5kV system. Small secondary loads such as station service supplies are generally connected to the 12.47kV system. A copy of our 34.5kV and 12.47kV system maps can be provided on request.

Connection of small DER projects to the PUC distribution system can generally be made directly at 12.47kV or downstream of the customer transformer at the customer delivery voltage level. Our 12.47kV system is solidly grounded, 4 wire, wye connected.

Metering requirements and additional technical requirements for all installations are to be in accordance with the requirements outlined in our 'Conditions of Service' document.

Additional technical requirements are outlined in the DER Connection Procedures of the DSC.

Standard Contractual Terms and Conditions

Our 'Conditions of Service' document, which describes our standard terms and conditions, technical requirements and metering requirements for connection to the distribution network is available on our website at www.ssmppuc.com.

Connection Impact Assessment, Connection Cost Recovery, and Connection agreements are required for all connections. These agreements are prepared on a case by case basis but are closely based on the model agreements found in Appendix E of the DSC.

Representative for DER Inquiries

Please direct all inquiries related to DER connections to:

By mail or in person:

PUC Services Inc.

500 Second Line East, P.O. Box 9000

Sault Ste. Marie, Ontario, P6A 6P2

Attn: Engineering – DER Applications

By phone: (705) 759-6500

By E-mail: eng-dept@ssmpuc.com Subject: DER Applications

We trust that this information package is adequate for your current requirements and will wait for you to provide us with a completed copy of the attached DER Connection Application Form and any applicable supporting documents. Upon receiving the requested documentation, we will contact you to arrange an initial consultation meeting. The purpose of that meeting will be to review your specific development plans and comment on the feasibility, timeline, and costs associated with connecting your project. If any further clarification on these requirements is required, please do not hesitate to contact us.

Attachments:

- DER Connection Application Form
- OEB Distribution System Code DERCR EVCCP 20240527
- DER Connection Procedures – DERCP 20220914

Distributed Generation Technical Interconnection Requirements

**Prepared for
PUC Services Inc.**

January 26, 2012

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Revision History

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January 2012	Rev. 0	New report

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Notice

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1. Purpose

This report provides recommended technical interconnection requirements for generation projects connecting to PUC's feeders. The focus in this report is on requirements that affect the power quality and reliability of the distribution system. The generation facilities must satisfy local and national standards and codes, in addition to these requirements.

2. Interconnection Requirements

The interconnection requirements in Table 1 are based largely on Hydro One's requirements, [1, 2].

Table 1 - Interconnection Requirements

Category	Hydro One's Requirement	Recommended Requirement for PUC	Comments
Voltage control	DG shall not actively regulate voltage at the point of connection	DG shall not actively regulate voltage at the point of connection The generator should be able to operate within the voltage range specified in CSA Standard CAN3-C235-83	Same as HONI
Power factor	DG Facilities > 30 kW shall be capable of operating in the power factor range of +/-0.9 (i.e. 0.9 lagging and leading DG Facilities < 30 kW shall not be required to adjust their power factor.	DGs larger than 1 MW, shall have the capability to operate at a power factor between 0.95 lagging and 0.95 leading	
Power quality	Sections 2.2.2 and 2.2.3 of HONI's TIR	Appendix A	Most of HONI's requirements apply also to PUC
Protection anti islanding	Upon loss of voltage in one or more phases of HONI's Distribution System, the DG Facility shall automatically disconnect from HONI's Distribution System within 500 ms	Upon loss of voltage in one or more phases of PUC's feeder, the DG shall automatically disconnect from PUC's system within 500 ms	Similar to HONI, but can be faster depending on realistic equipment capability.

3. References

- [1] *Distributed Generation Technical Interconnection requirements*, Hydro One Networks Inc., Rev 2, June 2011
- [2] *Technical Interconnection Requirements for Distributed Generation - Micro Generation & Small Generation*, 2010 Hydro One Networks Inc., DT-10-20

Appendix A – Power Quality Requirements

A.1 General

- a. The DG Facility shall be designed, built and maintained in accordance with all applicable codes, regulations and standards, along with the requirements of this document.
- b. The interconnection of the DG must not materially compromise the reliability or restrict the operation of PUC's system.
- c. The interconnection must not degrade power quality below acceptable levels listed below.
- d. During normal operation, the DG shall be loaded and unloaded gradually to allow adequate time for regulating devices to respond and avoid excessive voltage fluctuations

A.2 Voltage and Current Harmonics

- a. The DG shall not inject harmonic current that causes unacceptable voltage distortion on PUC's system
- b. The DG shall follow the requirements of CAN/CSA C61000-3-06 with regards to voltage and current harmonic limits
- c. The total harmonic distortion (THD) of the DG at the point of connection to PUC shall not exceed 3%

A.3 Voltage and Current Unbalance

- a. The DG shall not cause deterioration of existing unbalance voltage and current conditions at the point of connection to PUC system.
- b. A single phase DG shall not cause a voltage unbalance greater than 2% at the point of connection to PUC's system.
- c. The phase-phase voltage unbalance at the unloaded DG terminals of a three-phase DG must not be greater than 1%.

A.4 Fast Voltage Fluctuations (Flicker)

- a. The DG facility shall conform to the flicker requirements in CAN/CSA C61000-3-7.

ONTARIO ENERGY BOARD

DISTRIBUTED ENERGY RESOURCES CONNECTION PROCEDURES

Version 2 – January 27, 2025

(Originally Issued on March 22, 2022)



Ontario
Energy
Board

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1. Purpose

The Distributed Energy Resources Connection Procedures (DERCP) document is a consolidation of the procedures, timing, workflows, and template forms issued by the Ontario Energy Board (OEB) to facilitate the communication and implementation of a standardized procedure for the connection of distributed energy resources (DERs) to distribution systems.

The provisions of the DERCP are given force by requirements of Chapters 3 and 6 of the Distribution System Code (DSC) as noted throughout. Compliance with the DSC is a condition of the OEB's Electricity Distributor Licence. Pursuant to the *Ontario Energy Board Act, 1998*, OEB codes, including the DSC, may incorporate by reference, in whole or in part, any standard, procedure or guideline. In case of any conflict between the DERCP and the Code, the provisions of the Code shall govern.

2. Definitions

All definitions in Section 1.2 of the DSC are adopted and apply in the DERCP. The most relevant definitions in the context of the DERCP are: emergency backup generation facility, exporting connection, non-exporting connection, restricted feeder, and system power.

For the purposes of the DERCP the following definitions also apply:

Applicant

An applicant means a person who approaches a distributor and requests information for the purpose of connecting, or requests to connect a DER to the distributor's system.

Connection Impact Assessment (CIA)

A connection impact assessment means a study performed by or on behalf of the distribution company to assess the impact of a proposed DER (generation or storage facility) connection on its system. The CIA will specify technical requirements for the connection.

Distributed Energy Resource (DER)

Distributed Energy Resource (DER) means, for the purposes of the DERCP, an electricity source that is connected to a distribution system for the purpose of providing energy, typically through a connection on the customer-side of an ownership demarcation point. Sources generate electricity (e.g. generation facilities and energy storage facilities when discharging).

3. Distributed Energy Resources Connection Procedures Overview

The DERCP applies to the connection of a generating facility, including a storage facility, to a distribution system. Throughout the DERCP, the term “generating facility” includes energy storage facilities. All timelines specified in the DERCP refer to calendar days. When an energy storage facility is in discharge mode, it is treated the same as a generating facility. When an energy storage facility is in charging mode, it is treated the same as a load. The DERCP applies regardless of whether the connection is expected to be exporting energy to the grid or non-exporting as both types of generation facilities contribute to short circuit current through the connection under fault conditions. For emergency backup generation facilities, customers are referred to their respective distributor’s websites for information on connection requirements.

From the distributor’s perspective, the connection process can be broken into 4 main stages once an applicant approaches the distributor for a connection. The DERCP provides process flowcharts, information requirements and template forms regarding interaction between applicants and distributors for the 4 stages.

- a) **Preliminary Consultation**
 - Planning, information exchange, capacity check
- b) **Connection Impact Assessment**
 - Capacity allocation
 - Technical requirements for connection
 - Connection cost estimate
- c) **Connection Cost Agreement**
 - Project scope and cost
- d) **Build and Energization**
 - Connection work
 - Commissioning
 - Connection Agreement
 - Project completion



Figure 1: Distributed Energy Resources Connection Process

A distributor is required by Section 6.2.3 of the DSC to maintain a location on its website that serves as a centralized repository for all the information, forms and instructions, including information on applicable fees, necessary for an applicant to apply for connection to the distributor’s system.

4. Preliminary Consultation

4.1 Description

During the initial planning phase of a project, an applicant needs to know if there are any potential connection complexities or system limitations that could prevent connecting the project at a specific location on a distributor's distribution system. The DERCP provides template forms in Appendix C that a distributor must make available to an applicant pursuant to section 6.2.9 of the DSC. The applicant completes and submits a Preliminary Consultation Information Request (PCIR) form to the distributor. The distributor in turn responds with a Preliminary Consultation Report (PCR). A PCR is not required in order to apply for a CIA, however it contains connection-related details that can be helpful in completing the CIA application.

4.2 Restricted Feeder Lists

A distributor will, in accordance with the requirements of the DSC:

- a) Maintain a list¹ of feeders that it owns that have no additional short circuit capacity to accommodate a DER connection.
- b) A feeder should be included on the list whether the constraint is within the distributor's system or caused by limitations upstream in the host distributor or transmitter's system.
- c) Update the list if the system changes or at least every 3 months.

When the distributor removes a feeder from the list of restricted feeders, the distributor shall a) notify the public of this change on its website; and b) notify by email those customers who have expressed an interest in receiving information on the status of the feeder. The notification shall be given as soon as possible and at least one month prior to accepting new applications for the connection of DERs to the feeder.

4.3 Preliminary Consultation Information Request

The PCIR form gathers basic information on the proposed project, including applicant information, project nameplate and type, proposed fuel/energy type, site information (including information on existing DER(s) at the same site), and other information. The DERCP includes templated forms to standardize the means by which this information is to be collected. The template form is included in Appendix C to the DERCP.

- 4.3.1** Where the distributor needs to add to the template PCIR form in response to unique characteristics of its system or operational needs, the distributor will advise the OEB of the changes.

¹ A distributor may use an interactive tool to allow applicants to check feeder capacity for a restricted feeder.

- 4.3.2** A distributor may establish a web-based interface for the purpose of collecting this information, provided the web-based interface is consistent with Appendix A or is amended in accordance with section 4.3.1.

4.4 Preliminary Consultation Report

The PCR is provided by the distributor to the applicant and identifies the feasibility and the complexity level of a connection based on the information provided in the PCIR and the distributor's knowledge of available capacity at the proposed point of connection. However, capacity is only reserved upon completion of a successful CIA.

The Preliminary Consultation Report will provide a preliminary assessment of connection complexity including information on:

- i. System constraints
- ii. Anticipated impact assessments required
The PCR will identify what connection studies will be required at the CIA application stage. Depending on the size and location of the project, these may include multiple studies: the distributor, and if applicable: the host distributor, the transmitter, and possibly a System Impact Assessment from the IESO.
- iii. Distribution system infrastructure
- iv. Protection, monitoring, metering, and telecom
- v. LDC-specific criteria
- vi. LDC overall assessment of connection feasibility

The distributor must respond to a PCIR within 15 days of receipt of a PCIR as per Section 6.2.9.1 of the DSC.

If the PCR identifies the overall assessment is "Conditional Pass: Capacity may be available, pending a Connection Impact Assessment" or 'Conditional Pass: Capacity may be available, pending a Connection Impact Assessment and adherence to the Flexible Hosting Capacity Arrangement', it will provide information that the applicant will need to prepare for a CIA application. Any other information that the distributor considers helpful to the applicant in deciding whether to proceed to the next stage of connection, is to be included in the additional comments section of the PCR.

It is important to remember that the PCR is a snapshot in time and does not reserve capacity for a project.

5. Connection Impact Assessment

5.1 Description

The next stage for the connection of a DER is the CIA. This is a study prepared by the distributor that assesses the steady state and transient reliability and stability impacts of the project at the specific location on the distribution system. The information requirements at this stage are more substantial than the preliminary consultation phase; nonetheless, applicants are cautioned that completion of a CIA does not constitute approval of the protection philosophy and single line diagram (SLD) by the distributor. The protection philosophy and SLD will be subject to distributor review after the CIA has been issued.

Depending on the size of the project and its location within the distribution system, an additional CIA by a host distributor and/or transmitter, and/or a System Impact Assessment by the IESO may also be necessary to assess upstream system impacts. The PCR will identify, for the location specified in the PCIR, the additional studies required. Table 1 outlines an anticipated additional studies required based on DER classification.

Table 1: Connection Classifications for Processing

DER Classification	Rating	Potential Studies:
Micro	≤ 10 kW	None
Small	(a) ≤ 500 kW connected on distribution system voltage < 15 kV (b) ≤ 1 MW connected on distribution system voltage ≥ 15 kV	1. Distributor 2. Host Distributor (if applicable)
Mid-Sized	(a) ≤ 10 MW but > 500 kW connected on distribution system voltage < 15 kV (b) > 1 MW but ≤ 10 MW connected on distribution system voltage ≥ 15 kV	1. Distributor 2. Host Distributor (if applicable) 3. Transmitter
Large	> 10 MW	1. Distributor 2. Host Distributor (if applicable) 3. Transmitter 4. IESO System Impact Assessment

In determining the size of a DER facility for the purpose of DER classification, the distributor shall accept statically derated capacity, achieved through configured power rating control, of a DER unit or inverter instead of nameplate rated capacity if it has been

derated at the factory. If the DER unit or inverter has been derated in the field by either the installer or manufacturer, the distributor shall accept the derated capacity if the following conditions are met:

1. The derated capacity is clearly indicated on the equipment, adjacent to the nameplate,
2. Proper labeling must specify site-specific power and current values,
3. Documentation provided by the inverter manufacturer must state the maximum continuous derated output current in amperes. Alternatively, the programmed limit can be demonstrated to the distributor's satisfaction, such as through certification from a licensed electrician, and
4. A restricted access protocol must be in place to prevent unauthorized capacity changes.

The applicant will also need to comply with other industry requirements with respect to derated capacity.

Appendix D provides further guidance on the determination of DER classification.

In response to a CIA application and where the distributor has determined that there is available capacity to connect the proposed project:

- 5.1.1.** The distributor will provide the applicant with the technical and non-technical requirements for connection to the distributor's system.
- 5.1.2.** The distributor will provide an estimate of the cost to facilitate the connection. Section 5.9 has more information on connection cost estimates.
- 5.1.3.** The distributor will reserve capacity on its system for the proposed project in accordance with Section 6.2.4.1 of the DSC.
- 5.1.4.** The distributor will provide an offer to connect in accordance with the requirements of the DSC.

5.2 Application forms

In accordance with DSC sections 6.2.5 and 6.2.11, the distributor must make the connection agreement for micro generation facilities and the CIA application form for all other generation facilities available on its website and in hard copy at its offices. It is preferable for applicants to be able to fill in and submit these forms electronically through email or the distributor's website. To facilitate timely and near concurrent processing of the application, applicants are encouraged to provide payment for all required studies with the application (i.e. study payments for the distributor, host distributor, transmitter and IESO, if required). Distributors will require payment before commencing studies. The distributor will identify on its website and in the application package the relevant study fee charges.

Micro Generation Facility

To apply for a connection of a micro generation facility, an applicant will submit to the distributor a copy of the Micro-Embedded Generation Facility Agreement, in the form provided in Appendix E of the DSC. The applicant will provide the relevant information on the connection agreement and submit it to the distributor. If requested by the distributor, the applicant shall also provide an SLD and generator specification and connection information as required. The distributor may establish and use its own intake form for processing micro generation facility connection applications, but any agreement between the distributor and the applicant for the connection of the micro generation facility must be in the form provided in Appendix E of the DSC. The distributor will assess the project and, if approved for connection, sign the connection agreement, and proceed with the connection.

Small / Mid-sized / Large Generation Facility

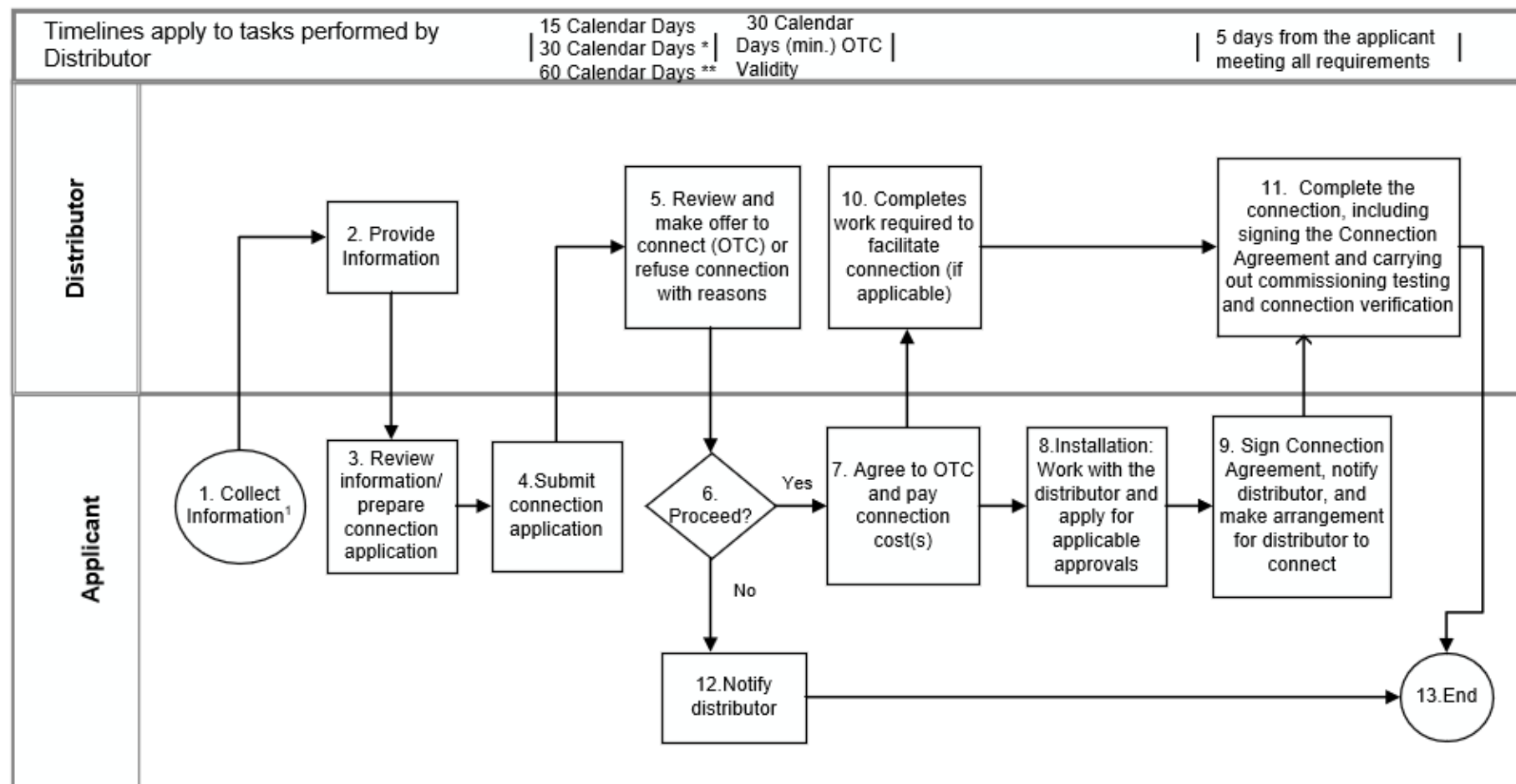
For all other categories of projects, distributors must use the CIA Application template form provided by the OEB in Appendix B, unless the project qualifies for a simplified CIA as set out in Appendix E. The expectation of the OEB is that the distributor will only need to add its contact information to the template prior to deploying the form. If unique characteristics of a distributor's system require the distributor to make revisions to the template form, beyond the designated distributor-specific sections, then the revised form must be filed with the OEB.

5.3 Micro Generation Facility Connections

5.3.1 Micro Generation Facility Connection Processes

Micro generation facilities are equal to or less than 10 kW and are considered to pose a relatively low connection risk to the distribution system compared to larger generation facilities. The distributor (in accordance with Section 6.2.6 of the DSC) and applicant are expected to follow the process flowchart in Figure 2 and steps outlined below.

Connection Process: Micro Generation Facility



* If at existing connection and site assessment needed ** If not located at existing customer connection
 1 Check distributor webpage for information on process, forms and other helpful info, including how to apply.

Figure 2: Micro Generation Facility Connection Process

Step 1	The applicant proposing to connect a micro generation facility checks the distributor's DER webpage for information on processes, forms and other helpful information, including how to apply. The applicant can also contact the distributor and the Electric Safety Authority (ESA) to obtain more information on connection process and requirements.
Step 2	The distributor makes the information on connection process available to the applicant in a timely manner. The information package includes the description of the connection process approvals needed by the distributor for connection, technical requirements including metering, contractual requirements (Micro-Embedded Generation Facility Connection Agreement), and application forms.
Step 3	The applicant reviews relevant information and prepares a connection application that includes: <ul style="list-style-type: none"> • an installation plan, including the size, type of generation (e.g. net metering and non-exporting) facility; and • a project plan.
Step 4	The applicant submits a connection application to the distributor for its review.
Step 5	<p>Within the prescribed timeline, which varies based on the facility location, the distributor shall either provide the applicant with an offer to connect (OTC) or a refusal to connect, including reasons for the decision, as outlined in sections 5.3.2, 5.3.4, and 5.3.5 below.</p> <p>The distributor's review of an application submitted for the connection of a micro generation facility will include:</p> <ul style="list-style-type: none"> • typical requirement for new meter; • check for service upgrade requirement; • check for significant amount of other generation on feeder; • response to the applicant with an offer to connect or refusal; and • response to applicant with requirements specific to the connection (typically requirements for metering) and costs, timing to implement, etc.
Step 6	The applicant decides whether to proceed with the connection. If so, proceed to step 7. If not, proceed to step 12.
Step 7	The applicant must indicate its intention to connect. Within the validity period of the OTC, which shall be at least 30 days, the applicant

	accepts the OTC and pays the required connection cost(s).
Step 8	<p>During the installation phase, the applicant should work closely with the distributor, the ESA, and any other organizations from which work, inspections, approvals, or licences are required to prevent delays.</p> <p>The activities will be planned in coordination with project milestones, and it is up to the applicant to initiate actions at the required times.</p>
Step 9	The applicant reviews and signs the connection agreement, notifies the distributor, and makes arrangement for the distributor to connect.
Step 10	The distributor completes any work required to facilitate the connection to the distribution system (if applicable).
Step 11	Subject to the provisions of section 6.2.7 of the DSC, the distributor works with the applicant to complete the connection, including signing the connection agreement and carrying out any commissioning testing and connection verification.
Step 12	If the applicant decides not to proceed with the connection (step 6), the applicant notifies the distributor of the applicant's decision not to proceed with the connection process and then proceeds to step 13.
Step 13	The connection process ends.

5.3.2. If the proposed facility is located at an existing customer connection and does not require a site assessment, the distributor shall make an offer to connect within 15 days of receiving a completed application or provide reasons for refusing to connect.

5.3.3. The distributor shall not charge the applicant to prepare the offer to connect outlined in section 5.3.2 above.

5.3.4. If the proposed facility is located at an existing customer connection and requires a site assessment, the distributor shall make an offer to connect within 30 days of receiving a completed application or provide reasons for refusing to connect.

5.3.5. If the proposed facility is not located at an existing customer connection, the distributor shall make the offer to connect within 60 days of receiving a completed application or provide reasons for its refusal.

- 5.3.6.** In all cases, the distributor shall give the applicant at least 30 days to accept the offer to connect and the distributor shall not revoke the offer to connect until this time period has expired.
- 5.3.7.** If a site assessment is needed, the distributor may charge a \$500 connection deposit for preparing the offer to connect, which shall be payable in the form of cash, cheque, electronic funds transfer, letter of credit from a bank, or surety bond.
- 5.3.8.** If the distributor refuses the connection after a site visit, it shall return the deposit within 30 days.
- 5.3.9.** If the applicant does not accept the offer or withdraws its application, the distributor will keep the deposit.
- 5.3.10.** If actual connection costs are less than the deposit, the distributor shall refund the difference when the connection is completed and in service.
- 5.3.11.** Interest shall accrue monthly on connection deposits made by way of cash or cash equivalents commencing on receipt of the total deposit required by the distributor. The interest rate shall be at the Prime Business Rate as published on the Bank of Canada website less 2 percent, updated quarterly. Refunds, in whole or part, of deposits made in cash or cash equivalents shall include interest on the refunded amount from the date of receipt.
- 5.3.12.** An applicant must notify the distributor that it has satisfied all applicable service conditions and received all necessary approvals including confirmation of issuance of the authorization to connect from the ESA.
- 5.3.13.** The applicant must enter into a Connection Agreement and pay the required connection costs, including costs for any necessary new or modified metering.
- 5.3.14.** Once these conditions have been satisfied, the distributor shall connect the applicant's micro generation facility to its distribution system within 5 business days, or at such later date as agreed to by the DER applicant and the distributor.
- 5.3.15.** The distributor must meet the five-day requirement for connection 90 percent of the time on a yearly basis.

5.4. Connection Application Processes for Small, Mid-Sized, and Large Generation Facility Projects

The connection application processes for small, mid-sized, and large generation facilities are similar, with the differences primarily being the number and complexity of connection impact assessments required which will vary on a project to project basis and depend on the size of the project and the connection point to the system. Unlike the micro generation facility process, the connection process for small, mid-sized, and large generation facilities includes a common screening process on application intake.

5.5. CIA Screening Process

CIA applications are subject to a review for completeness, i.e. a screening process. The screening process is intended to provide feedback to the applicant early in the process on any deficiencies in their submission that would prevent a distributor from proceeding with a review. Upon submission of an application, the distributor confirms if the application is substantially complete. A substantially complete application is a submission in which there is sufficient information provided for the distributor to process the application and complete the CIA. To aid an applicant in determining the information requirements that a distributor would typically deem as being sufficient information, a sample application package has been provided in the Appendix C(vii).

The sample application package includes:

- Completed application
- Single line diagram sample
- Protection philosophy sample
- Submission checklist

In order to facilitate timely processing of applications, payment² for the applicable studies should be included with the submission when possible. The fees for required studies and assessments should be identified on the distributor's website and in the PCR.

If the application is incomplete, the distributor will return the incomplete part of the application package to the applicant with a deficiency notification identifying the error and omissions in the application. Upon receipt of a deficiency notification, an applicant should review and correct the application and resubmit the revised application within 14 days. If the application is not returned in 14 days, the application may lose its position in the processing queue.

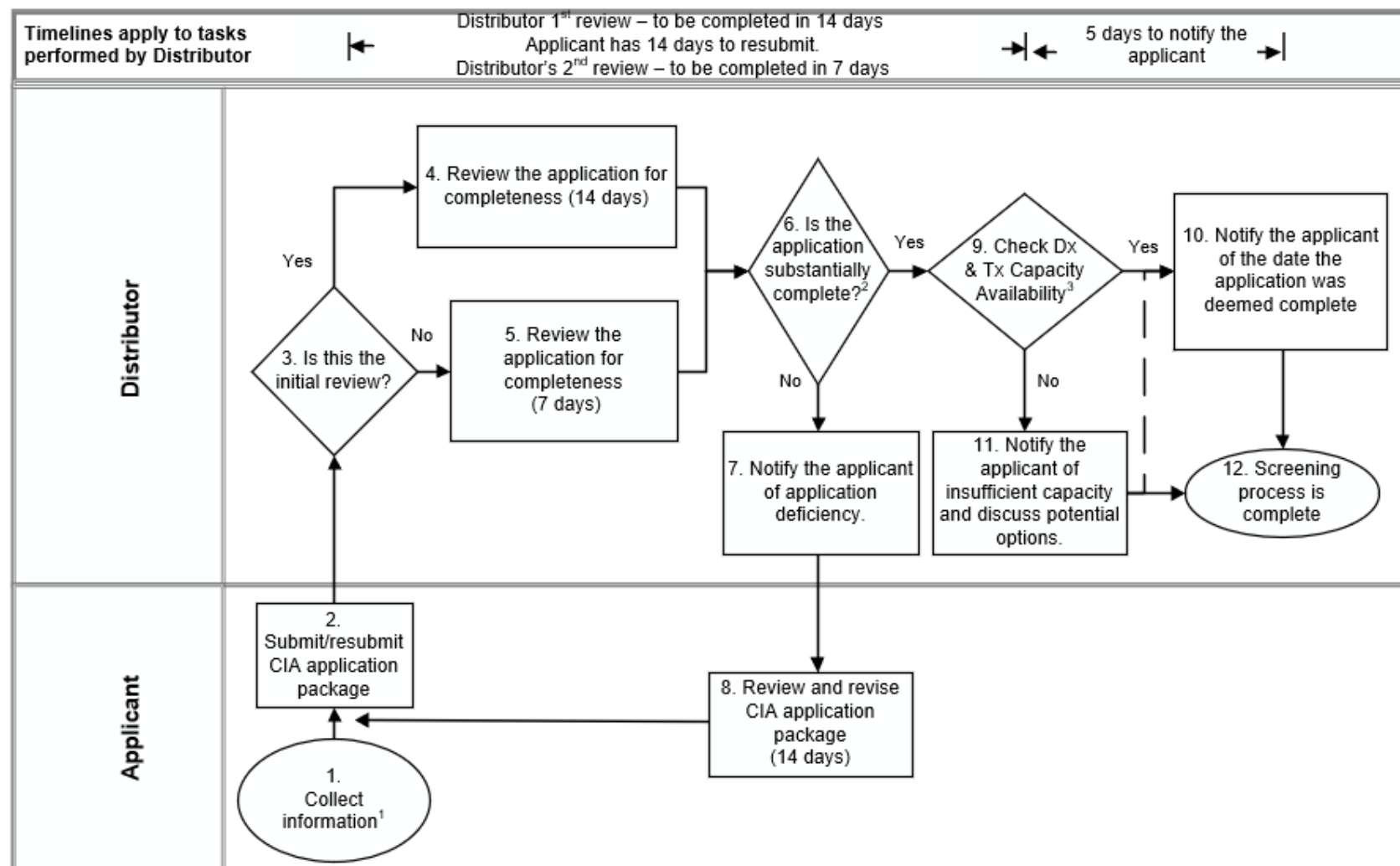
Upon receipt of a revised CIA application, the distributor must review the application within 7 days to determine if there is sufficient information for the distributor to process the application. If there is sufficient information, the

² Distributors are to identify required study cost in the Preliminary Consultation Report.

submission is deemed substantially complete, and the distributor will reconfirm that the distribution and transmission capacity that was available at the preliminary consultation stage remains available. Please note that capacity is not reserved until the CIA is completed. If capacity is available, the distributor will notify the applicant and proceed to perform a CIA. The date the submission is deemed substantially complete starts the timed-day window for the distributor to send the completed CIA to the applicant.

The process flowchart for determining the status of an application using the screening process is outlined in Figure 3. The corresponding procedure steps for the distributor and applicant to follow are outlined below the flowchart.

CIA Screening Process



¹ Submitting a Preliminary Consultation Information Request (PCIR) prior to CIA application will help gather potential connection complexity information before investing in a CIA.

² A CIA application is complete if the information it contains is sufficient to allow a distributor to complete a CIA.

³ A secondary check to address changes between the preliminary consultation and the CIA application.

Figure 3: CIA Screening Process

Step 1	The applicant begins the process by collecting any needed information. The applicant can submit a PCIR prior to a CIA application to gather potential connection complexity information specific to the generation facility.
Step 2	The applicant submits the completed CIA application package, including completed application form, payment for required studies, attachments, application checklist, and the PCR (if available).
Step 3	The distributor determines if this is the initial application submission or a revised application submission. If it is the initial submission, proceed to step 4. If it is a revised submission, proceed to step 5.
Step 4	For initial application submission, the distributor reviews the application to determine whether it is missing any required information. A review must be completed within 14 days.
Step 5	For revised application submission, the distributor reviews the revised application to determine whether it is missing any required information. A review must be completed within 7 days.
Step 6	For the completeness check outlined in steps 4 and 5, the distributor reviews the application to determine if the information the applicant provided is sufficient to allow the distributor to complete a CIA. If the distributor deems the application incomplete, proceed to step 7. If the distributor deems the application complete, proceed to step 9.
Step 7	For submissions that are not substantially complete, the distributor will notify the applicant of the application deficiencies via email or letter (if the applicant's email is not provided). The deficiency notification shall identify any errors and omissions in the application that would prevent the distributor from proceeding with the CIA. The notification shall outline the available remedies required to have the application deemed substantially complete.
Step 8	On receipt of a deficiency notification, an applicant should review and revise the application to address the deficiencies and resubmit the application. The process allows 14 days for the applicant to resubmit a revised application. If the applicant does not return the revised application within 14 days, it may be treated as a new application once it is resubmitted.
Step 9	For submissions that are deemed substantially complete, the distributor will reconfirm distribution and transmission capacity availability. This is a secondary check to address changes between

	the pre-consultation phase and the CIA application. The distributor may carry out a capacity check before the application completeness review. If capacity is available, proceed to step 10. If capacity is not available, proceed to step 11.
Step 10	The distributor notifies the applicant of within 5 calendar days of when the application is deemed substantially complete. The date the application is deemed substantially complete starts the timed-day window for the distributor to send the completed CIA to the applicant.
Step 11	If capacity is not available, the distributor will notify the applicant that capacity is not available to support the connection and may offer a flexible hosting capacity arrangement if the distributor has this option available. If the distributor and the applicant agree to explore a flexible hosting capacity arrangement, proceed to step 10. If not, process to step 12.
Step 12	The screening process is complete.

5.6 CIA Process for Small, Medium, and Large Generation Facilities

The next step in the connection process is the completion of the CIA. The overall CIA timelines are as follows:

For small generation facilities the distributor shall provide an applicant proposing to connect with its assessment of the impact of the proposed generation facility, a detailed cost estimate of the proposed connection and an offer to connect within:

- a) 60 days of the receipt of the complete application where no distribution system reinforcement or expansion is required; and
- b) 90 days of the receipt of the complete application where a distribution system reinforcement or expansion is required.

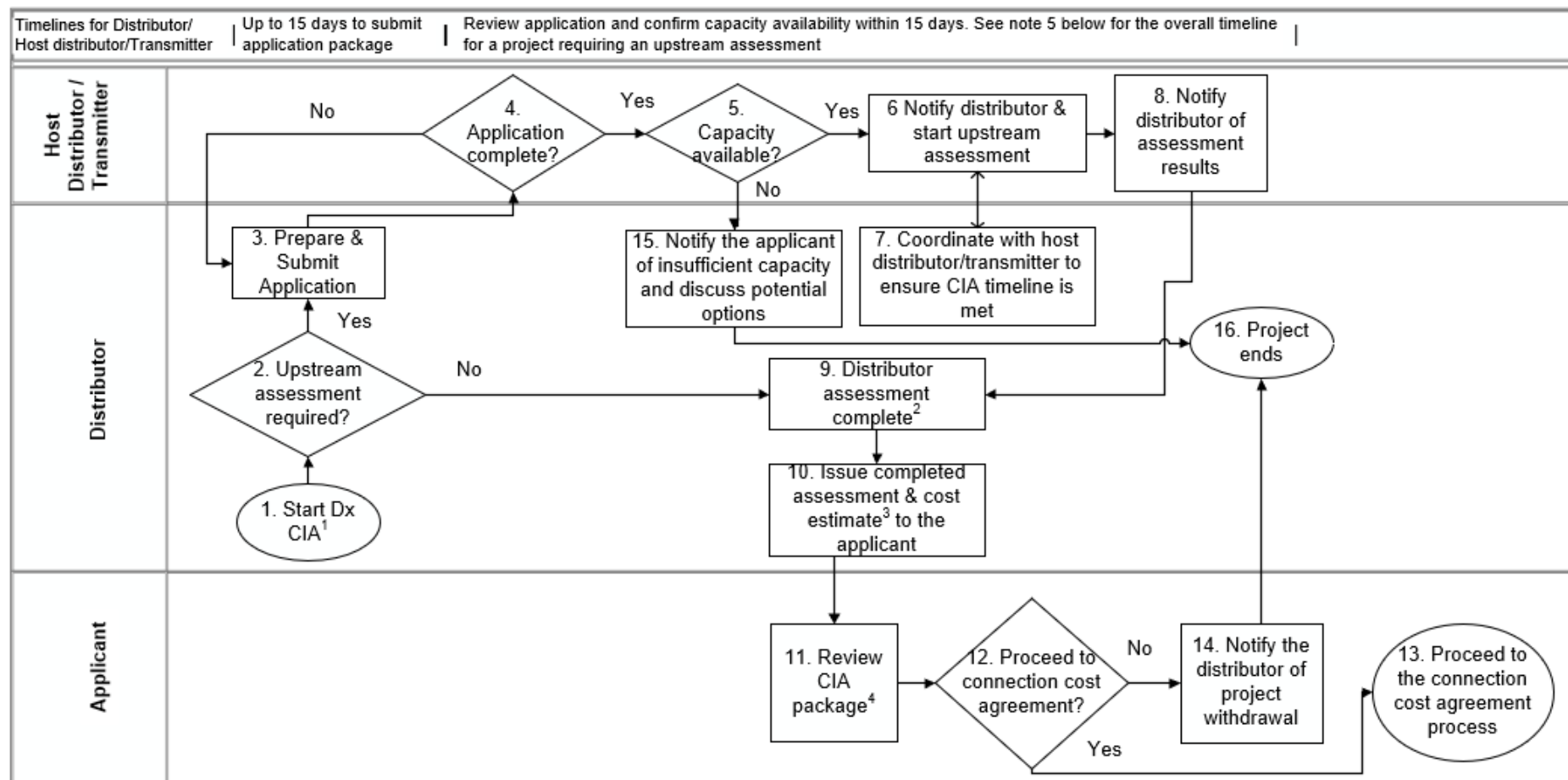
For mid-sized and large generation facilities, after receipt of a complete CIA application, a distributor shall respond with its CIA:

- a) within 60 days for a mid-sized generation facility;
- b) within 90 days for a large generation facility;
- c) within 75 days for a mid-sized generation facility when a host distributor/transmitter CIA is also needed; and
- d) within 105 days for a large generation facility when a host distributor/transmitter CIA is also needed.

