Transmission-Distribution Coordination Working Group (TDWG)

Meeting #11 Notes

Meeting Objective: As part of the B1 Deliverable, review the proposed high-level DSO architecture and present details of the Process & User Journey Mapping for one of the DSO models.

Meeting date: February 16, 2024

Meeting time: 9:00 – 12:00 PM

Meeting location: Virtual

Agenda Item 1: Introduction materials (IESO)

- Ali Golriz (IESO) opened TDWG meeting #11 by presenting recap slides on TDWG objectives, T-D protocols, and past meetings.

- A member reminded the working group that the IESO is looking to procure enabled DER/A as part of long and medium-term procurements and that wholesale market participation is expected to be an eligibility requirement. Considering the procurement timelines, there is additional urgency and importance to introduce new DER/A participation models and improve T-D coordination.

- Certain feedback provided by TDWG members following meetings #9 and #10 was presented by Shreya Dutta (IESO). Additional feedback from meeting #9 on Deliverable B4 will be discussed in one of the upcoming meetings.

- A work plan spreadsheet with the summary of the work packages, timelines, and dependencies in the five Deliverables statements of work was briefly shared by Ali Golriz. It was noted that the work plan is a tentative one and is anticipated to be updated periodically as required.

Agenda Item 2: Deliverable B1 - Process & User Journey Map (Toronto Hydro and Alectra)

- Hani Taki (Toronto Hydro) provided an overview of the B1 presentation and a recap of the proposed high-level DSO architecture presented at TDWG Meeting #10 in December 2024.

- The presentation discussed the high-level distributor and/or DSO systems and processes, including identifying the existing functionalities of an LDC and the enhanced and the net new functionalities proposed for day-to-day DSO operation.

- A working group member pointed out that not every LDC has the functionalities presented, e.g., ADMS. The B1 team responded that Advanced Distribution Management Systems (ADMS) is being

used as a broad term and some of the capabilities of it are present in existing Distribution Management Systems. They further elaborated that the details of the functionalities as well as urgency to develop functionalities would be a part of future work packages.

- It was emphasized that it is difficult to fully decouple planning from operations in the user journeys and therefore some planning-related requirements will also a part of the B1 Deliverable.

- Hisham Omara (Alectra) continued the presentation, providing an overview of three proposed DSO models to be covered by the Process & User Journey Map work package, a guide to reading the user journey presentation, and a draft journey map for one of the DSO models.

- The purpose of the journey map presented was to capture what the high level DSO steps, data requirements, and impacted systems could be for different DSO frameworks. This work will inform a gap analysis and business requirements for DSO capabilities and investments. Out of the five user journeys envisioned, the 'Neutral Market Facilitator with Shared Platform' user journey was presented during the session.

- It was acknowledged that the term 'Neutral Market Facilitator' or 'NMF' is a placeholder as there are on-going discussion about what the name should be. There will be follow-up discussion with the TDWG members.

- A working group member inquired about the actions of a DSO in the 'NMF' model. The B1 team responded that DSOs would not change bids/offers or the IESO's dispatch. It would simply relay the information between the IESO and DER/A participants.

- The DSO would only change the dispatch instructions to DER/A if they determined that network conditions have changed in a way that could not accommodate the dispatch. Prior to changing the instructions, the DSO would seek to reconfigure/optimize the distribution network to maximize DER/A availability and participation.

- There was discussion that the different DSO models are similar in many ways. For example, the NMF is like a T-DSO that acts largely as a 'flow-through' entity. Both the T-DSO and NMF approaches allow opportunities to optimize, while the kinds of optimization and the level of optimization is different. The NMF approach is also similar to a DP-DSO in that there is a direct commercial relationship between the IESO and DER/A participant.

- The B1 team noted that the key features of the NMF approach are the DSO optimizing the distribution network and dispatching the DER/A while the DSO is not party to the commercial arrangement between the IESO and DER/A for wholesale market services.

- A working group member asked if it is envisioned that all three DSO models being discussed would be implemented by LDCs. In response, it was noted that the TDWG's objective is to investigate the different models in detail but that recommendations for which model or models to implement are out of TDWG's scope. Additionally, it was noted that certain working group members have received feedback from the ministry staff, aggregators, and other stakeholders that they would like one consistent approach across the whole province when implemented, which streamlines the approach and allows for cost efficiencies.

- A working group member suggested that to evaluate limits on DER aggregations due to distribution network conditions, the DSO should assess both individual DER and the aggregation. The B1 team concurred, adding that the DSO must understand individual DER operational plans in order to exclude DERs that are not planned to operate, allowing other DERs to operate and maximizing DER/A availability.

- The working group members were highly encouraged to examine the presentation in detail in their own time and provide written feedback.

Action Log Summary

IESO staff will maintain an ongoing action log to track actions raised in the TDWG meetings and their resolution. The log will be reviewed at the start of each TDWG meeting.

Date	Action	Resolution
Dec 8, 2023	Deliverable B2 - Hydro One to follow up on use of Internet Protocol (IP) as method of communication	
Dec 8, 2023	Deliverable B4 - IESO/Alectra to follow up on the concept of NMF as part of working definitions	
Dec 14, 2023	IESO to circulate meeting notes among TDWG members by Dec 21, 2024	Posted Dec 21, 2023
Dec 14, 2023	TDWG members to provide comments and send to engagement@ieso.ca by Jan 11, 2024	1 feedback form received
Dec 14, 2023	IESO to post all meeting materials to the TDWG webpage by Jan 18, 2024	Posted Jan 23, 2023
Dec 14, 2023	IESO to briefly follow up on DER/A and system restoration as part of Deliverable A	
Feb 16, 2024	IESO to circulate meeting notes among TDWG members by Feb 23, 2023	Notes circulated Feb 23, 2023
Feb 16, 2024	TDWG members to provide comments and send to engagement@ieso.ca by Mar 15, 2024	
Feb 16, 2024	IESO to post all meeting materials to the TDWG webpage by Mar 22, 2024	