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BY EMAIL AND WEB POSTING

January 27, 2025

- To: All Licensed Electricity Distributors All Licensed Electricity Generators All Licensed Electricity Storage Companies All Participants in Consultation Process EB-2019-0207 All Other Interested Parties
- Re: Revisions to Distributed Energy Resources Connection Procedures (DERCP) Distributed Energy Resources (DER) Connections Review (EB-2019-0207)

The Ontario Energy Board (OEB) is issuing an updated version of the *Distributed Energy Resources Connection Procedures* (DERCP) as part of its ongoing <u>DER</u> <u>Connections Review</u> initiative. The revised DERCP aims to increase customer choice and support the energy transition by increasing the overall efficiency of DER connections. The changes to the DERCP address customer concerns, enhance access, standardize connection practices, improve clarity, and simplify processes to reduce connection costs and timelines. The new version of the DERCP will come into force on June 2, 2025.

A. Background

In March 2022, the OEB amended the *Distribution System Code* (DSC) to facilitate the connection of DERs through the establishment of the DERCP. These changes have facilitated greater DER adoption by informing and guiding electricity distributors, DER proponents, and other DER stakeholders about applicable connection requirements and expectations. The DERCP was the result of the work of the DER Connections Review Working Group (Working Group) established through the OEB's DER Connections Review initiative. Currently in Tranche 5 of the initiative, this collaborative effort has been instrumental in meeting the initiative's key objectives: removing barriers to DER connections and streamlining connection processes with a continued focus on emerging best practices. The changes to the DERCP, detailed in Appendix A to this letter, are the result of the work and input from the members of the Working Group. The OEB

appreciates the effort and support of the Working Group members. Materials related to the Working Group, including presentations and meeting notes, are available on the OEB's Engage with Us project <u>website</u>.

Since issuing the DERCP in 2022, the OEB amended Appendix C of the DERCP on June 16, 2023 and, in March 2023 and in March 2024, amended the DSC to introduce new connection-related requirements. Accordingly, the OEB has revised the DERCP to reflect these 2023 and 2024 amendments.

B. DERCP Version 2.0

The revised <u>DERCP</u> includes numerous enhancements in structure to increase clarity and accuracy of information provided to DER applicants, along with significant revisions and new requirements which are discussed below. Key changes introduced in the latest version include:

- A simplified connection impact assessment (CIA) process and simplified commissioning and verification process requirements for some small DERs, reducing costs and shortening timelines to improve the efficiency and effectiveness of DER connection processes for these facilities. The updated DERCP also provides for distributors to develop clear and consistent commissioning process requirements to ensure safe and reliable DER connections.
- A capacity notification requirement that informs customers of available system capacity as a result of changes in a distributor's restricted feeder list. Implementing provisions for allowable flexible hosting capacity arrangements across the generation connection process along with a new section 5.8 that explains the CIA process for flexible hosting capacity arrangements. These changes are expected to increase the amount of capacity that is available on distribution systems for connecting and integrating DERs.
- Standardizing practices related to DER classification, requirements pertaining to the permission to operate, and timeline requirements for projects that require upstream CIA. The changes ensure consistency and efficiency in DER classification, authority and responsibilities related to the permission to operate, and connection assessment timelines.
- As noted above changes to templates in <u>Appendix C</u> have also been made to reflect earlier changes.

The OEB acknowledges that distributors may need to update their websites and processes to implement various new and updated requirements outlined above. The revised DERCP will therefore come into effect on June 2, 2025.

Questions regarding this letter should be addressed to Industry Relations at IndustryRelations@oeb.ca.

DATED at Toronto, **January 27, 2025** ONTARIO ENERGY BOARD

Brian Hewson Vice President, Consumer Protection, and Industry Performance

Attachment A: Key updates to the DERCP

Attachment A: January 2025 Updates to the DERCP

The following sections outline the updates to the DERCP, along with the rationale for these updates.

Definitions

• Provide a more specific and relevant DER definition for DERCP purposes:

The DER definition has been revised to be more specific to connection of facilities that generate electricity (e.g. generators and energy storage facilities while in discharge mode) to avoid confusion with other OEB requirements and ongoing initiatives related to the connection of loads. The DERCP continues to recognize that energy storage is a load during charging periods for the purposes of connection evaluations and cost recovery.

Preliminary consultation phase (DERCP Section 4)

• Addition of a new generation capacity notification requirement:

Since October 1, 2022, distributors have been required to include a restricted feeders list in their generation connection information packages. When a distributor upgrades their distribution system and provides capacity to one or more previously restricted feeders, it is beneficial for prospective DER customers to be informed about the newly available capacity. To enhance transparency, the OEB has introduced a new notification requirement under section 4.2 (Restricted Feeder List) for feeders that distributors identify are no longer restricted for DER connections. The provision requires that at least one month prior to accepting new DER connection applications after a feeder is removed from the restricted feeders list, a distributor must post this information on its website and notify customers who have previously expressed an interest in receiving such information. This requirement will ensure equal access to generation capacity and improve transparency regarding distribution system availability.

