



Distributed Energy Resources (DER) Connections Review

FEIWG Meeting

July 9, 2021

Purpose

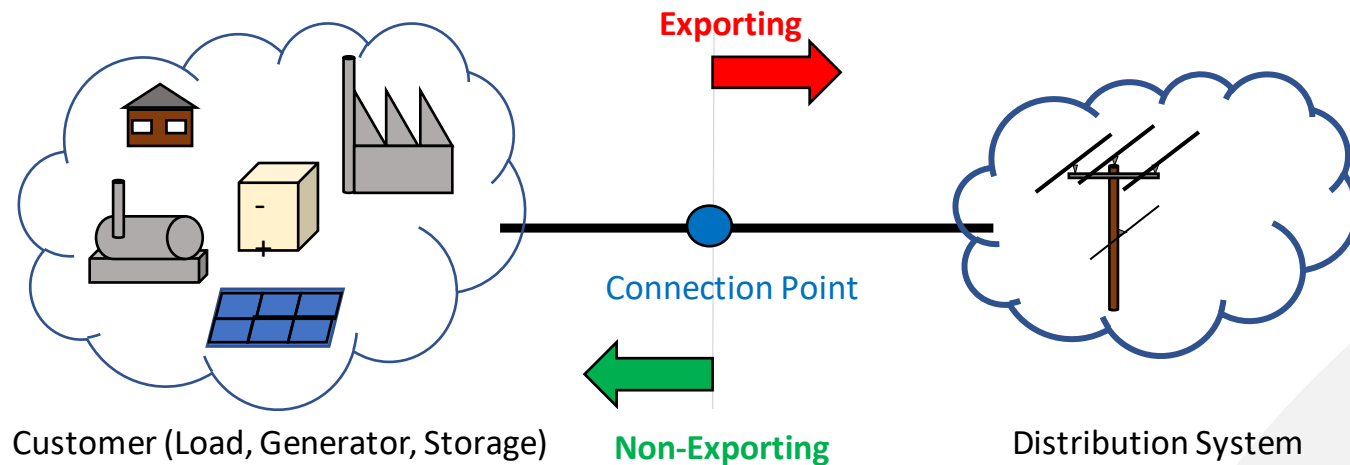
- Provide an update on the DER Connections Review consultation

Overview of DER Connections Review

Identify barriers to the connection of DERs, and, where appropriate, standardize and improve the connection process

- Stakeholders outlined the need for:
 - Clarity in the connection rules, process and technical requirements (including cost responsibility)
 - Consistency in application of the rules across the Ontario
 - Reduction in connection process timelines
- Working Group (WG) landed on consensus approach to provide recommendations to OEB Staff
 - WG outlined priorities and used Technical & Process Subgroups to discuss issues and develop draft recommendations
 - Technical & Process Subgroups established small groups to tackle specific deliverables for the Subgroups (i.e. CIA application form, Risk Framework)

A New Connection Paradigm



New Connection Paradigm

Working Group agreed to look at DER connections from a new perspective where we focused on what happens at the connection point and its impact on the distribution system as opposed to looking at the customer site and determining whether the connection request is for a load or generation customer. Under this new paradigm, if power flow is into the distribution system, then it is considered an exporting connection while if the power flow is strictly from the distribution system, then the connection is considered a non-exporting connection.

Working Group Progress

Tranche 1 – Low Hanging Fruit

- In November 2020, the OEB issued two letters providing guidance to distributors to support the efficient and timely connection of customers with DER projects
- WG made a recommendation to the ESA in response to a gap between the new CSA C22.3 No 9 standard and the existing inverter equipment standard. Based on the recommendation, the ESA moved ahead with accepting inverters certified to UL standard, UL 1741 SA (2016) if required by the Electrical Distributor.
 - The permission became effective October 1, 2020 and will be reviewed by ESA when a revised CSA standard for inverters, C22.2 No.107.1, is published.

Working Group Progress

Tranche 2 – A Deeper Dive

Major WG Recommendations: Possible implementation via the issuance of guidance documents and/or code amendments

- Remove the Load Displacement Exemption
 - Even though they are non-exporting, a load displacement generation (LDG) connection still has an impact on the distribution system that needs to be assessed. The exemption for emergency backup generation will remain.
- Requiring the use of Standardized Forms (Preliminary Consultation and CIA Application)
 - Improves clarity and consistency by standardizing the information being required by all LDCs
 - Expected to reduce costs for proponents through process and information predictability
 - Expected to reduce the costs for smaller LDCs who rarely get connection applications, and would otherwise need to develop a form or process
- Implement CIA Application Screening Process –
 - Expected to reduce overall application processing time by improving the overall quality of the applications being submitted to LDCs
- Implement Restricted Feeder List (name and feeder designation)
 - Restricted feeders include any feeders owned by the LDC that have zero short circuit capacity for connection of generation facilities even if the constraint is caused by an upstream asset that the LDC does not own
 - Expected to help proponents make more informed investment decisions as it relates to locating DERs by avoiding the pursuit of locations that have no chance of connecting due to lack of capacity

Working Group Progress

Tranche 2 – A Deeper Dive cont'd

- Replace Technical Requirements outlined in Appendix F.2 with a reference to CSA C22.3 No 9
 - Expected to keep code aligned with evolving technical standards
- Implement Dual/Multiple CIA Process Flowcharts
 - Provide clarity that the Distributor's, Host Distributor's and Transmitter's CIAs should be processed concurrently as well as highlight how the screening process should be incorporated
 - Expected to reduce overall processing time
- Standardized Technical Interconnection Requirements
 - Recognize Hydro One (HONI) Technical Interconnection Requirements (TIR) as a guideline (or upper bound example) for good utility practice for connection of DERs.
 - LDCs should specify where the TIR for their system would differ from the HONI TIR
 - LDCs that do not have a published TIR should compile a repository of technical requirements based on examples/samples of completed projects connected to their system.
 - Require LDCs to provide specific, binding technical requirements for a project as an output of the CIA.
 - This would remove uncertainty for DER developers about interconnection requirements

Working Group Progress

Tranche 3 – To reconvene in July/August

Issues identified in Tranche 1 and 2 that the WG needs to prioritize for potential discussion in Tranche 3

- Further work on the Risk Framework
- Application Fees, Consistency & Predictability
- Benchmark Performance Reporting
- Improved Cost Estimates
- Further discussion on Dispute Resolution
- Impact of Electric Vehicles (EVs) on connections

Next Steps

- Subject to internal approvals;
 - Proceed with Notice and Comment on any proposed code amendments
 - Proceed with development and issuance of any guidance documents
- Proceed with Tranche 3 – WG to confirm priority focus during first meeting

Thank You!

