

September 16, 2021

Registrar
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto ON M4P 1E4

Submitted via email

**RE: PROPOSED AMENDMENTS TO THE DISTRIBUTION SYSTEM CODE TO
FACILITATE CONNECTION OF DISTRIBUTED ENERGY RESOURCES (EB-2021-0117)**

Energy Storage Canada (ESC) appreciate the opportunity to provide comments on the proposed amendments to the DSC with respect to DER connections. Innovative and emerging technologies, such as energy storage, are offering electricity customers new ways of meeting their electricity needs. The current components for connection of resources in the DSC were developed under a different era when new connections were overwhelmingly driven by centralized procurement under the Feed-In Tariff (FIT) and micro-FIT programs. Looking forward new connections are expected to be driven by unique customer requests that require updates to the DSC. ESC fully supports the amendments to the DSC and has specific comments and feedback provided below.

Energy Storage Canada

ESC is the national association for the energy storage industry in Canada. Our membership represents all players along the energy storage value chain – technology providers, project developers, investors and operators, utilities, electricity distribution companies and NGOs. We represent some of the largest energy companies in Canada as well as some of the smallest and most innovative clean-tech organizations.

ESC focuses on advancing opportunities and building the market for energy storage through advocacy, networking, and stakeholder education. Our mission is to advance the energy storage industry in Canada through collaboration, education, policy development and research. ESC takes an unbiased view with respect to the range of available storage technologies and is supported by the contributions of our active members.

Feedback on Proposed DSC Amendments

ESC has the following comments for consideration as part of the DSC amendment process:

- Inclusion of Energy Storage
- Definition of restricted feeder

- Cost Allocation of Preliminary Consultation Report
- Technical details in emergency transfer switch requirements
- Support for DER Connection Process document
- Pathway to resolve upstream connection constraint
- Capacity allocation deposit timelines

Each comment will be discussed in greater detail below:

Inclusion of Energy Storage

ESC fully supports, and has been advocating for, the inclusion of Storage Facility within the DSC. As noted by many other jurisdictions and Ontario, energy storage is a unique resource that is neither a load nor a generator. Treatment of energy storage must reflect its unique attributes and characteristics. In addition to defining energy storage, ESC recommends that the OEB consider providing guidance on the treatment of energy storage within connection cost agreements and cost allocation. Under the current distribution rate design, energy storage resources pay demand charges for peak consumption on a monthly basis. The DSC and OEB should ensure that the future payments by energy storage are appropriately reflected in cost allocation and capital contribution calculations during the connection process. It would be unfair for energy storage to fully fund a connection expansion and then be forced to pay monthly during its operating life for the same infrastructure beyond the amounts that load customers are expected to pay.

Definition of Restricted Feeders

ESC supports the inclusion of restricted feeders in the DSC. The distribution and transmission system has finite connection capability and guidance provided to connection proponents is helpful in optimizing the development of new resources. One issue ESC wants to flag is that the definition of restricted feeders in Appendix A (Section 1.2) does not fully align with the definition included in the DER Connection Procedures (Section 4.2). DER Connection Procedures specifically discusses feeders that have zero short-circuit capability while the Appendix A definition discusses zero capacity in general. ESC supports the definition of restricted feeders as feeders with zero short-circuit capability since short-circuit limitations are hard technical restrictions due to safety and equipment protection reasons. General capacity restrictions, such as thermal capacity, are more flexible constraints and can be addressed through additional investments funded by the connecting resources (e.g., re-conductoring of limited feeder portion, re-arrangement of normal operating conditions to lower thermal overload, new switching capability under reliability events, etc.).

As part of the Tranche 3 discussions, ESC recommends that this enhanced package include a list of all feeders by name and feeder designation with stated short-circuit capacity available, to be updated at least every 3 months. This document will enhance the transparency of the capacity allocation process, and reduce the number of Preliminary Consultation Reports distributors receive to check available capacity.

Cost Allocation of Preliminary Consultation Report

The DSC Amendments propose to offer three free Preliminary Consultation Reports per person in a calendar year before distributors are allowed to charge for completion of additional Preliminary Consultation Reports. ESC does not understand the justification for limiting the access to Preliminary Consultation Reports. The Preliminary Consultation Reports appear to be a slightly adjusted version of the Form A that is shared with customers free of charge today. Further, the Preliminary Consultation Report is the only document that allows customers to link their connection location with the proposed restricted feeder list. Without a Preliminary Consultation Report, a customer cannot determine if their connection point is on a restricted feeder, creating an unfair and unjustified barrier to customers seeking to manage their electricity needs. The information provided in the Preliminary Consultation Report appears to be common and easily accessible data that should not be a significant cost for distributors to compile.

In addition, the DSC amendments provide no definition of person and therefore it is not clear if it is a corporate entity, individual, or developer. Distributor service territories come in various sizes, the standard limit of three for all distributors is not fair to customers within large service territories.

ESC recommends that the limit of three be removed and the Preliminary Consultation Report be provided free of charge once a year to each individual customer upon request. This ensures fair and equal access to distribution system information for all customers.

Technical Details in Emergency Transfer Switch Requirements

Section 6.2.1 includes a technical requirement for a transfer switch to be able to isolate within 100 milliseconds. While ESC does not have a view on whether the 100 milliseconds is appropriate or not, it does not believe it is appropriate for the DSC to include specific technical requirements. Specific technical requirements are detailed within each distributor's technical interconnection requirements and primarily determined by Hydro One's Technical Interconnection Requirements (TIR). Transfer switch requirements should be removed from the DSC and the general objectives of safe and reliable operation be included instead.

Support for DER Connection Process (DERCP) Document

ESC supports the creation of the DERCP document. It provides a common and clear guide for connection requests and process steps. It also provides an easy document to address errors, omissions, and clarifications without having to go through the whole DSC amendment process. ESC requests that the DERCP be expanded to provide additional information on the process steps and deliverables that distributors and transmitters are expected to complete throughout the process similar to the description for connection requesting proponents.

Pathway to Resolve Upstream Connection Constraints

An off-ramp and rejection of a connection request identified in the DERCP is no capacity at upstream distribution or transmission systems. It appears that the host distributor only needs to inform the connection request proponent that no capacity is available and to reject the connection request. It is

not clear to ESC what options are available to the proponent to resolve the upstream connection constraint. ESC believes there should be a feedback loop to determine if the proponent is willing to fund upgrades to the upstream constrained equipment as part of their connection requests. In many cases the cost of upgrades will be uneconomic, but in limited cases there may be options that proponents would be willing to fund. The process for the upgrade of upstream equipment does not need to be formalized; however, it could be completed on an ad-hoc basis. The DERCP should outline a pathway to resolve upstream connection constraints.

Capacity Allocation Deposit Timelines

Section 6.2.18 requires an exporting generation facility to make a \$20,000/MW deposit at the time the connection cost agreement is executed and then a further \$20,000/MW by the first day of the 16th calendar month following the connection cost agreement execution. Timelines for developing resources vary and the requirement to collect a second deposit does not provide fair and equal treatment for all resources. Instead, ESC recommends that the second deposit be collected once exporting generation facilities reach a specific milestone within the connection cost agreement.

Sincerely,

A handwritten signature in black ink that reads "Justin W Rangooni". The signature is written in a cursive, flowing style.

Justin W. Rangooni
Executive Director
Energy Storage Canada

