Meeting Notes

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

Meeting Date: August 16, 2021 **Time**: 9:30am –11:30am

Location: Ontario Energy Board
ZOOM

Attendees:

Name	Organisation
Bob Bralectic	Alectra
Nicholas Gall	CANSIA
Marc Brouillette	CME
Paul Luukkonen	Customized Energy Solutions Ltd. (CES)
Ian Jarvis	Demand Renewables
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)
Thomas Ladanyi (Tom)	Energy Probe (EP)
Justin Wahid Rangooni	Energy Storage Canada
Robert Barkely	Great Circle Solar
Ryan Boudreau	Hydro One Networks Inc. (HONI)
Mohab Elnashar	Independent Electricity System Operator (IESO)

These notes are for the Working Group purposes only and do not represent the view of the OEB.

Greg Sheil	London Hydro (London)
Utilia Amaral	Marketstep
Brian Pelkey	Ministry of Energy, Northern Development and Mines (MoE)
Mark Thompson	Ministry of Energy, Northern Development and Mines (MoE)
William Coutts	Ministry of Energy, Northern Development and Mines (MoE)
Roy Hrab	Ontario Energy Association
Brad Kyte	Ontario Power Generation
Steve Pepper	Ontario Society of Professional Engineers
Matt Sachs	Peak Power
Richard Carlson	Pollution Probe
Richard Laszlo	QUEST Canada
Nishant Gehani	Rodan Energy Solutions (Rodan)
Hani Taki	Toronto Hydro-Electric System Ltd. (Toronto Hydro)
Ryan Holder Catherine Ethier Natasha Gocool James Sidlofsky	Ontario Energy Board.

These notes summarize the information provided during the working group meeting and key points of the issues presented in the published materials.

Meeting Agenda

1. Introduction:

- Welcomed participants and provided general instructions on how to participate in the meeting.
- Participants introduced themselves and their affiliations
- OEB staff provided a recap of the scope and focus of this initiative.
- The purpose of the meeting was defined as follows:
    - To provide as status update of Tranche 2 recommendations and the Risk Framework
    - To consider issues with connection of EVs to the grid
    - To discuss and identify the Top 3 priorities for Tranche 3.

- There were no new agenda items added for discussion.

2. Tranche 2: Proposed Recommendations

- OEB Staff provided a high level overview of the Tranche 2 recommendations to the Working Group members and noted that the Notice of Proposal to Amend the DSC was issued on August 6th and it is currently in the comment phase and has been assigned a new OEB File No. EB-2021-0117.
- Working Group members are encouraged to review the Notice of Proposal to Amend the DSC and to be mindful that the comment submission date is **September 16, 2021**.
- OEB Staff noted that because the Tranche 2 recommendations are in an amendment process phase and comments on the proposed changes cannot be discussed within context of this meeting.
- A member enquired about extending the comment deadline.
    - Staff noted that any request or comments relative to the Notice should send in their request to the Registrar's Office.

Discussion Outcome: The Tranche 2 recommendations for proposed changes to the DSC has been put forth in a Notice of Proposal to Amend the DSC Code (EB-2021-117) and Working Group members are encouraged to review and provide comments by September 16, 2021.

Action Item: Members to address and comments/request to the Registrar's office

3. Vehicle-to-Building/Grid:

- A presentation on Vehicle-to-Building/Grid was delivered to the Working Group members by Environmental Defense (ED) representative.
- It was noted this presentation, was initially created for the FEI Working Group, however, it is also relevant to this initiative, as the matter deals with DER connections to the grid.
- It was highlighted that the idea of electrification of vehicle-to-building provides a huge potential to lower energy costs.
- The group was informed that there are two types of electrification (EV):
    1. One Way Smart Charing: Shifts EV load to off peak times
    2. Bi-direction Charging:
        a. Vehicle-to-building- Discharging battery to offset other building loads at the peak (often includes vehicle-to-home, which is the residential version of vehicle-to-building)
        b. Vehicle-to-grid: Discharging battery to export into the grid to offset other grid loads

- It was indicated that the electrification of vehicle-to-building, creates a cost-effective manner that people can capitalize on, through the discharge capacity of the battery from a car that is plugged into a building.
- It was noted that the federal government is mandating that 100% of new cars be EVs by 2035.
- The idea of electrification of vehicle-to-building and vehicle-to-grid are important for distributors because they are:
    A. A non-wires-alternative (NWA) to traditional capital infrastructure

B. A tool to manage impacts of EV expansion on the distribution grid

- The view was put forth that with transportation electrification, the lack of EV rate designs, utility incentives, capital and connection costs and availability of technical guidance may pose regulatory barriers.
- Members are encouraged to forward any questions on the presentation to Kent Elson.
- A member of Peak Power outlined that they are currently working on a pilot project in downtown Toronto, in which there are 20 vehicles in 2 buildings, that are being discharged as multi-asset power plant. It was noted they are working with the IESO on a project that can demonstrate how EV's can participate in the IESO-administrative market.
- A member enquired what the requirements for vehicle-to-building to be installed into a power wall would be. It was noted, an application for notification of a new electrical receptacle is required for installation for both types of chargers similar to a Tesla power wall. There are some code rules in Section 8- Inspection and Approval of Construction, *ESA Technical Guideline,* that documents the rules.
- Members were in general agreement that this topic should be discussed in Tranche 3, as it poses a significant tool to improve grid flow.