The distributor must ensure that only 15 days are added to the overall CIA timeline for mid-sized and large projects when an upstream assessment is required.

The flowchart in Figure 4 describes the process for performing the CIA. The corresponding procedure steps for the distributor and applicant are outlined below the flowchart.

CIA Process: Small, Mid-sized, or Large Generation Facility



¹ Refer to CIA Screening flowchart for prior process steps; ² Distributor consolidates finalized assessments

³ For mid-sized and large generation facility applications, the applicant may elect to obtain a detailed cost estimate which is a separate process that may require a new agreement between the applicant and the distributor, as well as associated fees; ⁴ The applicant to see CIA expiration terms and conditions

⁵ Overall CIA timeline for a project requires an upstream assessment: 60 days (Small DER – no system reinforcement/expansion)/ 90 days (Small DER – with system reinforcement/expansion)/ 75 days (Mid-sized DER) / 105 days (Large DER).

Figure 4: CIA Process for Small, Mid-sized, or Large Generation Facility

Step 1	The distributor initiates the distribution CIA when the CIA application is deemed substantially complete and gathers required information.
Step 2	The distributor determines if an upstream assessment from a host distributor/transmitter is required. If so, proceed to step 3. If not, proceed to step 9.
Step 3	If an upstream assessment is required, the distributor submits the completed CIA application package to the host distributor/transmitter, including completed application form, payment for required studies, attachments, and application checklist. The distributor must submit a completed application as soon as possible and no later than 15 days after starting the downstream CIA to ensure there is adequate time for the host distributor/transmitter to carry out upstream assessment(s) and to consolidate upstream assessment results into the distributor's CIA. The distributor must include information on the expected timeline for the host distributor CIA in its application, in accordance with the project classification and the date the CIA application is deemed substantially complete in Step 1.
Step 4	The host distributor/transmitter reviews the application and determines if the application is complete. If additional information or changes to the application is/are needed, the host distributor/transmitter must inform the distributor as soon as possible, and no later than 15 days. This ensures there is sufficient time for the distributor to submit the revised application package and for the upstream assessment to be completed concurrently with the distributor's CIA.
Step 5	The host distributor/transmitter confirms there is capacity for the connection. This check can take place again during the CIA process. If there is capacity available, proceed to step 6. If not, notify the distributor there is insufficient capacity and discuss the feasibility of a flexible hosting capacity arrangement.
Step 6	If the application is complete and capacity is available, the host distributor/transmitter notifies distributor and begins the upstream assessment.
Step 7	Distributor coordinates with the host distributor/transmitter to ensure the host distributor/transmitter sends the upstream assessment in time for the distributor to complete the distribution CIA within the prescribed CIA timeline. The overall CIA timeline for a project requires an upstream assessment based on the size of the proposed DER:

	<ul style="list-style-type: none"> • Small DER: <ul style="list-style-type: none"> ○ 60 days (without system reinforcement/expansion) ○ 90 days (with system reinforcement/expansion) • Mid-sized DER: 75 days • Large DER: 105 days
Step 8	The host distributor/transmitter notifies distributor of assessment results.
Step 9	Upon receiving upstream assessment results, the distributor completes its CIA.
Step 10	The distributor issues a completed CIA and cost estimate to the applicant. For mid-sized and large generation facility applications, the applicant may elect to obtain a detailed cost estimate which is a separate process that may require a new agreement between the applicant and the distributor, as well as associated fees.
Step 11	The applicant will review the CIA package and signs the connection cost agreement within a prescribed timeline, in accordance with the terms and conditions regarding the expiration of the capacity allocation.
Step 12	The applicant decides whether to proceed to the connection cost agreement to move forward with the connection process. If so, proceed to step 13. If not, proceed to step 15.
Step 13	The applicant proceeds to the connection cost agreement process.
Step 14	If the applicant decides not to proceed, notify the distributor in writing of project withdrawal.
Step 15	Upon receiving the notification from the host distributor/transmitter that there is insufficient capacity in Step 5, the distributor notifies the applicant. The distributor identifies the potential for entering into a flexible hosting capacity arrangement.
Step 16	Project ends due to insufficient capacity, or the applicant's decision not to proceed to the connection cost agreement process.

5.7 Simplified CIA Process

A distributor shall offer a simplified CIA process to small DERs that meet distributor-specific criteria, such as, but not limited to, a nameplate rated capacity threshold, and receive a confirmation from the distributor.

The simplified CIA process is expected to reduce assessment costs and timelines for a subset of small DERs.

Appendix E outlines the provisions for simplified CIA process including: eligibility, timelines, fees, potential outcomes, and processes.

5.8 CIA Process for Flexible Hosting Capacity Arrangements

A distributor may offer a flexible hosting capacity arrangement to a proposed DER when the entire requested capacity is not available in the normal capacity allocation process, and when it is cost effective and technically feasible to proceed. Under a flexible hosting arrangement, the proposed DER's output or operation can be varied according to system operating conditions as agreed to by the distributor and DER customer. This arrangement will enable a distributor to optimize the capacity available on its distribution system and support greater DER adoption, through use of technologies such as a DER management systems (DERMs).

In the case of flexible hosting capacity arrangements, the distributor is not required to adhere to the prescribed timelines for CIA, as mentioned under section 5.6, and capacity allocation timeline or CIA validation timeline, as mentioned under process step 1 of Figure 5. However, the distributor is expected to follow, as closely as possible, the processes set out above in the flow charts. In setting out to offer flexible hosting arrangements, a distributor will establish reasonable timelines for CIA and capacity allocation to ensure timely connections and avoid creating new connection barriers to other prospective DER customers. The distributor will aim to provide the technical requirements and estimated cost for the proposed connections as soon as possible without affecting the timelines for other connections that are ahead of the applicant.

The distributor must inform prospective DER customers and include information in the DER connection section of its website about whether they offer flexible hosting capacity arrangements. The distributor will also confirm the feasibility through the preliminary consultation and CIA processes.

5.9 Connection Cost Estimates

When a distributor provides the applicant with the technical requirements for the proposed connection as a result of a CIA, the distributor shall also provide a cost estimate for the connection. At this stage, the cost is usually based on typical pricing, with the distributor indicating the anticipated level of uncertainty in the estimate.

5.9.1 Cost estimate timeline extension for a mid-sized or large generation facility

During the CIA process, when a distributor anticipates needing additional time to carry out a cost estimate for a mid-sized or large generation facility, it may assess whether the project meets the criteria below for a timeline extension. Upon confirmation, the distributor must document the rationale for the extension, detailing how the criteria are met, and inform the applicant of the need for extra time, including the rationale for the extension and the revised timeline for the cost estimate. This extension does not change the prescribed timeline the distributor must adhere to when providing the applicant with the technical requirements for connecting to the distributor's system.

The following criteria must be used by the distributor to assess whether a timeline extension can be applied to a specific project:

1. In comparison to historical projects, the project must include one or more connection work items that are atypical or complex where the distributor:
 - a) needs to carry out additional technical and cost evaluation of various options to determine the most suitable and cost-effective solution for the applicant, or
 - b) cannot obtain the estimated cost from potential vendors or through information sharing with other distributors in time, or
 - c) must carry out additional studies to implement a complex operational arrangement requested by the applicant such as islanding mode to enable microgrid configuration

and
2. The additional days the distributor plans to take must lead to a meaningful improvement in the accuracy of the cost estimate. If the potential cost difference is not material, the distributor should provide the cost estimate simultaneously with the technical requirements for connection.

A distributor can take up to 30 days after issuing the CIA with the technical requirements for a connection, to complete the cost estimate for a mid-sized or large project that meets both criteria listed above. The distributor must indicate on its website that a project that meets the criteria may require additional time for the cost estimate.

5.9.2 Option to Request a More Detailed Cost Estimate

Upon receipt of the CIA, an applicant for a mid-sized or large generation facility has the option to request a more detailed cost estimate prior to entering into a Connection Cost Agreement.

To obtain a detailed estimate, the applicant must make a written request for the estimate. If necessary, the distributor and applicant may enter into an agreement for the preparation of the detailed cost estimate, and the applicant

may be responsible for paying the distributor's costs for preparation of the detailed cost estimate. Within 10 days of receiving the payment from the applicant for a mid-sized or large DER, the distributor shall inform the host distributor/transmitter that it is preparing an estimate. For a small DER, the distributor shall only inform the host distributor/transmitter, within 10 days of receiving payment, if it believes their system may be impacted by the proposed DER. The distributor shall provide the applicant with the detailed cost estimate and an offer to connect by the later of 90 days after the receipt of payment from the applicant and 30 days after the receipt of comments from a host distributor/transmitter.

When the proposed connection is under a flexible hosting capacity arrangement, the distributor will make best effort to follow the timelines mentioned above.

6. Connection Cost Agreement

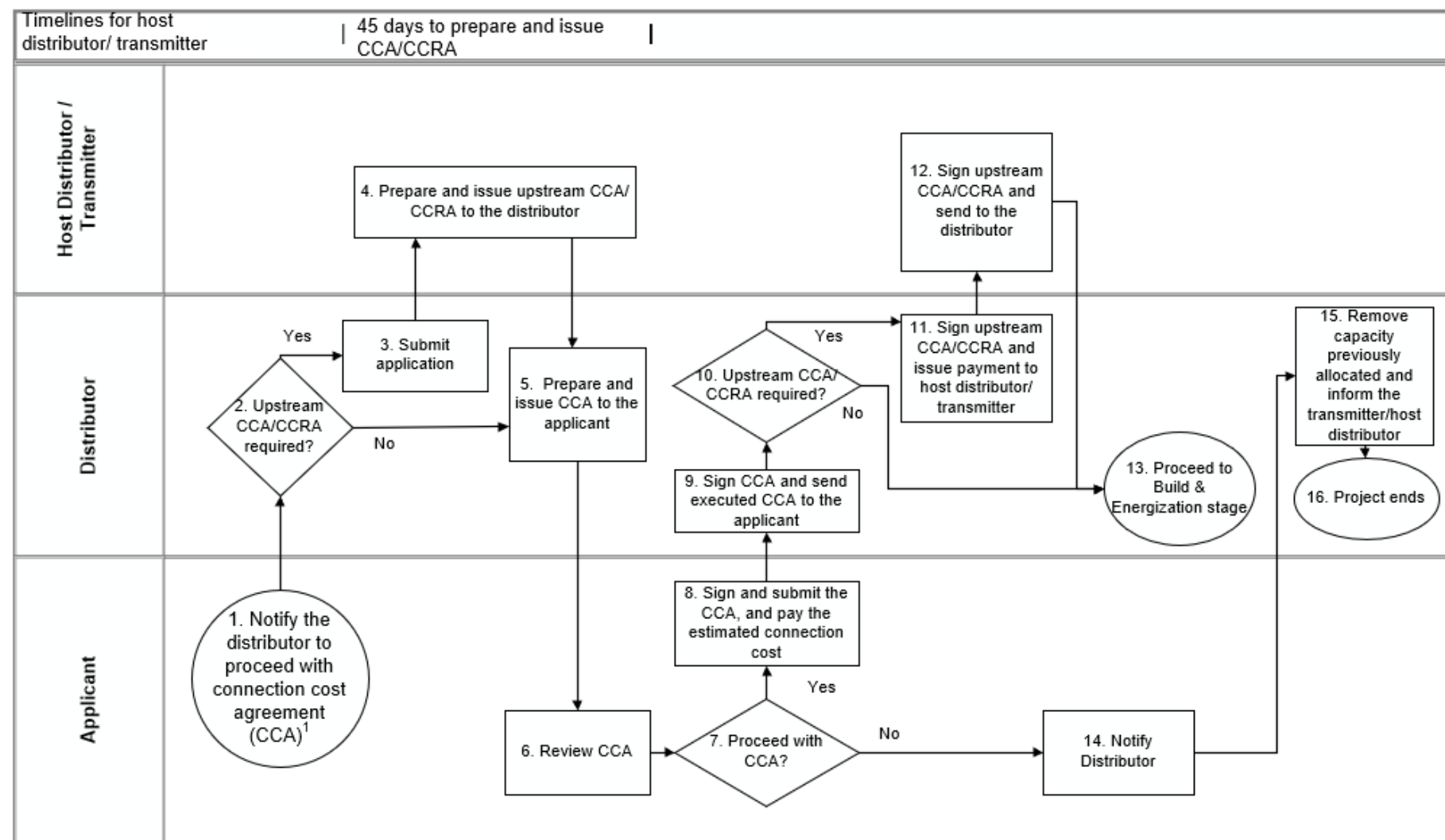
Once the distributor and transmitter or host distributor have completed their respective CIAs and cost estimates, the process moves to the Connection Cost Agreement phase and then moves to the Build & Energization phase which requires a Connection Agreement.

6.1. Connection Cost Agreement

The Connection Cost Agreement (CCA) sets out the scope of work and the associated cost the distributor will recover from the applicant to connect the project to the distribution system. If the connection affects a host distributor's distribution system or the transmission system, the host distributor will complete a CIA and require a CCA while the transmitter will complete a transmitter study and require a Connection and Cost Recovery Agreement (CCRA). In cases where a CCRA is required, the distributor will include the costs of any transmission work in its own CCA. It is the distributor's responsibility to contract with and pay the transmitter and then recover those costs from the applicant. The OEB does not prescribe specific forms for CCA and CCRA.

Figure 5 outlines the interaction between the applicant, distributor, and host distributor/transmitter when multiple assessments and agreements are involved. The corresponding process steps are provided below the figure.

Connection Cost Agreement



¹ If the CCA is not signed within 6 months for small and mid-sized generation facilities and 9 months or 17 months for large generation facilities, the capacity allocation will be removed and the CIA will become invalid. The applicant may need to complete a CCA application form.

Figure 5: Connection Cost Agreement Process

Step 1	<p>The applicant notifies the distributor that it wishes to proceed with the CCA process. To ensure the capacity allocation is not lost and the CIA remains valid, the applicant should initiate the CCA process promptly. This allows sufficient time for all parties to prepare and sign the CCA before the prescribed deadlines. The CCA must be signed within:</p> <ul style="list-style-type: none"> - 6 months for small and mid-sized generation facilities - 9 months for large generation facilities if a transmission system impact assessment is required; or - 17 months for large generation facilities if transmission upgrades are required. <p>from the date the applicant receives the technical requirements for the connection under the CIA process.</p>
Step 2	The distributor determines whether an upstream CCA from a host distributor or a CCRA from a transmitter is needed. If upstream cost agreement is needed, proceed to step 3. If not, proceed to step 5.
Step 3	The distributor submits upstream CCA/CCRA application to host distributor/transmitter and coordinates the effort and timeline to ensure the CIA does not expire before the applicant has adequate time to review and sign the CCA.
Step 4	The host distributor/transmitter prepares and issues an upstream CCA/CCRA. Host distributor and transmitter (if applicable) have up to 45 days in total to complete this step.
Step 5	The distributor reviews the upstream CCA/CCRA, finalizes and issues a complete CCA to the applicant.
Step 6	The applicant reviews the complete CCA and seeks clarification from the distributor if required.
Step 7	The applicant decides whether to sign the CCA. If yes, proceed to step 8. If no, proceed to step 14.
Step 8	The applicant signs and submits the CCA and pays the estimated connection cost to the distributor.
Step 9	The distributor acknowledges receipt of the CCA and sends the executed CCA to the applicant.
Step 10	If an upstream CCA/CCRA is required, the distributor proceeds to

	step 11. If not, proceed to step 13.
Step 11	The distributor signs upstream CCA/CCRA and issues required payment to the host distributor/transmitter.
Step 12	The host distributor/transmitter signs the upstream CCA/CCRA and sends the executed upstream CCA/CCRA to the distributor.
Step 13	Proceed to the build and energization stage.
Step 14	The applicant notifies the distributor of the decision not to proceed with the CCA.
Step 15	Upon receiving confirmation that the applicant is no longer proceeding with the CCA, the distributor will release the capacity previously allocated to the project and notify the host distributor/transmitter.
Step 16	The project ends.

6.2 Connection Cost Responsibility (CCR)

Connection cost responsibility is outlined in Chapter 3 and Appendix B of the DSC. The distributor shall clearly outline the connection cost responsibility in the CCA.

7. Build and Energization

Once the CCA is executed, the distributor assigns a project manager and arranges for a kick-off meeting with the applicant within 45 days. The applicant is responsible to provide any required information or documents to support the distributor's engineering design review. This review shall be completed within 1 month after the distributor receives all the required information / documents. The applicant may only begin construction as agreed upon by the distributor. The Build and Energization process flowchart begins with the assignment of the distributor project manager at the conclusion of the CCA phase. The process flowchart is outlined in Figure 6: Build and Energization Process. The corresponding process steps for the distributor, host distributor, transmitter and applicant are detailed thereafter.

7.1 Overall Build and Energization Process

Build and Energization Process

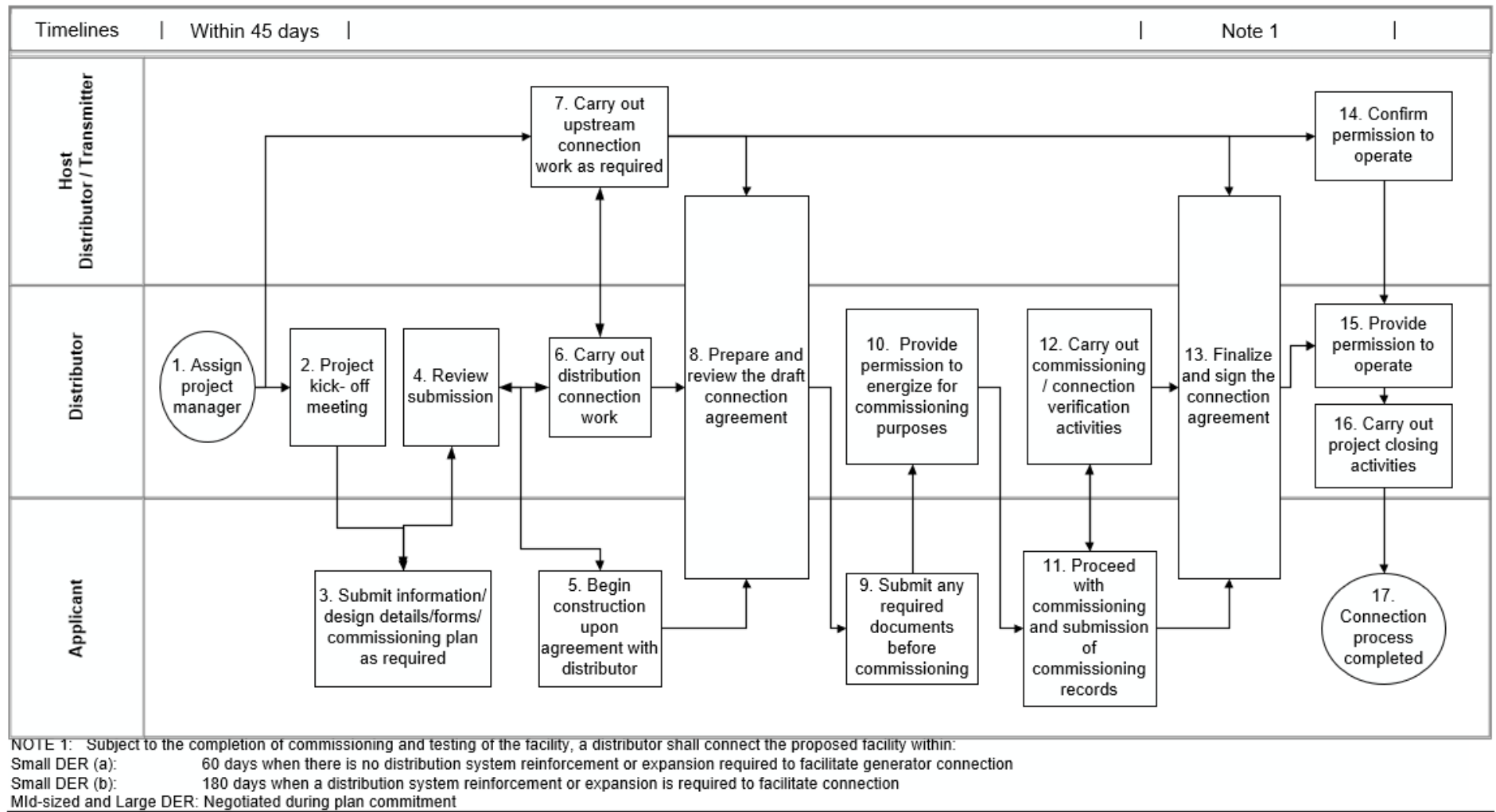


Figure 6: Build and Energization Process

Step 1	The distributor assigns a project manager who will coordinate connection work with the applicant. If upstream connection work is required, the distributor's project manager will coordinate connection work with the host distributor/transmitter.
Step 2	The distributor's project manager will complete a project kick-off meeting with all parties involved to discuss facility design, single line diagram, protections and controls, cost estimates, commissioning requirements and the project schedule including target in-service date.
Step 3	<p>The applicant shall, at the distributor's request, submit construction documents, including but not limited to the following:</p> <ul style="list-style-type: none"> (a) Project details including single line diagrams (SLDs), proposed project schedule, and targeted in-service date. The targeted in-service date must be no later than five (5) years for water power projects or three (3) years for all other types of projects from the initial date of connection application, or in accordance with the timelines in an executed IESO contract. (b) Commissioning plan (c) Summary of testing results, including any certificates of inspection or other applicable authorizations or approvals certifying that any of the applicant's new, modified or replacement facilities have passed the relevant tests and comply with all applicable instruments and standards.
Step 4	Once the applicant receives any applicable permits and upon agreement with the distributor, the applicant begins construction.
Step 5	Once the applicant receives any applicable permits and upon agreement with the distributor, the applicant begins construction.
Step 6	The distributor carries out any connection work required and coordinates with the host distributor/transmitter if upstream work is required. The distributor proceeds to step 18
Step 7	The host distributor/transmitter carries out any upstream connection work (if required).
Step 8	The distributor prepares and discusses the draft connection agreement with the applicant. The applicant reviews the terms and conditions in the draft connection agreement and discusses any

	necessary changes with the distributor. If required, the distributor will work with the host distributor/transmitter to prepare the upstream connection agreement between the distributor and the host distributor/transmitter.
Step 9	The applicant submits any required documents for facility energization/commissioning, including the commissioning plan, to the distributor.
Step 10	The distributor reviews the documents required for commissioning, and upon approval, provides the applicant permission to energize for commissioning purposes.
Step 11	The applicant proceeds with commissioning of the DER. Upon completion, the applicant submits the commissioning records to the distributor.
Step 12	The distributor carries out commissioning/connection verification activities.
Step 13	The distributor coordinates with the applicant and finalize any operating parameters and the connection agreement. Both the distributor and the applicant will then sign the agreement. If required, the distributor will work with the host distributor/transmitter to finalize and sign the upstream connection agreement between the distributor and the host distributor/transmitter.
Step 14	If necessary, the distributor coordinates with the host distributor/transmitter to confirm the permission to operate required for step 15.
Step 15	<p>Upon confirming that the applicant has received all applicable permits, the distributor provides the applicant permission to operate when all connection work items have been completed, and all connection requirements have been satisfied. The distributor proceeds to step 16.</p> <p>If the applicant has not completed its portion of connection work items or executed all planned commissioning and verification activities, but the DER facility can operate without adversely affecting the reliability and safety of the distribution system, the distributor may grant a permission to operate. When doing so, the distributor shall provide the applicant with a list of the incomplete tasks. The distributor and the applicant must agree</p>

	on the terms and conditions for completing these tasks, including a timeline. During this agreed period, the applicant is responsible for finalizing the remaining tasks.
Step 16	The distributor carries out project closing activities as described under section 7.4.
Step 17	Connection process completed.

7.2 Commissioning

A distributor shall establish and maintain clear commissioning requirements and processes that are proportionate with the risks associated with projects of different sizes and characteristics. The distributor shall post general commissioning requirements and processes electronically on the distributor's website. Subject to safety and reliability requirements, the distributor shall make best efforts to minimize commissioning costs for applicants, such as only carrying out field visit when needed.

When a distributor requires an applicant of a proposed DER facility to comply with a specific commissioning standard or technical document, the distributor shall periodically review the document to implement newer versions if available or to assess its continued applicability.

7.2.1 Simplified commissioning and verification

A distributor shall offer a simplified commissioning and verification process to small DERs that meet the distributor-specific criteria, such as, but not limited to, a nameplate rated capacity threshold. The simplified process is expected to reduce connection costs and timelines for a subset of small DERs.

When a distributor requires an applicant of a DER facility that meets the criteria for a simplified process to perform any commissioning and verification tasks, the distributor shall provide the applicant with a simplified commissioning and verification form. This form must be based on the simplified template in Appendix F and adhere to the requirements and expectations outlined therein.

7.3 Connection Agreement

A Connection Agreement between a distributor and an applicant outlines specific terms and conditions governing the connection to the distributor's distribution system. Appendix E of the DSC provides forms of connection agreements for micro, small, and mid-size generation facilities.

Table 2: Other Potential Agreements

Agreement Name	Parties	Purpose
Construction Agreement (e.g. Connection Cost Agreement)	Distributor, Generator	Describes obligations of the distributor and the generator to complete connection, including terms of cost recovery.
Construction Agreement (e.g. Connection Cost Recovery Agreement)	Distributor, Transmitter)	<u>As specified in the Transmission System Code</u> In the event a transmission system requires modifications to connect the generator, this document describes the obligations of the distributor and the transmitter to complete the connection, including terms of cost recovery.
Conditions of Service	Distributor, Generator	In the event that the generator is also a load customer of the distributor, this document describes terms and applicable rates.
Additional Operations Agreement (if required) ³	Distributor, Generator	<u>Within limits of permission under of the DSC</u> Modifications as necessary to existing Connection Agreement to include provisions for safe and effective operation in presence of the generator on the distribution system.

When a distributor and an applicant enter into a flexible hosting capacity arrangement, the distributor shall clearly outline in Schedule D of the connection agreement set out in Appendix E of the DSC for that size of generation facility all system conditions, operating requirements and/or contractual terms that will require the output or operation of the generation facility to be varied.

7.4 Project Completion

The distributor provides a connection cost report or connection cost true-up and processes potential deposit refund as described under the DSC section 6.2.18F. The

³ Additional Operations Agreement(s) or Construction Agreement(s) may be required where other parties are affected by generation connection, e.g.: distributors.

distributor will also carry out a review to ensure all connection work items and requirements have been completed and closes the project accordingly.

If the distributor provides a permission to operate when the applicant has not completed its portion of connection work items or executed all planned commissioning and verification activities and the applicant does not meet the terms and conditions agreed to under the process step 15 of Figure 6, the distributor may revoke the permission to operate until the applicant fulfil the agreement.

Once the connection process is complete, the applicant operates and maintains the proposed DER.

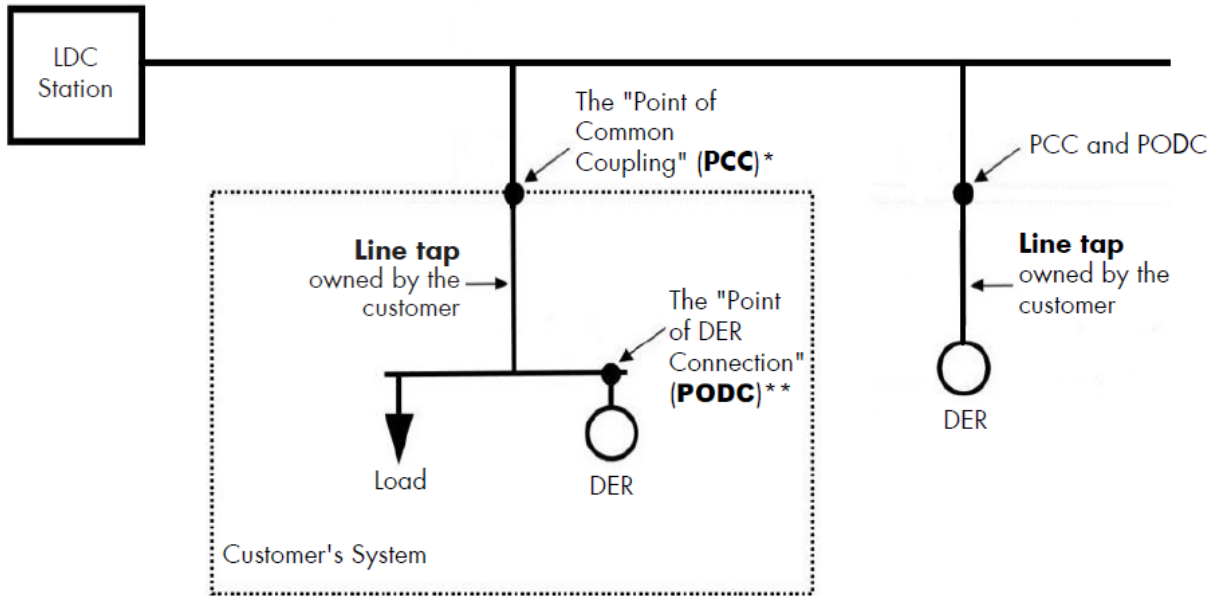
8. Glossary

Point of Common Coupling (PCC)

The point where the distributor's distribution system ends, and the new DER's connection assets or the existing load customer's connection assets begin. This is equivalent to the DSC definition for Point of Supply. The PCC is shown in Figure 7: PCC vs PODC (Without Distributor-Owned Line Expansion) and Figure 8: PCC vs PODC (With New Distributor-Owned Line Expansion), in relation to assets owned by the distributor (Local Distribution Company, LDC) and the customer.

Point of DER Connection (PODC)

The point where the DER connects with the DER's connection assets as outlined in Figure 7 and Figure 8



*PCC: the point where the customer facility connects to the LDC owned system

**PODC: the point where the DER unit(s)'s interconnection system connects the DER unit(s) to the DER facility.

Figure 7: PCC vs PODC (Without Distributor-Owned Line Expansion)

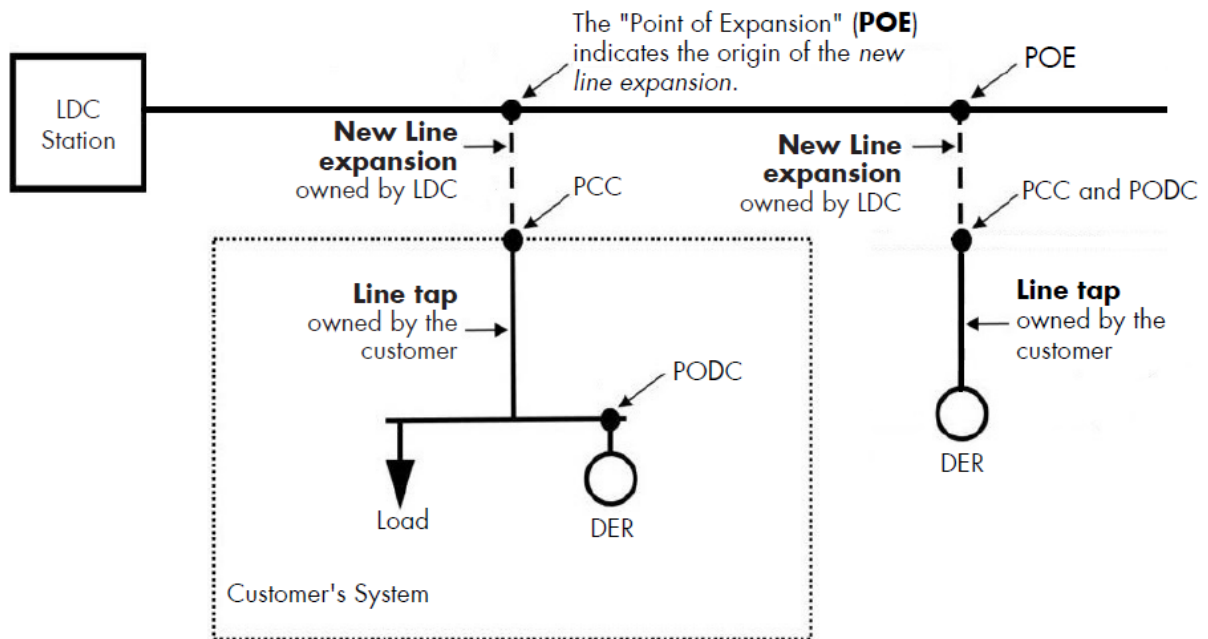


Figure 8: PCC vs PODC (With New Distributor-Owned Line Expansion)

9. Appendices

- A. Sample Protection Philosophy
- B. Single Line Diagrams
- C. Standardized Form Templates
 - i. Preliminary Consultation Information Request Template
 - ii. Preliminary Consultation Information Request Sample
 - iii. Preliminary Consultation Report Template
 - iv. Preliminary Consultation Report Sample
 - v. Connection Impact Assessment Application Template
 - vi. Connection Impact Assessment Application Instructions
 - vii. Connection Impact Assessment Application Sample
 - viii. Connection Impact Assessment Modification Guide
- D. DER Classification
- E. Simplified Connection Impact Assessment
- F. Simplified Commissioning and Verification Template

Appendix A - Sample Protection Philosophy for Battery Energy Storage System

Sample Protection Philosophy for Distributed Energy Resource Proponents Applying for Connection

This document is a summary of a sample protection philosophy for non-exporting, inverter-based (NE/I) connections including storage, solar, and wind. The OEB intends it as a guide for applicants regarding the kinds of protections, and particularly the categories of protections, that distributors will require for connection.

This is one example of a protection philosophy that would meet the requirements for a complete protection philosophy for the purpose of a CIA application⁴. Other philosophies may also meet the standards. It provides guidance to a distributed energy resource (DER) proponent on good utility practice as it relates to protection requirements of non-exporting, inverter-based (NE/I) DERs. To form a protection scheme, all the elements for each category within any given protection philosophy are requirements.

This document is not an approval for connection. This information should help applicants file better and more complete applications for connection. An applicant will need to submit detailed protection settings after the utility has completed the impact assessment of the submitted connection application.

The standards and certification testing referenced in this document should be read as referring to the current versions of these standards at time of reading.

Sample Protection Philosophy for Non-exporting Inverter-based Sources

Project Name:

Project ID#:

Project Type:

Capacity:

Connection feeder (optional):

In compliance with the technical interconnection requirements of the local distribution company for which this project will interconnect, the protection system of the connection will be designed to:

- Detect internal faults with the generator facility, downstream of the Point of Common Coupling (PCC), and automatically disconnect the NE/I source
- Detect external faults on the utility feeder and automatically disconnect the NE/I source
- Detect islanding conditions and disconnect the NE/I source
- Detect export of power from the NE/I source to the utility feeder and automatically disconnect the NE/I source

Internal Faults Within the Generator Facility

The following protections are in place to protect against internal faults resulting from the NE/I source:

⁴ The contents of this document, although intended as guidance, conform to the interconnection and approval requirements prevalent at the time of its issuance. At all times, the current versions of relevant codes and standards govern.

- **Multi-Function Relay**-At the PCC, a multi-function relay will be installed to monitor internal faults resulting from the NE/I source. The 52 Trip Breaker will trip if it detects the following:
 - 25 - Synchronization Check
 - 27 - Undervoltage
 - 59 - Overvoltage
 - 81O/U - Under and Over Frequency
 - ID -Active Anti-Islanding
- **Inverter Breakers** - Each inverter is equipped with an AC breaker at the output of the inverter providing additional overcurrent protection
- **Facility Overcurrent Protection** - All circuits within the facility are protected from both phase-to-phase and phase-to-ground faults by appropriate overcurrent protection devices. Fuses are sized to clear under fault conditions within the generator facility

External Phase and Ground Faults in the Distribution System

The following protections are in place to protect against external faults resulting from the utility feeder:

- **Multi-Function Relay** - At the main utility service, prior to the first facility load, a multi-function relay will be installed to monitor faults from the utility feeder. The 52 Trip Breaker at the NE/I source PCC will trip under the following faults:
 - 27 - Undervoltage
 - 32R- Reverse Power
 - 50/51- Overcurrent
 - 59 - Overvoltage
 - 81O/U - Under and Over Frequency
 - 67 - Directional
- **Inverter Protection:** The inverters proposed for this project are certified to UL 1741, IEEE 1547, CSA C22.2 107.1-01 standards⁵ and will behave accordingly.