• Updates to the PCR template under the DERCP Appendix C to reflect the enablement of flexible hosting capacity arrangements:

On March 27, 2024, the OEB amended the DSC by adding a new section 6.2.4.1A to enable flexible hosting capacity arrangements. As the result, the OEB updated the PCR template in Appendix C to include response options for the flexible hosting capacity arrangements and the revised description for the 'Extremely High' complexity tiers. Distributors are required to use the new template.

• Updates to sections 4.3 and 4.4 to reflect the changes to Appendix C:

Amendments made in <u>June 2023</u> to Appendix C of the DERCP contain version 2 of the Preliminary Consultation Information Request (PCIR) and PCR templates. The updated templates are designed to enhance the exchange of information between distributors and customers, thereby improving the overall value of the preliminary consultation process. As of October 2023, DER customers can receive comprehensive preliminary information about the potential DER connections, including the complexity level. The updates to sections 4.3 and 4.4 summarize the key requirements of those templates. Section 4.4 is also updated to reflect the change to the PCR mentioned in the section above.

CIA phase (DERCP Section 5)

• Clarification of capacity size determination for sites with multiple DERs and for sites with derated equipment:

As residential and small business customers adopt more advanced DER solutions, such as solar panels combined with energy storage, clear and consistent interpretation of DER classification is essential to ensure a safe and cost-effective connection process. Recent customer inquiries highlight that capacity size can be calculated differently, leading to varying connection processes and requirements. To address this, the DERCP now includes additional clarification on how capacity size is determined. These updates are particularly relevant for sites with multiple DERs and derated equipment, as outlined in the revised Section 5 and the new Appendix D. These changes aim to create a more transparent, consistent, and streamlined process for connecting DERs in Ontario.

• Addition of the simplified CIA process requirements for small DERs:

Since 2023, OEB staff has worked closely with the Working Group to remove connection barriers for small DERs characterized by a nameplate capacity exceeding 10kW (the maximum capacity to meet the DSC definition of a micro-embedded generation facility) but still significantly below the maximum threshold for small generation facilities. This group faces notably higher connection costs and process complexities compared to micro generation facilities.

As Ontario's experience with DER connections evolves, distributors are expected to improve their ability to assess risks and connection impacts more efficiently. The OEB believes it is now appropriate to reduce the connection assessment costs and timelines for this DER group, as their impact on the distribution system is similar to that of micro generation facilities. The DERCP will require distributors to offer simplified CIA options for small DER proponents that meet distributor-

specific capacity thresholds. Section 5 and Appendix E outline these requirements along with expectations and recommendations.

The simplified CIA is a connection assessment that is largely based on predetermined screening criteria without the need for power flow simulations. The DERCP provides a set of size and voltage thresholds and outlines expectations and guidance regarding the application eligibility, fee, timeline, and potential assessment outcome. The OEB expects this simplified CIA will streamline the connection process, reduce costs, and encourage broader adoption of small DERs in Ontario.

• CIA process for flexible hosting capacity arrangements:

A new section 5.8 in the DECP includes requirements for the flexible hosting capacity arrangements in relation to the CIA process outlined in the new DSC section 6.2.4.1A. Additionally, the March 27, 2024, Notice of Amendments to the DSC set forth recommendations, such as the recommendation for distributors to inform prospective DER customers, via the DER connection sections of their websites, whether they offer flexible hosting capacity arrangements.

• Clarifies the timeline requirements for projects that require an upstream CIA:

The DER Connections Review aimed to provide clearer more detailed timelines for the connection process to ensure the timelines are well understood. The 2022 version of the DERCP established timelines for projects that require upstream assessment(s). To ensure consistency in assessment timelines, the OEB is providing further clarification for connections requiring assessments from host distributor/transmitter. The revised CIA process flowchart in Figure 4 sets out the overall timeline for a project that requires an upstream assessment based on the size of the proposed DER.

In the process descriptions, the DERCP indicates that a distributor must submit a completed application to the host distributor/transmitter as soon as possible and no later than 15 days after starting the downstream CIA to ensure the host distributor/transmitter has adequate time to carry out the upstream CIA. This allows the distributor to consolidate the results of upstream assessment into their own CIA. The distributor must include information on the expected timeline for the host distributor/transmitter CIA in its application. A host distributor/transmitter must review the application as soon as possible, and within 15 days to allow sufficient time for the downstream distributor to submit any revised application package (if necessary) and for the upstream assessment to be completed within the required overall CIA timeline for the connection. The OEB reiterates its expectation that all parties collaborate efficiently to ensure the overall CIA timeline is met.

• Providing potential cost estimate timeline extensions for mid-sized and large projects:

The DERCP includes a requirement for a distributor to provide an estimate of the connection cost for mid-sized or large generation facilities when providing the technical requirements to the applicant. During Tranche 5, Working Group members expressed concerns about the quality of cost estimates for complex projects.

