

Transmission-Distribution Coordination Working Group (TDWG)

Meeting #12 Notes

Meeting Objective: Review LDC reliability considerations related to T-D coordination as part of Deliverable A and outline the telemetry requirements for DER(A) proposed in the DER Market Vision Project as part of Deliverable B2.

Meeting date: March 28, 2024

Meeting time: 9:00 – 12:00 PM

Meeting location: Virtual

Agenda Item 1: Introduction materials (IESO)

- Ali Golriz opened TDWG meeting #12 and informed the working group on the hybrid nature of the next meeting (meeting #13), hosted by Alectra.
- Shreya Dutta presented recap slides on TDWG objectives, T-D protocols, and past meetings. It was noted that the working group is currently discussing a third DSO model (Market Facilitator DSO or MF-DSO), which will be formally introduced once the model specifics are finalized.
- As a follow-up action item from TDWG meeting #10 for deliverable A, Nima Omran presented on the impact of Distributed Energy Resources (DERs) on restoration plans.

Agenda Item 2: Deliverable A: Distribution Reliability Overview (Hydro One)

- John Penaranda provided an overview of typical distribution reliability metrics, LDC supply and reliability concepts and feeder-level reliability.
- A working group member inquired on the time period of the reliability performance metrics. Hydro One noted that they track the metrics on a monthly basis in order to observe seasonal patterns. Loss of supply and force majeure and extreme weather phenomenon are excluded from the metrics.
- For Ontario, it was noted that, the regulator typically establishes the reliability requirements based on the past three years' performance metrics values. In exceptional cases, such as when a major investment is made, the regulator establishes specific reliability targets, which may not be based on past years' data.
- It was highlighted that the metrics presented are traditional reliability performance metrics and moving forward, community-based metrics could be beneficial to more granularly track and manage reliability.

- There was a question on whether changes to traditional reliability metrics are being discussed at the distribution level. A working group member mentioned that the OEB's Reliability and Power Quality Review (RPQR) is a forum for exploring these topics. Additionally, EPRI and the DOE are also investigating this topic in the US context.
- Hydro One mentioned in terms of outage management that there are instances where distributed generators do not comply when asked for curtailment to support an outage, which presents an issue with managing distribution systems with high DER penetration.
- There was a discussion on different types of battery energy storage present in Hydro One's network. There were questions on the use of customer-owned DER and using DER for additional services (e.g., in the wholesale market). It was noted that both grid-scale and residential-level storage devices have been installed primarily for distribution reliability purposes and that these are owned by Hydro One.

Agenda Item 3: Deliverable B2: Telemetry Requirements for DERs (IESO)

- Shutha Pulendran presented on the existing telemetry requirements for DERs, the proposed changes to telemetry requirements as part of the Enabling Resources Program (ERP) to enable small DER/As to participate in the market, modeling of DER/As in the IESO Energy Management System (EMS), and several examples of telemetry pathways.
- With respect to modeling DER/As in the IESO EMS, there was a detailed discussion on factors determining whether to aggregate multiple generators or to consider them as a separate resource. Consideration of losses and network re-configuration information in modeling DER/As was also discussed.
- To support the IESO in receiving the telemetry, working group members noted the potential to:
 - use distributors' SCADA systems
 - use new Advanced Metering Infrastructure (AMI)
 - disaggregate load meters to get visibility into behind-the-meter DERs
 - make more use IEEE 2030.5 communication standard
- IESO staff acknowledged the ideas and invited TDWG members to provide additional information as part of their written feedback following the meeting.

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	B2 - Hydro One to follow up on use of Internet Protocol as method of communication	
Dec 8, 2023	B4 - IESO/Alectra to follow up on the concept of NMF as part of working definitions	Presented slides on Apr 22
Dec 14, 2023	IESO to briefly follow up on DER/A and system restoration as part of Deliverable A	Presented slides on Mar 28
Feb 16, 2024	IESO to circulate meeting notes among TDWG members by Feb 23, 2024	Sent Feb 23
Feb 16, 2024	TDWG members to provide comments and send to engagement@ieso.ca by Mar 15, 2024	Feedback received
Feb 16, 2024	IESO to post all meeting materials to the TDWG webpage by Mar 22, 2024	Posted Mar 21
Mar 28, 2024	IESO to circulate meeting notes among TDWG members by Apr 4, 2024	Notes circulated Apr 8, 2024
Mar 28, 2024	TDWG members to provide comments and send to engagement@ieso.ca by Apr 18, 2024	
Mar 28, 2024	IESO to post all meeting materials to the TDWG webpage by Apr 25, 2024	