Anti-Islanding

- The Energy Resource Facility will operate in a grid following mode and will not operate islanded.
- **Anti-Islanding Inverters** -The NE/I source inverters contain both passive and active anti- islanding protection as required by IEEE 1547 and UL1741 SA. If the utility normal power supply is interrupted, the inverters detect the loss of power and disconnect.

Reverse Power

- **Reverse Power Protection** - In addition to the multi-function relay at the utility supply monitoring reverse power (32R), the load is continually monitored to ensure the NE/I source discharge is below the consumption of the facility. This additionally protects

⁵ All references to standards or testing certifications should be read as the most current version.

against power injection to the utility grid.

Directional Overcurrent

- **Directional overcurrent protection** - Directional overcurrent relays are normally used on incoming line circuit breakers on buses which have two or more sources. They are connected to trip an incoming line breaker for fault current flow back into the source, so that a fault on one source is not fed by the other sources.

Special Comment Regarding Inverter Based Generation

The inverters specified for this project have a limited fault current contribution.

- Because inverters are current-limited devices, unlike rotating generators, the fault current is very close to the maximum output current, limiting the fault current in the system to 120% -140% of FLA.

Breaker Failure Scheme (Facilities with an aggregate output > 500kW)

In the event that 52-A fails to open when intertie protection relay calls for a trip, 52-B will instantaneously trip and lock out.

Reconnection

Manual reconnection: There is no automatic reconnection scheme at this facility. A manual reconnection will only be executed when given permission by the respective controlling authority.

OR

Automatic reconnection scheme: Intertie protection relay will initiate automatic reconnection of DER only after a fault event has occurred on the utility feeder and not after a fault event within the DER facility. Stable voltage and frequency measurement within ranges and for time period stipulated in the technical interconnection requirements will be met prior to automatic reconnection. Internal faults will be distinguished from external faults by pickup of directional overcurrent 67/67N protection element looking into DER facility. This will ensure reconnection into facility fault is prohibited by blocking of automatic reconnection scheme for facility faults.

Open Phase Protection

This project consists of multiple 1-phase inverters connecting to a 3-phase service or multiple 3-phase inverters connecting to a 3-phase service; therefore, open phase protection will be provided by 46 and/or 47 element(s) in the intertie protection relay to ensure the BESS maintains a balanced 3-phase output and detects loss of voltage in one or more phases and will trip the entire generating facility upon detection of such.

OR

Attached is a signed letter from the inverter manufacturer stating that a facility comprising of multiple inverters is capable of maintaining a balanced 3-phase output and will detect loss of voltage in one or more phases and will trip the entire

generating facility upon detection of such.

Communications and Transfer Trip/DGEO (if applicable)

Summarize communication systems and transfer trip/DGEO timing (if applicable).

Table 1: Protection Summary Matrix

Description	IEEE Device	Internal Faults	External Faults	Anti-Islanding	Reverse Power	Trips 52-A	Trips 52-B	Disables Inverters
Over-Voltage	59	X	X	X		X		X
Under-Voltage	27	X	X	X		X		X
Over-Frequency	81O	X	X	X		X		X
Under-Frequency	81U	X	X	X		X		X
Instantaneous Over-Current Phase	50	X	X			X		X
Timed Over-Current Phase	51	X	X			X		X
Reverse Power	32R			X	X	X		
Breaker Fail	50BF						X	
Active Anti-Islanding	IEEE 1547			X				X

Table 2: Protection Elements

Protection Element Function	Device#	Feeder Protection Relay/Shunt Trip	IEEE 1741 SA Inverter
Over-Voltage	59	X	Y
Under-Voltage	27	X	Y
Over-Frequency	81O	X	Y
Under-Frequency	81U	X	Y
Synchronization Check	25	X	Y
Reverse Power	32R	X	
Overcurrent	50/51	X	Y
Directional	67	X	
Active Anti-islanding	ID		X

X = Primary

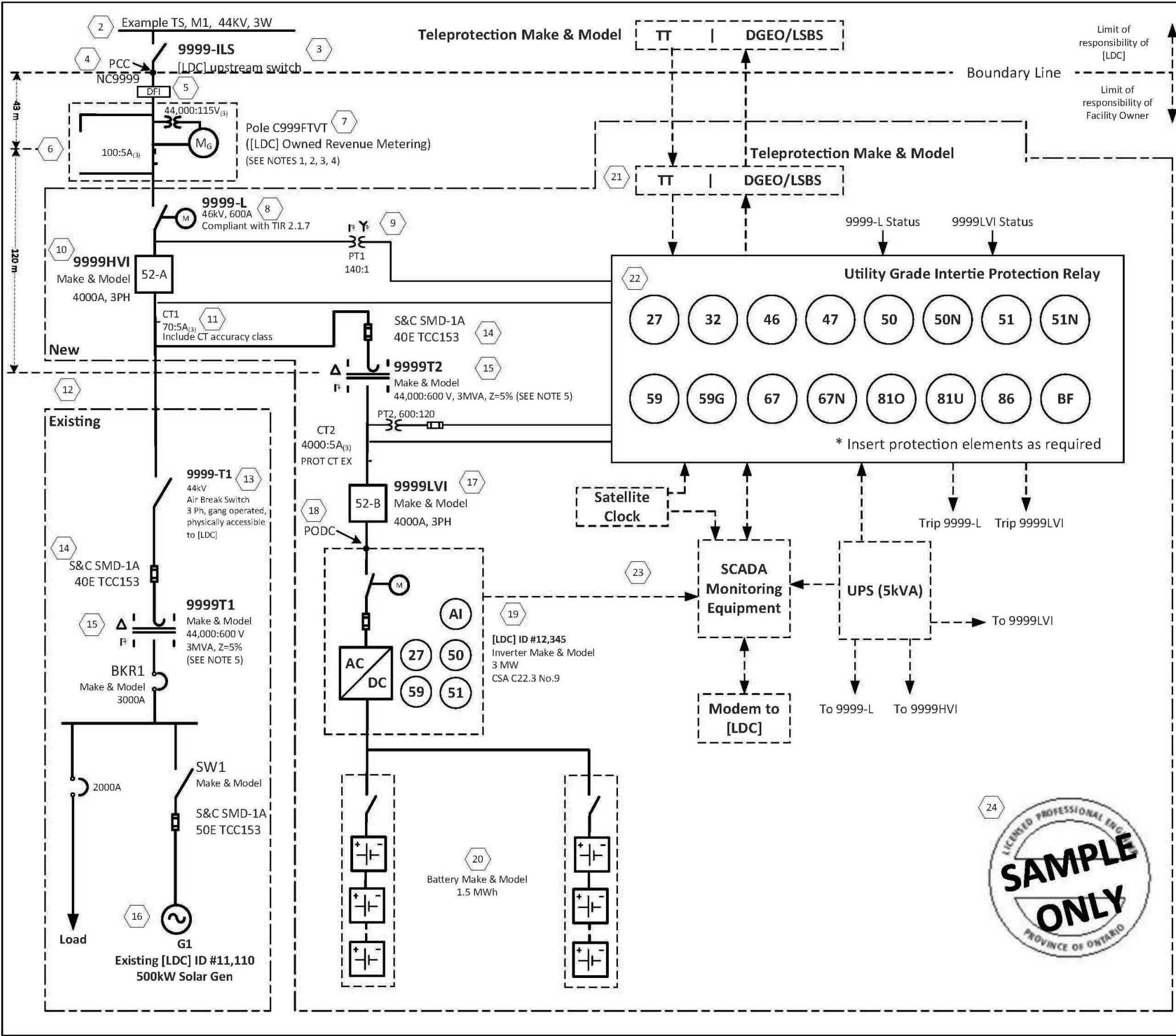
Y = Secondary

Appendix B - Sample Single Line Diagram

Item Number	Information to Include
1	<p>The title block should include:</p> <ul style="list-style-type: none"> • The legal name of the facility owner • Facility address/location • Project purpose • LDC assigned project ID • Revision history
2	<ul style="list-style-type: none"> • State utility's distribution and transmission facility (station) name(s) • State the name of utility's station feeder to which the generator is connected • State the nominal distribution supply voltage (eg. 44kV) • State the information for the upstream and downstream switches closest to the PCC (nomenclature, type, etc.)
3	<ul style="list-style-type: none"> • LDC to assign nomenclature for this switch. <p>Note: initial submission can have the consultant/customer assigned nomenclature if a LDC designation is not yet available. Later, the customer is assigned a LDC designation, which should be added to the SLD and resubmitted to LDC before the SLD is considered finalized. The consultant/customer then has the option to replace the initial designation with LDC designation or keep both. Ensure the LDC designation is clearly marked to differentiate it from the consultant/customer designation (bolded, in brackets, etc). Item 3 has an example showing only LDC designation, while item 17 shows an alternate method that shows both designations. LDC only refers to the LDC designation when dealing with the customer. Example, when witnessing the switch used for work protection as per the LDC TIR. When submitting the new SLD with the changes, a higher revision number of the SLD should be used to track the changes. See SLD example.</p>
4	<ul style="list-style-type: none"> • The Point of Common Coupling (PCC) is the point of demarcation between LDC and the DER. It is the point where the DER is to connect to LDC's Distribution System. PCC demarcation point • LDC designated facility operating designation (NCXXXX) • If the nomenclature is not included, the SLD is considered incomplete.
5	<ul style="list-style-type: none"> • Fault indicators with directional functionality are required for each phase between the PCC and the first pole on the customer owned new line and should be visible from the PCC location.
6	<ul style="list-style-type: none"> • Provide the length(s), ownership, and size(s) of line(s) from PCC to the meter. This data is used for SSLA determination. The metering point is at the location of the CT's and not the physical meter. • To comply with LDC TIR •
8	<ul style="list-style-type: none"> • State the number of CTs being used • State the CT ratios including both ratios if they are dual ratio • State the in-use CT ratio if dual ratio • State the ANSI/CSA CT accuracy class information (provide example on SLD after)
9	<ul style="list-style-type: none"> • Clearly identify existing and new facility if applicable

Item Number	Information to Include
	<ul style="list-style-type: none"> If a new equipment (ex. transformer) is being replaced in an existing facility, it should be indicated Ensure all existing generators or backup generators are shown
10	<ul style="list-style-type: none"> LDC designation must be shown Voltage rating Current rating Type of switch Single/3 phase Physically accessible to LDC <p>Alternatively, switch information can be shown on SLD as per item number 14</p>
11	<p>Fuse information to include:</p> <ul style="list-style-type: none"> Fuse rating Manufacturer make/model Fuse type on the SLD Example: S&C SMD-1A 50E TCC153
12	<p>Transformer Information to include:</p> <ul style="list-style-type: none"> Winding configuration LDC designation Manufacturer make/model Rating Ratio Transformer ownership
13	<ul style="list-style-type: none"> Please detail where the existing FIT/micro-FIT generator/meter are connected. Include LDC ID Show existing load Capacity Type <p>For new generators:</p> <ul style="list-style-type: none"> Show the generator(s) connection(s) to the power transformer(s) Show the operating nomenclature of the generator(s) (e.g. G1, G2, etc.) State the nameplate capacity of the generator or individual generators, where there is more than one, in kVA / MVA. or kW /MW For solar, state the size(s) and number of inverter(s) State the operating power factor (PF) State connection type (Wye, Delta, etc.) and indicate grounding State whether the generator is induction or synchronous type.
14	<p>This is an alternate way to item number 10 to show the information for a switch</p> <ul style="list-style-type: none"> LDC designation Voltage rating Current rating Indicate which device is compliant with isolation device requirements
15	<ul style="list-style-type: none"> To comply with LDC TIR
16	See item number 12

Item Number	Information to Include
17	<ul style="list-style-type: none"> • LDC designation • Manufacturer make/model • Current rating • Single/3 phase <p>Note: initial submission can have the consultant/customer assigned nomenclature if a LDC designation is not yet available. Later, the customer is assigned a LDC designation, which should be added to the SLD and resubmitted to LDC before the SLD is considered finalized. The consultant/customer then has the option to replace the initial designation with LDC designation or keep both. Ensure the LDC designation is clearly marked to differentiate it from the consultant/customer designation (bolded, in brackets, etc). Item 3 has an example showing only LDC designation, while item 17 shows an alternate method that shows both designations. LDC only refers to the LDC designation when dealing with the customer. Example, when witnessing the switch used for work protection as per the LDC TIR. When submitting the new SLD with the changes, a higher revision number of the SLD should be used to track the changes. See SLD example.</p>
18	<ul style="list-style-type: none"> • The Point of DER Connection (POC) is the point where DER unit(s)'s interconnection system connects the DER unit(s) to the DER facility. • Depending on the facility, it can be the same as the PCC
19	<ul style="list-style-type: none"> • Include LDC Project ID # • Inverter manufacturer make/model • MW rating • IEEE/ANSI protection elements need to be noted for the customer's inverters • Include CSA Certification
20	<ul style="list-style-type: none"> • Manufacture make/model • MWh rating • Include information for gross load billing where required
21	<ul style="list-style-type: none"> • Teleportation equipment make/model • Flow of information/signals
22	<ul style="list-style-type: none"> • Relay manufacturer make/model • ANSI Device numbers used • Flow of information signals
23	Flow of signals between devices
24	<p>Other general information required:</p> <ul style="list-style-type: none"> • SLD must be stamped and signed by a Registered Professional Engineer in the Province of Ontario • All information on the SLD must be legible, and of a reasonably sized font for ease of reading • The Connection Impact Assessment provides details regarding the type and configuration of isolation devices required. • The DER facility must comply with all applicable interconnection requirements specified in the "Distributed Generation Technical Interconnection Requirements Interconnections at Voltages 50kV and Below" (TIR).



SLD CHECKLIST

- 1. The legal name of the facility owner, facility address/location, project purpose, [LDC] assigned project ID, and revision history should be included in the title block
- 2. See attached table for remaining important items.
- 3. Note, please do not include the hex markers on the official SLD submitted to [LDC]. They are shown here for illustration only

NOTES:

1. Colour code of the revenue metering instrument transformers secondary wiring shall match the overhead phase conductors
2. 100:5A, Measurement of Canada approved current transformer AE 1653, 0.15B0.9 CCRF=1.5
3. 44000:115V Measurement of Canada approved voltage transformer AE 2160r3, 0.3WXY, 200kV BIL
4. Compliant with Settlements & Revenue Metering SLD Requirements Revision 1.5.1
5. Transformer owned by ABC Inc

DISCLAIMER: This sample SLD shall only be used to highlight some of the main information that must be shown on the SLD submitted to [LDC]. All design decisions must be made by the proponent and meet the minimum requirement set forth in the TIR. Due to limited space, only some of the required items are shown. The rest of the information is indicated in the notes related to each number.

01	Revised as per [LDC] comments	18/11/2020
00	Initial SLD for [LDC] review	13/07/2020
NO	REVISION/ISSUE	DATE
PROJECT: Customer Name Customer Address Line 1 Customer Address Line 2 Project Purpose [LDC] Project ID: #12,345 Other Info		
ABC Inc. LOGO ABC Inc.		
DWG NAME: BEHIND THE METER EXAMPLE SLD		
DATE: DD/MM/YYYY	DRAWN:	CHECKED:
18/11/2020	S. M.	S. H.
DWG NO:	SHEET NO:	REV NO:
18/11/2020	1 of 1	01

Appendix C - Standardized Form Templates

To facilitate distributors uploading these documents to their website the following templates are posted on the OEB website at: <https://www.oeb.ca/regulatory-rules-and-documents/rules-codes-and-requirements/distribution-system-code-dsc>

- i. Preliminary Consultation Information Request Template
- ii. Preliminary Consultation Information Request Sample
- iii. Preliminary Consultation Report Template
- iv. Preliminary Consultation Report Sample
- v. Connection Impact Assessment Application Template
- vi. Connection Impact Assessment Application Instructions
- vii. Connection Impact Assessment Application Sample
- viii. Connection Impact Assessment Modification Guide

Appendix D - DER Classification

Table 1 in Section 5.1 outlines the classification of DERs, primarily based on their nameplate rated capacity. This appendix provides further clarification on how capacity ratings are determined, particularly for sites with multiple DERs or derated equipment.

- **Site with multiple DERs:** The nameplate rated capacity for a site calculated as the sum of the AC nameplate rated capacities of all DERs if they are not connected to the same inverter. If these DERs share the same inverter, the nameplate rated capacity for the site is determined by the AC nameplate rated capacity of the inverter.
- **Site with derated equipment:** The distributor shall accept statically derated capacity, achieved through configured power rating control, instead of the nameplate rated capacity, as detailed in Section 5.1. Transformers do not affect the capacity rating of a DER facility.

Appendix E - Simplified Connection Impact Assessment

This appendix outlines additional expectations and recommendations regarding the simplified CIA option.

Application eligibility

A distributor may consider adopting the following nameplate capacity thresholds for the simplified CIA option. It is recommended that the distributor conduct a through analysis before establishing distributor-specific thresholds.

❖ Single-phase DER:

- > 10 kW and ≤ 30 kW

❖ Three-phase DER:

- Connecting to a supply feeder with a voltage less than 15 kV
 - > 10 kW and ≤ 50 kW
- Connecting to a supply feeder with a voltage of 15 kV or greater:
 - > 10 kW and ≤ 100 kW

If a distributor can offer simplified CIA to prospective DERs based on the listed thresholds for most, but not all, of its distribution system, it may still apply these thresholds. The distributor may post on the DER connection website a list of conditions or specific feeders where a DER may not be qualified for a simplified CIA, along with a general explanation, such as low load density or high DER concentration levels.

If the distributor-specific threshold(s) have lower nameplate capacity thresholds as those listed above (i.e. 30kW, 50kW, and 100kW), the distributor should provide a general explanation for the lower thresholds on its DER connection website. This allows transparency and supports potential future industry reviews of the simplified CIA process.

The distributor should provide the applicants with an opportunity to get a confirmation whether their proposed DER qualifies for a simplified CIA process. This confirmation can be obtained through the preliminary consultation process or through the CIA application screening.

Application fee

A distributor is expected to charge an application fee proportionately reduced to reflect the lower costs associated with the time and materials required for a simplified CIA, as compared to the costs for a full CIA, for small DER thresholds.

The distributor should review the Handbook for Utility Rate Applications and relevant Filing Requirements⁶ to determine whether a new specific service charge or a change to

⁶ Filing Requirements for Electricity Distribution Rate Applications – 2023 Edition for 2024 Rate Applications, Chapter 2 Cost of Service, December 15, 2022

an existing charge requires the OEB's approval. If applicable, the distributor must seek approval from the OEB when setting a standardized fee for a group of customers. The establishment of a specific service charge is excluded from the incentive rate-setting mechanism application process and is typically proposed in a distributor's cost of service application.⁷

The distributor may consider establishing multiple tiers of simplified CIA options, each with different fee structures that reflect the actual costs to carry out a simplified CIA for these thresholds.

The distributor should provide clear and transparent fee information on its website. This is particularly important because:

- Due to distributor-specific system conditions, not all DERs within the simplified CIA thresholds may qualify for a simplified CIA.
- The distributor may need to inform the applicant of the need for additional studies or a full CIA, along with additional fees.

The total connection assessment fee should not exceed the fee for a full CIA for the same or similar thresholds.

Below is an example to illustrate multiple tiers of simplified CIA thresholds and the associated costs.

Nameplate Capacity Size	Simplified CIA Eligibility	Fee
1. Group size #1	Apply to all DERs within this group.	Fee info for this group.
2. Group size #2	Potentially. Confirmation is required.	Fee info for the simplified CIA option and fee info for the full CIA option (if required).
3. Group size #3	Potentially. Confirmation is required and the general eligibility exemptions are listed below [...]	Fee info for the simplified CIA option and fee info for the full CIA option (if required).
4. Group size #4	No	Fee info for the full CIA option.

Timeline

Upon receipt of a complete application, a distributor must follow the existing requirements to provide the applicant with its assessment of the impact of the proposed generation facility, a detailed cost estimate of the proposed connection and an offer to connect. The recommended timeline is within 30 days. The distributor should aim to reduce assessment timeline for simplified CIA option.

⁷ Filing Requirements for Electricity Distribution Rate Applications – 2023 Edition for 2024 Rate Applications, Chapter 3 Incentive Rate-Setting Applications, June 15, 2023

Potential outcome

The outcome of a simplified CIA may result in a requirement for additional studies, a full CIA or an offer to connect. A distributor should clearly communicate the potential outcomes of this process. If additional studies or a full CIA is required, the distributor will promptly notify the applicant. The total fee and timeline for the connection assessment process should be equal to or less than the payment and timeline required for a normal CIA.

Simplified CIA process

Below are high-level process steps for a distributor to consider before offering simplified CIA:

Step 1: Review the starting point thresholds outlined in the Application eligibility section and carry out assessment to determine distributor-specific thresholds for the simplified CIA option.

Step 2: Set the distributor-specific fee for a simplified CIA. The fee should be proportionately reduced to reflect the reduced costs associated with the time and materials required for a simplified CIA.

Step 3: Revise existing process and/or template as needed.

The distributor should follow the majority of the process steps outlined in DERCP Figure 4 for carrying out a simplified CIA. The process should be adjusted to integrate the following activities:

- a) The applicant is to obtain confirmation if the proposed DER is qualified for a simplified CIA.
- b) If additional studies or a full CIA are required, the distributor will notify the applicant, including any additional fees (if applicable). The distributor should provide the applicant with sufficient time to respond and confirm. The applicant should acknowledge the change, agree to proceed, and pay any additional fee, if required.

Step 4: Post simplified CIA information and documents on the DER website, such as:

- Simplified CIA nameplate capacity thresholds (including potential exemptions) and fees.
- Instruction on how to obtain a confirmation on whether a prospective DER is qualified for the simplified CIA option (e.g. through preliminary consultation process or CIA screening process).
- Any applicable forms / templates.

Appendix F - Simplified Commissioning and Verification Template

INTRODUCTION & REQUIREMENTS

This template assists distributors in streamlining the commissioning and verification processes and forms. The template contains general requirements, recommendations, and potential sections with examples for a simplified commissioning and verification form.

When a distributor requires an applicant of a small DER facility, which meets the distributor-specific criteria for a simplified commissioning and verification process (as discussed under Section 7.2.1), to perform any commissioning and verification tasks, the distributor must provide the applicant with a simplified commissioning and verification form. The distributor-specific form must be based on this template and adhere to the requirements and expectations outlined below, as well as those in the potential sections.

GENERAL REQUIREMENTS AND EXPECTATIONS

- A distributor **shall use plain language** to enable DER applicants to better understand the process and requirements. It will also facilitate meaningful dialogues with their DER consultant and the distributor and promote prompt responses related to commissioning submissions.
- A distributor **shall provide all necessary information** on the form and shall post the general form on the distributor's website. If a separate document is created for any section, the distributor must include a high-level summary and a link to the document. The requirement to simplify and use plain language applies to all additional documents as well.
- A distributor **shall be very specific** in its requirements for commissioning and verification tests. When a distributor refers to a certain standard requirement, the distributor must identify clearly the specific section in the standard.
- A distributor **shall not include** in the form any potential commissioning and verification **tests that are not applicable** to the proposed DER facility.
- The distributor must **aim to keep** the references and standard requirements **up to date**.

A distributor has the discretion to customize all potential sections below. However, some sections are mandatory. When a distributor chooses to include a particular section, the distributor must follow the general requirements outlined in the section.

POTENTIAL SECTIONS TO BE INCLUDED IN THE SIMPLIFIED FORM

Below are potential sections a distributor may include in a simplified commissioning and verification form. Instructions for distributors are provided under the 'Instruction' headings and within the square brackets. Within each potential section, this template provides one or more examples to illustrate the type of information that could be included in the simplified form.

1. Applicability

Instruction: This section is **mandatory**. A distributor shall clearly define the criteria for the simplified commissioning and verification route under this section.

Please note that one of the general requirements is that a distributor must not include any commissioning and verification tasks that are not applicable to the proposed DER facility in the simplified form. Therefore, if a distributor creates a simplified form specific to a DER technology/type, they should only include relevant commissioning and verification tasks for that particular DER technology/type.

Example:

The simplified commissioning & verification form is applicable to a proposed DER facility that meets the following criteria:

- a) [Provide distributor-specific nameplate rated capacity thresholds]
- b) [Include any other potential criteria]

2. Process requirements

Instruction: This is a **mandatory** section. A distributor shall list all important process requirements, including information on what to expect after the commissioning process is completed.

- If there are potential additional costs to the applicant, such as charges for extra visits by the distributor if the applicant has not met the requirements before a certain commissioning task, please provide this information upfront under this section.
- If a distributor needs to review the results of a specific commissioning or verification task before the applicant can proceed with the remaining tasks, the distributor must clearly indicate this requirement in this section. As per the requirement under section 7.2, the distributor must make best efforts to minimize commissioning costs for applicants, subject to safety and reliability requirements. Normally, an applicant can carry out all commissioning and verification tasks for a simple DER system on the same date.
- A distributor will provide contact information in case applicants have any questions regarding the process requirements. The contact information should include name, title, phone number, and email address.

Examples of important process requirements:

- a) Before installing equipment and commencing testing of the facility, an applicant must [\[include the requirements here\]](#).
- b) The distributor will review the commissioning plan and generally respond to its acceptability within [\[#\]](#) days. To ensure a timely review, the applicant should be prepared to respond to any questions and inquiries promptly.
- c) The distributor has the right to witness the commissioning and testing of the connection of DER facilities. The applicant shall notify the distributor no later than [\[#\]](#) days prior to scheduled commissioning tests to enable the distributor to witness the commissioning tests.
- d) Important commissioning sections or materials [\[identify what they are here\]](#) must be signed by [\[select between a Professional Engineer \(P.Eng\) registered in Ontario and a licensed electrical contractor\]](#).
- e) The commissioning report shall be submitted for approval before the operation of the DER facility.
- f) Summary of testing results and certificates must be kept on file for a minimum period of [\[#\]](#) years by the applicant.
- g) In situations where site modifications [\[identify only modifications that need further discussion\]](#) are required, the applicant must notify the distributor to discuss the next steps.
- h) It is the applicant's responsibility to ensure that all requirements are met. Additional requirements may be necessary to address unique situations, and the applicant will be advised of any additional requirements at the appropriate assessment stage.
- i) Upon completion of the commissioning steps, the distributor will initiate discussions regarding the connection agreement.

3. Project Information

Instruction: A distributor may consider asking applicants to provide project information in the form.

Example of information table:

General project and site details	
Project number	
Project address	
Project name	
Nameplate rated capacity (kW/kVA/PF)	
Export rated capacity (kW/kVA/PF)	
Planned in-service date	
Connecting station and feeder	
Number of electricity generating or storage device/inverters	
Manufacturer	

Generator/Inverter model number, quantity, and hardware certification			
1.		5.	
2.		6.	
3.		7.	
4.		8.	
Commissioning contact information			
Applicant name			
Applicant contact			
<ul style="list-style-type: none"> • Name • Title • Date • Phone number • Email 			
			License No.
Design engineer			
Commissioning agent [identify engineer or licensed electrical contractor]			
Notes:			

4. Commissioning and verification plan

Instruction: A distributor will inform the applicant of what information is to be included in the commissioning plan with instructions on how to submit to the distributor for approval.

Examples of potential information:

- Planned commissioning date:
- Milestone description

Please describe all commissioning and verification tasks the applicant plans to execute on the commissioning date.

If the applicant plans to have multiple commissioning dates with different milestones, the applicant is to include a milestone description for each commissioning date using the format below.

Milestone #:

Goal:

Commissioning date:

Tasks:

- [\[Include other potential items\]](#)

- d) Signature from the commissioning agent [identify engineer or licensed electrical contractor]

Name: _____

Date: _____

Signature: _____

5. Checklist prior to the main commissioning and verification tasks

Instruction: This section is a **mandatory** section when a distributor requires an applicant to carry out any checks or verifications prior to the main commissioning and verification tasks.

A distributor can also use this section to inform the applicant about the specific checks it plans to conduct.

Example of a potential checklist an applicant may need to carry out:

The commissioning agent [identify engineer or licensed electrical contractor] is to carry out the following checks prior to conducting the main commissioning and verification tasks.

	Results (Yes/No)	Initials	Comments
Conductors are per the single-line diagram (SLD) (type, size and length)			
Fusing is installed as per SLD and protection scheme			
All switches & devices labeled for proper identification			
Nameplate values on the equipment are correct			
[Include other potential items as applicable]			

6. Commissioning and verification tasks

Instruction: This is a **mandatory** section. Under this section, a distributor shall list the required commissioning and verification tasks. A distributor must be very specific in its requirements and describe the requirements well.

Examples of potential tests:

[The following examples show how a distributor can be specific about certain commissioning and verification requirements].

Example 1: Cease to Energize

i. Turn off utility-size disconnect switch

Verification	Yes/No	Initials	Date	Notes
Did the DER facility indicate a loss of the utility grid?				
After a loss of the utility grid, is there voltage on the output of the DER facility?				
Did the DER facility shut down as required?				

ii. Turn on utility-size disconnect switch

Verification	Yes/No	Initials	Date	Notes
Did the DER facility turn back on upon reconnection with the utility grid?				
Did the DER facility wait the requisite 300s before returning to normal operation?				
Did the DER facility return to its normal operating state?				

Example 2: Steady-state parameters

The steady-state parameters listed in the table below must be monitored and recorded for a minimum of 5 minutes at the point of supply both prior to energization of the DER facility, and then another minimum 5 minutes while the DER facility is operating.

Parameter	Reference	Results	Notes
Voltage variations at the point of supply are limited to +/- 6% of the normal voltage			
Frequency is operating in the range of 59.3Hz to 60.5Hz			
Maximum output capacity requirement [Clearly identify the net export or zero export requirement] is met			
[Provide any other parameters]			

Example 3: Equipment Based Protection & Control

Commissioning agent [identify engineer or licensed electrical contractor] to review generator/inverter certificates and generator/inverter manufacturer production test reports in order to fulfill the following items.

Items to be verified	Standards/ References	Results	Notes
Interface protection of the facility ceases to energize under the following conditions: <ul style="list-style-type: none"> Internal faults at the facility External faults on the distributor's distribution system 			
Under-voltage protection is functioning Over-voltage protection is functioning			
Under-frequency protection is functioning Over-frequency protection is functioning			

7. Deficiency and resolution

Instruction: A distributor may ask the applicant to identify any potential deficiencies as well as the proposed resolutions under this section.

Example:

Please use the table below to document if the facility doesn't meet certain utility requirements, such as the kVA requirement.

Any operating/design deficiencies should be corrected before concluding commissioning and verification tasks and before submitting the required commissioning materials to the distributor.

Item	Deficiency	Resolution

8. Required supplementary document

Instruction: If there is a need to provide a distributor with supplementary document(s), a distributor shall identify the need under this section.

Example:

Please provide the following document(s) for review upon the completion of the commissioning and verification tasks.

Document	Notes
----------	-------

[Identify the document(s) here]	

9. Commissioning and verification signatures

Instruction: When a distributor asks for signatures, the distributor shall be clear about what the applicant and the commissioning agent are signing off on.

Example:

By signing this section, the applicant and the commissioning agent [identify engineer or licensed electrical contractor] acknowledge that all required commissioning and verifications tasks specified in this form have been completed.

The commissioning agent [identify engineer or licensed electrical contractor] also acknowledges that the facility meets the following connection requirements:

- a) [List the requirements that the commissioning agent is signing off on. The distributor must be as specific as possible. General wording, such as 'minimum standard requirements' is not sufficient].

Applicant	Name:	
	Signature:	
	Date (dd/mm/yyyy):	
Commissioning agent [identify engineer or licensed electrical contractor]	Name:	
	Signature:	
	Date (dd/mm/yyyy):	
	Licence number and seal (if applicable):	

10. Commissioning and verification report

Instruction: A distributor shall inform the applicant about the contents required in a commissioning report under this section.

A distributor shall clearly indicate what type of test results, if required, the distributor is expecting to ensure the correct commissioning equipment is being used, e.g. time intervals, resolution on data, plots, and graphs.

Example:

This section outlines the required items to be included in a commissioning report.

- Commissioning and verification tables under the “Commissioning and verification tasks” section with all information provided, including test results, dates, initials, and notes.
- Information under the deficiency and resolution section
- The required supplementary document(s)
- Commissioning and verification signatures
- [\[Include other potential items as applicable\]](#)

11. Submission checklist

Instruction: A distributor shall specify the required document(s) an applicant must submit to conclude the commissioning & verification process.

Example:

Please ensure the following items are completed and included in the submission to the distributor. The applicant will not proceed to the next connection step [\[be specific about what the next step would be\]](#) if any of these items is omitted or incomplete.

Item	Document
1.	Commissioning report
2.	Required supplementary document
3.	Commissioning and verification signatures
4.	[Include any other items as needed]

12. References

Instruction: A distributor should identify the applicable references and provide links to those under this section.

Ideally, a distributor should clearly point out the applicable sections in these references.

Example:

The requirements in this package are primarily from the following sources:

[\[List references and provide links to those\]](#)



ONTARIO ENERGY BOARD

Distribution System Code

Last Revised on May 5, 2025

(Originally Issued on July 14, 2000)

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APPENDICES

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1 GENERAL AND ADMINISTRATIVE PROVISIONS

1.1 The Purpose of this Code

This Code sets the minimum conditions that a distributor must meet in carrying out its obligations to distribute electricity under its licence and the Energy Competition Act, 1998. Unless otherwise stated in the licence or Code, these conditions apply to all transactions and interactions between a distributor and all retailers, generators, distributors, transmitters and consumers of electricity who use the distributor's distribution system.

1.2 Definitions

In this Code:

“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 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 IESO-controlled grid; including frequency control, voltage control, reactive power and operating reserve services;

“bandwidth” means a distributor's defined tolerance used to flag data for further scrutiny at the stage in the VEE process where a current reading is compared to a reading from an equivalent historical billing period. For example, a 30 percent bandwidth means a current reading that is either 30 percent lower or 30 percent higher than the measurement from an equivalent historical billing period will be identified by the VEE process as requiring further scrutiny and verification;

“Board” means the Ontario Energy Board;

“business day” means any day other than a Saturday or a holiday;

“Code” means the Distribution System Code;

“competitive retailer” is a person who retails electricity to consumers who do not take Standard Supply Service (“SSS”);

“complex metering installation” means a metering installation where instrument transformers, test blocks, recorders, pulse duplicators and multiple meters may be employed;

“Conditions of Service” means the document developed by a distributor in accordance with subsection 2.4 of this Code that describes the operating practices and connection rules for the distributor;

“connection” means the process of installing and activating connection assets in order to distribute electricity;

“Connection Agreement” means an agreement entered into between a distributor and a person connected to its distribution system that delineates the conditions of the connection and delivery of electricity to or from that connection;

“connection assets” means that portion of the distribution system used to connect a customer to the existing main distribution system, and consists of the assets between the point of connection on a distributor’s main distribution system and the ownership demarcation point with that customer;

“connection cost agreement” means the agreement referred to in section 6.2.18;

“consumer” means a person who uses, for the person’s own consumption, electricity that the person did not generate;

“critical customers” include, at a minimum, emergency services (police fire and ambulance services) stations, hospitals, water and wastewater treatment plants, designated emergency shelters, and municipal and provincial emergency operations centres;

“CSP” means the centralized service provider engaged by the Board to administer the OESP on the Board’s behalf;

“customer” means a generator or consumer whose facilities are connected to or are

intended to be connected to a distributor's distribution system. This includes developers of residential or commercial sub-divisions. For the purposes of section 3 of this Code (except section 3.3), an embedded distributor is deemed to be a customer;

"cyber security" means a body of technologies, processes, and practices designed to protect networks, computers, programs, data and personal information from attack, damage or unauthorized access. Cyber security includes electronic security and physical security issues as they relate to cyber security protection;

"Cyber Security Framework" means the Ontario Cyber Security Framework that was issued December 20, 2017, or the current version of the document;

"day" means a calendar day unless specifically stated otherwise;

"demand meter" means a meter that measures a consumer's peak usage during a specified period of time;

"disconnection" means a deactivation of connection assets that results in cessation of distribution services to a consumer;

"disconnect/collect trip" is a visit to a customer's premises by an employee or agent of the distributor to demand payment of an outstanding amount or to shut off or limit distribution of electricity to the customer failing payment;

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

"Distributed Energy Resources Connection Procedures" means the document referred to in section 6.2;

"distribution losses" means energy losses that result from the interaction of intrinsic characteristics of the distribution network such as electrical resistance with network voltages and current flows;

"distribution loss factor" has the meaning described to it in the Retail Settlement Code;

"distribution services" means services related to the distribution of electricity and the services the Board has required distributors to carry out;

“distribution system” means a system for distributing electricity, and includes any structures, equipment or other things used for that purpose. A distribution system is comprised of the main system capable of distributing electricity to many customers and the connection assets used to connect a customer to the main distribution system;

“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 a distributor with respect to the services and terms of service to be offered to customers and retailers and provides minimum technical operating standards of distribution systems;

“distributor” means a person who owns or operates a distribution system;

“distributor-owned asset” means an asset owned by a distributor other than an asset installed as part of a basic connection;

“Electric Vehicle Supply Equipment” or “EVSE” means electrical supply equipment that is dedicated to supplying a source of electricity for the sole purpose of charging electric vehicles;

“Electric Vehicle Charging Connection Procedures” means the document issued from time to time by the Board that sets out a procedure for the connection of EVSE and that is referred to in sections 6.1.6 and 6.1.6.1;

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

“Electrical Safety Authority” or “ESA” means the person or body designated under the Electricity Act regulations as the Electrical Safety Authority;

“eligible low-income customer” means:

- (a) a residential electricity consumer who has been approved by the CSP for the OESP; or
- (b) a residential electricity consumer who has been approved by a LEAP Intake Agency for Emergency Financial Assistance;

“embedded distributor” means a distributor that is provided electricity by a host distributor;

“embedded generation facility” means a generation facility which is not directly connected

to the IESO-controlled grid but instead is connected to a distribution system, and has the extended meaning given to it in section 1.9;

“embedded retail generator” means a customer that:

- (a) is not a wholesale market participant or a net metered generator (as defined in section 6.7.1);
- (b) owns or operates an embedded generation facility, other than an emergency backup generation facility; and
- (c) sells output from the embedded generation facility to the IESO under contract or to a distributor;

“embedded wholesale consumer” means a consumer who is a wholesale market participant whose facility is not directly connected to the IESO-controlled grid but is connected to a distribution system;

“emergency” means any abnormal system condition that requires remedial action to prevent or limit loss of a distribution system or supply of electricity that could adversely affect the reliability of the electricity system;

“emergency backup generation facility” means a standby power system that is installed on a customer site for the sole purpose of providing electrical power if the primary or system power has been interrupted or is unavailable;

“Emergency Financial Assistance” means emergency financial assistance under LEAP;

“Energy Competition Act” means the Energy Competition Act, 1998, S.O. 1998, c. 15;

“enhancement” means a modification to the main distribution system that is made to improve system operating characteristics such as reliability or power quality or to relieve system capacity constraints resulting, for example, from general load growth, but does not include a renewable enabling improvement;

“exempt distributor” means a distributor as defined in section 3 of the Act who is exempted from various requirements in the Act by Ontario Regulation 161/99;

“expansion” means a modification or addition to the main distribution system in response

to one or more requests for one or more additional customer connections that otherwise could not be made, for example, by increasing the length of the main distribution system, and includes the modifications or additions to the main distribution system identified in section 3.2.30 but in respect of a renewable energy generation facility excludes a renewable enabling improvement;

“exporting connection” means a connection through which power flow is from the customer’s premises to the distribution system where the injection to the system is intentional (the connection is supporting a generation facility). This connection type may also support power flow from the distribution system to the customer’s premises (non-exporting mode), e.g. storage in charging mode, or station or customer load;

“Family Law Act” means the *Family Law Act*, R.S.O. 1990, c. F.3;

“four-quadrant interval meter” means an interval meter that records power injected into a distribution system and the amount of electricity consumed by the customer;

“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;

“geographic distributor,” with respect to a load transfer, means the distributor that is licensed to service a load transfer customer and is responsible for connecting and billing the load transfer customer;

“good utility practice” means any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry in North America during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good practices, reliability, safety and expedition. Good utility practice is not intended to be

limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in North America;

“high-impact low-frequency event” means a severe weather event that meets the following criteria: (i) the daily System Average Interruption Duration Index exceeds the distributor’s Major Event Day threshold as calculated in accordance with IEEE Standard 1366; and (ii) more than 48 hours is required for the distributor to restore service to at least 90% of affected customers.

