Appendix B

to

Notice of Proposed Amendments to the

Distribution System Code

August 5, 2021

EB-2021-0117

Proposed Amendments to the Distribution System Code - Clean Version

Note: Underlined text indicates proposed addition to the Distribution System Code and strikethrough text indicates proposed deletions from the Code. Numbered titles are included 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.

Typographical errors in the connection agreements in Appendix E have been corrected.

The following definitions are added to the Distribution System Code:

1 GENERAL AND ADMINISTRATIVE PROVISIONS

1.2 Definitions

"Distributed Energy Resources Connection Procedures" means the document approved by the Board that contains procedures for distributors and guidance for proponents on the processes for connecting distributed energy resources to the distribution system. Distributed Energy Resource (DER) means an electricity source or sink that is connected to a local distribution system or connected to a host facility within the local distribution system. A DER includes generation facilities and energy storage facilities.

"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.

"storage facility" means a facility that is connected to a Transmission or Distribution System and is capable of withdrawing electrical energy from the Transmission or Distribution System (i.e. charging), and then storing such energy for a period of time, and then re-injecting only such energy back into the Transmission or Distribution System, minus any losses (i.e. discharging).

"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.

"System power" means power flowing through a connection to a customer from the distribution system.

"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 zero capacity for connection of generation facilities even if the constraint is caused by an upstream asset that it does not own.

Section 6 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.

Cost Responsibility for Connection of Generation Facilities and Storage Facilities

- 6.2.31 The provisions of Chapter 3 of the Distribution System Code are applicable to all generation facilities and storage facilities, connecting to a distributor's distribution system and are also applicable to non-exporting connections.
- 6.2.3 A distributor shall promptly make available a generation connection information 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:
 - (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 distributed energy resource 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 distributor shall make available a Micro-Embedded Generation Facilities Application, in the form specified in Appendix E, to a person who is considering applying for the connection of a micro-embedded generation facility to the distributor's distribution system. The Micro-Embedded Generation Application 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 and forms as specified in the *Distributed Energy Resources*Connection Procedures to process a request for connection of a micro-embedded generation facility.

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 three (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.
- 6.2.11 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.

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; and
 - (b) within 90 days for a large embedded generation facility.
- 6.2.14A If the distributor requires a transmitter or host distributor to complete a Transmission System (TS) 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.
- 6.2.16 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 study results from a transmitter or distributor requested under section 6.2.14A.

6.2.18

- (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;
- 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 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.