To address these concerns and ensure high quality cost estimates, the OEB is providing a timeline extension for projects with atypical or complex connection work items. This extension ensures distributors have sufficient time to accurately estimate the connection costs and explore potential lower-cost options. Section 5.9.1 in Version 2.0 provides distributors up to 30 days after issuing a CIA to complete a cost estimate for a mid-sized or large project with atypical or complex project. During the CIA process, if a distributor determines that additional time is needed to prepare a cost estimate, it can assess whether the project qualifies for a timeline extension using the criteria outlined in this section. The criteria explain what is considered atypical or a complex project. Upon confirmation, the distributor must document the justification for the extension and inform the applicant of the rationale and expected timeline for cost estimate when issuing the CIA.

The OEB expects that, in the normal course, cost estimates should be provided at the same time as the CIA, with extensions used only when the criteria are met, and it is practically necessary. Additionally, the DERCP outlines further expectations regarding the cost estimates, requiring distributors to actively work on reducing barriers improving the efficiency of DER connections.

Build and energization phase (DERCP Section 7)

• Commissioning process requirements, including simplified commissioning and verification requirements and template:

Several Working Group members highlighted the need to develop clear and consistent commissioning process requirements to ensure safe and reliable DER connections. Members also sought out opportunities to improve efficiency in the process to help reduce connection costs. In response, the Working Group made several recommendations related to this process. The OEB has considered these recommendations and has introduced a new commissioning Section 7.2.

The new section requires distributors to establish and maintain clear commissioning requirements and processes that are proportionate to the risks associated with projects of different sizes and characteristics. Distributors must also post the general commissioning requirements, processes, and forms electronically on their websites. The OEB expects distributors to make their best efforts to minimize commissioning costs for DER applicants.

Additionally, under Section 7.2, the OEB requires distributors with specific commissioning standards or technical document requirements to periodically review these documents to implement newer versions if available or to assess their continued applicability.

The OEB also established a new Section 7.2.1 to require distributors to create a simplified process for a subset of small DERs that meet the distributor-specific criteria and provides a simplified template in the new Appendix F to assist distributors in creating a simplified commissioning and verification form. The simplified process is expected to reduce connection costs and timelines for these small DERs.

• Revisions to Connection Agreement section 7.3 to include requirements related to flexible hosting capacity arrangements:

To reflect the March 27, 2024, amendments to the DSC related to the flexible hosting capacity arrangements, the OEB revised the Connection Agreement section 7.3 in the DERCP to require distributors to clearly outline all operating terms and conditions that will require the DER output or the operation of the DER to be varied in Schedule D of the connection agreement set out in Appendix E to the DSC.

• Establishes new requirements pertaining to the permission to operate:

Section 6.2.18F of the DSC, revised in the 2023 amendments, enabled the distributors to provide a DER facility permission to operate even if the applicant has not completed its portion of connection work items or executed all planned commissioning and verification activities. For example, a distributor may permit a DER facility to begin operations while certain weather-dependent commissioning activities remain pending. These amendments facilitated faster DER connections.

In the updated DERCP, the OEB has revised the overall build and energization process under section 7.1 to outline the distributors' authority to provide such permissions, establishing terms and conditions for completing outstanding work, and revoke permission if those terms are not met (in the new Project completion section 7.4). These changes ensure that distributors only permit DER facilities that have progressed sufficiently through the build and energization process, can operate without adversely affecting the reliability and safety of the distribution system, and are committed to completing all outstanding work. The updates also ensure clarity and transparency regarding the terms and conditions of the permission to operate.

• Introduction of a new section 7.4 to establish project completion requirements:

The March 7, 2023, amendments to the DSC sets out the requirements related to connection cost report or true-up, and the connection cost deposit refund process and timelines. The OEB introduced a new section 7.4 to include these requirements. This section also provides distributors with the ability to revoke permission to operate, as mentioned in the section above, and requires the proper review and closure of projects.

All phases of the Connections Process

• Independent sections for all connection phases with streamlined process flowcharts:

The OEB has revised the DERCP by creating independent sections for each connection phase, supporting the implementation of new requirements. The connection process flowcharts have also been streamlined to improve clarity. Additionally, these amendments provide timeline clarifications to enhance both clarity and consistency.

These revisions reflect the Working Group's recommendations. While the majority of the updates do not alter the information provided in the existing flowcharts or modify the processes themselves, the revised DERCP provides greater clarity on steps, consistency in format and more user-friendly descriptions of each process step.

The flowcharts are also updated to reflect the enablement of the flexible hosting capacity arrangements.

• Other revisions:

In addition to the changes mentioned above, the OEB has made other minor revisions throughout the DERCP to ensure alignment with the DSC and to enhance clarity. These revisions are not expected to affect distributors' current practices.