Meeting Notes

DERs Connection Review (EB-2019-0207)
Working Group Meeting #2

Meeting Date: December 16, 2019 **Time**: 9:30am – 12:30pm

Location: Ontario Energy Board
2300 Yonge St. ADR Room, 25th Floor

Attendees:

Ryan Holder Catherine Ethier Laurie Reid Natasha Gocool Rachel Anderson	Ontario Energy Board (OEB)
Bob Braletic	Alectra Utilities (Alectra)
Pat Dalzell	Bruce Power
Nicolas Gall*	CanSIA (CanSia)
Martin Lensink	CEM Engineering (CEM)
Rachael Taljaard	CIMA
Paul Luukkonen*	Customized Energy Solutions Ltd. (CES)
Tatjana Dinic	Electrical Safety Authority (ESA)
Kathryn Farmer	Electricity Distributors Association (EDA)
Marty Tzolov	Elenchus Research Associates (For PWU)
Kent Elson	Elson Advocacy (On behalf of Environmental Defence) (ED)

Dan Sweeney*	Enel X Canada LTD. (Enel X)
Thomas Ladanyi (Tom)	Energy Probe (EP)
Robert Barkley	Great Circle Solar (Great Circle)
Ankur Mehrotra	HCE ENERGY INC. (HCE)
Ryan Boudreau	Hydro One Networks Inc. (HONI)
Mohab Elnashar Phillip Chisulo*	Independent Electricity System Operator (IESO)
Peter Ronson	Markham District Energy
Arasi Vicknewaswaran	Ministry of Energy, Northern Development and Mines (MoE)
Kerry Lakatos Hayward	OSEA
Roy Hrab*	Ontario Energy Association (OEA)
Matt Sachs	Peak Power Inc. (Peak Power)
Michael Brophy	Pollution Probe (PP)
Neil Freeman	Public Energy Inc. (PE)
Richard Laszlo	QUEST Canada (QUEST)
Nishant Gehani	Rodan Energy Solutions (Rodan)
Utilia Amaral Marc Brouillette*	Stem Canadian Mfrs. & Exp.(CME)
Alex Simakov	Sussex
Hani Taki	Toronto Hydro-Electric System Ltd. (Toronto Hydro)
Sagar Kancharla	W S P
Jordan Hoogerdan	Zon Engineering Inc.

Aqueel Zaidi	
Absent:	
Dan Guatto	Burlington Hydro
Falguni Shah	Elexicon Energy
Sarah Griffiths	Enel X Canada LTD.
Justin Wahid Rangooni	Energy Storage Canada
Tim Hessenlink	EPCOR Ontario (EPCOR)
Greg Sheil	London Hydro (London)
Paul Norris	Ontario Waterpower Association

**Participated Via Tele-conference/WebEX*

Meeting Purpose:

These meeting notes are intended to provide a summary of key issues that were discussed during the 2nd Working Group (WG) meeting.

Background:

The Ontario Energy Board (OEB) initiated a review of the connection requirements for distributed energy resources (DERs). The review is focused on the connection of generation and storage facilities to the distribution system.

The purpose of the consultation process is to identify any barriers to the connection of DERs, and where appropriate, to standardize and improve the connection process for DERs.

The working group (WG) to review the issues, identify and to develop a set of options and recommendations for the OEB to consider.

Meeting #2 Agenda:

1. Introduction and Recap

2. WG Meeting #2 Outline:
    - OEB's Introduction and Overview of the Initiative

- Project Purpose and Scope
- Review of Definitions
- New Connection Paradigm
- Subgroups
- Action Items and Next Steps

Purpose of the Working Group (WG):

The purpose of the Connections Review Working Group is to discuss the issues identified in the stakeholder's comments and identify potential solutions that will result in clearer and more consistent rules with respect to process, timeframes, costs and technical requirements for connecting DERs.

Introduction and Overview of Project Purpose and Scope:

OEB staff provided a brief overview of the scope of the initiative outlining those issues that would be considered in scope and out of scope for this initiative. For ease of reference, the scoping statement is outlined below;

The working group will focus on the point of connection between the customer's electrical equipment of storage and generation facilities with the distributor's system only. This will include the metering point, whether before or after the connection point.

The issues arising downstream within the customer's premises or upstream in the distributor's system ***will not*** *be considered unless they impact the connection.*

Review of Definitions

OEB staff presented a revised DER definition and outlined that for the purpose of this initiative, DERs consist of generators and energy storage technologies. It was suggested that a holistic DER definition is not needed to address the connection issues and that a scoping statement would suffice for the purposes of this review. There was general consensus by WG members to replace the DER definition with a scoping statement. WG members also agreed to remove the word "sink" from the DER scoping statement and inquired about having the option to change the scope once the subgroup meetings have begun. OEB Staff agreed that the scope can be revised later if required.