“holiday” means a holiday described in section 88 of the *Legislation Act, 2006*, S.O. 2006, c. 21, Sched. F as well as the August Civic Holiday;

“host distributor” means a distributor who provides electricity to an embedded distributor;

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

“IESO-controlled grid” means the transmission systems with respect to which, pursuant to agreements, the IESO has the authority to direct operations;

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

“large embedded generation facility” means an embedded generation facility with a nameplate rated capacity of more than 10 MW;

“LEAP” means the Low-Income Energy Assistance Program established by the Board;

“LEAP Intake Agency” means a social service agency, municipality or government agency that assesses a residential electricity consumer’s eligibility for Emergency Financial Assistance;

“load control device” means a load limiter, timed load interrupter or similar device that limits or interrupts normal electricity service;

“load displacement” means, in relation to a generation facility that is connected on the customer side of a connection point, that the output of the generation facility is used or intended to be used exclusively for the customer’s own consumption;

“load limiter device” means a device that will allow a customer to run a small number of electrical items in his or her premises at any given time, and if the customer exceeds the limit of the load limiter, then the device will interrupt the power until it is reset;

“load transfer” means a network supply point of one distributor that is supplied through the distribution network of another distributor and where this supply point is not considered a wholesale supply or bulk sale point;

“load transfer customer” means a customer that is provided distribution services through a load transfer;

“Market Rules” means the rules made under section 32 of the Electricity Act;

“master consumer” means the exempt distributor or the person authorized by Ontario Regulation 389/10 to retain a unit smart meter provider for the prescribed property being served by the licensed distributor;

“Measurement Canada” means the Special Operating Agency established in August 1996 by the Electricity and Gas Inspection Act, 1980-81-82-83, c. 87, and Electricity and Gas Inspection Regulations (SOR/86-131);

“meter service provider” means any entity that performs metering services on behalf of a distributor or generator;

“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;

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

“micro-embedded generation facility” means an embedded generation facility with a name-plate rated capacity of 10 kW or less;

“mid-sized embedded generation facility” means an embedded generation facility with a name-plate rated capacity of 10 MW or less and:

(a) more than 500 kW in the case of a facility connected to a less than 15 kV line;
and

(b) more than 1 MW in the case of a facility connected to a 15 kV or greater line;

“MIST meter” means an interval meter from which data is obtained and validated within a designated settlement timeframe. MIST refers to “Metering Inside the Settlement Timeframe”;

“MOST meter” means an interval meter from which data is only available outside of the designated settlement timeframe. MOST refers to “Metering Outside the Settlement Timeframe”;

“non-exporting connection” means a connection through which power flow is only from the distribution system to the customer’s premises (the connection is considered to be supplying a load);

“OESP” means the Ontario Electricity Support Program established pursuant to section 79.2 of the Ontario Energy Board Act;

“Ontario Electrical Safety Code” means the code adopted by O. Reg. 164/99 as the Electrical Safety Code;

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

“operational demarcation point” means the physical location at which a distributor’s responsibility for operational control of distribution equipment including connection assets ends at the customer;

“ownership demarcation point” means the physical location at which a distributor’s ownership of distribution equipment including connection assets ends at the customer;

“performance standards” means the performance targets for the distribution and connection activities of the distributor as established by the Board pursuant to the Act and in the Rate Handbook;

“physical distributor”, with respect to a load transfer, means the distributor that provides physical delivery of electricity to a load transfer customer, but is not responsible for connecting and billing the load transfer customer directly;

“point of supply”, with respect to an embedded generation facility, means the connection point where electricity produced by the generation facility is injected into the distribution system;

“prescribed property” means one of the properties or classes of property prescribed by Ontario Regulation 389/10;

“rate” means any rate, charge or other consideration, and includes a penalty for late payment;

“Rate Handbook” means the document approved by the Board that outlines the regulatory mechanisms that will be applied in the setting of distributor rates;

“Regulations” means the regulations made under the Act or the Electricity Act;

“renewable enabling improvement” means a modification or addition to the main distribution system identified in section 3.3.2 that is made to enable the main distribution system to accommodate generation from renewable energy generation facilities;

“renewable energy expansion cost cap” means, in relation to a renewable energy generation facility, the dollar amount determined by multiplying the total name-plate rated capacity of the renewable energy generation facility referred to in section 6.2.9(a) (in MW) by \$90,000, reduced where applicable in accordance with section 3.2.27A or section 3.2.27B;

“renewable energy generation facility” has the meaning given to it in the Act;

“renewable energy source” has the meaning given to it in the Act;

“restricted feeder” means any feeder owned by the distributor that has no additional short circuit capacity for connection of generation facilities even if the constraint is caused by an upstream asset that it does not own;

“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 retailer 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 Settlement 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 customers and provides for tracking and facilitating customer transfers among competitive retailers;

“retailer” means a person who retails electricity;

“service area”, with respect to a distributor, means the area in which the distributor is authorized by its license to distribute electricity;

“severe weather” means any weather condition that is severe and poses a substantial risk to the reliability, safety, or operation of the distribution system. Such conditions include, but are not limited to, high winds, freezing rain, tornadoes, ice storms, blizzards, heavy rainfall, flooding, and lightning storms.

“severe weather event” means widespread interruptions in a distributor’s service area caused by severe weather.

“small embedded generation facility” means an embedded generation facility which is not a micro-embedded generation facility with a name-plate rated capacity of 500 kW or less in the case of a facility connected to a less than 15 kV line and 1MW or less in the case of a facility connected to a 15 kV or greater line;

“smart meter” means a meter that is part of an advanced metering infrastructure that meets the functional specification referenced in the Criteria and Requirements for Meters and Metering Equipment, Systems and Technology Regulation, O. Reg. 425/06;

“storage facility” means, for the purpose of connections, a facility that uses electrical energy (i.e. charges), and then stores such energy for a period of time, and then provides electrical energy as an output, minus any losses (i.e. discharges);

“system power” means power flowing through a connection to a customer from the distribution system;

“total losses” means the sum of distribution losses and unaccounted for energy;

“timed load interrupter device” means a device that will completely interrupt the customer’s electricity intermittently for periods of time and allows full load capacity outside of the time periods that the electricity is interrupted;

“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 Transmitter with respect to its relationship with customers, as well as establishing the standards for connection of customers 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 cannot 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;

"unit smart meter" has the meaning ascribed to it in the Energy Consumer Protection Act, 2010;

"unit smart meter provider" has the meaning ascribed to it in the Energy Consumer Protection Act, 2010;

“unmetered loads” means electricity consumption that is not metered and is billed based on estimated usage;

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

“wholesale buyer” means a person that purchases electricity or ancillary services in the

IESO-administered markets or directly from a generator;

“wholesale market participant”, means a person that sells or purchases electricity or ancillary services through the IESO-administered markets; and

“wholesale supplier” means a person who sells electricity or ancillary services through the IESO-administered markets or directly to another person, other than a consumer.

“Cyber Security Standard” means the Cyber Security Standard document that was issued on March 27, 2024, as updated from time to time.

1.3 Interpretation

1.3.1 Unless otherwise defined in this Code, words and phrases shall have the meaning ascribed to them in the Act, or the Electricity Act, 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 a holiday may occur on or by the next day, that is not holiday.

1.3.2 For the purposes of the definition of “eligible low-income customer” in section 1.2 of this Code, a residential electricity customer becomes an eligible low-income customer on the day the customer is approved for Emergency Financial Assistance or the OESP, and remains an eligible low-income customer until the later of the following days: (a) the day that is two years from the day the customer is approved for Emergency Financial Assistance, and (b) the day that the customer stops receiving assistance under the OESP.

1.3.3 [Revoked by amendment, effective October 8, 2015.]

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. These entities are obligated to comply with the Code as a condition of their licence.

1.5 Hierarchy of Codes

The order of hierarchy for the Distribution System Code in relation to other codes, subject to any specific conditions of a licence that apply to the distributor, are as follows:

1. Affiliate Relationships Code
2. Distribution System Code
3. Retail Settlement Code
4. Standard Supply Service Code

1.6 Amendments to this Code

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

1.7 Coming into Force

This Code comes into force on the day subsection 26(1) of the Electricity Act comes into force with the following exception.

Any amendments to this Code shall come into force on the date the Board publishes the amendments by placing them on the Board's website after they have been made by the Board, except where expressly provided otherwise.

All of Chapter 3, Connections and Expansions and Subsection 6.2.3 of Section 6.2, Responsibilities to Generators come into force on September 29, 2000. These provisions do not apply to projects that are the subject of an agreement entered into before November 1, 2000.

The amendments to this Code made by the Board on December 19, 2003 come into effect on March 22, 2004. [Note: Primarily section 6.2. Appendix E and F were also replaced.]

Sections 2.4.6.1, 2.4.6.2 and 2.4.9 to 2.4.28 come into force on the day that is 6 months after these sections are published on the Board's website after having been made by the Board. [Note: These sections were published on February 3, 2004.]

The amendments to this Code made by the Board February 24, 2005 will come into effect 90 days after this date.

Section 6.7 of the Code and the amendment to section 4.2 of the “Micro-Embedded Generation Facility Connection Agreement” in Appendix F of the Code, made by the Board on February 1, 2006 come into force on February 10, 2006.

Sections 2.4.30 and 2.4.31 of the Code, made by the Board on May 12, 2006, come into force on the day that is ninety days after they are published on the Board’s website after having been made by the Board. [Note: These sections were published on May 12, 2006.]

The amendments to this Code made by the Board on July 27, 2006, will come into effect 180 days after that date. The amendments will only apply to expansions where the distributor's initial offer to connect the customer and build the expansion, as set out in sections 3.2.8 and 3.2.9, occurs on or after the date the amendments come into force.

All of section 7, Service Quality Requirements, comes into force on January 1, 2009 with the exception of section 7.10.

Section 2.5.6 comes into force on January 1, 2010.

Section 4.7 and Appendix H come into force on the day that is 90 days from the date on which they are published on the Board’s website after having been made by the Board. [Note: Section 4.7 and Appendix H were published on the Board’s website on June 16, 2009.]

The amendments to sections 2.7.1 to 2.7.5, and 4.2.2.6 and 4.2.2.7, come into force on October 1, 2010.

The amendments to sections 2.4.10, 2.4.17, 2.4.20A, 2.4.22A, 2.4.23A, 2.4.25A, 2.4.26A, 2.4.26B, 2.6.1 to 2.6.7, 4.2.2 to 4.2.2.5, 4.2.3, 4.2.5 and 7.10.1 to 7.10.2 come into force on January 1, 2011.

The amendments to sections 1.2 (namely the addition of the definitions for “exempt distributor”, “master consumer”, “prescribed property”, “unit smart meter”, and “unit smart metering”), 5.1.7, 5.1.9, and 5.3.13, made by the Board on December 16, 2010, come into force on January 1, 2011.

The further revisions to sections 1.2 (definition of “Conditions of Service”), 2.4.10, 2.6.6.3(b), 4.2.2 and 4.2.2.1 come into force on February 7, 2011.

The amendments to sections 2.7, 2.8.1 to 2.8.5, and 6.1.2, come into force on April 1, 2011.

The amendment to section 2.9.2 comes into force on April 1, 2011.

The amendments to sections 2.6.6.2A, 2.6.6.2B, 2.6.6.3(c), 2.7.4, 2.7.4.4, 2.7.7, 4.2.2(k) and 4.2.2.4(f) come into force on April 1, 2011.

The amendments to sections 2.7.1A, 2.7.8, 3.1.1(g), 4.2.2.6, 4.2.2.7, 4.2.6 and 7.10(1)(b) come into force on April 1, 2011.

The amendments to sections 1.2 (definitions of “load limiter device”, “timed load interrupter device” and “load control device”), 2.9 and 4.2.2(k2) come into force on July 1, 2011.

The amendments to sections 1.2 (definitions of “eligible low-income customer”, “Emergency Financial Assistance” and “Social Service Agency or Government Agency”), 1.3.1, 1.3.2, 1.3.3, 2.4.11(c), 2.4.11.1, 2.4.11.2, 2.4.23B, 2.4.23C, 2.7.1.3, 2.7.2(c) to (e),

2.7.4.3, 2.7.5.1, 2.7.6, 2.7.6A, 2.9.2, 4.2.2(k1) and 4.2.2.4(f1) come into force on October 1, 2011.

All of section 8, Regional Planning, comes into force on August 26, 2013.

The amendments to section 5.1.3 come into force on August 21, 2014.

The amendments to section 2.4.6 regarding unmetered load customers come into force on January 1, 2015.

The amendments to sections 6.5.3 through 6.5.6 come into force on December 21, 2015.

Section 2.6.1A comes into force on December 31, 2016.

The amendment to delete section 5.4 comes into force on May 18, 2017.

The amendment to section 6.7.3 comes into force on July 1, 2017.

The amendments to section 1.2 (definitions of “cyber security” and “Cyber Security Framework”) and all of section 6.8 come into force on March 15, 2018.

The amendments to sections 3.2.20, 3.2.21, 3.2.23 and 3.2.24 made by the Board on December 18, 2018 come into force on March 18, 2019.

The amendments to sections 6.7.1 and 6.7.6, and the amendments to Appendix E made by the Board on June 14, 2022 come into force on July 1, 2022.

The amendments to sections 1.2 and 6.2 made by the Board on March 22, 2022 come into force on October 1, 2022.

The amendments to sections 1.2, 6.2 and 6.2A made by the Board on March 7, 2023 come into force on June 7, 2023.

The amendment to section 8.3.1(a) comes into force on August 2, 2023.

The amendments to sections 6.2.4.1(f), 6.2 and 6.2A.4(i) made by the Board on March 27, 2024 come into force on March 27, 2024.

The amendments to section 1.2 and 6.1 made by the Board on February 16, 2024 come into force on May 27, 2024.

The amendments to section 3.2 and Appendix B made by the Board on December 23, 2024 come into force on March 3, 2025.

The amendments to sections 1.2 and 4.5.7, and all of section 4.9 made by the Board on March 17, 2025 come into force on May 5, 2025.

1.8 Requirements for Board Approvals

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

1.9 Extended Meaning of Embedded Generation Facility

A distributor shall, for all purposes under this Code, treat a generation facility that is connected on the customer side of a connection point to the distribution system as an embedded generation facility. To that end:

- (a) the terms "connect", "connected" and "connection" when used in relation to such a generation facility shall be interpreted accordingly; and

- (b) the distributor shall treat the owner or operator of the generation facility as a generator in relation to the connection and operation of that generation facility.

1.10 Separate Accounts for Embedded Retail Generators

Where an embedded retail generator that has a contract issued under the feed-in-tariff program referred to in section 25.35 of the Electricity Act is connected on the customer side of a connection point (as set out in section 1.9), the distributor shall open a separate account for the embedded retail generator and shall for settlement purposes treat the embedded retail generator as a separate customer, separate and apart from any associated load customer. This rule applies regardless of the electrical configuration of the load and generation meters and regardless of whether the embedded retail generator and the associate load customer are the same person or entity.

2 STANDARDS OF BUSINESS PRACTICE AND CONDUCT

2.1 Distributor-owned Generation Facilities

Except as otherwise expressly provided in its licence or this Code, a distributor shall not, in respect of any matter addressed in or under this Code, provide favoured treatment or preferential access to the distributor's distribution system or the distributor's services for any generation facilities whether owned by the distributor, an affiliate or another third party.

2.2 Liability

2.2.1 A distributor shall only be liable to a customer and a customer shall only be liable to a distributor for any damages which arise directly out of the willful misconduct or negligence:

1. Of the distributor in providing distribution services to the customer;
2. Of the customer in being connected to the distributor's distribution system; or
3. Of the distributor or customer in meeting their respective obligations under this Code, their licences and any other applicable law.

2.2.2 Despite section 2.2.1; neither the distributor nor the customer shall be liable under any circumstances whatsoever for any loss of profits or revenues, business interruption losses, loss of contract or loss of goodwill, or for any indirect, consequential, incidental or special damages, including but not limited to punitive or exemplary damages, whether any of the said liability, loss or damages arise in contract, tort or otherwise.

2.3 Force Majeure

- 2.3.1 Neither party shall be held to have committed an event of default in respect of any obligation under this Code if prevented from performing that obligation, in whole or in part, because of a force majeure event.
- 2.3.2 If a force majeure event prevents a party from performing any of its obligations under this Code and the applicable Connection Agreement, that party shall:
1. Promptly notify the other party of the force majeure event and its assessment in good faith of the effect that the event will have on its ability to perform any of its obligations. If the immediate notice is not in writing, it shall be confirmed in writing as soon as reasonably practicable.
 2. Not be entitled to suspend performance of any of its obligations under this Code to any greater extent or for any longer time than the force majeure event requires it to do;
 3. Use its best efforts to mitigate the effects of the force majeure event, remedy its inability to perform, and resume full performance of its obligations;
 4. Keep the other party continually informed of its efforts; and
 5. Provide written notice to the other party when it resumes performance of any obligations affected by the force majeure event.
- 2.3.3 Notwithstanding any of the foregoing, settlement of any strike, lockout, or labor dispute constituting a force majeure event shall be within the sole discretion of the party to the agreement involved in the strike, lockout, or labour dispute. The requirement that a party must use its best efforts to remedy the cause of the force majeure event, mitigate its effects, and resume full performance under this Code shall not apply to strikes, lockouts, or labour disputes

2.4 Conditions of Service

- 2.4.1 A distributor shall document its Conditions of Service that describe the operating practices and connection policies of the distributor. All distributors shall have a Conditions of Service. Subject to this Code and other applicable laws, a distributor shall comply with its Conditions of Service but may waive a provision of its Conditions of Service in favour of a customer or potential customer.
- 2.4.2 A distributor shall file a copy of its Conditions of Service with the Board, make its Conditions of Service publicly available and provide a copy to any person requesting it. A distributor shall provide one copy per revision for each person that requests it.
- 2.4.3 [Revoked effective March 14, 2019.]
- 2.4.4 Note: Section 2.4.4 revoked by amendment, effective March 22, 2004.
- 2.4.5 A distributor's Conditions of Service may be subject to review as part of the distributor's performance based rates plan.
- 2.4.6 A distributor's Conditions of Service shall include, at a minimum, a description of the following:
- The types of connection service performed by the distributor for each customer class, and the conditions under which these connections will be performed (connection policy).
 - The distributor's basic connection service that is recovered through its revenue requirements and does not require a variable connection charge.
 - The distributor's capital contribution policy by customer class for an offer to connect, including procedures for collection of capital contributions.
 - The demarcation point at which the distributor's operational responsibilities for distribution equipment end at the customer.
 - The demarcation point at which the distributor's ownership of distribution equipment ends at the customer.

- The billing cycle period and payment requirements by customer class.
- Design requirements for connection to the distribution system.
- Voltages at which the distributor provides electricity and corresponding load thresholds.
- Type of meters provided by the distributor.
- Meters required by customer class.
- Quality of Service standards to which the distribution system is designed and operated.
- Conditions under which supply may be unreliable or intermittent.
- Conditions under which service may be interrupted.
- Conditions under which the distributor may disconnect a consumer.
- Policies for planned interruptions.
- The business process the distributor uses to disconnect and reconnect consumers, including means of notification and timing.
- The distributor's rights and obligations with respect to a customer.
- Rights and obligations a consumer or embedded generator has with respect to the distributor.
- The distributor's liability limitations in accordance with this Code.
- The distributor's dispute resolution procedure.
- Terms and conditions under which the distributor provides other services in its capacity as a distributor.
- The following items in relation to unmetered load customers:

- the rights and obligations an unmetered load customer has with respect to the distributor and the rights and obligations a distributor has with respect to an unmetered load customer;
 - the process an unmetered load customer must use to file its updated data with its distributor and what evidence is necessary for the distributor to validate the data;
 - the process the distributor will use to update the bills for an unmetered load customer; and
 - the process the distributor will use to communicate and engage with unmetered load customers in relation to the preparation of cost allocation studies, load profile studies or other rate-related materials that may materially impact unmetered load customers.
- The business practices the distributor uses to estimate bills where no metered consumption is available.
 - The distributor's late payment policy, including the date from which any Board-approved late payment charges apply.

The conditions of service must be consistent with the provisions of this Code and all other applicable codes and legislation including the Rate Handbook.

2.4.6.1 A distributor's Conditions of Service shall include the distributor's security deposit policy which shall be consistent with the provisions of this Code. A distributor's security deposit policy shall include at a minimum the following:

- a list of all potential types/forms of security accepted;
- a detailed description of how the amount of security is calculated;
- limits on amount of security required;
- the planned frequency, process and timing for updating security;

- criteria customers must meet to have security deposit waived and/or returned; and
- methods of enforcement where a security deposit is not paid.

2.4.6.2 In managing customer non-payment risk, a distributor shall not discriminate among customers with similar risk profiles or risk related factors except where expressly permitted under this Code.

2.4.7 If a distributor's Conditions of Service are documented in a form or in an order different than that specified in the generic Conditions of Service attached to this Code as Appendix A, the distributor shall provide a mapping of terms in its Conditions of Service to the sections and subsections in Appendix A.

2.4.8 A distributor shall provide advance public notice of any changes to its Conditions of Service. Notice shall be, at a minimum, provided to each customer by means of a note on and/or included with the customer's bill. The public notice shall include a proposed timeline for implementation of the new Conditions of Service and a means by which public comment may be provided. A distributor shall provide the Board with a copy of the new Conditions of Service once they are implemented. The copy of the revised document shall include a cover letter that outlines the changes from the prior document, as well as a summary of any public comments on the changes.

2.4.9 A distributor may require a security deposit from a customer who is not billed by a competitive retailer under retailer-consolidated billing unless the customer has a good payment history of 1 year in the case of a residential customer, 3 years in the case of a non-residential customer in a <50 kW demand rate class or 7 years in the case of a non-residential customer in any other rate class. The time period that makes up the good payment history must be the most recent period of time and some of the time period must have occurred in the previous 24 months. A distributor shall provide a customer with the specific reasons for requiring a security deposit from the customer.

2.4.9A Before requiring a security deposit under section 2.4.9 from a residential customer who has not been served by the distributor in the previous 24 months, a distributor shall offer the customer the option of enrolling in an equal monthly

payment plan in accordance with the Standard Supply System Code, a pre-authorized payment plan, or both, and where the customer elects to enroll, no security deposit shall be required.

2.4.9B Despite section 2.4.9A, a distributor may require a security deposit from the customer if within 12 months of enrollment in an equal monthly payment plan, a pre-authorized payment plan, or both,

- (a) the customer terminates the plan;
- (b) the customer receives more than one disconnection notice from the distributor;
- (c) more than one payment by the customer has been returned for insufficient funds;
- (d) a disconnect / collect trip has occurred; or
- (e) in the case of an equal monthly payment plan, the plan has been cancelled due to non-payment by the distributor in accordance with the Standard Supply Service Code.

2.4.9C Section 2.4.9B does not apply if any of the events listed in paragraphs (b) to (e) of that section occurred due to an error by the distributor.

2.4.10 For the purposes of section 2.4.9, a customer is deemed to have a good payment history unless, during the relevant time period set out in section 2.4.9, the customer has received more than one disconnection notice from the distributor, more than one cheque given to the distributor by the customer has been returned for insufficient funds, more than one pre-authorized payment to the distributor has been returned for insufficient funds, a disconnect / collect trip has occurred or the distributor had to apply a security deposit in accordance with section 2.4.26A and required the customer to repay the security deposit in accordance with section 2.4.26B. If any of the preceding events occur due to an error by the distributor, the customer's good payment history shall not be affected.

2.4.11 Despite section 2.4.9, a distributor shall not require a security deposit where:

- (a) a customer provides a letter from another distributor or gas distributor in Canada confirming a good payment history with that distributor for the most recent relevant time period set out in section 2.4.9 where some of the time period which makes up the good payment history has occurred in the previous 24 months;
- (b) a customer, other than a customer in a >5000 kW demand rate class, provides a satisfactory credit check made at the customer's expense; or
- (c) an eligible low-income customer has requested a waiver under section 2.4.11.1.

2.4.11.1 When issuing a bill for a security deposit in accordance with section 2.4.9, the distributor shall advise a residential customer that the security deposit requirement will be waived for an eligible low-income customer upon request. The distributor shall notify the customer by means of a bill insert, bill message, letter or outgoing telephone message and shall include the distributor's contact information where the customer can obtain further information and a referral to a LEAP Intake Agency to review the customer's low-income eligibility.

2.4.11.2 Where a distributor is advised by a LEAP Intake Agency that the agency is assessing the customer for eligibility as a low-income customer, the due date for payment of the security deposit shall be extended for at least 21 days pending the eligibility decision of the LEAP Intake Agency.

2.4.12 The maximum amount of a security deposit which a distributor may require a customer to pay shall be calculated by multiplying the distributor's billing cycle factor and the customer's estimated bill (which shall be based on the customer's average monthly load with the distributor during the most recent 12 consecutive months within the past two years).

Where relevant usage information is not available for the customer for 12 consecutive months within the past two years or where the distributor does not have systems capable of making the above calculation, the customer's average monthly load shall be based on a reasonable estimate made by the distributor.

2.4.13 Despite section 2.4.12, where a non-residential customer in any rate class other than a < 50 kW demand rate class has a credit rating from a recognized credit rating agency, the maximum amount of a security deposit which the distributor may require the non-residential customer to pay shall be reduced in accordance with the following table:

Credit Rating (Using Standard and Poor's Rating Terminology)	Allowable Reduction in Security Deposit
AAA- and above or equivalent	100%
AA-, AA, AA+ or equivalent	95%
A-, From A, A+ to below AA or equivalent	85%
BBB-, From BBB, BBB+ to below A or equivalent	75%
Below BBB- or equivalent	0%

2.4.14 For the purposes of calculating the estimated bill under section 2.4.12 for a low-volume consumer or designated consumer who is billed under SSS or distributor-

- consolidated billing, the price estimate used in calculating competitive electricity costs shall be the same as the price used by the IESO for the purpose of determining maximum net exposures and prudential support obligations for distributors, low-volume consumers and designated consumers. For the purpose of calculating the estimated bill under section 2.4.12 for all other customers billed under SSS or distributor-consolidated billing, the price estimate used in calculating competitive electricity costs shall be the same as the price used by the IESO for the purpose of determining maximum net exposures and prudential support obligations for market participants other than distributors, low-volume consumers and designated consumers.
- 2.4.15 Subject to section 2.4.6.2, a distributor may in its discretion reduce the amount of a security deposit which it requires a customer to pay for any reason including where the customer pays under an interim payment arrangement and where the customer makes pre-authorized payments.
- 2.4.16 For the purposes of sections 2.4.12, the billing cycle factor is 2.5 if the customer is billed monthly, 1.75 if the customer is billed bi-monthly and 1.5 if the customer is billed quarterly.
- 2.4.17 Where a customer, other than a residential electricity customer, has a payment history which discloses more than one disconnection notice in a relevant 12 month period, the distributor may use that customer's highest actual or estimated monthly load for the most recent 12 consecutive months within the past 2 years for the purposes of making the calculation of the maximum amount of security deposit under section 2.4.12.
- 2.4.18 The form of payment of a security deposit for a residential customer shall be cash or cheque at the discretion of the customer or such other form as is acceptable to the distributor.
- 2.4.19 The form of payment of a security deposit for a non-residential customer shall be cash, cheque or an automatically renewing, irrevocable letter of credit from a bank as defined in the *Bank Act*, S.C. 1991, c. 46 at the discretion of the customer. The distributor may also accept other forms of security such as surety bonds and third party guarantees.

- 2.4.20 A distributor shall permit the customer to provide a security deposit in equal installments paid over at least four months. A customer may, in its discretion, choose to pay the security deposit over a shorter time period.
- 2.4.20A Despite section 2.4.20, a distributor shall permit a residential customer to provide a security deposit in equal installments paid over a period of at least 6 months, including where a new security deposit is required due to the distributor having applied the existing security deposit against amounts owing under section 2.4.26A. A customer may elect to pay the security deposit over a shorter period of time.
- 2.4.21 Interest shall accrue monthly on security deposits made by way of cash or cheque commencing on receipt of the total deposit required by the distributor. The interest rate shall be at the Prime Business Rate as published on the Bank of Canada website less 2 percent, updated quarterly. The interest accrued shall be paid out at least once every 12 months or on return or application of the security deposit or closure of the account, whichever comes first, and may be paid by crediting the account of the customer or otherwise.
- 2.4.22 A distributor shall review every customer's security deposit at least once in a calendar year to determine whether the entire amount of the security deposit is to be returned to the customer as the customer is now in a position that it would be exempt from paying a security deposit under section 2.4.9 or 2.4.11 had it not already paid a security deposit or whether the amount of the security deposit is to be adjusted based on a re-calculation of the maximum amount of the security deposit under section 2.4.12 or 2.4.13.
- 2.4.22A For the purposes of section 2.4.22, where a residential customer has paid a security deposit in installments, a distributor shall conduct a review of the customer's security deposit in the calendar year in which the anniversary of the first installment occurs and thereafter at the next review as required by this Code.
- 2.4.23 A distributor shall respond promptly to a customer who, no earlier than 12 months after the payment of a security deposit or the making of a prior demand for a review, demands in writing that the distributor undertake a review to determine whether the entire amount of the security deposit is to be returned to

the customer as the customer is now in a position that it would be exempt from paying a security deposit under section 2.4.9 or 2.4.11 had it not already paid a security deposit or whether the amount of the security deposit is to be adjusted based on a re-calculation of the maximum amount of the security deposit under section 2.4.12 or 2.4.13.

2.4.23A For the purposes of section 2.4.23, where a residential customer has paid a security deposit in installments, the customer shall not be entitled to request a review of the security deposit until 12 months after the first installment was paid.

2.4.23B A distributor shall give notice to all residential customers, at least annually, that any residential customer that qualifies as an eligible low-income customer may request and receive a refund of any security deposit previously paid to the distributor by the customer, after application of the security deposit to any outstanding arrears on the customer's account.

2.4.23C Where an eligible low-income customer requests a refund of a security deposit previously paid to a distributor by the customer, the distributor shall advise the customer within 10 days of the request that the balance remaining after application of the security deposit to any outstanding arrears will be credited to his or her account where the remaining amount is less than one month's average billing or, where the remaining amount is equal to or greater than one month's average billing, the customer may elect to receive the refund by cheque and the distributor shall issue a cheque within 11 days of the customer requesting payment by cheque.

2.4.24 [Revoked effective March 14, 2019.]

2.4.25 Where the distributor determines in conducting a review under section 2.4.22 or 2.4.23 that some or all of the security deposit is to be returned to the customer, the distributor shall promptly return this amount to the customer by crediting the customer's account or otherwise. Despite sections 2.4.22 and 2.4.23, in the case of a customer in a > 5000 kW demand rate class, where the customer is now in a position that it would be exempt from paying a security deposit under section 2.4.9 or 2.4.11 had it not already paid a security deposit, the distributor is only required to return 50% of the security deposit held by the distributor. Despite

- section 2.4.20, where the distributor determines in conducting a review under section 2.4.22 or 2.4.23 that the maximum amount of the security deposit is to be adjusted upward, the distributor may require the customer to pay this additional amount at the same time as that customer's next regular bill comes due.
- 2.4.25A Despite section 2.4.25, where a residential electricity customer is required to adjust the security deposit upwards, a distributor shall permit the customer to pay the adjustment amount in equal installments paid over a period of at least 6 months. A customer may elect to pay the security deposit over a shorter period of time.
- 2.4.26 Within six weeks of the closure of a customer's account, a distributor shall return any security deposit received from the customer, subject to the distributor's right to use the security deposit to set off other amounts owing by the customer to the distributor.
- 2.4.26A A distributor shall not issue a disconnection notice to a residential customer for non-payment unless the distributor has first applied any security deposit held on account for the customer against any amounts owing at that time and the security deposit was insufficient to cover the total amount owing.
- 2.4.26B Where a distributor applies all or part of a security deposit to offset amounts owing by a residential customer under section 2.4.26A, the distributor may request that the customer repay the amount of the security deposit that was so applied. The distributor shall allow the residential customer to repay the security deposit in installments in accordance with section 2.4.20A.
- 2.4.27 A distributor shall apply a security deposit to the final bill prior to the change in service where a customer changes from SSS to a competitive retailer that uses retailer-consolidated billing or a customer changes billing options from distributor-consolidated billing to split billing or retailer-consolidated billing. A distributor shall promptly return any remaining amount of the security deposit to the customer. A distributor shall not pay any portion of a customer's security deposit to a competitive retailer. Where a change is made from distributor-consolidated billing to split billing, a distributor may retain a portion of the security deposit amount that reflects the non-payment risk associated with the new billing option.
- 2.4.28 Despite sections 2.4.22, 2.4.23, 2.4.25, 2.4.26 and 2.4.27, where all or part of a

security deposit has been paid by a third party on behalf of a customer, the distributor shall return the amount of the security deposit paid by the third party, including interest, where applicable, to the third party. This obligation shall apply where and to the extent that:

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

2.4.29 For the purposes of sections 2.4.9 and 2.4.18, the following customers shall be deemed to be residential customers:

- (a) seasonal customers who are not classified as general service customers; and
- (b) customers of a distributor with a farm rate class who have farms with a dwelling that is occupied as a residence continuously for at least 8 months of the year, where the customer has a < 50 kW demand.

2.4.30 A customer that is a corporation within the meaning of the *Condominium Act, 1998* who has an account with a distributor that:

- (a) relates to a property defined in the *Condominium Act, 1998* and comprised predominantly of units that are used for residential purposes; and
- (b) relates to more than one unit in the property,

shall be deemed to be a residential customer for the purposes of sections 2.4.9 and 2.4.18 provided that the customer has filed with the distributor a declaration in a form approved by the Board attesting to the customer's status as a corporation within the meaning of the *Condominium Act, 1998*.

2.4.31 Sections 2.4.22 and 2.4.23 shall be applied on the basis that a customer referred to in section 2.4.30 is a residential customer even if the customer paid the security deposit prior to the date on which section 2.4.30 came into force.

2.4.32 Despite any other provision of this Code and despite the billing cycle that would otherwise be applicable based on the distributor's normal practice as documented in its Conditions of Service, in managing customer non-payment risk a distributor may:

- (a) bill a customer on a bi-weekly basis, if the value of that customer's electricity bill over 12 consecutive months falls between 51% and 100% of the distributor's approved distribution revenue requirement over that 12-month period; or
- (b) bill a customer on a weekly basis, if the value of that customer's electricity bill over 12 consecutive months exceeds 100% of the distributor's approved distribution revenue requirement over that 12-month period.