Discussion Outcome: Member feedback was that this is an important topic for discussion in Tranche 3. Members are encouraged to send any questions to ED Representative for further review and discussion.

Action Item: Include the EV topic in further Tranche 3 discussions
Members to send further questions about EVs connections to Kent Elson

4. Tranche 3: Proposed Topics

- The Working Group members were presented with a list of Tranche 3 topics for prioritization for Tranche 3 discussions.
- It was noted that continued development of the Risk Framework continues to be a high priority.
- Members were given an opportunity to identify important topics that should be discussed in Tranche 3.
- Members were supportive of the idea to move forward with the development of the Risk Framework. It was noted that his work would also address connection issues relative to electric vehicles as the framework is a flexible tool.
- A member enquired about cost estimates and if the OEB issued guidance to all utilities to adopt HONI's version of cost estimates of +/-50%. It was noted that the OEB did not issue guidance to utilities to adopt HONI's cost estimate version. Cost estimates were discussed as part of Tranche 2, and it was noted that this was an area for further discussion as a part of Tranche 3.
- Given the popularity of the EV's topic, a member suggested that it would be better to have a kickoff meeting to discuss EV's and than branch off the topic into subgroups for discussion and priority review.
- A member suggested adding a new topic: Embedded Generation Facility Connection Agreements and have the subgroups perform a review, to identify any issues that can be resolved and develop an updated agreement.

- A member enquired if the discussion on EV's will provide an outcome for an EV rate class? Members were reminded that the scope of this initiative, is to look at improving and streamlining the connection process and EV's are currently seen as a mobile storage device, which would be treated as embedded generation if it were to inject (V2B, V2G) or otherwise behaves as a load when charging. Based on the size of the EV battery, the applicable embedded generation size-based connection process would apply.
- It was further noted that the topic of EV's and its role of aggregation, will be addressed as the risk framework is further developed in Tranche 3. However, discussions on establishing an EV rate class are out of scope for this initiative.
- Members enquired about the timeline to discuss Tranche 3 topics and establish recommendations on those topics. It was noted that Tranche 3 subgroup meetings will be begin in September 2021, with a 6-month goal to finalize recommendations brought forward. As well, additional tranches may be established, if there is a need for further discussion on emerging issues.
- Members agreed that the Risk Framework is a top priority and EV's can be addressed during the risk framework discussions. A member also noted that benchmarking and performance reporting should be a low priority. OEB staff asked members to review and provide a ranking with rationale for their top three priorities. Working Group members are to submit their top 3 priorities and their rationale by **August 27, 2021** to DER.ConnectionsReview@oeb.ca.

Discussion Outcome: Working group members reviewed the list of topics to be discussed in Tranche 3 and identified the Risk Framework as a top priority, noting EV's can be addressed during the Risk Framework discussions. Members requested additional time to review the priorities list and provide their list of top 3 choices. OEB Staff to circulate the list of priorities and request the Working Group provide a rationale for each topic, when identifying the top 3 priorities. Working Group members are to submit their top 3 priorities and their rationale by **August 27, 2021**.

Action Item: Working Group members are requested to review the Tranche 3 priorities list and provide their top 3 choice, along with a rationale for each choice by **August 27, 2021**.

Working Group Report:

- Working Group members were reminded of their request to have a Working Group developed report that documented the discussion and outcomes of the consultation.
- The report is still in draft form and the working group members are requested to continue updating the report. The report can be found in the MS Teams SharePoint location to which all members were given access.

Discussion Outcome: The working group report is intended to provide a historical record of discussion and outcomes of this consultation process. The working group report is currently in draft mode and working group members are encouraged to continue editing the report through their SharePoint access.

Action Item: Working group members are encouraged to continue updating the Working Group report, since Tranche 2 has concluded and as Tranche 3 discussion move forward.

Risk Framework Update:

- An update on the Risk Framework and next steps was provided.
- The next step is to finalize the risk grouping and feeder characteristics by:
    - Partnering with LDCs to provide a dataset of historical CIA assessments covering a diversity of DER technology and feeder factors.
    - Apply the filter of existing DER and Feeder Factors Risk Matrix on CIA dataset
    - Compare the results of the risk matrix vs actual past CIA results
    - Adjust DER Risk Factors and Feeder Risk Factors, as required.
    - Update DER Risk and Feeder Risk Matrix, as required.

- OEB staff requested 1-2 members representing smaller utilities volunteer to assist the Risk Framework small group to help further complete the risk framework.
- Members were reminded that the Risk Framework is not intended to replace the CIA process. It's a model for proof of concept to determine how it can be made applicable.

Discussion Outcome: The Risk Framework subgroup to continue finalizing the risk framework during Tranche 3.

Action Item: OEB Staff requested members of the smaller utilities volunteer to work with the subgroup members, in further developing the risk framework, to decipher any nuisances that are seen at the smaller utility level.

5. Next Steps and Action Items:

- The next Working Group Meeting will be held on **September 28, 2021**.

Action Items:

1. OEB Staff to circulate Tranche 3 topics for member feedback
    a. The Working Group members to review the priorities list and submit their top 3 priorities and provide a rationale of importance for each priority selected, by **August 27, 2021**.
2. Electrical Vehicles: Kent Elson to provide materials for discussion at the next meeting
3. Risk Framework Small group: To provide an update at the next meeting

Next Working Group Meeting: September 28, 2021