Appendix B

to

Notice of Amendments to the

Distribution System Code

March 22, 2022

EB - 2021-0117

Final Amendments to the Distribution System Code

Note: The wording in this appendix presents the text of the sections of the DSC that have been amended, as they will appear once the amendments come into force. Numbered titles are for convenience of reference only.

References to Ontario Power Authority and OPA have been changed to Independent Electricity System Operator and IESO as appropriate throughout the Code. This includes modifications to s. 6.2.18 paragraphs d and e, which are otherwise unchanged from the existing DSC.

For sections from Chapter 6, where a section has been amended, the full text of the section has been included to provide appropriate context, even when the balance of that section may remain unchanged from the existing DSC.

The definition of "Emergency backup generation facility," below, represents an amendment to the existing definition in the DSC. The remainder of the definitions are added to the DSC.

1 GENERAL AND ADMINISTRATIVE PROVISIONS

1.2 Definitions

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

"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.

"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.

"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). "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.

"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.

1.7 Coming into Force

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

Section 6.2 of the Distribution System Code is amended as follows:

- 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.

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; and

- (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.

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.

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.
- 6.2.10 [Deleted]
- 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.

An offer to connect made to an applicant proposing to connect a capacity allocation exempt small embedded generation facility may be revoked by the distributor if not accepted by the applicant within 60 days.

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.
- 6.2.14A 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 inservice date of the project or placing the project in service.
- 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) applies only to an exporting generation facility: if the applicant does not have an executed IESO contract which includes a requirement for security deposits or similar payments, a requirement that the applicant pay a capacity allocation deposit equal to \$20,000 per MW of capacity of the embedded generation facility at the time the connection cost agreement is executed;
 - (c) applies only to an exporting generation facility: if the applicant does not have an executed IESO contract which includes a requirement for additional security deposits or similar payments, a requirement that if fifteen (15) calendar months following the execution of the connection cost agreement the embedded generation facility is not connected to the distributor's distribution system, the applicant must pay an additional capacity allocation deposit equal to \$20,000 per MW of capacity of the embedded generation facility on the first day of the sixteenth(16th) calendar month following the execution of the connection cost agreement;

- (d) if the applicant has an executed IESO contract which includes a requirement for security deposits or similar payments, the distributor shall not require the applicant to pay a capacity allocation deposit or an additional capacity allocation deposit;
- (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.

- 6.2.20 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.
- 6.2.23 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.

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.

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.