For the purposes of determining whether this section applies in relation to a customer, a distributor may consider the value of the customer's electricity bill in the 12-month period preceding the coming into force of this section.

2.4.33 A distributor shall not bill a customer in accordance with section 2.4.32 unless the distributor has given the customer at least 42 days' notice before issuance of the first bi-weekly or weekly bill, as the case may be.

2.4.34 Where a distributor is billing a customer in accordance with section 2.4.32 or section 2.4.36, the distributor shall resume billing the customer in accordance with the billing cycle that would otherwise be applicable based on the distributor's normal practice as documented in its Conditions of Service if the value of that customer's annual electricity bill over 12 consecutive months falls below 51% of the distributor's distribution revenue over that 12-month period.

2.4.35 Where a distributor is billing a customer in accordance with section 2.4.32(b), the distributor shall bill the customer as follows if the value of that customer's annual electricity bill over 12 consecutive months falls between 51% and 100% of the distributor's distribution revenue over that 12-month period:

- (a) in accordance with the billing cycle that would otherwise be applicable based on the distributor's normal practice as documented in its Conditions of Service; or
- (b) in accordance with section 2.4.32(a) or section 2.4.36.

2.4.36 Despite any other provision of this Code, a distributor that intends to bill or is billing a customer in accordance with section 2.4.32 may, in lieu of such billing, negotiate alternative arrangements with the customer, including in relation to a lesser frequency of billing or in relation to the giving or retention of security deposits.

2.5 Frequency and Notice of Customer Reclassification and Notice of kVA Billing

2.5.1 A distributor shall, at least once in each calendar year, review each non- residential customer's rate classification to determine whether, based on the rate classification requirements set out in the distributor's rate order, the customer should be assigned to a different rate class. Subject to section 2.5.3, other than at the request of the non-residential customer a distributor may not change a non- residential customer's rate classification more than once in any calendar year.

2.5.2 A distributor shall review a non-residential customer's rate classification upon being requested to do so by the customer to determine whether, based on the rate classification requirements set out in the distributor's rate order, the customer should be assigned to a different rate class. Subject to section 2.5.4, a distributor is not required to respond to more than one such customer request in any calendar year.

2.5.3 A distributor may review a non-residential customer's rate classification at any time if the customer's demand falls outside the upper or lower limits applicable to the customer's current rate classification for a period of five consecutive months.

2.5.4 A distributor shall review a non-residential customer's rate classification upon being requested to do so by the customer at any time if the customer's demand falls outside the upper or lower limits applicable to the customer's current rate classification for a period of five consecutive months.

2.5.5 Where a distributor assigns a non-residential customer to a different rate class as a result of a review initiated by the distributor, the distributor shall give the customer written notice of the reclassification no less than one billing cycle before the reclassification takes effect for billing purposes.

2.5.6 A distributor that charges a non-residential customer on the basis of 90% of the kVA reading of the customer's meter rather than on the basis of the kW reading of the customer's reading shall include on all bills issued to that customer a message

to the effect that billing is based on 90% of the kVA reading.

2.6 Bill Issuance and Payment

2.6.1 A distributor shall include on each bill issued to a customer the date on which the bill is printed.

2.6.1A A distributor shall issue a bill to each non-seasonal residential customer and each general service < 50kW customer on a monthly basis.

2.6.2 Except as otherwise permitted by this Code, a distributor shall not treat a bill issued to a customer as unpaid, and shall not impose any late payment or other charges associated with non-payment, until the applicable minimum payment period set out in section 2.6.3 has elapsed.

2.6.3 For the purposes of section 2.6.2, the minimum payment period shall be 20 days from the date on which the bill was issued to the customer. A distributor may provide for longer minimum payment periods, provided that any such longer minimum payment periods are documented in the distributor's Conditions of Service.

2.6.4 For the purposes of section 2.6.3, a bill will be deemed to have been issued to a customer:

- (a) if sent by mail, on the third day after the date on which the bill was printed by the distributor;
- (b) if made available over the internet, on the date on which an e-mail is sent to the customer notifying the customer that the bill is available for viewing over the internet;
- (c) if sent by e-mail, on the date on which the e-mail is sent; or
- (d) if sent by more than one of the methods listed in paragraphs (a) to (c), on whichever date of deemed issuance occurs last.

2.6.5 A distributor shall apply the following rules for purposes of determining the date on which payment of a bill has been received from a customer:

- (a) if paid by mail, three days prior to the date on which the distributor receives the payment;
- (b) if paid at a financial institution or electronically, on the date on which the payment is acknowledged or recorded by the customer's financial institution; or
- (c) if paid by credit card issued by a financial institution, on the date and at the time that the charge is accepted by the financial institution.

2.6.6 Where a bill issued to a residential customer includes charges for goods or services other than electricity, a distributor shall allocate any payment made by the customer first to the electricity charges and then, if funds are remaining, to the charges for other goods or services.

2.6.6.1 [Revoked effective March 14, 2019.]

2.6.6.2A Where payment on account of a bill referred to in section 2.6.6 is sufficient to cover electricity charges, security deposits and billing adjustments, the distributor shall not impose late payment charges, issue a disconnection notice or disconnect electricity supply.

2.6.6.2B Where payment on account of a bill referred to in section 2.6.6 is not sufficient to cover electricity charges, security deposits and billing adjustments, the distributor shall allocate the payments in the following order: electricity charges as defined in section 2.6.6.3, payments towards an arrears payment agreement, outstanding security deposit, under-billing adjustments and non-electricity charges.

2.6.6.2C Despite sections 2.6.6 and 2.6.6.2B, where a customer requests that a payment be allocated in a manner other than that specified in those sections, the distributor may, but is not required to, allocate the payment in the manner requested.

2.6.6.3 For the purposes of this section, "electricity charges" are:

- (a) charges that appear under the sub-headings "Electricity", "Delivery", and "Regulatory Charges" as described in Ontario Regulation 275/04 (Information on Invoices to Low-volume Consumers of Electricity) made under the Act, and all applicable taxes on those charges;
- (b) where applicable, charges prescribed by regulations under section 25.33 of the

Electricity Act and all applicable taxes on those charges; and

- (c) Board-approved specific service charges, including late payment charges, and such other charges and applicable taxes associated with the consumption of electricity as may be required by law to be included on the bill issued to the customer or as may be designated by the Board for the purposes of this section, but not including security deposits or amounts owed by a customer pursuant to an arrears payment agreement or a billing adjustment.

2.6.7 For the purposes of section 2.6, a distributor shall apply the following rules relating to the computation of time:

- (a) where there is reference to a number of days between two events, the days shall be counted by excluding the day on which the first event happens and including the day on which the second event happens;
- (b) where the time for doing an act expires on a day that is not a business day, the act may be done on the next day that is a business day;
- (c) where an act, other than payment by a customer, occurs on a day that is not a business day, it shall be deemed to have occurred on the next business day;
- (d) where an act, other than payment by a customer, occurs after 5:00 p.m., it shall be deemed to have occurred on the next business day; and
- (e) receipt of a payment by a customer is effective on the date that the payment is made, including payments made after 5:00 p.m.

2.7 Arrears Payment Agreements

2.7.1 A distributor shall make available to any residential or general service < 50 kW customer who is unable to pay their outstanding electricity charges, as defined in section 2.6.6.3, the opportunity to enter into an arrears payment agreement with the distributor. In respect of residential customers, the arrears payment agreement shall include, at a minimum, the terms and conditions specified in sections 2.7.1.1 to 2.7.5 inclusive and 2.7.6A. In respect of general service < 50 kW customers, an arrears payment agreement need not include those terms and conditions, but shall be offered on reasonable terms.

2.7.1A If a distributor enters into discussions with a residential customer and offers an arrears agreement but the customer declines to enter into an arrears agreement, the distributor may proceed with disconnection and is not required to offer an arrears agreement to such a customer after disconnection.

2.7.1.1 Before entering into an arrears payment agreement with a residential customer under section 2.7, a distributor shall apply any security deposit held on account of the customer against any electricity charges owing at the time.

2.7.1.2 As part of the arrears payment agreement, a distributor may require that the customer pay a down payment of up to 15% of the electricity charge arrears accumulated, inclusive of any applicable late payment charges but excluding other service charges, when entering into the arrears management program.

2.7.1.3 Where an eligible low-income customer enters into an arrears payment agreement for the first time or subsequent to having successfully completed a previous arrears payment agreement as an eligible low-income customer, a distributor may require that the customer pay a down payment of up to 10% of the electricity charge arrears accumulated, inclusive of any applicable late payment charges but excluding other service charges.

2.7.2 The arrears payment agreement referred to in section 2.7.1 shall allow the residential electricity customer to pay all remaining electricity charges that are then overdue for payment as well as the current bill amount if the customer elects to do so, after applying a security deposit under section 2.7.1.1, and the down payment referred to in section 2.7.1.2, including all electricity-related service charges that have accrued to the date of the agreement, over the following periods:

- (a) a period of at least 5 months, where the total amount of the electricity charges remaining overdue for payment is less than twice the customer's average monthly billing amount;
- (b) a period of at least 10 months, where the total amount of the electricity charges remaining overdue for payment is equal to or exceeds twice the customer's average monthly billing amount;
- (c) in the case of an eligible low-income customer, a period of at least 8 months, where the total amount of the electricity charges remaining overdue for

payment is less than or equal to 2 times the customer's average monthly billing amount;

(d) in the case of an eligible low-income customer, a period of at least 12 months where the total amount of the electricity charges remaining overdue for payment exceeds 2 times the customer's average monthly billing amount and is less than or equal to 5 times the customer's average monthly billing amount; or

(e) in the case of an eligible low-income customer, a period of at least 16 months where the total amount of the electricity charges remaining overdue for payment exceeds 5 times the customer's average monthly billing amount.

2.7.3 For the purposes of section 2.7.2, the customer's average monthly billing amount shall be calculated by taking the aggregate of the total electricity charges billed to the customer in the preceding 12 months and dividing that value by 12. If the customer has been a customer of the distributor for less than 12 months, the customer's average monthly billing amount shall be based on a reasonable estimate made by the distributor. For the purposes of this section, "electricity charges" has the same meaning as in section 2.6.6.3.

2.7.4 Where a residential customer defaults on more than one occasion in making a payment in accordance with an arrears payment agreement, or a payment on account of a current electricity charge billing, a security deposit amount due or an under-billing adjustment, the distributor may cancel the arrears payment agreement.

2.7.4.1 If the distributor cancels an arrears payment agreement pursuant to section 2.7.4, the distributor will give written notice of cancellation to the customer and to any third party designated by the customer under section 2.7.4.1A at least 10 days before the effective date of the cancellation.

2.7.4.1A Where, at the time of entering into an arrears payment agreement a customer has designated a third party to receive notice of cancellation of the arrears payment agreement, the distributor shall provide notice of cancellation to such third party.

2.7.4.1B A distributor shall accept electronic mail (e-mail) or telephone communications from the customer for purposes of section 2.7.4.1A.

2.7.4.2 If the customer makes payment of all amounts due pursuant to the arrears payment agreement as of the cancellation date referred to in section 2.7.4.1 and makes such payment on or before the cancellation date, the distributor shall reinstate the arrears payment agreement.

2.7.4.3 Where an eligible low-income customer defaults on more than two occasions in making a payment in accordance with an arrears payment agreement, or a payment on account of a current electricity charge billing or an under-billing adjustment, the distributor may cancel the arrears payment agreement.

2.7.4.4 For purposes of sections 2.7.4 and 2.7.4.3, the defaults must occur over a period of at least 2 months before the distributor may cancel the arrears payment agreement.

2.7.5 A distributor shall make available to a residential electricity customer a second arrears payment agreement if the customer so requests, provided that 2 years or more has passed since a first arrears payment agreement was entered into and provided that the customer performed his or her obligations under the first arrears payment agreement.

2.7.5.1 In the case of an eligible low-income customer, the distributor shall allow such a customer to enter into a subsequent arrears payment agreement upon successful completion of the previous arrears payment agreement on the following terms:

- i) If a second or subsequent arrears agreement is requested less than 12 months from the date of completion of the previous arrears payment agreement, then the standard arrears payment agreement terms applicable to all residential customers under sections 2.7.1 to 2.7.4.1 also apply to the eligible low-income customer; or
- ii) If a second or subsequent arrears agreement is requested 12 months or more from the date of completion of the previous arrears payment agreement, the eligible low-income customer shall be entitled to the arrears payment agreement terms set out in sections 2.7.1.3, 2.7.2(c), 2.7.2(d), 2.7.2(e), 2.7.4.3 and 2.7.4.4.

2.7.6A The distributor is not required to waive any late payment charges, as described in section 2.6.6.3, that accrue to the date of the arrears payment agreement but no further late payment charges may be imposed on a residential customer after he or she has entered into an arrears payment agreement with the distributor in respect of the amount that is the subject of that agreement.

2.7.7 The distributor shall not disconnect the property of a residential customer, for failing to make a payment subject to an arrears payment agreement, unless the customer is in default, according to sections 2.7.4 or 2.7.4.3, and 2.7.4.4, and the distributor has cancelled the arrears payment agreement in accordance with the provisions of this Code.

2.7.8 In the event a customer failed to perform their obligations under a previous arrears payment agreement and the distributor terminated the agreement pursuant to section 2.7.4 (in the case of a residential customer) or otherwise (in the case of a general service < 50 kW customer), the distributor may require that the customer wait 1 year after termination of the previous agreement before entering into another arrears payment agreement with the distributor.

2.8 Opening and Closing of Accounts

2.8.1 Where a distributor opens an account for a property in the name of a person at the request of a third party, the distributor shall within 15 days of the opening of the account send a letter to the person advising of the opening of the account and requesting that the person confirm that he or she agrees to be the named customer. If the distributor does not receive confirmation from the intended customer, within 15 days of the date of the letter, the distributor shall advise the third party that the account will not be set up as requested.

2.8.1.1 The distributor is not required to send a letter advising of the opening of the account where the request to open the account is made in writing by the person's solicitor or person in possession of a valid Power of Attorney for the person.

- 2.8.2 Despite any other provision of this Code, with the exception of the parties mentioned in section 2.8.1.1, where a distributor has opened an account for a property in the name of a person at the request of a third party, the distributor shall not seek to recover from that person any charges for service provided to the property unless the person has agreed to be the customer of the distributor in relation to the property.
- 2.8.3 Despite any other provision of this Code, with the exception of the parties mentioned in section 2.8.1.1 or an agreement under section 2.8.3A, where a distributor receives a request to close or transfer an account in relation to a rental unit in a residential complex as defined in the Residential Tenancies Act, 2006 or another residential property, the distributor shall not seek to recover any charges for service provided to that rental unit or residential property after closure of the account from any person, including the landlord for the residential complex or a new owner of the residential property, unless the person has agreed to assume responsibility for those charges.
- 2.8.3A A distributor may enter into an agreement with a landlord whereby the landlord agrees to assume responsibility for paying for continued service to the rental property after closure of a tenant's account.
- 2.8.4 For the purposes of section 2.8, the requirement for an agreement in writing includes agreements in electronic form in accordance with the Electronic Commerce Act, 2000.
- 2.8.4A For the purposes of sections 2.8.1, 2.8.2 and 2.8.3, the agreement may be established by verbal request over the telephone provided that a recording of the verbal request is retained by the distributor for 24 months thereafter.
- 2.8.4B For the purposes of section 2.8.3A, the agreement may be established by verbal request over the telephone provided that a recording of the verbal request is retained by the distributor for the length of the agreement, plus an additional 6 months.
- 2.8.5 Nothing in sections 2.8.1 – 2.8.4B inclusive is intended to void or cancel any binding agreements for service existing as of the effective date of these amendments or any pre-existing agreements between landlords and distributors.

2.9 Use of Load Control Devices

2.9.1 A distributor may install a load control device instead of disconnecting supply to a customer for non-payment, provided that the distributor complies with the provisions set out in sections 2.9.3, 2.9.3A, 2.9.3B, 2.9.3C, 2.9.4, 2.9.5 and 2.9.6.

2.9.1A Where a customer voluntarily requests the installation or continued use of a load limiter device, the distributor shall install a load limiter device provided the distributor ordinarily provides such a service.

2.9.2 Where a distributor is notified by a LEAP Intake Agency that the agency is assessing the customer for Emergency Financial Assistance, the distributor shall refrain from installing a load control device for a period of 21 days after receiving such notification.

2.9.3 When the distributor installs a load limiter device, either for non-payment or at the customer's request, it shall also deliver a written notice to the customer explaining in plain language the operation of the device, the maximum capacity of the device, how to reset the device if the maximum capacity is exceeded ,as well as a telephone number for the customer to obtain further information and an emergency telephone number to contact if the capacity is exceeded and the customer cannot manually reset the device for any reason.

2.9.3A When the distributor installs a load limiter device for non- payment that cannot be manually reset by the customer after the maximum limit is triggered, then the distributor must provide a 24-hour telephone number the customer may call to have the load limiter device remotely reset.

2.9.3B When the distributor installs a timed load interrupter for non-payment, it shall also deliver a written notice to the customer explaining in plain language the effect of the device on service and a telephone number for the customer to obtain further information.

2.9.3C When a distributor installs a load control device for non-payment, the distributor shall also provide to the customer:

- (a) the Fire Safety Notice of the Office of the Fire Marshal; and
- (b) any other public safety notices or information bulletins issued by public safety authorities and provided to the distributor, which provide information to consumers respecting dangers associated with the disconnection of electricity service.

2.9.4 A load control device may not be installed at a residential customer's property during the course of an arrears payment agreement, unless the agreement has been terminated in accordance with the provisions of this Code.

2.9.5 Where a distributor had previously installed a load control device for non-payment and the residential customer then enters into an arrears payment agreement, the distributor shall remove the device within 2 business days of the customer entering into an arrears payment agreement.

2.9.5A Despite sections 2.9.4, 2.9.5 and 7.10.1(b), a customer may request the installation or continued use of the load limiter device during the course of the arrears payment agreement where the distributor ordinarily provides such a service.

2.9.6 Subject to section 2.9.5, where a load control device was installed by a distributor for non-payment, the distributor shall remove the load control device within 2 business days of an outstanding account being paid in full.

2.10 Estimated Billing

2.10.1 Where a smart meter or interval meter has been installed, a distributor shall issue a bill to a residential or general service < 50 kW customer based on an actual meter read.

2.10.2 Despite 2.10.1, to account for exceptional circumstances, a distributor may issue a bill to a residential or general service < 50kW customer with a smart meter or interval meter based on estimated consumption twice every 12 months.

3 CONNECTIONS AND EXPANSIONS

3.0 For the purposes of section 3 of this Code (except section 3.3), an embedded distributor is deemed to be a customer.

3.1 Connections

3.1.1 In establishing its connection policy as specified in its Conditions of Service, and determining how to comply with its obligations under section 28 of the Electricity Act, a distributor may consider the following reasons to refuse to connect, or continue to connect, a customer:

- (a) contravention of the laws of Canada or the Province of Ontario including the Ontario Electrical Safety Code;
- (b) violation of conditions in a distributor's licence;
- (c) materially adverse effect on the reliability or safety of the distribution system;
- (d) imposition of an unsafe worker situation beyond normal risks inherent in the operation of the distribution system;
- (e) a material decrease in the efficiency of the distributor's distribution system;
- (f) a materially adverse effect on the quality of distribution services received by an existing connection; and
- (g) if the person requesting the connection owes the distributor money for distribution services, or for non-payment of a security deposit. The distributor shall give the person a reasonable opportunity to provide the security deposit consistent with sections 2.4.20 and 2.4.20A.

3.1.2 A distributor shall ensure that all electrical connections to its system meet the distributor's design requirements, unless the electrical connections are separated by a protection device that has been approved by the distributor. If an electrical connection does not meet the distributor's design requirements, a distributor may refuse connection.

- 3.1.3 If a distributor refuses to connect a customer, the distributor shall inform the person requesting the connection of the reason(s) for not connecting and, where the distributor is able to provide a remedy, make an offer to connect. If the distributor is unable to provide a remedy to resolve the issue, it is the responsibility of the customer to do so before a connection may be made.
- 3.1.4 For residential customers, a distributor shall define a basic connection and recover the cost of the basic connection as part of its revenue requirement. The basic connection for each customer shall include, at a minimum:
- (a) supply and installation of overhead distribution transformation capacity or an equivalent credit for transformation equipment; and
 - (b) up to 30 meters of overhead conductor or an equivalent credit for underground services.
- 3.1.5 For non-residential customers other than micro-embedded generation facility customers, a distributor may define a basic connection by rate class and recover the cost of connection either as part of its revenue requirement, or through a basic connection charge to the customer.
- 3.1.5A For micro-embedded generation facility customers, a distributor shall define a basic connection and recover the cost of the basic connection through a charge to the customer. The basic connection for each micro-embedded generation facility customer shall include, at a minimum, the supply and installation of any new or modified metering.
- 3.1.6 All customer classes shall be subject to a variable connection charge to be calculated as the costs associated with the installation of connection assets above and beyond the basic connection. A distributor may recover this amount from a customer through a connection charge or equivalent payment.
- 3.1.7 Where a distributor-owned asset has reached its end-of-life and is planned to be retired and replacement is determined to be the optimal solution, the distributor shall undertake an assessment to determine the appropriate capacity of the replacement asset. Where the asset is a distribution station that is connected to the transmission system or a distribution line that connects a load customer with a

non-coincident peak demand that is equal to or greater than 5 MW, that assessment shall be undertaken in consultation with the applicable customer(s). Where the asset is replaced, the distributor shall either:

- (a) not recover a capital contribution from a customer to replace that asset, where the new asset is the same capacity or lower capacity; or
- (b) recover a capital contribution from a customer to replace the asset, where the customer requires additional capacity. The capital contribution shall be limited to the incremental cost relative to the cost of a like-for-like replacement asset.

3.1.7A Where a distributor-owned asset has not reached its end-of-life and is replaced at the request of a customer, the distributor shall recover a capital contribution from the customer. The capital contribution shall be equal to the remaining net book value of the replaced asset plus the advancement cost.

3.1.8 A distributor shall not connect to the distribution system of another distributor for the purpose of obtaining additional transmission connection capacity without the approval of the Board. The two distributors shall file a joint application for approval of the arrangement between them, any investment in distribution assets, and the compensation to be provided by the connecting distributor to the other distributor (“the facilitating distributor”), with the Board and include as part of the application:

- (a) confirmation by the IESO that the proposed distribution investment would avoid a higher cost investment in a transmission connection facility and would be the optimal infrastructure solution from a regional planning perspective;
- (b) a copy of the agreement between the connecting distributor and the facilitating distributor; and
- (c) evidence that there is sufficient capacity on the transmission connection facility that connects the facilitating distributor to the transmission network to meet the forecast needs of both distributors (i.e., a transmission connection investment will not be required during the forecast period), by

providing the amount of excess capacity on the transmission connection facility and a load forecast from each distributor.

The agreement between the connecting distributor and the facilitating distributor shall ensure the customers of the facilitating distributor will not be negatively affected in any way due to the connection to the facilitating distributor's distribution system. In that regard, the agreement shall specify:

- (a) the capital contribution that the connecting distributor will provide to the facilitating distributor to compensate it for all the costs incurred to facilitate the distribution investment that connects it, taking into account any capital contribution refund that may be required under section 6.3.17 of the Transmission System Code;
- (b) any additional charges incurred by the facilitating distributor, due to the incremental load withdrawn from the transmission system by the connecting distributor, shall be recovered from the connecting distributor;
- (c) any other costs that may be identified by the two distributors, for the purpose of cost recovery from the connecting distributor, including any investment required in existing distribution assets of the facilitating distributor; and
- (d) the frequency by which the connecting distributor will provide an updated load forecast to the facilitating distributor.

For the purpose of this section, the connecting distributor shall be considered a customer of the facilitating distributor under section 3.1.

- 3.1.9 For a new or modified distributor-owned asset that will serve a mix of load customers and generator customers, a distributor shall attribute the cost to the customers on a pro-rata basis, based on the apportioned benefit, taking into account factors including the respective rated peak output of each generation facility and the respective non-coincident incremental peak load requirements of each load customer, and the relative line length in proportion to the line length being shared by the customers.

- 3.1.10 Where a customer requests the relocation of a distributor-owned asset, the distributor shall recover from that customer the cost of relocating that asset, except to the extent recovery is limited under law.
- 3.1.11 Where a distributor-owned asset is relocated in the absence of a customer request, the distributor shall bear the cost of relocating that asset.

3.2 Expansions

- 3.2.1 If a distributor must construct new facilities to its main distribution system or increase the capacity of existing distribution system facilities in order to be able to connect a specific customer or group of customers, the distributor shall perform an initial economic evaluation based on estimated costs and forecasted revenues, as described in Appendix B, of the expansion project to determine if the future revenue from the customer(s) will pay for the capital cost and on-going maintenance costs of the expansion project.
- 3.2.2 If the distributor's offer was an estimate, the distributor shall carry out a final economic evaluation once the facilities are energized. The final economic evaluation shall be based on forecasted revenues, actual costs incurred (including, but not limited to, the costs for the work that was not eligible for alternative bid, and any transfer price paid by the distributor to the customer) and the methodology described in Appendix B.
- 3.2.3 If the distributor's offer was a firm offer, and if the alternative bid option was chosen and the facilities are transferred to the distributor, the distributor shall carry out a final economic evaluation once the facilities are energized. The final economic evaluation shall be based on the amounts used in the firm offer for costs and forecasted revenues, any transfer price paid by the distributor to the customer, and the methodology described in Appendix B.
- 3.2.4 The capital contribution that a distributor shall charge an embedded distributor or a customer other than a generator to construct an expansion shall be equal to that customer's share of the difference between the present value of the projected capital costs and on-going maintenance costs for the facilities and the present value of the projected revenue for distribution services provided by those

facilities. The methodology and inputs that a distributor shall use to calculate this amount are described in Appendix B.

3.2.4A Where an expansion involves an upstream transmission asset that has been deemed by the Board to be a distribution asset pursuant to section 84 of the Act, a distributor shall not require a capital contribution under section 3.2.4 or section 3.2.27 from a load customer with a non-coincident peak demand of less than 5 MW.

3.2.5 The capital contribution that a distributor shall charge a generator to construct an expansion to connect a generation facility to the distributor's distribution system shall be equal to the generator's share of the present value of the projected capital costs and on-going maintenance costs for the facilities. Projected revenue and avoided costs from the generation facility shall be assumed to be zero, unless otherwise determined by rates approved by the Board. The methodology and inputs that a distributor shall use to calculate this amount are described in Appendix B.

3.2.5A Notwithstanding section 3.2.5 but subject to section 3.2.5B, a distributor shall not charge a generator to construct an expansion to connect a renewable energy generation facility:

- (a) if the expansion is in a Board-approved plan filed with the Board by the distributor pursuant to the deemed condition of the distributor's licence referred to in paragraph 2 of subsection 70(2.1) of the Act, or is otherwise approved or mandated by the Board; or
- (b) in any other case, for any costs of the expansion that are at or below the renewable energy generation facility's renewable energy expansion cost cap.

For greater clarity, the distributor shall bear all costs of constructing an expansion referred to in (a) and, in the case of (b), shall bear all costs of constructing the expansion that are at or below the renewable energy generation facility's renewable energy expansion cost cap.

3.2.5B Where an expansion is undertaken in response to a request for the connection of more than one renewable energy generation facility, a distributor shall not charge any of the requesting generators to construct the expansion:

- (a) if the expansion is in a Board-approved plan filed with the Board by the distributor pursuant to the deemed condition of the distributor's licence referred to in paragraph 2 of subsection 70(2.1) of the Act, or is otherwise approved or mandated by the Board; or
- (b) in any other case, for any costs of the expansion that are at or below the amount that results from adding the total name-plate rated capacity of each renewable energy generation facility referred to in section 6.2.9(a) (in MW) and then multiplying that number by \$90,000.

For greater clarity, the distributor shall bear all costs of constructing an expansion referred to in (a) and, in the case of (b), shall bear all costs of constructing the expansion that are at or below the number that results from the calculation referred to in (b).

3.2.5C Where, in accordance with the calculation referred to in section 3.2.5B(b), a capital contribution is payable by the requesting generators, the distributor shall apportion the amount of the capital contribution among the requesting generators on a pro-rata basis based on the total name-plate rated capacity of the renewable energy generation facility referred to in section 6.2.9(a) (in MW).

3.2.6 If a shortfall between the present value of the projected costs and revenues is calculated under section 3.2.1, the distributor may propose to collect all or a portion of that amount from the customer in the form of a capital contribution, in accordance with the distributor's documented policy on capital contributions by customer class.

3.2.7 If the capital contribution amount resulting from the final economic evaluation provided for in section 3.2.2 or 3.2.3 differs from the capital contribution amount resulting from the initial economic evaluation calculation, the distributor shall obtain from the customer, or credit the customer for, any difference between the two calculations.

3.2.8 If an expansion is needed in order for a distributor to connect a customer, the distributor shall make an initial offer to connect the customer and build the expansion. A distributor's initial offer shall include, at no cost to the customer:

- (a) a statement as to whether the offer is a firm offer or is an estimate of the costs that would be revised in the future to reflect actual costs incurred;
- (b) a reference to the distributor's Conditions of Service and information on how the customer requesting the connection may obtain a copy of them;
- (c) a statement as to whether a capital contribution will be required from the customer;
- (d) a statement as to whether an expansion deposit will be required from the customer and if the distributor will require an expansion deposit from the customer, the amount of the expansion deposit that the customer will have to provide; and
- (e) a statement as to whether the connection charges referred to in sections 3.1.5 and 3.1.6 will be charged separately from the capital contribution referred to in section 3.2.8(c), and a description of, and if known, the amount for, those connection charges.

3.2.9 If the distributor will require a customer to pay a capital contribution, the distributor must, in addition to complying with section 3.2.8, also include in its initial offer, at no cost to the customer:

- (a) the amount of the capital contribution that the customer will have to pay for the expansion;
- (b) the calculation used to determine the amount of the capital contribution to be paid by the customer including all of the assumptions and inputs used to produce the economic evaluation as described in Appendix B;
- (c) a statement as to whether the offer includes work for which the customer may obtain an alternative bid and, if so, the process by which the customer may obtain the alternative bid;

- (d) a description of, and costs for, the work that is eligible for alternative bid and the work that is not eligible for alternative bid associated with the expansion broken down into the following categories:
 - i) labour (including design, engineering and construction);
 - ii) materials;
 - iii) equipment; and
 - iv) overhead (including administration);
- (e) an amount for any additional costs that will occur as a result of the alternative bid option being chosen (including, but not limited to, inspection costs);
- (f) if the offer is for a residential customer, a description of, and the amount for, the cost of the basic connection referred to in section 3.1.4 that has been factored into the economic evaluation; and
- (g) if the offer is for a non-residential customer and if the distributor has chosen to recover the non-residential basic connection charge as part of its revenue requirement, a description of, and the amount for, the connection charges referred to in section 3.1.5 that have been factored into the economic evaluation.

3.2.10 Once the customer has accepted the distributor's offer, and if the customer requests it, the distributor shall provide to the customer, at cost, an itemized list of the costs for the major items in each of the categories listed in section 3.2.9(d) and shall be done in the following manner:

- (a) if the customer has not chosen to pursue an alternative bid, the distributor shall provide the itemized list for all of the work; or
- (b) if the customer has chosen to pursue the alternative bid option, the distributor shall only be required to provide the itemized list for the work that is not eligible for alternative bid.

- 3.2.11 If the customer submits revised plans or requires additional design work, the distributor may provide, at cost, a new offer based on the revised plans or the additional design work.
- 3.2.12 The distributor shall provide the customer with the calculation used to determine the final capital contribution amount including all of the assumptions and inputs used to produce the final economic evaluation as provided for in sections 3.2.2 and 3.2.3. The distributor shall provide the final economic evaluation and final capital contribution amount to the customer at no cost to the customer.
- 3.2.13 The last sentence of section 3.2.12 does not apply to a customer who is a generator or is proposing to become a generator unless the customer's proposed or existing generation facility is an emergency backup generation facility.
- 3.2.14 Where the distributor requires a capital contribution from the customer, the distributor shall allow the customer to obtain and use alternative bids for the work that is eligible for alternative bid. The distributor shall require the customer to use a qualified contractor for the work that is eligible for alternative bid provided that the customer agrees to transfer the expansion facilities that are constructed under the alternative bid option to the distributor upon completion.
- 3.2.15 The following activities are not eligible for alternative bid:
- (a) distribution system planning; and
 - (b) the development of specifications for any of the following:
 - i) the design of an expansion;
 - ii) the engineering of an expansion; and
 - iii) the layout of an expansion.
- 3.2.15A Work that requires physical contact with the distributor's existing distribution system is not eligible for alternative bid unless the distributor decides in any given case to allow such work to be eligible for alternative bid.

3.2.15B Despite any other provision of this Code, decisions related to the temporary de-energization of any portion of the distributor's existing distribution system are the sole responsibility of the distributor. Where the temporary de-energization is required in relation to work that is being done under alternative bid, the distributor shall apply the same protocols and procedures to the de-energization as it would if the customer had not selected the alternative bid option.

3.2.16 If a customer chooses to pursue an alternative bid and uses the services of a qualified contractor for the work that is eligible for alternative bid, the distributor shall:

- (a) require the customer to complete all of the work that is eligible for alternative bid;
- (b) require the customer to:
 - i) select and hire the contractor;
 - ii) pay the contractor's costs for the work that is eligible for alternative bid; and
 - iii) assume full responsibility for the construction of that aspect of the expansion;
- (c) require the customer to be responsible for administering the contract (including the acquisition of all required permissions, permits and easements) or have the customer pay the distributor to do this activity;
- (d) require the customer to ensure that the work that is eligible for alternative bid is done in accordance with the distributor's distribution system planning and the distributor's specifications for any of the following:
 - i) the design of the expansion;
 - ii) the engineering of the expansion; and
 - iii) the layout of the expansion

- (d.1) require the customer to obtain the distributor's review and approval of plans for the design, engineering, layout, and work execution for the work that is eligible for alternative bid to ensure conformance with the distribution system planning and specifications referred to in paragraph (d) prior to commencing that work; and
- (e) inspect and approve, at cost, all aspects of the constructed facilities as part of a system commissioning activity, prior to connecting the constructed facilities to the existing distribution system.

3.2.17 In addition to the capital contribution amounts in sections 3.2.4 and 3.2.5, the distributor may also charge a customer that chooses to pursue an alternative bid any costs incurred by the distributor associated with the expansion including, but not limited to, the following:

- (a) costs for additional design, engineering, or installation of facilities required to complete the project;
- (a.1) costs associated with any temporary de-energization of any portion of the existing distribution system that is required in relation to an expansion that is constructed under the alternative bid option;
- (a.2) costs associated with the review and approval referred to in section 3.2.16(d.1);
- (b) costs for administering the contract between the customer and the contractor hired by the customer if the distributor is asked to do so by the customer and the distributor agrees to do it; and
- (c) costs for inspection or approval of the work performed by the contractor hired by the customer.

When the customer transfers the expansion facilities to the distributor in accordance with section 3.2.18 and 3.2.19, the charges referred to above shall be included as part of the customer's costs for the purposes of determining the transfer price.

- 3.2.18 When the customer transfers the expansion facilities that were constructed under the alternative bid option to the distributor, and provided that the distributor has inspected and approved the constructed facilities, the distributor shall pay the customer a transfer price. The transfer price shall be the lower of the cost to the customer to construct the expansion facilities or the amount set out in the distributor's initial offer to do the work that is eligible for alternative bid. If the customer does not provide the distributor with the customer's cost information in a timely manner, then the distributor may use the amount for the work that is eligible for alternative bid as set out in its initial offer for the transfer price instead of the customer's cost.
- 3.2.19 Where a distributor is required to pay a transfer price under section 3.2.18, the transfer price shall be considered a cost to the distributor for the purposes of completing the final economic evaluation.
- 3.2.20 For expansions that require a capital contribution, a distributor shall require the customer to provide an expansion deposit for up to 100% of the present value of the forecasted revenues as described in Appendix B. For expansions that do not require a capital contribution, a distributor may require the customer to provide an expansion deposit for up to 100% of the present value of the projected capital costs and on-going maintenance costs of the expansion project.
- 3.2.21 The expansion deposit collected under section 3.2.20 shall cover both the forecast risk (the risk associated with whether the projected revenue for the expansion will materialize as forecasted) and the asset risk (the risk associated with ensuring that the expansion is constructed, that it is completed to the proper design and technical standards and specifications, and that the facilities operate properly when energized) related to the expansion.
- 3.2.22 If the alternative bid option was chosen, a distributor shall be allowed to retain and use the expansion deposit to cover the distributor's costs if the distributor must complete, repair, or bring up to standard the facilities. Complete, repair, or bring up to standard includes costs the distributor incurs to ensure that the expansion is completed to the proper design and technical standards and specifications, and that the facilities operate properly when energized.

3.2.23 Once the facilities are energized and subject to sections 3.2.22 and 3.2.24, the distributor shall annually return the percentage of the expansion deposit in proportion to the actual connections (for residential developments) or actual demand (for commercial and industrial developments) that materialized in that year (i.e., if twenty percent of the forecasted connections or demand materialized in that year, then the distributor shall return to the customer twenty percent of the expansion deposit). This annual calculation shall only be done for the duration of the customer connection horizon determined in accordance with Appendix B. If at the end of the customer connection horizon the forecasted connections (for residential developments) or forecasted demand (for commercial and industrial developments) have not materialized, the distributor shall be allowed to retain the remaining portion of the expansion deposit.