Definitions for Point of Common Coupling, Point of Connection, Point of Supply, Connection, Connection Assets, Ownership Demarcation Point, Embedded generation facility and load displacement were presented. A brief discussion on the alignment of these definitions with IEEE definitions and the DSC were discussed. The need for greater flexibility with definitions was mentioned and the group concluded that the subgroups would use these definitions as a starting point for their discussions and would revise the definitions if required. These revised definitions would be brought back to the WG members to review and agree on. OEB Staff outlined that embedded generation facility was referenced 94 times in the DSC and undertook to review embedded generation facility as well as generation facility in the DSC to determine the impact of any changes as it relates to these terms.

New Connection Paradigm:

OEB staff reviewed the new connection paradigm and recapped the definitions for injection and non-injecting. A WG member suggested the subgroup also consider the addition of Point of Common Coupling into the definition for injecting. Staff outlined a modified 2x2 connection model with a number of connection sketches based on Injecting and Non Injecting with sub categories of parallel and series. WG members felt that the use of series and parallel as well as showing metering points in the sketches was confusing and agreed that the 2x2 connection paradigm be modified to use synchronized for parallel connections and non-synchronized for the series (non-parallel) connection. OEB staff agreed to modify the sketches to remove the metering points. WG members also suggested that OEB staff should consider reordering the sequence of matrix to address the most common connection

first i.e. load displacement non-injecting synchronized. OEB staff agreed to make those changes to the deck.

A WG member suggested the subgroups consider the quality impacts connecting injecting and non-injecting DERs under the synchronized branch of the 2x2 connection paradigm have on the distribution system. WG member had a brief discussion on the use of emergency generation and raised concerns as to how these units should be dealt with when used in a load displacement capacity. It was discussed that issues that may be related to the misuse of emergency generation i.e. such as operation when the grid is available, may not be completely addressed by this consultation based on the review scoping but may be parked for further discussions in other OEB initiatives. It was agreed that the connection process and technical requirements for emergency generators which fall within the scope of this review would be further discussed at the subgroup level.

Subgroups:

OEB Staff outlined the purpose of the Process and Technical Requirements subgroups and presented the list of subgroup volunteers. A WG member inquired as to the form of the outcomes of the subgroups meetings and if the recommendations will be reviewed by the main WG. OEB staff acknowledged that the subgroups are vehicles to provide recommendations to the main WG and that OEB staff will use the information gathered from the WG sessions to formulate recommendations to the OEB for review and approval. It was highlighted that there was no customer representation on the subgroups and members asked if the OEB intended to solicit the involvement of this stakeholder cohort. OEB staff outlined that some customer groups provided comments on the high level issues but they opted not to participate at the WG or subgroup levels. Some WG members, outlined that through their DER related businesses, they represented the interest of the customer.

A question was posed as to how members can provide feedback on prior connection process experiences to the subgroups to consideration. OEB staff suggested that a presentation or a report similar to the OEA report can be shared with WG and subgroup members. Presentations and any other documents that WG members would like to be shared with the subgroup member should be emailed to Catherine Ethier at Catherine.Ethier@oeb.ca

WG members suggested that the technical subgroup meetings should occur before the process subgroup meetings as a number of the technical issues need to be addressed before process matters can be addressed. There was general agreement with this idea however there was also agreement for both subgroups to move ahead with their initial meetings so that work plans can be created and published to allow the groups to identify touch point. It was also suggested that each subgroup include evolving sector practices in their discussions and that subgroups bring their recommendations back to the main WG for review. A WG Member suggested identifying issues that are relevant to other OEB processes and register it in a listing for other OEB initiatives to consider at a future date. OEB Staff agreed to park ideas that are not in scope and create a list that can passed to other OEB initiatives for consideration.

A WG member asked for clarity on the OEB's timeline for this initiative. OEB staff noted that there are a number of issues to covered during this review and a definite timeline is not available. However, staff is anticipating that the discussions would lead to some quick wins or solutions that would allow staff to present some feedback or recommendations from the WG to the Board on a quarterly basis.

OEB Staff highlighted a sample list of priorities for subgroups to consider. For the technical subgroup, a WG member suggested the technical subgroup look at appendix F for the DSC for size requirements. Another WG member suggested that the group defer the review of size requirements and concentrate on the issues raised during this review. WG member agreed to develop solutions to address the current issues.

OEB suggested subgroup members send in their top 3 priority issues to OEB staff to use as a starting point of issues to tackle in subgroups. The WG agreed to start half day subgroup meetings on a bi-weekly basis starting January 14th with the Technical Subgroup meeting occurring in the morning and the Process Subgroup meeting during the afternoon. A second subgroup meeting is scheduled for January 28th with a WG meeting proposed for end of February. Based on subgroup progress, the WG will meet every month or every 2 months.

Action Items:

- Subgroup members to send in their top 3 priority issues to OEB (January 8th)
- Meeting invitation for subgroup meetings will be sent out at the end of the week (Dec 20th).
- Meeting Notes from 2nd Working Group to be sent out to WG members before the break.

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Next Meeting:

1. The purpose of the WG Meeting (#3) will be to focus on any issues identified in the Subgroup Meetings (#1 & #2)
2. The next WG Meeting date: **February 24, 2019** (place holder date)