3.2.24 If the alternative bid option was chosen, the distributor shall retain at least ten percent of the expansion deposit for a warranty period for at least two years. This portion of the expansion deposit can be applied to any work required to repair the expansion facilities within the two year warranty period. The two year warranty period begins:

- (a) when the last forecasted connection in the expansion project materializes (for residential developments) or the last forecasted demand materializes (for commercial and industrial developments); or
- (b) at the end of the customer connection horizon determined in accordance with Appendix B,

whichever is first. The distributor shall return any remaining portion of this part of the expansion deposit at the end of the two year warranty period.

3.2.25 Any expansion deposit required under section 3.2.20 shall be in the form of cash, letter of credit from a bank as defined in the Bank Act, or surety bond. The distributor shall allow the customer to select the form of the expansion deposit.

3.2.26 Where any expansion deposit is in the form of cash, the distributor shall return the expansion deposit to the customer together with interest in accordance with the following conditions:

- (a) interest shall accrue monthly on the expansion deposit commencing on receipt of the total deposit required by the distributor; and
- (b) the interest rate shall be at the Prime Business Rate set by the Bank of Canada less 2 percent.

3.2.27 Unforecasted customers that connect to the distribution system during the customer connection horizon determined in accordance with Appendix B will benefit from the earlier expansion and should contribute their share. In such an event, the initial contributors shall be entitled to a rebate from the distributor. A distributor shall collect from the unforecasted customers an amount equal to the rebate the distributor shall pay to the initial contributors. The amount of the rebate shall be determined as follows:

- (a) for the period of the customer connection horizon determined in accordance with Appendix B, the initial contributor shall be entitled to a rebate without interest, based on apportioned benefit for the remaining period; and
- (b) the apportioned benefit shall be determined by considering such factors as the relative name-plate rated capacity of the generator customers, the relative non-coincident peak demand of the load customers and the relative line length in proportion to the line length being shared by the customers, as applicable.

3.2.27A Notwithstanding section 3.2.27, when the unforecasted customer is a renewable energy generation facility to which section 3.2.5A or 3.2.5B applies and the customer entitled to a rebate under section 3.2.27 is a load customer or a generation customer to which neither section 3.2.5A nor 3.2.5B applies, the initial contributors shall be entitled to a rebate from the distributor in an amount determined in accordance with section 3.2.27. The distributor shall reduce the connecting renewable energy generation facility's renewable energy expansion cost cap by an amount equal to the rebate. If the amount of the rebate exceeds the connecting renewable generation facility's renewable energy expansion cost cap, the distributor shall also collect the difference from the connecting renewable energy generation customer.

3.2.27B Notwithstanding section 3.2.27, when an unforecasted customer that is a

renewable energy generation facility to which section 3.2.5A or 3.2.5B applies (the “unforecasted renewable generator”) connects to the distribution system during the customer connection horizon determined in accordance with Appendix B and benefits from an earlier expansion made on or after October 21, 2009 to connect another renewable energy generation facility to which section 3.2.5A or 3.2.5B applies (the “initial renewable generator”), the initial renewable generator shall be entitled to a rebate if the cost of the earlier expansion exceeded the initial renewable generator’s renewable energy expansion cost cap. In such a case, the following rules shall apply:

- (a) the distributor shall pay to the initial renewable generator a rebate in an amount determined in accordance with section 3.2.27C; and
- (b) the distributor shall collect from the unforecasted renewable generator an amount determined in accordance with section 3.2.27C.

For greater certainty, no rebate shall be payable to an initial renewable generator towards the cost of an earlier expansion if the cost of the earlier expansion did not exceed the initial renewable generator’s energy expansion cost cap.

3.2.27C For the purposes of section 3.2.27B:

- (a) the amount of the rebate payable by the distributor to the initial renewable generator shall be the difference between the amount paid by the initial renewable generator towards the cost of the earlier expansion and the amount that would have been paid by the initial renewable generator towards that cost, determined in accordance with the rules set out in sections 3.2.5B and 3.2.5C, had the earlier expansion been undertaken for both the initial renewable generator and the unforecasted renewable generator. The rebate shall be without interest; and
- (b) the amount to be collected from the unforecasted renewable generator shall be the amount that would have been paid by the unforecasted renewable generator towards the cost of the earlier expansion, determined in accordance with the rules set out in sections 3.2.5B and 3.2.5C, had the earlier expansion been undertaken for both the initial renewable generator and the unforecasted renewable generator.

3.2.27D Notwithstanding section 3.2.27, an unforecasted customer that is a load customer or a generation customer to which neither section 3.2.5A or 3.2.5B applies, that connects to the distribution system during the customer connection horizon determined in accordance with Appendix B and that benefits from an earlier expansion made on or after October 21, 2009 to connect a renewable generation facility to which section 3.2.5A or 3.2.5B applies (the “initial renewable generator”) shall contribute towards the cost of the earlier expansion. In such a case, the following rules shall apply:

- (a) where the cost of the earlier expansion exceeded the initial renewable generator’s renewable energy expansion cost cap, the initial renewable generator and the distributor shall be entitled to a rebate in an amount determined in accordance with sections 3.2.27 and 3.2.27E; or
- (b) where the cost of the earlier expansion was at or below the initial renewable generator’s renewable energy expansion cost cap, the distributor shall be entitled to a rebate in an amount determined in accordance with section 3.2.27.

3.2.27E For the purposes of section 3.2.27D(a), the amount of the rebate shall be apportioned between the initial renewable generator and the distributor on a pro-rata basis based on their respective contributions to the cost of the earlier expansion.

3.2.27F For greater certainty:

- (a) sections 3.2.27B and 3.2.27D do not apply in respect of an expansion referred to in section 3.2.5A(a) or 3.2.5B(a);
- (b) the amount of the rebate payable to an initial renewable generator under section 3.2.27B or section 3.2.27D(a) shall not exceed the amount paid by the initial renewable generator as a capital contribution towards the cost of the earlier expansion; and
- (c) where an earlier expansion referred to in section 3.2.27B or 3.2.27D was made to connect more than one renewable energy generation facility to which section 3.2.5B applies, the amount of the rebate payable to the renewable

generators shall be apportioned between them on a pro-rata basis based on the total name-plate rated capacity of each renewable energy generation facility referred to in section 6.2.9(a) (in MW).

3.2.28 A distributor shall prepare all estimates and offers required by section 3.2 in accordance with good utility practice and industry standards.

3.2.29 The distributor shall perform all of its responsibilities and obligations under section 3.2 in a timely manner.

3.2.30 An expansion of the main distribution system includes:

- (a) building a new line to serve the connecting customer;
- (b) rebuilding a single-phase line to three-phase to serve the connecting customer;
- (c) rebuilding an existing line with a larger size conductor to serve the connecting customer;
- (d) rebuilding or overbuilding an existing line to provide an additional circuit to serve the connecting customer;
- (e) converting a lower voltage line to operate at higher voltage;
- (f) replacing a transformer to a larger MVA size;
- (g) upgrading a voltage regulating transformer or station to a larger MVA size; and
- (h) adding or upgrading capacitor banks to accommodate the connection of the connecting customer.

3.3 Enhancements

3.3.1 A distributor shall continue to plan and build the distribution system for reasonable forecast load growth. A distributor may perform enhancements to its distribution system for purposes of improving system operating characteristics or for relieving system capacity constraints. In determining system enhancements

to be performed on its distribution system, a distributor shall consider the following:

- (a) good utility practice;
- (b) improvement of the system to either meet or maintain required performance-based indices;
- (c) current levels of customer service and reliability and potential improvement from the enhancement; and
- (d) costs to customers associated with distribution reliability and potential improvement from the enhancement.

3.3.2 Renewable enabling improvements to the main distribution system to accommodate the connection of renewable energy generation facilities are limited to the following:

- (a) modifications to, or the addition of, electrical protection equipment;
- (b) modifications to, or the addition of, voltage regulating transformer controls or station controls;
- (c) the provision of protection against islanding (transfer trip or equivalent);
- (d) bidirectional reclosers;
- (e) tap-changer controls or relays;
- (f) replacing breaker protection relays;
- (g) Supervisory Control and Data Acquisition system design, construction and connection;
- (h) any other modifications or additions to allow for and accommodate 2-way electrical flows or reverse flows; and
- (i) communication systems to facilitate the connection of renewable energy generation facilities.

3.3.3 Subject to section 3.3.4, the distributor shall bear the cost of constructing an enhancement or making a renewable enabling improvement, and therefore shall not charge:

- (a) a customer a capital contribution to construct an enhancement; or
- (b) a customer that is connecting a renewable energy generation facility a capital contribution to make a renewable enabling improvement.

3.3.4 Section 3.3.3(a) shall not apply to a distributor until the distributor's rates are set based on a cost of service application for the first time following the 2010 rate year.

3.4 [Revoked by amendment, effective December 18, 2018.]

3.5 Bypass Compensation

3.5.1 A distributor shall require bypass compensation from a customer with a non-coincident peak demand that meets or exceeds 5 MW, if:

- (a) the customer disconnects its load facility from the distributor's distribution system and connects that facility to a generation facility or to another load facility that is not owned by the distributor such that the distributor will no longer receive rate revenues in relation to that disconnected facility; or
- (b) the customer, while retaining its connection to the distributor's distribution system, also connects its load facility to a generation facility or to another load facility that is not owned by the distributor such that the customer reduces its load served directly by the distributor's distribution system, and the distributor's rate revenues in relation to that facility will be reduced.

The distributor shall calculate bypass compensation using the methodology set out in section 3.5.3.

3.5.2 A distributor shall not require bypass compensation from any customer:

- (a) when a load customer provides its own facility to serve new load or transfers new load to the facility of another person;

- (b) for any reduction in a customer's existing load served by the distributor's distribution system that the customer has demonstrated to the reasonable satisfaction of the distributor (such as by means of an energy study or audit) has resulted from embedded renewable generation, energy conservation, energy efficiency or load management activities; or
- (c) where a distributor-owned asset has been overloaded, and a customer transfers the overload to its own facility or to the facility of another person.

3.5.3 For the purposes of section 3.5.1, the distributor shall calculate bypass compensation by first multiplying the net book value of the bypassed distributor-owned asset (including a salvage credit and reasonable removal and environmental remediation costs, if applicable) by the bypassed capacity on the relevant distributor-owned asset. The distributor shall then divide the resulting figure by the maximum amount of load that can be supplied by the bypassed distributor-owned asset. For the purposes of this calculation, the bypassed capacity on the relevant distributor-owned asset shall be equal to the difference between the customer's existing load on that distributor-owned asset at the time of bypass and the highest rolling three-month average of the customer's non-coincident peak demand in the twelve-month period following the date on which bypass occurred.

3.6 Upstream Transmission Connections

3.6.1 Where a distributor has been required to provide a capital contribution to a transmitter under the Transmission System Code for the purpose of a new or modified transmitter-owned connection facility, and the new or modified transmitter-owned connection facility also meets the needs of an embedded distributor and/or a load customer with a non-coincident peak demand that is equal to or greater than 5 MW, the distributor shall require a capital contribution from all beneficiaries that contributed to the need for the new or modified transmitter-owned connection facility based on their respective incremental capacity requirements and the total project cost. The distributor shall request that the transmitter, who owns the connection facility, calculate the capital contribution amount for each beneficiary using the methodology and inputs described in Appendix 5 of the Transmission System Code.

4 OPERATIONS

4.1 Quality of Supply

- 4.1.1 A distributor shall follow good utility practice in managing the power quality of the distributor's distribution system and define in its Conditions of Service the quality of service standards to which the distribution system is designed and operated.
- 4.1.2 A distributor shall maintain a voltage variance standard in accordance with the standards of the Canadian Standards Association CAN3-235. A distributor shall practice reasonable diligence in maintaining voltage levels, but is not responsible for variations in voltage from external forces, such as operating contingencies, exceptionally high loads and low voltage supply from the transmitter or host distributor.
- 4.1.3 Subject to section 4.7, a distributor shall respond to and take reasonable steps to investigate all consumer power quality complaints and report to the consumer on the results of the investigation.
- 4.1.4 Except in relation to an investigation conducted under section 4.7, if the source of a power quality problem is caused by the consumer making the complaint, the distributor may seek reimbursement for the time and cost spent to investigate the complaint.
- 4.1.5 A distributor shall take appropriate actions to control harmonic distortions found to be detrimental to consumers connected to the distribution system. If the distributor is unable to correct a problem without adversely impacting other distribution system consumers, a distributor may choose not to make the corrections. In deciding which actions to take, a distributor should use appropriate industry standards and good utility practice as guidelines.
- 4.1.6 A distributor shall require a consumer or customer that owns equipment connected to the distribution system to take reasonable steps to ensure that the operation or failure of that equipment does not cause a distribution system outage or disturbance.

- 4.1.7 A distributor may require that any consumer or customer condition that adversely affects the distribution system be corrected immediately by the consumer or customer at the consumer's or customer's cost.
- 4.1.8 A distributor may direct a consumer or customer connected to its distribution system to take corrective or preventive action on the consumer's or customer's electric system when there is a direct hazard to the public or the consumer or customer is causing or could cause adverse effects to the reliability of the distributor's distribution system. If the situation is not corrected, the distributor may disconnect the consumer or customer in accordance with its disconnection policy.

4.2 Disconnection and Reconnection

- 4.2.1 A distributor shall establish a process for disconnection and reconnection that specifies timing and means of notification consistent with the Electricity Act and this Code. In developing physical and business processes for reconnection, a distributor shall consider safety and reliability as a primary requirement. A distributor shall document its business process for disconnection in the distributor's Conditions of Service.
- 4.2.1.1 Without limiting the generality of the foregoing, prior to disconnecting a property for non-payment, a distributor shall provide to any person that, according to the distributor's Conditions of Service, receives notice of the disconnection:
- (a) the Fire Safety Notice of the Office of the Fire Marshal; and
 - (b) any other public safety notices or information bulletins issued by public safety authorities and provided to the distributor, which provide information to consumers respecting dangers associated with the disconnection of electricity service.
- 4.2.1.2 A distributor shall include a copy of the notices or bulletins referred to in s. 4.2.1.1 along with any notice of disconnection that is left at the property at the time of actual disconnection for non-payment.

4.2.2 A distributor that intends to disconnect, pursuant to section 31 of the Electricity Act, the property of a residential customer for non-payment shall send or deliver a disconnection notice to the customer that contains, at a minimum, the following information:

- (a) the date on which the disconnection notice was printed by the distributor;
- (b) the earliest and latest dates on which disconnection may occur, in accordance with sections 4.2.3 and 4.2.2.3;
- (c) the amount that is then overdue for payment, including all applicable late payment and other charges associated with non-payment to that date;
- (d) the amount of any approved service charge(s) that may apply to reconnect service following disconnection, and the circumstances in which each of these charges is payable;
- (e) the forms of payment that the customer may use to pay all amounts that are identified as overdue in the disconnection notice, which must at least include payment by credit card issued by a financial institution as described in section 4.2.5 and any other method of payment that the distributor ordinarily accepts and which can be verified within the time period remaining before disconnection;
- (f) the time period during which any given form of payment listed under paragraph (e) will be accepted by the distributor;
- (g) that, in order to avoid disconnection if the distributor attends at the customer's property to execute the disconnection, a customer will only be able to pay by credit card issued by a financial institution, unless the distributor, in its discretion, will accept other forms of payment at that time and sets out the other forms of payment in the disconnection notice;
- (h) that a disconnection may take place whether or not the customer is at the premises;
- (i) that the disconnection may occur without attendance at the customer's premises (provided, however, that this information need not be included if the

distributor does not in fact disconnect service without attendance at the customer's premises);

- (j) that a Vital Services By-Law may exist in the customer's community and that the customer should contact their local municipality for more information (provided, however, that this information need not be included if in fact such a by-law does not exist);
- (k) that a Board-prescribed standard arrears management program and equal monthly payment plan option may be available to all residential customers, along with contact information for the distributor where the customer can obtain further information;
- (k1) that the following additional assistance may be available to an eligible low-income customer, along with contact information for the distributor where the customer can obtain further information about the additional assistance:
 - i. Board-prescribed arrears management program, and other expanded customer service provisions, specifically for eligible low-income customers; and
 - ii. Emergency Financial Assistance;
- (k2) that the distributor may install a load control device at the customer's premises in lieu of disconnection (provided, however, that this information need not be included if the distributor does not in fact make use of load control devices); and
- (l) any additional option(s) that the distributor chooses, in its discretion, to offer to the customer to avoid disconnection and the deadline for the customer to avail himself or herself of such option(s).

4.2.2.1 A distributor that sends or delivers to a customer a disconnection notice, pursuant to section 31(2) of the Electricity Act, for non-payment shall not include that notice in the same envelope as a bill or any other documentation emanating from the distributor.

4.2.2.2 A distributor shall, at the request of a residential customer, send a copy of any disconnection notice issued to the customer for non-payment to a third party designated by the customer for that purpose provided that the request is made no later than the last day of the applicable minimum notice period set out in section 4.2.3. In such a case:

- (a) the distributor shall notify the third party that the third party is not, unless otherwise agreed with the distributor, responsible for the payment of any charges for the provision of electricity service in relation to the customer's property; and
- (b) the rules set out in sections 2.6.4 and 2.6.7 shall apply, with such modifications as the context may require, for the purposes of determining the date of receipt of the disconnection notice by the third party.

4.2.2.2A A residential customer may, at any time prior to disconnection, designate a third party to also receive any future notice of disconnection and the distributor shall send notice of disconnection to such third party.

4.2.2.2B A distributor shall accept electronic mail (e-mail) or telephone communications from the customer for purposes of section 4.2.2.2A.

4.2.2.3 A disconnection notice issued for non-payment shall expire on the date that is 14 days from the last day of the applicable minimum notice period referred to in section 4.2.3, determined in accordance with the rules set out in section 2.6.7. A distributor may not thereafter disconnect the property of the customer for non-payment unless the distributor issues a new disconnection notice in accordance with section 4.2.2.

4.2.2.4 A distributor shall make reasonable efforts to contact, in person or by telephone, a residential customer to whom the distributor has issued a disconnection notice for non-payment at least 48 hours prior to the scheduled date of disconnection. At that time, the distributor shall:

- (a) advise the customer of the scheduled date for disconnection;

- (b) advise the customer that a disconnection may take place whether or not the customer is at the premises;
- (c) where applicable, advise the customer that the disconnection may occur without attendance at the customer's premises;
- (d) advise that the customer has the option to pay amounts owing by credit card issued by a financial institution, in addition to other forms of payment that the distributor will accept at that time and which can be verified within the time period remaining before disconnection; and advise during what hours such payments may be made;
- (e) advise the customer that, if the distributor attends at the customer's property to execute the disconnection, the customer will only be able to pay by credit card issued by a financial institution, unless the distributor, in its discretion, will accept other forms of payment at that time;
- (f) advise the customer that a Board-prescribed standard arrears management program and equal monthly payment plan option may be available to all residential customers; the distributor must be prepared to enter into an arrears payment agreement at that time if the customer is eligible under section 2.7;
- (f1) advise that the following additional assistance may be available to an eligible low-income customer, along with contact information for the distributor where the customer can obtain further information about the additional assistance:
 - i) a Board-prescribed arrears management program, and other expanded customer service provisions, specifically for eligible low-income customers; and
 - ii) Emergency Financial Assistance; and
- (g) advise the customer of any additional option(s) that the distributor, in its discretion, wishes to offer to the customer to avoid disconnection.

- 4.2.2.5 Where a distributor issues a disconnection notice for non-payment in respect of the disconnection of a multi-unit, master-metered building, the distributor shall post a copy of the disconnection notice in a conspicuous place on or in the building promptly after issuance of the notice.
- 4.2.2.6 A distributor shall suspend any disconnection action for a period of 21 days from the date of notification by a LEAP Intake Agency that it is assessing a residential customer for the purposes of determining whether the customer is eligible to receive such assistance, provided such notification is made within 14 days from the date on which the disconnection notice is received by the customer. Where a residential customer had requested prior to the issuance of the disconnection notice that the distributor also provide a copy of any disconnection notice to a third party, the distributor shall suspend any disconnection action for a period of 21 days from the date of notification by the third party that he, she or it is attempting to arrange assistance with the bill payment, provided such notification is made within 14 days from the date on which the disconnection notice is received by the customer.
- 4.2.2.7 Despite section 4.2.2.6, upon notification by a LEAP Intake Agency that a customer is not eligible to receive such assistance, or if another third party who was considering the provision of bill assistance decides not to proceed, the distributor may continue its disconnection process. Distributors will have up to 14 days to act on the previous disconnection notice and must make a further reasonable effort to contact the customer in accordance with section 4.2.2.4 prior to executing disconnection.
- 4.2.3 A distributor shall not disconnect a customer for non-payment until the following minimum notice periods have elapsed.
- (a) 60 days from the date on which the disconnection notice is received by the customer, in the case of a residential customer that has provided the distributor with documentation from a physician confirming that disconnection poses a risk of significant adverse effects on the physical health of the customer or on the physical health of the customer's spouse, dependent family member or other person that regularly resides with the customer; or

- (b) 14 days from the date on which the disconnection notice is received, in all other cases.

4.2.3.1 For the purposes of section 4.2.3:

- (a) where a disconnection notice is sent by mail, the disconnection notice shall be deemed to have been received by the customer on the fifth calendar day after the date on which the notice was printed by the distributor;
- (b) where a disconnection notice is delivered by personal service, the disconnection notice shall be deemed to have been received by the customer on the date of delivery;
- (c) where a disconnection notice is delivered by being posted on the customer's property, the disconnection notice shall be deemed to have been received by the customer on the date of such posting;
- (d) "spouse" has the meaning given to it in section 29 of the Family Law Act;
- (e) "dependent family member" means a "dependant" as defined in section 29 of the Family Law Act and also includes a grandparent who, based on need, is financially dependent on the customer; and
- (f) the distributor shall apply the rules relating to the computation of time set out in section 2.6.7.

4.2.4 A distributor may disconnect without notice in accordance with a court order or for emergency, safety or system reliability reasons.

4.2.4A At least seven days before issuing a disconnection notice for non-payment, a distributor shall deliver an account overdue notice to the customer by the customer's preferred method of communication, if known, or otherwise by mail or any other means determined to be appropriate by the distributor.

4.2.5

- (a) Where a distributor has issued a disconnection notice to a residential customer for non-payment, the distributor shall ensure it has the facilities or staff available to permit the customer to pay all amounts that are then overdue for payment by credit card issued by a financial institution. Subject to paragraph (b), this payment option must be offered during the regular business hours of the distributor, from the time the disconnection notice is delivered to a residential customer until the time the distributor's staff attends at the customer's premises to execute the disconnection.
- (b) Where a distributor attends at a residential customer's property to execute a disconnection, whether during or after the distributor's regular business hours, the distributor shall ensure it has the facilities or staff available at that time to permit the customer to pay all amounts that are then overdue for payment by credit card issued by a financial institution. The distributor may, in its discretion, also accept other forms of payment at the time of disconnection.
- (c) Where a distributor was unsuccessful in its attempt to contact a residential customer 48 hours before the planned disconnection as required under section 4.2.2.4, and the distributor intends to execute the disconnection by attendance at the customer's premises, the distributor shall make a reasonable attempt to communicate with the customer, with due regard for the safety and security of the distributor's personnel, if the customer is at the property, to advise that disconnection will be executed and that payment may be made by credit card issued by a financial institution.
- (d) A distributor shall not disconnect a customer for non-payment on a day the distributor is closed to the public to make payment and/or reconnection arrangements or on the day preceding that day.

4.2.5.1 The physical process by which a distributor disconnects or reconnects shall reflect good utility practice and consider safety as a primary requirement.

4.2.5.1A A distributor shall not apply any charges for disconnecting a customer for non-payment.

- 4.2.5.2 A distributor may recover from the customer responsible for the disconnection reasonable costs for repairs of the distributor's physical assets attached to the property in reconnecting the property.
- 4.2.5.3 A distributor may recover from the person requesting the reconnection any Board approved reconnection charges. The reconnection charges shall be applied only after reconnection has occurred. If a residential customer is unable to pay the reconnection charges, the distributor shall offer reasonable payment arrangements. The distributor shall waive the reconnection charges for an eligible low-income customer.
- 4.2.6 In establishing its disconnection policy as specified in its Conditions of Service, consistent with section 30 and 31 of the Electricity Act and good utility practice, a distributor may consider the following reasons for disconnection:
- Adverse effect on the reliability and safety of the distribution system.
 - Imposition of an unsafe worker situation beyond normal risks inherent in the operation of the distribution system.
 - A material decrease in the efficiency of the distributor's distribution system.
 - A materially adverse effect on the quality of distribution services received by an existing connection.
 - Inability of the distributor to perform planned inspections and maintenance.
 - Failure of the consumer or customer to comply with a directive of a distributor that the distributor makes for purposes of meeting its licence obligations.
 - The customer owes the distributor money for distribution services, or for a security deposit. The distributor shall give the customer a reasonable opportunity to provide the security deposit consistent with sections 2.4.20 and 2.4.20A.
- 4.2.7 A distributor shall not disconnect a residential or general service <50 kW customer with a smart meter or interval meter based solely on an estimated bill.

4.3 Unauthorized Energy Use

- 4.3.1 A distributor shall use its discretion in taking action to mitigate unauthorized energy use. Upon identification of possible unauthorized energy use, a distributor shall notify, if appropriate, Measurement Canada, the Electrical Safety Authority, police officials, retailers that service consumers affected by the unauthorized energy use, or other entities.
- 4.3.2 A distributor shall monitor losses and unaccounted for energy use on an annual basis to detect any upward trends that may indicate the need for management policies to moderate unauthorized energy use.
- 4.3.3 A distributor may recover from the customer responsible for the unauthorized energy use all reasonable costs incurred by the distributor arising from unauthorized energy use.

4.4 System Inspection Requirements and Maintenance

- 4.4.1 A distributor shall maintain its distribution system in accordance with good utility practice and performance standards to ensure reliability and quality of electricity service, on both a short-term and long-term basis.
- 4.4.2 A distributor shall perform inspection activities of its distribution system in accordance with the requirements in Appendix C attached to this Code.
- 4.4.3 A distributor shall perform more frequent inspections if warranted due to local conditions such as geographic location, climate, environmental conditions, technologies available to perform the inspection, type and vintage of distribution technology in place, manufacturer specifications, system design or relative importance to overall system reliability of a particular piece of equipment or portion of the distributor's distribution system.
- 4.4.4 A distributor shall perform inspection activities using persons qualified to identify the types of defects that could be discovered during such inspection activities. Persons performing inspection activities shall be trained to protect both themselves and the public, and to respond to emergencies that may arise as a result of inspection activities.

- 4.4.5 A distributor shall address any defects discovered during the inspection activities within a reasonable period of time after the discovery of the defect. A distributor shall address a defect by scheduling a more detailed inspection, by planning repair activities or by performing any other action that is an affirmative response to the discovery of the defect. A distributor shall have an internal review procedure to ensure that the identified defects and follow-up activities have been addressed appropriately.
- 4.4.6 A distributor shall determine the methodology by which inspection cycles are structured and the manner in which defects identified during inspection activities are to be repaired in accordance with good utility practice.
- 4.4.7 A distributor shall notify consumers regarding the expected duration and frequency of planned outages and provide as much advance notice as possible. A distributor shall make all reasonable efforts to minimize the duration and frequency of planned outages. The distributor's policies and procedures with respect to planned outages shall be described in the Conditions of Service.

4.5 Unplanned Outages and Emergency Conditions

- 4.5.1 A distributor may require a consumer or customer or a party to a joint use agreement to comply with reasonable and appropriate instructions from the distributor during an unplanned outage or emergency situation.
- 4.5.2 To assist with distribution system outages or emergency response, a distributor may require a customer to provide the distributor emergency access to customer-owned distribution equipment that normally is operated by the distributor or distributor-owned equipment on customer property.
- 4.5.3 During an emergency, a distributor may interrupt supply to a consumer in response to a shortage of supply or to effect repairs on the distribution system or while repairs are being made to consumer-owned equipment.
- 4.5.4 A distributor may require consumers or customers with permanently connected emergency backup generation facility to notify the distributor regarding the presence of such equipment.

- 4.5.5 A distributor shall require that a consumer's or customer's portable or permanently connected emergency backup generation facility complies with all applicable criteria of the Ontario Electrical Safety Code and does not adversely affect the distributor's distribution system.
- 4.5.6 A distributor shall develop and maintain appropriate emergency plans in accordance with the requirements of the Minister of Energy, Science and Technology and in the Market Rules, regardless of whether the distributor is a wholesale market participant. A distributor's emergency plan shall include, at a minimum, mutual assistance plans with neighbouring distributors or other measures to respond to a wide-spread emergency.
- 4.5.7 A distributor shall establish outage management policies that include the following:
- Arrangements for on-call personnel in accordance with good utility practice.
 - Establishment and operation of a call centre or equivalent telephone service to provide consumers with available information regarding an outage.
 - Identification of the locations of distribution circuits for critical customers.

4.6 Health and Safety and Environment

- 4.6.1 A distributor shall follow good utility practices in operating and maintaining the distribution system and shall abide by safety rules and regulations that apply to routine utility work, including but not limited to the Occupational Health & Safety Act R.S.O. 1990 and any associated regulations.
- 4.6.2 A distributor shall be a member of an industry-specific, recognized health and safety organization in Ontario.
- 4.6.3 A distributor shall implement an industry recognized health and safety program that includes training and regularly conducted audits. This program also will include Public Education and Public Safety initiatives.

4.6.4 Any problems that a distributor identifies as part of the audit shall be remedied as soon as possible or in accordance with the distributor's health and safety program.

4.6.5 A distributor shall have a corporate policy that addresses environmental stewardship that applies to all of the distributor's operations. A documented program supporting procedures and appropriate training should be in place to ensure compliance with environmental regulations and indicate a proactive approach to environmental damage avoidance.

4.7 Farm Stray Voltage

4.7.1 In this section 4.7:

- ACC—means animal contact current, being the steady state 60 Hz (including harmonics thereof) root mean square alternating current when measured through a 500 Ohm resistor connected between animal contact points;
- ACV—means animal contact voltage, being the steady state 60 Hz (including harmonics thereof) root mean square alternating current voltage when measured in parallel with a 500 Ohm resistor connected between animal contact points;
- “farm stray voltage” means ACC or ACV occurring at a location on a farm where livestock make contact with it; and
- “livestock farm customer” in respect of a distributor means any customer of the distributor that is engaged principally in livestock husbandry in an area zoned for agricultural use.

4.7.2 A distributor shall initiate a farm stray voltage investigation using the procedure set out in Appendix H where a livestock farm customer provides the distributor with information that reasonably indicates that farm stray voltage may be adversely affecting the operation of the livestock farm customer's farm.

4.7.3 Where an investigation initiated under section 4.7.2 reveals that either:

- (a) ACC on the farm exceeds 2.0 milliamperes; or

(b) ACV on the farm exceeds 1.0 volt,

the distributor shall conduct tests in accordance with the investigation procedure set out in Appendix H to determine whether and the extent to which the distributor's distribution system is contributing to farm stray voltage measured on the farm.

4.7.4 Where the tests referred to in section 4.7.3 reveal that the distributor's distribution system is contributing more than 1 mA ACC or 0.5 V ACV to farm stray voltage on a farm, the distributor shall take such steps as may be required to ensure that such contribution does not exceed 1 mA ACC or 0.5 V ACV.

4.7.5 A distributor shall ensure that persons responsible for investigating, analyzing and determining the appropriate means of remediating farm stray voltage situations on the distributor's behalf for the purposes of meeting the distributor's obligations under this section 4.7 have competency in performing these activities. Competency may be based on recognized qualification requirements that include a training course that meets the requirements of the tasks to be performed. Services provided in relation to these activities by a person that does not have the recognized qualification requirements shall be reviewed, affirmed and documented by a person with exhibited competency.

4.7.6 A distributor serving livestock farm customers shall document, post on its web site and otherwise make available to any person on request, and file with the Board upon request, a farm stray voltage customer response procedure that describes the steps involved in the distributor's response to farm stray voltage complaints and inquiries. At a minimum, the customer response procedure must indicate:

- (a) how and to whom farm stray voltage complaints and inquiries should be made by livestock farm customers;
- (b) the types of information required by the distributor regarding the basis of the livestock farm customer's concern that ACC/ACV from the distributor's system is affecting farm operations; and
- (c) the estimated amount of time the distributor requires following receipt of a complaint or inquiry to contact the livestock farm customer for the purpose of

scheduling a site visit for the purpose of initiating an investigation where an investigation is required.

4.7.7 A distributor shall record, retain for a period of five years and provide to the Board, on request and in the form and manner required by the Board, the following information:

(a) the name and contact information of each livestock farm customer that submits a farm stray voltage complaint to the distributor, the date of the complaint and the date on which the matter was considered closed by the distributor; and

(b) for each farm stray voltage investigation initiated by the distributor:

- site information for the livestock farm customer's farm, including location; the identity and design characteristics of the circuit(s) supplying the site; and distance of the site from the circuit substation and from the end of the circuit;
- an investigation report prepared in accordance with Appendix H, together with all other documentation required by Appendix H to be prepared; and
- identified ACC or ACV source(s) and distribution system contribution levels; any remediation measures taken; and the total cost of the investigation and of any remediation measures taken.

4.7.8 A distributor serving livestock farm customers shall, not less than annually, provide written notice to all livestock farm customers in its service area describing how they can obtain the following from the distributor:

(a) information on what farm stray voltage is, what causes it, and common ways of addressing distribution system contributions to it;

(b) a copy of the distributor's farm stray voltage customer response procedure referred to in section 4.7.6; and

(c) a copy of the distributor's dispute resolution process set out in its Conditions of Service.

Such notice may be given by including an insert with at least one bill submitted to livestock farm customers or by any other means as may reasonably be expected to bring the information to the attention of livestock farm customers. Posting of the information or of notice of the availability of the information on the distributor's website alone shall not constitute sufficient written notice for the purposes of this section.

4.8 Winter Disconnection, Reconnection and Load Control Devices

4.8.1 Subject to section 4.8.4, a distributor shall not, during a Disconnection Ban Period:

- (a) disconnect an occupied residential property solely on the grounds of non payment;
- (b) issue a disconnection notice in respect of an occupied residential property solely on the grounds of non-payment, provided, however, that the distributor may issue a disconnection notice that complies with section 4.2 of this Code in the last month of the Disconnection Ban Period in respect of a disconnection to take place after the end of the Disconnection Ban Period; or
- (c) install a load control device in respect of an occupied residential property solely on the grounds of non-payment.

Nothing in this section shall preclude the distributor from (i) disconnecting an occupied residential property during a Disconnection Ban Period in accordance with all applicable regulatory requirements, including the required disconnection notice, or (ii) installing a load control device in respect of an occupied residential property during a Disconnection Ban Period, in each case if at the unsolicited request of the customer given in writing for that Disconnection Ban Period.

4.8.2 Subject to section 4.8.4, a distributor shall ensure that any residential property that had been disconnected solely on the grounds of non-payment is, if an occupied residential property, reconnected by December 1st. The distributor shall waive any reconnection charge that might otherwise apply in respect of that reconnection. Nothing in this section shall require the distributor to reconnect an occupied residential property in respect of a Disconnection Ban Period if the

customer gives unsolicited notice to the Licensee not to do so in writing for that Disconnection Ban Period and has not rescinded that notice.

4.8.3 Subject to section 4.8.4, a distributor shall ensure that any load control device installed in respect of an occupied residential property either for non-payment or at the customer's request is removed and full service is restored to the property by December 1st. Nothing in this section shall (i) require the distributor to remove a load control device in respect of a Disconnection Ban Period if the customer gives unsolicited notice to the distributor not to do so in writing for that Disconnection Ban Period and has not rescinded that notice; or (ii) prevent the distributor from installing or maintaining a load control device if the customer makes an unsolicited request in writing for the Licensee to do so for that Disconnection Ban Period and has not rescinded that request.

4.8.4 Nothing in sections 4.8.1 to 4.8.3 shall:

- (a) prevent the distributor from taking such action in respect of an occupied residential property as may be required to comply with any applicable and generally accepted safety requirements or standards; or
- (b) require the distributor to act in a manner contrary to any applicable and generally accepted safety requirements or standards.

4.8.5 For the purposes of sections 4.8.1 to 4.8.4:

"Disconnection Ban Period" means the period commencing at 12:00 am on November 15th in one year and ending at 11:59 pm on April 30th in the following year;

"occupied residential property" means an account with a distributor:

- (a) that falls within a residential rate classification as specified in the distributor's rate order; and
- (b) that is:
 - i. inhabited; or

- ii. in an uninhabited condition as a result of the property having been disconnected by the distributor or of a load control device having been installed in respect of the property outside of a Disconnection Ban Period.

4.8.6 Sections 4.8.1 to 4.8.5 apply despite any other provision of the Distribution System Code to the contrary.

4.9 Communications Related to Severe Weather Events

- 4.9.1 A distributor shall use its best efforts to alert customers of impending severe weather that may cause a severe weather event.
- 4.9.2 A distributor shall make available to customers, through one of the means of communication identified in section 4.9.4, an estimated time of restoration of service as quickly as possible and in any event no more than 4 hours after completion of a damage assessment related to the impact of a severe weather event on the distributor's system.
- 4.9.3 A distributor shall update the estimated time of restoration whenever there is a change to the previously provided estimate, which for clarity includes any instance where the actual restoration is delayed beyond the most recent estimate that was provided to customers.
- 4.9.4 A distributor shall maintain at least one method of communicating with customers at all times during a severe weather event, including at least one of the following: the distributor's website; the distributor's social media channel; email; text messaging; telephone line; or radio broadcast.
- 4.9.5 A distributor shall:
 - (a) maintain a list of critical customers for the purposes of section 4.5.7 and for communications related to severe weather events; and
 - (b) establish communication protocols specifically for critical customers related to severe weather events that must, at a minimum, include an emergency phone number for the distributor's operations centre, control room or other designated emergency contact.

4.9.6 In the case of a high-impact low-frequency event, a distributor shall in addition to the requirements set out in sections 4.9.1 to 4.9.5:

- (a) make updates to the estimated time of restoration available to affected customers at intervals not exceeding six hours, starting from 48 hours after the event's onset and continuing until service is restored to all customers.; and
- (b) conduct a customer survey to evaluate the effectiveness of the distributor's communications during the high-impact low-frequency event and revise its communications approach as warranted based on the results of the survey. The survey shall:
 - be completed within 60 days after service has been restored to all customers; and
 - include questions to assess customer satisfaction with the nature and timing of the information provided during the high-impact low-frequency event and to gather feedback on areas for improvement.

5 METERING

5.1 Provision of Meters and Metering Services

- 5.1.1 A distributor shall provide, install and maintain a meter installation for retail settlement and billing purposes for each customer connected to the distributor's distribution system, subject to section 5.2.3.
- 5.1.2 A distributor may install a demand meter or interval meter for purposes of measuring demand in order to assign the customer to a rate class or to set the appropriate distribution services rate for that customer.
- 5.1.3 For the purposes of measuring energy delivered to the customer, a distributor shall:
- (a) install a MIST meter on any new installation that is forecast by the distributor to have a monthly average peak demand during a calendar year of over 50 kW; and
 - (b) have until August 21, 2020 to install a MIST meter on any existing installation that has a monthly average peak demand during a calendar year of over 50 kW.
- 5.1.4 A distributor may set a threshold level for installation of MIST meters other than that required by section 5.1.3. as long as the threshold is delineated by customer class in the distributor's Conditions of Service and sets a threshold lower than that required by section 5.1.3.
- 5.1.5 A distributor shall provide an interval meter within a reasonable period of time to any customer who submits to it a written request for such meter installation, either directly or through an authorized party, in accordance with the Retail Settlement Code, subject to the following conditions:
- The customer that requests interval metering shall compensate a distributor for all incremental costs associated with that meter, including the capital cost of the interval meter, installation costs associated with the interval meter, ongoing maintenance (including allowance for meter failure), verification and

reverification of the meter, installation and ongoing provision of communication line or communication link with the customer's meter, and cost of metering made redundant by the customer requesting interval metering.

- The distributor shall determine whether the meter will be a MIST or MOST meter, subject to the requirements of this Code.
- A communication system utilized for MIST meters shall be in accordance with the distributor's requirements.
- A communication line shall be required in the case of inside or restricted access meters.

5.1.6 A distributor shall identify in its Conditions of Service the type of meters that are available to a customer, the process by which a customer may obtain such meters and the types of charges that would be levied on a customer for each meter type.

5.1.7 For the purposes of sections 5.1.2 to 5.1.5 inclusive, a smart meter and unit smart meter is not an interval meter.

5.1.8 Section 5.1.7 ceases to have effect in relation to a distributor on the date determined for that purpose by the Board.

5.1.9 When requested to do so by a master consumer, a distributor shall install unit smart meters that meet the specifications prescribed by Ontario Regulation 389/10.

5.2 Metering Requirements for Generating Facilities

- 5.2.1 A distributor shall require that an embedded retail generator whose embedded generation facility has a gross name-plate capacity of more than 10 MW install a four-quadrant interval meter. A distributor shall require that a net metered generator (as defined in section 6.7.1) and an embedded retail generator whose embedded generation facility has a gross name-plate capacity of 10 MW or less install such metering as may reasonably be required having regard to:
- (a) the meter data requirements necessary to enable the distributor to settle amounts owing to or from the embedded retail generator; and
 - (b) the type of generation facility or generation technology of the embedded generation facility.
- 5.2.2 A distributor shall meter a customer with an embedded generation facility, other than an embedded retail generator or a net metered generator (as defined in section 6.7.1), in the same manner as the distributor's other load customers.
- 5.2.3 A distributor shall require that a customer with an embedded generation facility connected to the distributor's distribution system install its own meter in accordance with the distributor's metering requirements and provide the distributor with the technical details of the metering installation.
- 5.2.4 Where practical, metering for an embedded generation facility shall be installed at the point of supply. If it is not practical to install the meter at the point of supply, a distributor shall apply loss factors to the generation output in accordance with the loss factors applied for retail settlements and billing.

5.3 VEE Process

- 5.3.1 Metering data collected by a distributor shall be subjected to a validating, estimating and editing ("VEE") process if it is to be used for settlement and billing purposes.
- 5.3.2 A distributor shall establish a VEE process according to local practice that is fair and reasonable and provides assurance that correct data is submitted to the settlement process. The VEE process shall do the following:

- Convert raw metering data into validated, corrected or estimated “settlement-ready” metering data suitable for use in determining settlement amounts in accordance with the settlement schedule in the Retail Settlement Code.
 - Detect errors in metering data introduced as a result of improper operational conditions and/or hardware/software malfunctions, including failures of or errors in metering or communication hardware, and metering data exceeding pre-defined variances or tolerances.
 - Use operational system data, including historical generation and load patterns and data collected by the distributor, as appropriate, for validating raw metering data, and for editing, estimating and correcting metering data found to be erroneous or missing.
- 5.3.3 A distributor’s VEE process for data from non-interval and MOST meters shall compare energy and demand (if applicable) readings from at least one equivalent historical billing period. A distributor shall determine the appropriate bandwidths by customer class and specify other criteria used in the VEE process.
- 5.3.4 A distributor’s VEE process for data from MIST meters shall consider industry standards specified by the IESO in its VEE process for registered wholesale meters.
- 5.3.5 A distributor shall document and make available its VEE process and criteria, and allow scrutiny of its process by customers, retailers, the Board and Measurement Canada.
- 5.3.6 A distributor shall comply with Measurement Canada standards as a minimum metering installation and measurement standard, and may apply any other practices that exceed those standards.
- 5.3.7 A distributor shall have an inspection program for complex [polyphase] metering installations and document the inspection and results of the inspection.
- 5.3.8 Where an embedded generation facility metering installation does not conform to Measurement Canada standards or the accuracy class of instrument transformers cannot be confirmed, a distributor shall require the embedded generation facility

to have the metering installation, including instrument transformers, tested, and apply a Measurement Canada correction factor to meter readings until such time as standards conformance is achieved.

- 5.3.9 A distributor shall ensure that persons involved in metering services have competency in performing these services. Competency may be based on recognized qualification requirements that include a training course that meets the requirements of the tasks to be performed. Metering services provided by a person that does not have the recognized qualification requirements shall be reviewed, affirmed and documented by a person with exhibited competency.
- 5.3.10 A distributor that provides metering services directly or through a Meter Service Provider shall exercise appropriate diligence in detecting and acting upon instances of tampering with metering and service entrance equipment. Upon identification of possible meter tampering, the distributor should notify, as appropriate, Measurement Canada, police officials, the Electrical Safety Authority, or other entities.
- 5.3.11 Nothing in this Code shall affect the obligation of a distributor to comply with all Measurement Canada requirements provided that, where this Code or other conditions of licence prescribe a higher standard than that prescribed in those requirements, the distributor shall comply with the higher standard.
- 5.3.12 A distributor shall respond to customer and retailer metering disputes, and shall establish a fair and reasonable charge for costs associated with resolution of these disputes. If the complaint is substantiated, the charge shall not be applied. In resolving the dispute, a distributor may use a qualified, independent organization at any time during the dispute resolution process.
- 5.3.13 Notwithstanding any other provision of section 5.3, the VEE process for all data from a smart meter or unit smart meter shall be completed by one or more of:
- (a) the Smart Metering Entity;
 - (b) the IESO, in its capacity, given by regulation, to plan, manage and implement the smart metering initiative or any aspect of that initiative; or

(c) the distributor,

as may be provided by, and in accordance with, the VEE process established by the Smart Metering Entity or the IESO.

6 DISTRIBUTORS' RESPONSIBILITIES

6.1 Responsibilities to Load Customers

This section applies to load customers other than customers with existing or proposed embedded generation facilities that are not emergency backup generation facilities, and embedded distributors.

6.1.1 A distributor shall make every reasonable effort to respond promptly to a customer's request for connection. In any event a distributor shall respond to a customer's written request for a customer connection within 15 calendar days. A distributor shall make an offer to connect within 60 calendar days of receipt of the written request, unless other necessary information is required from the load customer before the offer can be made.

6.1.2 A distributor has an implied contract with any customer that is connected to the distributor's distribution system and receives distribution services from the distributor. The terms of the implied contract are embedded in the distributor's Conditions of Service, the Rate Handbook, the distributor's rate schedules, the Distributor's licence and the Distribution System Code.

6.1.2.1 Nothing in section 6.1.2 shall be construed as permitting a distributor to recover or to seek to recover charges for a service provided to a property from any person other than a person that has agreed to be the customer of the distributor in relation to the property or that has agreed to assume responsibility for those charges.

6.1.2.2 For the purposes of section 6.1.2.1, the agreement may be in electronic form pursuant to the Electronic Commerce Act, 2000, and includes telephone communications provided that a recording of the telephone communication is retained by the distributor for 24 months thereafter.

6.1.2.3 Section 6.1.2.1 applies to all agreements entered into after the effective date of these amendments and is not intended to void or cancel any binding agreements for service existing as of the effective date of these amendments.

- 6.1.3 A distributor may require a customer to enter into a Connection Agreement with the distributor if the distributor believes that the customer has characteristics that require an explicit document to describe the relationship between the distributor and the customer. Suggested information to be included in the Connection Agreement with customers is listed in Appendix D.
- 6.1.4 A distributor shall enter into a Connection Agreement with a customer that is connected to the distributor's distribution system and is a wholesale market participant.
- 6.1.5 Before entering a property to carry out an activity described in section 40 of the Electricity Act, the person shall, in accordance with subsection 40(8) of the Electricity Act:
- provide reasonable notice of the entry to the occupier of the property;
 - in so far as is practicable, restore the property to its original condition; and
 - provide compensation for any damages caused by the entry that cannot be repaired.

Electric Vehicle Supply Equipment Connections for Non-residential Customers

- 6.1.6 A distributor shall follow the connection and expansion requirements of this Code as well as the requirements of the Electric Vehicle Charging Connection Procedures to process a request for connection of non-residential EVSE where the connection requires modifications or additions to the distributor's distribution system.
- 6.1.6.1 A distributor shall include in its Conditions of Service an appendix setting out any additional requirements related to the connection of EVSE that are not specified in this Code or the Electric Vehicle Charging Connection Procedures. The appendix shall be in the form of Appendix 1 of the Electric Vehicle Charging Connection Procedures which sets out the minimum information a distributor shall include in the Conditions of Service appendix.

6.2 Responsibilities to Generators

- 6.2.1 Section 6.2 does not apply to the connection or operation of an emergency backup

generation facility. When connected in parallel with the distribution system, an emergency backup generation facility must have a transfer switch that isolates it from the distribution system within 100 milliseconds.

6.2.1A For the purposes of section 6.2, generation facility includes a storage facility, and generator includes the owner or operator of a storage facility. Further, when it uses electricity from a distribution system, a storage facility is a load.

6.2.2 A distributor shall enter into a Connection Agreement with all existing generators who have a generation facility connected to the distributor's distribution system and prior to connecting a new generation facility. Where a distributor does not have a Connection Agreement with an existing generator that has a generation facility connected to the distributor's distribution system, the distributor shall be deemed to have an implied contract with the generator. The terms of the implied contract are embedded in the distributor's Conditions of Service, the Rate Handbook, the distributor's rate schedules, the distributor's licence and the Distribution System Code.

Generation Connection Information Package

6.2.3 A distributor shall promptly make available a generation connection information package (the "package") to any person who requests this package. The package must be made available electronically on the distributor's website. It must also be available in hard copy at the distributor's premises for customers who request it. The package shall contain the following information:

- a) the process for having a generation facility connected to the distributor's distribution system, including any form necessary for applying to the distributor;
- b) information regarding any approvals from the ESA, the IESO, OEB, or a transmitter that are required before the distributor will connect a generation facility to its distribution system;
- c) the technical requirements for being connected to the distributor's distribution system including the distributor's feeder and substation technical capacity limits as well as metering requirements;
- d) the standard contractual terms and conditions for being connected to the distributor's distribution system;

- e) the name, telephone number and e-mail address of the distributor's representative for inquiries relating to the connection of embedded generation facilities;
- f) the sample Protection Philosophy as provided in the *Distributed Energy Resources Connection Procedures*; and
- g) a list of restricted feeders by name and feeder designation that the distributor operates that are known not to have any short circuit capacity to accommodate a generation facility connection. The list must be updated as necessary to capture system reconfiguration or expansions and shall be updated at least every 3 months.

6.2.4 Subject to all applicable laws, a distributor shall make all reasonable efforts in accordance with the provisions of section 6.2 to promptly connect to its distribution system a generation facility which is the subject of an application for connection.

6.2.4.1 Subject to section 6.2.4.2, a distributor shall establish and maintain a capacity allocation process under which the distributor will process applications for the connection of embedded generation facilities. The capacity allocation process shall meet the following requirements:

- (a) each application for connection, including an application under section 6.2.25a, will be allocated capacity only upon completion of the distributor's connection impact assessment, any required host distributor's connection impact assessment, and any required review of TS supply capability for the embedded generation facility;
- (b) a connection impact assessment will not be completed for a proposed connection that cannot be completed within the feeder and/or substation technical capacity limits of the distributor's distribution system, any host distributor's distribution system or the supply TS and transmission system, including capacity additions contained in any Board approved plans to increase the capacity of one or more of the distributor's distribution system, any host distributor's distribution system or the supply TS and transmission system;
- (c) a connection impact assessment will not be completed unless the embedded

generation facility which is the subject of the application meets the following requirements at the time the application is made:

- demonstrated site control over the land on which the embedded generation facility is proposed to be located and any required adjacent or buffer lands in the form of property ownership (deed), long term lease (lease agreement) or an executed option to purchase or lease the land.
 - a proposed in-service date for the embedded generation facility which is no later than 5 years for water power projects or 3 years for all other types of projects from the initial date of application for connection or in accordance with the timelines in an executed IESO contract.
- (d) the distributor shall notify the applicant when its capacity allocation is granted;
- (e) an applicant shall have its capacity allocation removed if:
- i) a connection cost agreement has not been signed in relation to the connection of the embedded generation facility within:
 - (1) 6 months of the date on which the applicant received a capacity allocation for the proposed embedded generation facility;
 - (2) 9 months of the date on which the applicant received a capacity allocation for the proposed large embedded generation facility if a transmission system impact assessment is required; or
 - (3) 17 months of the date on which the applicant received a capacity allocation for the proposed large embedded generation facility if transmission upgrades are required in order to connect the large embedded generation facility;
 - ii) a new connection impact assessment is prepared for a proposed embedded generation facility under section 6.2.15 and the new assessment differs in a material respect from the original connection impact assessment prepared for that facility;
 - iii) any required deposits payable to the distributor pursuant to section 6.2.18A or 6.2.18C have not been received by the date specified by the

distributor;

- iv) the distributor is informed by the IESO that the applicant has defaulted on an executed IESO contract; or
 - v) the applicant defaults on an executed connection cost agreement and fails to correct the default within 30 calendar days.
- (f) If any applicant has its capacity allocation removed in accordance with paragraph (e), the amount of any unspent connection cost deposit shall be returned to the applicant in accordance with the requirements of section 6.2.18 G.
- (g) the distributor shall provide the applicant with two months' advance notice of the expiry of the applicable time period referred to in paragraph e(i) prior to removing the capacity allocated to the applicant.

6.2.4.1A In the event that capacity cannot be allocated to the applicant for the connection of a proposed embedded generation facility in accordance with section 6.2.4.1(b), a distributor may offer a flexible hosting capacity arrangement to the applicant if technically feasible. Under a flexible hosting capacity arrangement, the distributor may establish specific system conditions, operating requirements and/or contractual terms that will require the output or operation of the proposed embedded generation facility to be varied. The distributor shall provide an applicant proposing to connect an embedded generation facility under this arrangement with all required assessments of the impact of connecting the generating facility, a cost estimate for the proposed connection and an offer to connect as soon as possible. Sections 6.2.4.1(e)(i), 6.2.12, 6.2.13, 6.2.16 and 6.2.17 of the connection process do not apply where a flexible hosting capacity arrangement is being considered for a proposed embedded generation facility.

- (a) When a distributor and the applicant for the connection of a proposed embedded generation facility enter into a flexible hosting capacity arrangement, the distributor shall clearly outline in Schedule D of the connection agreement set out in Appendix E for that size of generation facility all system conditions, operating requirements and/or contractual terms that will require the output or operation of the embedded generation facility to be

varied.

6.2.4.2 Section 6.2.4.1 does not apply to an application to connect a micro-embedded generation facility or an embedded generation facility that is not an embedded retail generation facility. Applications to connect to which the capacity allocation process does not apply, including by virtue of section 6.2.1, shall be processed by a distributor in accordance with this Code as and when received.

6.2.4.3 [Revoked by amendment, effective June 7, 2023]

Connection of Micro-Embedded Generation Facilities

6.2.5 A person who is considering applying for the connection of a micro-embedded generation facility to the distributor's distribution system shall complete the applicant portion of the Micro-Embedded Generation Facilities Agreement and submit it to the distributor, in accordance with the process established in the *Distributed Energy Resources Connection Procedures*. The Micro-Embedded Generation Agreement shall be available electronically, on the distributor's website where available, with a paper copy available at the distributor's address.

6.2.6 A distributor shall use the process as specified in the *Distributed Energy Resources Connection Procedures* to process a request for connection of a micro-embedded generation facility. Where the proposed micro-embedded generation facility is:

- a) located at an existing customer connection and a site assessment is not required, the distributor shall, within 15 days of receiving the application, make an offer to connect or provide reasons for refusing to connect the proposed generation facility;
- b) located at an existing customer connection and a site assessment is required, the distributor shall, within 30 days of receiving the application, make an offer to connect or provide reasons for refusing to connect the proposed generation facility; or
- c) located other than at an existing customer connection, the distributor shall, within 60 days of receiving the application, make an offer to connect or provide reasons for refusing to connect the proposed generation facility.

In all cases, the distributor shall give the applicant at least 30 days to accept the offer to connect and the distributor shall not revoke the offer to connect until this time period has expired.

6.2.6A [Revoked by amendment, effective October 1, 2022]

6.2.6B [Revoked by amendment, effective October 1, 2022]

6.2.6C [Revoked by amendment, effective October 1, 2022]

6.2.6D [Revoked by amendment, effective October 1, 2022]

6.2.6E [Revoked by amendment, effective October 1, 2022]

6.2.6F [Revoked by amendment, effective October 1, 2022]

6.2.6G [Revoked by amendment, effective October 1, 2022]

6.2.7 The distributor shall connect the applicant's micro-embedded generation facility to its distribution system within 5 business days, or at such later date as agreed to by the applicant and the distributor, of the applicant informing the distributor that it has satisfied all applicable service conditions and received all necessary approvals, providing the distributor with a copy of the authorization to connect from the ESA, entering into a Connection Agreement in the form set out in Appendix E and paying the distributor for the connection costs, including costs for any necessary new or modified metering.

6.2.7A The requirement in section 6.2.7 must be met 90 percent of the time on a yearly basis.

Connection of other Generation Facilities

6.2.8 Sections 6.2.9 to 6.2.20 apply to the connection to a distribution system of an embedded generation facility which is not a micro-embedded generation facility.

6.2.8A [Revoked by amendment, effective June 7, 2023]

6.2.8B [Revoked by amendment, effective June 7, 2023]

Preliminary Consultation Information Request and Report

- 6.2.9 A distributor shall make available a Preliminary Consultation Information Request form, in the manner specified in the *Distributed Energy Resources Connection Procedures*, to a person who is considering applying for the connection of a generation facility to the distributor's distribution system. The Preliminary Consultation Information Request Form should be available electronically on the distributor's website and in hard copy at the distributor's address.
- 6.2.9.1 The distributor shall respond within 15 days of receipt of a completed Preliminary Consultation Information Request form with a completed Preliminary Consultation Report, in the form specified in the *Distributed Energy Resources Connection Procedures*.
- (a) A distributor shall provide a Preliminary Consultation Report to a person without charge up to 3 times in a calendar year. The distributor may recover from the person the reasonable costs incurred by the distributor in preparing the Preliminary Consultation Report for the additional Preliminary Consultation Information Request forms beyond the three to be provided at no charge.
 - (b) A distributor shall meet with a person who requests a meeting coincident with the issuance of a Preliminary Consultation Report or after the person has received a Preliminary Consultation Report.
- 6.2.9.2 The distributor shall provide the information referred to in section 6.2.9.1 without charge and within the 15 days referred to in section 6.2.9.
- 6.2.9.3 Upon request, a distributor shall, subject to section 6.2.9.4, provide the information referred to in section 6.2.9.1(b) to a person that has requested a meeting under section 6.2.9 for one or more additional locations beyond the three required by section 6.2.9.1(b). The distributor shall use reasonable efforts to provide such information within the 15 days referred to in section 6.2.9, but shall in any event provide that information within a further 15 days. The distributor may recover from the person the reasonable costs incurred by the distributor in preparing the information for the additional locations.
- 6.2.9.4 A distributor may withhold information on minimum/maximum feeder loadings

where the distributor believes on reasonable grounds that the disclosure of such information could be used to identify the load characteristics of an existing customer and that the loading information is therefore commercially sensitive. A distributor shall, before deciding to withhold such information, make reasonable efforts to obtain the consent of the existing customer to the disclosure of the loading information.

6.2.10 [Revoked by amendment, effective October 1, 2022.]

6.2.11 A distributor shall make available a Connection Impact Assessment Application, in the form specified in the *Distributed Energy Resources Connection Procedures*, to a person who is considering applying for the connection of a generation facility to the distributor's distribution system. The Connection Impact Assessment Application should be available electronically, on the distributor's website where available, and in hard copy at the distributor's address.

Small Embedded Generation Facility

6.2.12 Subject to sections 6.2.4.1(b), 6.2.4.1(c) and 6.2.4.2, a distributor shall follow the process as set out in the *Distributed Energy Resources Connection Procedures* to process a request for connection of a small embedded generation facility. The distributor shall provide an applicant proposing to connect a small embedded generation facility with its assessment of the impact of the proposed generation facility, a detailed cost estimate of the proposed connection and an offer to connect within:

- (a) 60 days of the receipt of the application where no distribution system reinforcement or expansion is required; and
- (b) 90 days of the receipt of the application where a distribution system reinforcement or expansion is required.

Mid-sized or Large Generation Facility

6.2.13 Subject to sections 6.2.4.1(b) and 6.2.4.1(c), after receipt of a complete Connection Impact Assessment Application, a distributor shall respond with its assessment of the impact of connecting the generating facility:

- (a) within 60 days for a mid-sized embedded generation facility;

- (b) within 90 days for a large embedded generation facility;
- (c) within 75 days for a mid-sized embedded generation facility when a host distributor CIA is also needed; and
- (d) within 105 days for a large embedded generation facility when a host distributor CIA is also needed.

6.2.14 The distributor's impact assessment shall set out the impact of the proposed embedded generation facility on the distributor's distribution system and any customers of the distributor including:

- (a) any voltage impacts, impacts on current loading settings and impacts on fault currents;
- (b) the connection feasibility;
- (c) the need for any line or equipment upgrades;
- (d) the need for transmission system protection modifications; and
- (e) any metering requirements.

6.2.14A If the distributor requires a transmitter or host distributor to complete a Transmission System review study or connection impact assessment, the distributor shall file an application with the transmitter or host distributor for such within 15 days of initiating a connection impact assessment study. A distributor will also inform the transmitter or host distributor in writing on an ongoing basis of any change in status of the project including removing the capacity allocation for the project, material changes in the projected in-service date of the project or placing the project in service.

6.2.15 Any material revisions to the design, planned equipment or plans for the proposed embedded generation facility and connection shall be filed with the distributor and the distributor shall prepare a new impact assessment within the relevant time period set out in section 6.2.12 or 6.2.13. If the new impact assessment differs in a material respect from the original connection impact assessment for the project, the project shall have its capacity allocation removed in accordance with the requirements of section 6.2.4.1 (e) ii.

- 6.2.16 In the case of an application for the connection of a mid-sized or large embedded generation facility, once the impact assessment is provided to the applicant, the distributor and the applicant have entered into an agreement on the scope of the project and the applicant has paid the distributor for the cost of preparing a detailed cost estimate of the proposed connection, the distributor shall provide the applicant with a detailed cost estimate and an offer to connect by the later of 90 days after the receipt of payment from the applicant and 30 days after the receipt of comments from a transmitter or distributor that has been advised under section 6.2.17.
- 6.2.17 Where a distributor is preparing a detailed cost estimate in accordance with section 6.2.16 with respect to a proposed large or mid-sized embedded generation facility, the distributor shall advise any transmitter or distributor whose transmission or distribution system is directly connected to the distributor's distribution system that it is preparing an estimate, within 10 days of receiving payment from the applicant. Where a distributor is preparing a detailed cost estimate in accordance with section 6.2.12 with respect to a proposed small embedded generation facility, the distributor shall, where the distributor believes a system directly connected to its system may be impacted by the proposed generation facility, advise any transmitter or distributor whose transmission or distribution system is directly connected to the distributor's distribution system that it is preparing an estimate, within 10 days of receiving payment from the applicant.
- 6.2.18 A distributor shall enter into a connection cost agreement with an applicant in relation to a small embedded generation facility, a mid-sized embedded generation facility or a large embedded generation facility. The connection cost agreement shall include the following:
- (a) a requirement that the applicant pay a connection cost deposit equal to 100% of the total estimated allocated cost of connection at the time the connection cost agreement is executed;
 - (b) [Revoked by amendment, effective June 7, 2023];
 - (c) [Revoked by amendment, effective June 7, 2023];
 - (d) [Revoked by amendment, effective June 7, 2023];
 - (e) a requirement that the mutually agreed upon in-service date is no later than 5

years for water power projects or 3 years for all other types of projects from the initial date of application for connection or in accordance with the timelines in an executed IESO contract;

- (f) a requirement that the applicant complete its engineering design and provide detailed electrical drawings to the distributor at least 6 months prior to the specified in-service date or as reasonably required by the distributor;
- (g) any requirements relating to the applicant's acceptance of the distributor's offer to connect and the connection costs; and
- (h) the timing of the connection.

The distributor's offer to connect shall be attached as an appendix to and form part of the cost connection agreement. Once the applicant has entered into a connection cost agreement with the distributor and has provided the distributor with detailed engineering drawings with respect to the proposal, the distributor shall conduct a design review to ensure that the detailed engineering plans are acceptable.

6.2.18A For any proponent that executed a connection cost agreement prior to the date of coming into force of this section, but is not yet connected to the distributor's distribution system, the distributor shall notify the proponent of that embedded generation facility, within 60 days of this section coming into force, that a connection cost deposit equal to 100% of the total allocated cost of connection must be paid within 60 days of the distributor's notice as a condition of the applicant maintaining its current capacity allocation.

6.2.18B [Revoked by amendment, effective June 7, 2023].

6.2.18C For any proponent that was allocated capacity but that had not yet executed a connection cost agreement on or before the date of coming into force of this section for one or both of the following reasons:

- (a) the connection impact assessment was completed within the last 12 months,
- (b) an IESO System Impact Assessment ("SIA") is required and has not yet been completed, the distributor shall notify the applicant within 60 days of the later of i) the project having been allocated capacity for a period of 12 months or ii) the SIA study being completed and its impact on the generation facility being

identified, that as a condition of the applicant maintaining its current capacity allocation the applicant must execute a connection cost agreement with the distributor within 60 days of the distributor's notice.

6.2.18D Any connection cost deposit required to be obtained by the distributor pursuant to this Code shall be in the form of cash, letter of credit from a bank as defined in the Bank Act, or surety bond. The distributor shall allow the applicant to select the form of any required connection cost deposit.

6.2.18E The connection cost deposit shall be used by the distributor to pay for costs allocated to the applicant and related to the connection of the embedded generation facility to the distribution system in accordance with the terms of the relevant connection cost agreement.

6.2.18F Following the connection of an embedded generation facility to the distributor's distribution system a distributor shall, upon providing its permission to operate to an applicant as set out in the *Distributed Energy Resources Connection Procedures*:

- (a) at the time of providing its permission to operate to an applicant, where the agreed project scope for the connection has not yet been completed, provide a list of the incomplete elements of the agreed project scope for the connection;
- (b) no later than 60 days after providing its permission to operate, provide the applicant with a preliminary connection cost report specifying the total actual connection costs incurred and allocated to the applicant, including any host distributor and/or transmitter costs, as of the date upon which the distributor issued its permission to operate;
- (c) where the agreed project scope for the connection has been completed at the time the permission to operate has been provided by the distributor, and where the distributor determines that the amount of the connection cost deposit provided by the applicant exceeded the actual costs incurred by the distributor that were allocated to the applicant, refund to the applicant the amount of the unused connection cost deposit as soon as possible and no later than:
 - i) 180 days after providing its permission to operate, where the distributor is not an embedded distributor; or
 - ii) 210 days after providing its permission to operate, where the distributor

is an embedded distributor;

- (d) where the agreed project scope for the connection has not been completed at the time the permission to operate has been provided by the distributor:
 - i) where the agreed project scope for the connection, including those elements of the agreed project scope identified pursuant to subsection (a), is completed within 90 days after the distributor provides its permission to operate, and where the distributor determines that the amount of the connection cost deposit provided by the applicant exceeded the actual costs incurred by the distributor that were allocated to the applicant, the distributor shall refund to the applicant the amount of the unused connection cost deposit within the number of days specified in subsection (c);
 - ii) where the agreed project scope for the connection, including those elements of the agreed project scope identified pursuant to subsection (a), is completed more than 90 days after the distributor has provided its permission to operate, and where the distributor determines that the amount of the connection cost deposit provided by the applicant exceeded the actual costs incurred by the distributor that were allocated to the applicant, the distributor shall refund to the applicant the amount of the unused connection cost deposit within:
 - (1) 90 days of the completion of the agreed project scope for the connection, where the distributor is not an embedded distributor; or,
 - (2) 120 days of the completion of the agreed project scope for the connection, where the distributor is an embedded distributor.

6.2.18G The distributor shall, no later than 30 calendar days after the applicant has its capacity allocation removed in accordance with subsection 6.2.4.1(e), refund to the applicant the amount of any remaining connection cost deposit provided by

the applicant to the distributor pursuant to a connection cost agreement, provided that if the distributor has incurred costs associated with the connection of the applicant's embedded generation facility to the distributor's distribution system in accordance with the relevant connection cost agreement, the distributor shall subtract the amount of any such incurred costs from the total connection cost deposit amount provided by the applicant prior to remitting any refund to the applicant.

6.2.18H [Revoked by amendment, effective March 27, 2024].

6.2.18I Where any connection cost deposit is provided by an applicant to a distributor in the form of cash and where the distributor refunds all or any portion of such connection cost deposit to the applicant in accordance with this Code, the return of such deposit shall be in accordance with the following conditions:

- (a) interest shall accrue monthly on the deposit amounts commencing on the receipt of the deposit required by the distributor; and
- (b) the interest rate shall be at the Prime Business Rate set by the Bank of Canada less 2 percent.

6.2.19 The distributor shall have the right to witness the commissioning and testing of the connection of the generation facility to the distributor's distribution system.

6.2.20 Once the applicant informs the distributor that it has received all necessary approvals and enters into the Connection Agreement, and the distributor receives a copy of the applicable authorization to connect from the ESA, the distributor shall act promptly to connect the generation facility to its distribution system.

6.2.21 Subject to any delays in commissioning and testing of the generation facility which are beyond the control of the distributor, a distributor shall connect a proposed small embedded generation facility within:

(a) 60 days of the applicant taking the steps set out in section 6.2.20, where no distribution system reinforcement or expansion is required; and

(b) 180 days of the applicant taking the steps set out in section 6.2.20, where a distribution system reinforcement or expansion is required.

6.2.22 A Connection Agreement for a small, mid-sized or large embedded generation facility shall be in the form set out in Appendix E where a standard form of contract is set out in Appendix E for that size of embedded generation facility.

6.2.23 A distributor shall follow the process as specified in the *Distributed Energy Resources Connection Procedures* to process a request for connection of a mid-sized or large embedded generation facility.

6.2.24 A distributor may by written agreement with an applicant who is proposing to connect a small, mid-sized or large embedded generation facility provide that the process for connecting the generation facility to be followed is the process set out for a smaller category of embedded generation facility, including a micro-embedded generation facility.

6.2.25a A distributor shall require a generator that proposes to increase the output of an embedded generation facility that is then in service to submit a new application to connect, and the provisions of sections 6.2.9 to 6.2.24 shall apply.

Technical Requirements

6.2.25 A distributor shall ensure that the safety, reliability and efficiency of the distribution system is not materially adversely affected by the connection of a generation facility to the distribution system. A distributor shall require that new or significantly modified generation facilities meet the technical requirements specified in CSA C22.3 No. 9.

6.2.26 A distributor shall ensure that the distribution system is adequately protected from potential damage or increased operating costs resulting from the connection of a generation facility. Despite section 2.2.1, if damage to the distribution system or increased operating costs result from the connection of a generation facility other

than a micro-embedded generation facility, the distributor shall be reimbursed for these costs by the generator.

6.2.27 A distributor shall require that a generator with a generation facility connected to the distributor's distribution system has a regular, scheduled maintenance plan to ensure that the generator's connection devices, protection systems and control systems are maintained in good working order. This requirement will be provided for in the connection agreement.

6.2.28 All equipment that is connected, operating or procured or ordered before May 1, 2002 is deemed to be in compliance with the technical requirements of this code.

6.2.29 A distributor may require that equipment deemed compliant under section 6.2.28 be brought into actual compliance with the technical requirements of this code within a specific reasonable time period where there is:

- (a) a material deterioration of the reliability of the distribution system resulting from the performance of the generator's equipment;
- (b) a material negative impact on the quality of power of an existing or a new customer resulting from the performance of the generator's equipment; or
- (c) a material increase in generator capacity at the site where the equipment deemed compliant is located.

6.2.30 The distributor may act in accordance with section 6.2.29, once the distributor has developed rules and procedures for requiring equipment to be brought into actual compliance and these rules and procedures have been provided to the generator.

Cost Responsibility for Connection of Generation Facilities and Storage Facilities

6.2.31 Chapter 3 applies to all generation facilities, including storage facilities, connecting to a distributor's distribution system.

6.2A Connection Process for Distributor-owned Generation Facilities

- 6.2A.1 Except as otherwise provided in sections 6.2A.2 to 6.2A.6, a distributor shall connect a generation facility that will be owned by it in accordance with section 6.2
- 6.2A.2 The following sections do not apply in respect of the connection of a generation facility that will be owned by the distributor to whose distribution system the facility is being connected: 6.2.3; 6.2.4.1(d); 6.2.4.1(g); 6.2.5; 6.2.9; 6.2.9.1; 6.2.9.2
- 6.2A.3 In applying section 6.2 in relation to a generation facility that will be owned by the distributor to whose distribution system the generation facility will be connected, the following shall apply:
- (a) the distributor shall be deemed to be and shall in all respects be treated as the “applicant” or person applying for the connection of a generation facility (however that may be expressed in section 6.2);
 - (b) where a provision in section 6.2 requires an applicant or generator to pay a cost, charge, fee or other amount of money or requires a distributor to refund or return a cost, charge, fee or other amount of money to an applicant or a generator, the distributor shall instead record the relevant amount in accordance with the Accounting Guidelines. The payment requirement shall be deemed to have been satisfied on the date on which the requisite accounting record is made by the distributor;
 - (c) where a provision in section 6.2 requires an applicant or generator to provide a deposit or requires a distributor to refund or return all or part of a deposit to an applicant or a generator, the distributor shall instead record the relevant amount in accordance with the Accounting Guidelines. The requirement to provide, refund or return a deposit shall be deemed to have been satisfied on the date on which the requisite accounting record is made by the distributor;
 - (d) the distributor shall complete its standard connection application form applicable to the type and size of its generation facility, and shall append to

that form any information that would be required to be provided by a third party applicant under section 6.2.5 or 6.2.9, as applicable, and section 6.2.11, if that information is not already covered by the standard application. This completed form shall be deemed to be and shall in all respects be treated as the application to connect (however that may be expressed in section 6.2); and

- (e) the date on which an application is filed with the IESO for a contract under the Feed-in Tariff program in relation to the output of the distributor's generation facility shall be deemed to be and shall in all respects be treated as the date of receipt by the distributor of the application to connect its generation facility, and the distributor shall date stamp the application form referred to in section paragraph (d) accordingly.

For the purposes of this section: (i) "deposit" means a connection cost deposit; and (ii) "Accounting Guidelines" means all requirements established by the Board and in effect at the relevant time in respect of the accounting records, accounting principles and accounting separation standards to be followed by the distributor in relation to a generation facility owned by the distributor, including the "Guidelines: Regulatory and Accounting Treatments for Distributor-Owned Generation Facilities" (G-2009-0300).

6.2A.4 The following shall apply in relation to the connection of a generation facility that will be owned by the distributor to whose distribution system the generation facility will be connected:

- (a) where capacity can be allocated in respect of the generation facility in accordance with the applicable provisions of section 6.2, capacity shall be allocated in relation to the generation facility within 150 days from the deemed date of receipt of the application, determined in accordance with section 6.2A.3(e). The distributor shall document the date on which capacity has been allocated in relation to the generation facility;
- (b) in lieu of the requirement set out in section 6.2.4.1(e)(v), capacity allocated in respect of the generation facility shall be removed if the distributor or the

generation facility fail to satisfy any of the requirements of a connection cost agreement referred to in section 6.2A.4(i);

(c) in lieu of section 6.2.6, the following shall apply:

- i) the distributor shall complete its standard offer to connect applicable to micro-embedded generation facilities in relation to its generation facility within the applicable timeline set out in section 6.2.6; and
- ii) the distributor shall ensure that all applicable requirements of that standard offer to connect are met by or in relation to its generation facility;

(d) in lieu of section 6.2.7, the following shall apply:

- i) the distributor shall document the receipt of all of the necessary approvals or the authorization to connect referred to in section 6.2.7;
- ii) in lieu of the requirement to enter into a Connection Agreement, the distributor shall ensure that all applicable requirements of the Connection Agreement are met by or in relation to its generation facility; and
- iii) subject to paragraph (ii), the distributor shall connect its generation facility to its distribution system within 5 days of the receipt of last necessary approval or authorization referred to in section 6.2.7;

(e) in lieu of section 6.2.12, the following shall apply:

- i) the distributor shall complete an assessment of the impact of its generation facility and a detailed cost estimate of the proposed connection within the applicable timeline set out in section 6.2.12;
- ii) the distributor shall complete its standard offer to connect applicable to the type and size of its generation facility within the applicable timeline set out in section 6.2.6;

- iii) the distributor shall ensure that all applicable requirements set out in its standard offer to connect are met by or in relation to its generation facility; and
- iv) in lieu of the permission to revoke the standard offer to connect, if the distributor has not satisfied the obligation to provide any required deposits (as defined in section 6.2A.3) in the manner specified in section 6.2A.3(b) within 60 days of the date on which the distributor completes the standard offer to connect, the distributor shall terminate the connection process in relation to its generation facility and the capacity allocated to that facility shall be removed. The distributor shall not thereafter connect the generation facility except further to the preparation of a new application for connection as set out in section 6.2A.3(d);
- (f) in lieu of section 6.2.13, the distributor shall complete an assessment of the impact of its generation facility within the applicable timeline set out in section 6.2.13;
- (g) in lieu of section 6.2.15, where a material revision to the design, planned equipment or plans for its generation facility is proposed by the distributor, the distributor shall document the details of such revision;
- (h) in lieu of section 6.2.16, the following shall apply:
 - i) the distributor shall complete a detailed cost estimate of the proposed connection within the timeline set out in section 6.2.16;
 - ii) the distributor shall complete its standard offer to connect applicable to the type and size of its generation facility within the applicable timeline set out in section 6.2.16; and
 - iii) the distributor shall ensure that all applicable requirements set out in its standard offer to connect are met by or in relation to its generation facility;
- (i) in lieu of section 6.2.18, the following shall apply:

- i) the distributor shall ensure that all of the requirements that must be included in a connection cost agreement as set out in section 6.2.18, other than in section 6.2.18 (g), as well as all other applicable requirements contained in the distributor's standard connection cost agreement applicable to the type and size of its generation facility are met by or in relation to its generation facility;
- ii) [Revoked by amendment, effective March 27, 2024]
- (j) in lieu of section 6.2.20, the following shall apply:
 - i) the distributor shall document the receipt of all of the necessary approvals and of the authorization to connect referred to in section 6.2.20;
 - ii) in lieu of the requirement to enter into a Connection Agreement, the distributor shall ensure that all applicable requirements set out in the applicable form of Connection Agreement are met by or in relation to its generation facility; and
 - iii) subject to paragraph (ii), the distributor shall promptly connect its generation facility to its distribution system following receipt of the last necessary approval or authorization referred to in section 6.2.20;
- (k) to section 6.2A.2, sections 6.2.12 to 6.2.24 shall apply.

6.2A.5 Where any provision of section 6.2A requires a distributor to ensure that all applicable requirements of a standard offer to connect or of an agreement are met, a senior officer of the distributor shall certify such compliance in writing. Such certification shall be completed in respect of each such requirement at the time at which the distributor has taken the necessary steps to confirm that the requirement has been met.

6.2A.6 Where any provision of section 6.2A requires a distributor to document information or to complete a document, the distributor shall retain the document until two years after the date on which the connection process is terminated in respect of its generation facility or the date on which its generation facility ceases to be connected to its distribution system.

6.3 Responsibilities to Other Distributors

6.3.1 A distributor shall make every reasonable effort to respond promptly to another distributor's request for connection. A distributor shall provide an initial consultation with another distributor regarding the connection process within thirty

(30) days of receiving a written request for connection. A final offer to connect the distributor to the host distributor's distribution system shall be made within ninety (90) days of receiving the written request for connection, unless other necessary information outside the distributor's control is required before the offer can be made.

6.3.2 A distributor shall make a good faith effort to enter into a Connection Agreement with a distributor connected to the distributor's distribution system. The contents and format of the Connection Agreement are in the discretion of the distributors that participate in the Connection Agreement but must conform to the requirements of this Code. Appendix G provides an example of the process that distributors should follow in providing a connection to another distributor.

6.3.3 The reliability of supply and the voltage level at the delivery point from a host distributor's distribution system to an embedded distributor's distribution system shall be as good as or better than what is provided to the host distributor's other distribution customers.

6.3.4 A distributor shall not build any part of its distribution system in another distributor's licensed service area except under the following conditions:

- The part of the distribution system that is to be located inside another licensed service area is dedicated to the delivery of electricity to the distributor who owns the distribution facilities; and
- There is no apparent opportunity for both distributors to share the distribution facilities; and
- The distributor in whose service area the distribution facilities are to be located determines that the presence of the distribution facilities in that location does not impinge on its distribution operations.

6.3.5 A distributor that owns equipment in another distributor's licensed service area shall allow that distributor access to the equipment for the following reasons:

- Emergencies.
- When the equipment may cause a violation of a licence condition by the distributor who is licensed for the service area.
- Upon a reasonable request by the distributor who is licensed for the service area.
- In accordance with any arrangement between the two distributors.

6.4 Sharing Arrangements Between Distributors

6.4.1 A distributor that owns distribution facilities in another distributor's licensed service area, and decides to share those distribution facilities with the distributor licensed to serve the service area, shall have an agreement that describes the terms of the sharing arrangement with the other distributor.

6.4.2 An operating agreement for multiple ownership circuits shall include, among other conditions, clauses that require that:

- Each section owner provide downstream owners with fault current information and protection settings of upstream protective devices.
- Each section owner provides upstream owners with load forecasting information.
- Each section owner maintains phase balance within generally acceptable industry standards.
- Each section owner ensure generally acceptable industry standards pertaining to power quality and voltage levels are adhered to on the section owner's portion of the feeder.
- The owner of the feeder breaker be responsible for maintaining appropriate relay settings for overall feeder protection.
- Each distributor be responsible to provide the required information to

accomplish appropriate relay settings for overall feeder protection, including information on feeder characteristics and loading information.

- 6.4.3 In existing or new multiple ownership circuits, a distributor shall be responsible for maintenance, protection and power quality of the distributor's own portion of the shared feeder. The distributor shall ensure that its portion of the feeder has proper fault protection and voltage within proper limits. This generally would require the owner of each section of the feeder to provide for suitable overcurrent protection devices and voltage regulators, as appropriate, at the upstream boundary and suitable metering, if not already available for settlement purposes, at the downstream boundary.

6.5 Load Transfers

- 6.5.1 A distributor (referred to in this section as the geographic distributor) that provides distribution services through a load transfer may continue to do so under the following conditions:

- The load transfer customer enters into a Connection Agreement or is deemed to have an implied contract with the geographic distributor and interacts only with the geographic distributor.
- The geographic distributor provides service to the load transfer customer in accordance with its Conditions of Service and bills the load transfer customer in accordance with its regulated charges and rates.
- The geographic distributor is responsible for system reliability or equipment failures associated with the distribution system equipment it owns or operates that is used to deliver electricity to the load transfer customer.
- The geographic distributor allows the distributor that owns the connection assets (referred to as the physical distributor) access to the distribution equipment used to service the load transfer customer, as required for system reliability and safety.
- The geographic distributor is responsible to the physical distributor for all charges and costs incurred by the load transfer customer for all costs defined in Retail Settlement Code, including distribution costs, competitive electricity

costs and non-competitive electricity costs provided to the customer through the physical distributor's distribution system.

- The geographic distributor is responsible for facilitating the load transfer customer's access to retail competition and shall interact with any competitive retailer chosen by the customer.

6.5.2 A physical distributor that provides distribution services through a load transfer may continue to do so under the following conditions:

- The physical distributor refers the load transfer customer or a retailer that intends to service the load transfer customer to the geographic distributor for all issues. The geographic distributor is responsible to work with the physical distributor on any issues that are the direct responsibility of the physical distributor.
- The physical distributor is responsible for system reliability or equipment failures associated with the distribution system equipment it owns or operates that is used to deliver electricity to the load transfer customer.
- The physical distributor allows the geographic distributor access to its equipment, as required for system reliability and safety.

6.5.3 All load transfer arrangements shall be eliminated by transferring the load transfer customers to the physical distributor by June 21, 2017. The geographic distributor shall apply to the Board for a service area amendment to the necessary licence(s) to effect the transfer.

6.5.4 If the transfer to the physical distributor results in the load transfer customer(s) paying higher delivery charges, the physical distributor shall apply rate mitigation in a manner that is approved by the Board.

6.5.5 Until such time as the load transfer arrangement is eliminated under section 6.5.3, the physical distributor shall be obligated to continue to service an existing load transfer customer.

6.5.6 A distributor shall not enter into any new load transfer arrangements.

6.6 Provision of Information

- 6.6.1 A distributor shall communicate general market and educational information to consumers connected to its distribution system as required by the Board.
- 6.6.2 A distributor shall inform a person about the person's obligations to the distributor, and shall monitor and require compliance to ensure that the person is meeting its obligations. A distributor shall inform the consumer or customer about the distributor's rights to disconnect service.
- 6.6.3 At the request of a consumer, a distributor shall provide a list of retailers who have Service Agreements in effect with the distributor. The list shall conform to the requirements of section 2.5 of the Affiliate Relationships Code. The list should inform the consumer that an alternative retailer does not have to be chosen in order to ensure that the consumer receives electricity and the terms of service that are available under Standard Supply Service.
- 6.6.4 A distributor shall not provide information on products retailed by a retailer.
- 6.6.5 Upon receiving an inquiry from a consumer connected to its distribution system, the distributor shall either respond to the inquiry if it deals with the distributor's distribution services or provide the consumer with contact information for the entity responsible for the item of inquiry, in accordance with chapter 7 of the Retail Settlement Code.
- 6.6.6 An embedded distributor that receives electricity from a host distributor shall provide load forecasts or any other information related to the embedded distributor's system load to the host distributor, as determined and required by the host distributor. A distributor shall not require any information from another distributor unless it is required for the safe and reliable operation of either distributor's distribution system or to meet a distributor's licence obligations.

6.7 Net Metered Generators

- 6.7.1 In this section 6.7:
- "eligible generator" in respect of a distributor means a customer of a distributor that meets the definition of "eligible customer" or "eligible generator" as set out

in section 1 of the Net Metering Regulation;

- “net metered generator” means an eligible generator to whom net metering has been made available by a distributor; and
- “Net Metering Regulation” means the Net Metering Regulation, O. Reg. 541/05.

6.7.2 A distributor shall, upon request, make net metering available to eligible generators in its licensed service area in accordance with the Net Metering Regulation, on a first-come first-served basis, unless the cumulative generation capacity from net metered generators in its licensed service area equals one percent of the distributor’s annual maximum peak load for the distributor’s licensed service area, averaged over three years, as determined by the Board from time to time.

6.7.3 A distributor shall bill a net metered generator on a net metering basis in accordance with the Net Metering Regulation provided that the net metered generator meets the requirements of the Net Metering Regulation.

6.7.4 A distributor may, upon request, make net metering available to additional eligible generators in its licensed service area and may bill them on a net metering basis when the cumulative maximum generation capacity from net metered generators in its licensed service area exceeds one percent of the distributor’s annual maximum peak load for the distributor’s licensed service area, averaged over three years, as referred to in section 6.7.2.

6.7.5 A distributor shall, in the manner and time specified by the Board, file with the Board the total rated maximum output capacity of generation facilities in its licensed service area to which net metering has been made available as of:

February 10, 2006; and such later dates as are determined by the Board.

6.7.6 A confirmation provided to a distributor for the purposes of section 7. (1)(f) of the Net Metering Regulation shall be in such a form as may be approved by the Board.

6.8 Cyber Security

6.8.1 Reporting

6.8.1.1 A distributor shall report to the Board on the status of cyber security readiness referencing the Cyber Security Framework at such times and in such a manner

as may be directed by the Board.

6.8.1.2 The Chief Executive Officer of the distributor shall certify the distributor's reported cyber security readiness in such a form as may be required by the Board.

6.8.2 Continuing Obligations Re Distribution System and Privacy

Nothing in this section shall limit any obligations of a distributor to maintain the reliability and integrity of its distribution system, and to protect personal information

6.8.3 Compliance with the Cyber Security Standard

A distributor shall comply with the Cyber Security Standard.

7 SERVICE QUALITY REQUIREMENTS

7.1 Definitions

In this section 7, the following words have the meanings set out below.

"accurate bill" means a bill that contains correct customer information, correct meter readings, and correct rates that result in an accurately calculated bill.

"answered" means connected to a person that is a representative of the distributor. Connection to a voice mailbox or an answering machine, or placing a person in a queue, does not constitute answering.

"customer care telephone number" means any telephone number that is dedicated exclusively to, and given to the public by the distributor for, the purpose of contacting the distributor on matters concerning customer care, including customer account enquiries and other customer service enquiries. Where a distributor does not have a telephone number dedicated exclusively to matters concerning customer care, any telephone number given to the public for the purpose of making enquiries of the distributor shall be deemed to be a "customer care telephone number".

"emergency call" means a call where the assistance of the distributor has been requested by fire, ambulance or police services.

"qualified enquiry" means an enquiry received by a distributor from a customer or representative of a customer pertaining to the customer's existing or prospective service in which a written response is requested by the customer or representative of the customer or determined by the distributor to be necessary. A "qualified enquiry" does not include any of the following, which shall be addressed in accordance with other applicable requirements: cable locate requests; retailer Service Transaction Requests; and enquiries of a general nature not relating specifically to service currently provided to a customer or to a new service being requested by a customer.

"qualified incoming calls" means calls that are received during the regular hours of operation of a distributor's customer call centre and are either:

- (a) telephone calls for which the customer normally reaches a customer service representative directly or has been transferred to a customer care line by a general operator; or
- (b) telephone calls in which the customer has reached the distributor's Interactive Voice Response ("IVR") system and selected the option of speaking to a customer service representative.

The following are not "qualified incoming calls":

- (a) telephone calls that are abandoned by the customer prior to asking for a customer service representative; and
- (b) telephone calls for which the customer elects IVR self-service.

"new service" means a connection that requires an Electric Safety Authority certificate before the connection can be completed. This includes, but is not limited to, connections associated with a service upgrade and connections that involve the installation of an additional meter on the distribution system where no meter previously existed. Solely replacing an existing meter is not a new service.

"service conditions" means any condition that must be satisfied before the service will be provided and may include the payment of connection fees, the signing of an offer to connect, the completion of a distribution system expansion, the delivery of any necessary equipment and the receipt of an electrical safety inspection certificate.

7.2 Connection of New Services

- 7.2.1 A connection for a new service request for a low voltage (<750 volts) service must be completed within 5 business days from the day on which all applicable service conditions are satisfied, or at such later date as agreed to by the customer and distributor.
- 7.2.2 A connection for a new service request for a high voltage (>750 volts) service must be completed within 10 business days from the day on which all applicable service conditions are satisfied, or at such later date as agreed to by the customer and distributor.

- 7.2.3 This service quality requirement must be met at least 90 percent of the time on a yearly basis.

7.3 Appointment Scheduling

- 7.3.1 When a customer or a representative of a customer requests an appointment with a distributor, the distributor shall schedule the appointment to take place within 5 business days of the day on which all applicable service conditions are satisfied or on such later date as may be agreed upon by the customer and distributor.
- 7.3.2 Where the appointment in section 7.3.1 requires the presence of the customer or the customer's representative, the distributor shall fulfil the requirements set out in section 7.4.1.
- 7.3.3 Where the appointment in section 7.3.1 does not require the presence of the customer or the customer's representative, the distributor shall arrive for the appointment on the day scheduled under section 7.3.1.
- 7.3.4 This service quality requirement must be met at least 90 percent of the time on a yearly basis.
- 7.3.5 All of the actions set out in:
- (a) section 7.3.1; and
 - (b) section 7.3.2 or section 7.3.3, as applicable,
- must be completed in order to fulfil this service quality requirement.
- 7.3.6 This service quality requirement applies regardless of whether or not the presence of the customer or the customer's representative is required.
- 7.3.7 This service quality requirement does not apply to appointments that are subject to the requirements in sections 7.2.1 and 7.2.2.

7.4 Appointments Met

- 7.4.1 When an appointment is either:

- (a) requested by a customer or a representative of a customer with a distributor; or
 - (b) required by a distributor with a customer or representative of a customer,
- the distributor must offer to schedule the appointment during the distributor's regular hours of operation within a window of time that is no greater than 4 hours (i.e., morning, afternoon or, if available, evening). The distributor must then arrive for the appointment within the scheduled timeframe.
- 7.4.2 This service quality requirement must be met at least 90 percent of the time on a yearly basis.
- 7.4.3 Both of the actions set out in section 7.4.1 must be completed in order to fulfil this service quality requirement.
- 7.4.4 If the distributor arrives at the scheduled appointment within the required time period but the appointment cannot be met because the customer failed to attend the appointment, the distributor may consider the appointment to have been met for the purpose of determining its performance with the standard.
- 7.4.5 This service quality requirement applies to appointments that:
- (a) require the presence of the customer or the customer's representative;
 - (b) are scheduled to occur at the distributor's office, the customer's premises, business or work site, or at another location agreed to by the distributor and customer; and
 - (c) are a frequently recurring part of the distributor's normal course of business, including, but not limited to, the following:
 - i) disconnecting and/or reconnecting service to effect maintenance or upgrades;
 - ii) connecting a new customer;
 - iii) connecting a new service for an existing customer;

- iv) providing underground cable locates;
- v) inspections;
- vi) gaining access to read or replace an inside meter or to provide the customer with instructions on the proper use of a prepaid meter or similar device; and
- vii) appointments that are rescheduled as required by section 7.5.1.

7.5 Rescheduling a Missed Appointment

7.5.1 When an appointment to which sections 7.3.1, 7.3.3, or 7.4.1 apply is missed or is going to be missed, the distributor must:

- (a) attempt to contact the customer before the scheduled appointment to inform the customer that the appointment will be missed; and
- (b) attempt to contact the customer within one business day to reschedule the appointment.

7.5.2 This service quality requirement must be met 100 percent of the time on a yearly basis.

7.5.3 Both of the actions set out in section 7.5.1 must be completed in order to fulfil this service quality requirement.

7.5.4 This requirement does not apply if the appointment is missed due to the failure of the customer or the representative of the customer to attend the appointment.

7.5.5 The rescheduled appointment becomes a new appointment for the purposes of sections 7.3.1 or 7.4.1 as appropriate.

7.6 Telephone Accessibility

7.6.1 Qualified incoming calls to the distributor's customer care telephone number must be answered within the 30 second time period established under section 7.6.3.

7.6.2 This service quality requirement must be met at least 65 percent of the time on a yearly basis.

7.6.3 7.6.3 For qualified incoming calls that are transferred from the distributor's IVR system, the 30 seconds shall be counted from the time the customer selects to speak to a customer service representative. In all other cases, the 30 seconds shall be counted from the first ring.

7.7 Telephone Call Abandon Rate

7.7.1 The number of qualified incoming calls to a distributor's customer care telephone number that are abandoned before they are answered shall be 10 percent or less on a yearly basis.

7.7.2 For the purposes of section 7.7.1, a qualified incoming call will only be considered abandoned if the call is abandoned after the 30 second period established under section 7.6.1 has elapsed.

7.8 Written Response to Enquires

7.8.1 A written response to a qualified enquiry shall be sent by the distributor within 10 business days.

7.8.2 This service quality requirement must be met at least 80 percent of the time on a yearly basis.

7.8.3 The 10 business days shall be counted from the date on which any conditions associated with the enquiry have been satisfied (such as the date of a move where there is a request for a final statement of account) or, if there are no such conditions, from the date of receipt of the enquiry.

7.8.4 A distributor may consider a written response to have been sent if the distributor sends a written acknowledgement of receipt of the qualified enquiry and includes a specific date in which a complete response to the qualified enquiry will be provided.

7.8.5 A written response shall be deemed to have been sent on the date on which it is faxed, mailed or e-mailed by the distributor.

7.9 Emergency Response

- 7.9.1 Emergency calls must be responded to within 120 minutes in rural areas and within 60 minutes in urban areas.
- 7.9.2 This service quality requirement must be met at least 80 percent of the time on a yearly basis.
- 7.9.3 The definition of “rural” and “urban” should correspond to the municipality’s definition.
- 7.9.4 The arrival of a qualified service person on site will constitute a response.

7.10 Reconnection Standards

- 7.10.1 Where a distributor has disconnected the property of a customer for non- payment, the distributor shall reconnect the property within 2 business days, as defined in section 2.6.7, of the date on which the customer:
 - (a) makes payment in full of the amount overdue for payment as specified in the disconnection notice; or
 - (b) enters into an arrears payment agreement with the distributor referred to in section 2.7.1A.
- 7.10.2 This service quality requirement must be met at least 85 percent of the time on a yearly basis.

7.11 Billing Accuracy

- 7.11.1 A distributor must issue an accurate bill to each of its customers.
- 7.11.2 This service quality requirement must be met at least 98 percent of the time on a yearly basis.
- 7.11.3 A distributor should not include customer accounts that are unmetered accounts (e.g. street lighting and unmetered scattered loads) or power generation accounts when calculating the percentage of accurate bills.

- 7.11.4 The percentage of bills accurately issued shall be calculated by subtracting the number of inaccurate bills issued for the year from the total number of bills issued for the year and dividing that number by the total number of bills issued for the year.
- 7.11.5 The total number of bills issued for the year includes original and reissued bills.
- 7.11.6 Accurate bills that need to be cancelled in order to correct another bill shall not be included in the calculation of billing accuracy measure.
- 7.11.7 A bill is considered inaccurate if:
- (a) the bill does not meet the definition of an accurate bill set out in section 7.1;
 - (b) the bill has been issued to the customer and subsequently cancelled due to a billing error; or
 - (c) there has been a billing adjustment in a subsequent bill as a result of a previous billing error.

8 Regional Planning

8.1 Definitions

8.1.1 In this section 8:

“Integrated Regional Resource Plan” means a document prepared by the IESO that identifies the appropriate mix of investments in one or more of conservation and demand management, generation, transmission facilities or distribution facilities in order to address the electricity needs of a region in the near- (up to 5 years), mid- (5 to 10 years), and long-term (more than 10 and up to 20 years);

“integrated regional resource planning process” means a planning process led by the IESO for the purpose of determining the appropriate mix of investments in one or more of conservation and demand management, generation, transmission facilities or distribution facilities in order to address the electricity needs of a region in the near- (up to 5 years), mid- (5 to 10 years), and long-term (more than 10 and up to 20 years);

“lead transmitter” means a transmitter that is leading a regional planning process or is involved in a scoping assessment or an integrated regional resource planning process in a region;

“needs assessment” means a process led by a lead transmitter in accordance with section 3C of the Transmission System Code to determine if regional planning is required for a region;

“region” means an area that has been designated as such by a lead transmitter, in consultation with the IESO, under section 3C.2.2(a) of the Transmission System Code for regional planning purposes;

“Regional Infrastructure Plan” means a document prepared by the lead transmitter leading a regional infrastructure planning process that identifies investments in transmission facilities, distribution facilities or both that should be developed and implemented on a coordinated basis to meet the electricity infrastructure needs within a region;

“regional planning” means a planning process involving licensed transmitter(s), licensed distributor(s), and the IESO for the purpose of determining whether a Regional Infrastructure Plan and/or an Integrated Regional Resource Plan is required for a region

and, where required, developing or updating a Regional Infrastructure Plan and/or an Integrated Regional Resource Plan;

“scoping assessment” means a process led by the IESO to determine the form of regional planning process (regional infrastructure planning process or integrated regional resource planning process) that is required for a region; and

“transmission-connected distributor” means a distributor whose distribution system is connected to the transmission system of a licensed transmitter.

8.2 Participation in Regional Planning

8.2.1 A transmission-connected distributor shall participate in regional planning upon being requested to do so by the transmitter that is leading a regional infrastructure planning process or by the IESO that is leading a scoping assessment or an integrated regional resource planning process for the region within which the distributor’s licensed service area is located, in whole or in part, and shall do so to such extent and in such manner as may reasonably be required by the lead transmitter or the IESO.

8.2.2 An embedded distributor shall participate in regional planning upon being requested to do so by its host distributor or by the lead transmitter for the region within which the embedded distributor’s licensed service area is located, in whole or in part, and shall do so to such extent and in such manner as may reasonably be required by the host distributor or the transmitter.

8.3 Provision of and Requests for Information

8.3.1 A transmission-connected distributor shall provide the following to the lead transmitter for the region within which the distributor’s licensed service area is located, in whole or in part:

- (a) such information as the lead transmitter may from time to time reasonably require to support regional planning, and shall do so within 60 days of receipt of the lead transmitter’s request. For clarity, where a distributor owns transmission voltage assets, the information provided to the lead transmitter shall include a 10-year outlook related to the end-of-life of major transmission voltage assets. For the purpose of this section, major transmission voltage assets include transformers; circuit breakers (where replacement includes the

lesser of six breakers or more than 50% of station breakers); overhead lines (where replacement exceeds two kilometres and is over 50 kV); and underground cables (where replacement exceeds two kilometres and is over 50 kV); and

- (b) prompt notice of any developments in that part of the region in which its licensed service area is located that may trigger the need for investments in transmission facilities, distribution facilities or both, as applicable, or that may otherwise reasonably be expected to affect the lead transmitter's conduct of a needs assessment for the region.

Where the distributor is a host distributor, the information provided to the lead transmitter shall reflect any information provided to it by any of its embedded distributors under section 8.3.4.

8.3.2 A transmission-connected distributor shall provide the IESO with such information as the IESO may from time to time reasonably require, for the purpose of supporting regional planning, and shall subject to section 8.3.3 do so within 30 days of receipt of the IESO's request. Where the distributor is a host distributor, the information provided to the IESO shall reflect any information provided to it by any of its embedded distributors under section 8.3.4.

8.3.3 Where a transmission-connected distributor believes that it cannot meet the 30-day timeline referred to in section 8.3.2, the distributor and the IESO may agree to a longer timeline. In such a case, the distributor shall so notify the Board in writing. The notice shall indicate the region in question, the reasons for being unable to meet the 30-day timeline and the extended timeline that has been agreed to between the distributor and the IESO.

8.3.4 An embedded distributor shall provide its host distributor with the following:

- (a) such information as may from time to time reasonably be required by the host distributor to support regional planning, and shall do so within 15 days of receipt of the request for information; and
- (b) prompt notice of any developments in that part of the region in which its licensed service area is located that may trigger the need for investments in transmission facilities, distribution facilities or both, as applicable, or that may otherwise

reasonably be expected to affect a lead transmitter's conduct of a needs assessment for the region.

- 8.3.5 Where a transmission-connected distributor provides information to a lead transmitter or the IESO under section 8.3.1 or 8.3.2 in respect of a region, the distributor shall also provide the same information to all other transmission-connected distributors in the region. Each host distributor that receives information under this section shall provide that information to each of its embedded distributors.
- 8.3.6 Where, for the purpose of supporting an application proposed to be filed with the Board, a distributor requires information related to the status of regional planning for a region, including any Regional Infrastructure Plan that is being developed for the region, the transmission-connected distributor or embedded distributor shall request a letter confirming the status from the lead transmitter for the region no less than 60 days before the distributor requires the letter.
- 8.3.7 Where a needs assessment determines that the participation of a distributor in a regional planning process is not necessary, the distributor shall request a needs assessment report from the lead transmitter confirming that its involvement is not required no less than 10 days before the embedded distributor requires the report for the purpose of supporting an application proposed to be filed with the Board.

8.4 Monitoring and Reporting

- 8.4.1 Where a Regional Infrastructure Plan identifies the need for a distributor to make an investment in its distribution system, the distributor shall, upon request by the lead transmitter or host distributor or by a distributor referred to in section 8.4.2, provide an update regarding the status of the investment, and shall do so within 30 days of receipt of the request. Where the distributor is a host distributor, the letter shall reflect any investment update(s) provided to it by any of its embedded distributor(s).
- 8.4.2 Where a distributor has agreed to conduct the review referred to in section 3C.3.1(a) of the Transmission System Code, the distributor shall provide a report to the lead transmitter setting out the status of the investments set out in the applicable Regional Infrastructure Plan within 60 days of receipt of a request from the transmitter to do so.

8.5 Transition

- 8.5.1 A transmission-connected distributor shall, within 45 days of receipt of a request from a lead transmitter, provide the transmitter with a letter identifying whether the distributor foresees a potential need for additional transmission connection capacity to support the needs of the distributor's distribution system over the next five years. Where the distributor is a host distributor, the letter shall reflect any information provided to it by any of its embedded distributors under section 8.5.3.
- 8.5.2 Where a transmission-connected distributor provides a letter to a lead transmitter under section 8.5.1 in respect of a region, the distributor shall also provide the same information to all other transmission-connected distributors in the region. Each host distributor that receives a letter under this section shall provide that letter to each of its embedded distributors.
- 8.5.3 An embedded distributor shall, within 15 days of receipt of a request from its host distributor, provide its host distributor with a letter identifying whether the embedded distributor foresees a potential need for additional transmission capacity to support the needs of the embedded distributor's distribution system over the next five years.

8.6 Continuing Obligations Re Distribution System

- 8.6.1 Nothing in this section 8 shall limit any obligation of the distributor to maintain the reliability and integrity of its distribution system or to meet load growth within its licensed service area.

9 OESP

9.1 [Revoked by amendment, effective May 25, 2017.]

9.2 Application of OESP Rate Assistance to the Bill

- 9.2.1 Where a distributor receives notice from the CSP that a consumer is eligible for rate assistance under the OESP, the distributor shall as soon as reasonably practicable apply the rate assistance specified in the notice to the consumer's bill.
- 9.2.2 The distributor shall apply the OESP rate assistance on the consumer's bill for the eligibility period specified in the notice, unless a different eligibility period is specified by the CSP any time thereafter or the distributor issues a final bill to the consumer before the eligibility period has expired.
- 9.2.3 Where a distributor receives notice from the CSP that a consumer's eligibility for rate assistance under the OESP has been renewed or canceled, or that the amount of rate assistance for which the consumer is eligible has changed, the distributor shall implement the necessary changes to the consumer's bill as soon as reasonably practicable.
- 9.2.4 Where a distributor issues a bill covering less than a full billing period, the distributor may prorate the amount of the OESP rate assistance.
- 9.2.5 Where a distributor disconnects and issues a final bill to a consumer who is receiving OESP rate assistance and within two billing periods reconnects the consumer at the same premises, the distributor shall upon the reconnection apply the OESP rate assistance to the consumer's bill for the remainder of the eligibility period under section 9.2.2, if any.
- 9.2.6 Where the OESP rate assistance applied to a consumer's bill exceeds the amount owing on the bill, the distributor shall carry forward the credit to one or more subsequent bills, however the distributor shall not issue a refund of the credit to the consumer at any time including at the time the account is closed or transferred.

9.3 Billing Corrections

- 9.3.1 Where a distributor receives notice from the CSP of a correction to the amount of rate assistance that was specified in a notice under section 9.2.1, or where the distributor discovers that it has mistakenly applied an amount of rate assistance to a consumer's bill other than the amount specified in the notice under section 9.2.1, the distributor shall apply the corrected amount as soon as reasonably practicable.
- 9.3.2 Where the corrected amount is greater than the amount that was specified in the notice under section 9.2.1, the distributor shall apply any rate assistance owing as a credit on the consumer's account and identify the amount credited as a billing adjustment on the bill.
- 9.3.3 Where the corrected amount is less than the amount that was specified in the notice under section 9.2.1, the distributor shall not be entitled to recoup any rate assistance that the consumer has already received, and for greater certainty the distributor shall not collect any such rate assistance as under-billed amounts under sections 7.7.4 and 7.7.4.1 of the Retail Settlement Code, without the approval of the Board.

9.4 Technical and Administrative Requirements of the CSP

- 9.4.1 A distributor shall adhere to any technical and administrative requirements set out in a procedure or guideline issued by the CSP, provided that no such procedure or guideline is effective until it is approved by the Board.

9.5 Communications with Consumers

- 9.5.1 A distributor shall notify a consumer in writing that the consumer's eligibility period for OESP rate assistance is expiring at least 60 days before the period expires, and shall include in the notice information about applying for a renewal of the eligibility period. If the distributor sends the notice by mail, the distributor shall not include the notice in the same envelope as a bill or any other documentation emanating from the distributor.

9.5.2 A distributor shall post on its website a link to the Board's OESP application portal.

9.6 [Revoked effective March 14, 2019.]

9.7 [Revoked effective March 14, 2019.]

10 Consumer Complaint Response Process

10.1 Definitions

10.1.1 In this section 10:

“complaint” means an allegation by a consumer of a breach of an enforceable provision by a distributor;

“Consumer Complaint Response Process” means the requirements set out in this section 10;

“enforceable provision” has the meaning given to it in section 3 of the Ontario Energy Board Act; and

“OEB E-Portal” means the Board’s electronic communication tool used to communicate with a distributor for the purposes of the Consumer Complaint Response Process.

10.2 Complaint Response

10.2.1 After a consumer directly contacts a distributor and makes a complaint, if the complaint is not addressed within 10 business days, the distributor shall inform the consumer that the consumer can contact the Board at any time, and shall at the same time provide the consumer with the Board’s designated toll-free telephone number or local telephone number (as requested by the consumer), and the website address designated by the Board for that purpose.

10.2.2 A distributor shall, within five business days of the coming into force of this section, provide the Board with an e-mail address for the purposes of the Consumer Complaint Response Process. The distributor shall ensure that the e-mail address is monitored at all times during the distributor’s regular business hours.

10.2.3 A distributor shall, within five business days of the coming into force of this section, provide the Board with the name, title, direct telephone number, direct e-mail address, and mailing address of:

(a) the person designated by the distributor as the distributor’s contact person for

purposes of the Consumer Complaint Response Process; and

(b) the person that the person in paragraph (a) reports to.

10.2.4 If any of the information required under sections 10.2.2 or 10.2.3 changes, the distributor shall provide the Board with updated information as soon as possible upon becoming aware of the change and in any event no later than five business days of the change taking effect.

10.2.5 Where a non-complaint issue from a consumer is forwarded to a distributor through the OEB E-Portal, the distributor shall respond directly to the customer, in a timely manner. In such a case the distributor is not required to follow the process set out in sections 10.2.6 to 10.2.9.

10.2.6 Where a complaint is forwarded to a distributor through the OEB E-Portal, the distributor shall provide, through the OEB E-Portal, a response to the complaint that meets the requirements of section 10.2.7 within:

(a) two business days of the date of receipt of the complaint, where the complaint relates to the disconnection of a consumer's property or is otherwise identified as urgent by the Board when forwarding the complaint to the distributor; or

(b) 10 business days of receipt of the complaint in all other cases.

10.2.7 The distributor's response referred to in section 10.2.6 must include the following:

(a) all pertinent information regarding the complaint, including any relevant background information;

(b) the steps taken by the distributor to investigate the complaint;

(c) the steps taken by the distributor to resolve the complaint;

(d) any other information that is reasonably necessary to enable a good understanding of the circumstances surrounding the complaint;

(e) if the complaint has not been resolved to the satisfaction of the consumer, the reasons why the complaint remains unresolved;

(f) if the complaint has been resolved to the satisfaction of the consumer, a

description of the resolution and, if any further steps are required to implement the resolution, a timeline for when those steps will be completed; and

(g) a copy of all relevant documents and communications between the consumer and the distributor in relation to the complaint.

10.2.8 Within five business days of being requested to do so, a distributor shall provide, through the OEB E-Portal, such additional information beyond the information required by section 10.2.7 regarding the distributor's handling of a complaint as may be required by the Board in order to review and assess the matter.

10.2.9 Where section 10.2.7(f) applies and the steps for implementing the resolution were not all completed at the time the distributor provides its response under section 10.2.6, the distributor shall confirm through the OEB E-Portal once the full resolution is completed. Such confirmation shall be provided as soon as possible, but in no event later than five business days after the date on which the resolution is completed.

10.2.10 For the purposes of the Consumer Complaint Response Process, where there is a reference to a number of days between two events, the days shall be counted by excluding the day on which the first event happens and including the day on which the second event happens.