

# Transmission-Distribution Coordination Working Group (TDWG)

## Meeting Notes

Meeting date: December 8, 2023

Meeting time: 9:30 – 12:00 PM

Meeting location: Virtual

### **Agenda Item 1:** Introduction materials (IESO)

- Ali Golriz (IESO) opened TDWG meeting #9 by presenting recap slides on TDWG objectives, T-D protocols, and past meetings.
- Certain feedback provided by TDWG members following meeting #8 was reviewed, and it was noted that TDWG meetings will be recorded going forward but the recordings will not be posted publicly. Additional feedback from meeting #8 will be discussed in meeting #10.

### **Agenda Item 2:** Deliverable B2 - Current state of communication / data exchange (Hydro One)

- James McGowan (Hydro One), provided a presentation on the current telecommunication methods used in the distribution system for DER (>250 kW) as well as other equipment such as breakers, fault indicators, load break switches, and meters.
- The presentation discussed communication protocols and methods such as Inter-Control Center Communications (ICCP), Distributed Network Protocol (DNP3), cellular communications, Substation Modernization Platform (SMP) Gateway and concluded with a summary of the DER Technical Interconnection Requirements (TIR).
- A working group member asked if Hydro One owns all substations in the province. It was clarified that while Hydro One owns a number of substations, ownership varies across the province with some being owned by other distributors. The demarcation of ownership differs by station, and Hydro One also manages sub-transmission lines to embedded distributors in some areas.
- A working group member inquired about the implications of host and embedded distributor coordination on market participation, prompting a discussion on the complexities involved in integrating DER within Ontario's unique distribution systems and providing all parties with the necessary visibility.

- A comment from a working group member emphasized the importance of visibility in system reliability and to support service provision by DER and re-iterated that as an immediate, foundational step, investments should be made in improving visibility and network models.
- A question was raised regarding Hydro One's visibility into the embedded distributors' systems. It was noted that Hydro One, as host distributor, has limited operational visibility into downstream systems, highlighting the importance of coordination between host and embedded distributors.
- A working group member asked to what extent the communication methods presented are in use in other distributors' systems. It was acknowledged that additional information from other distributors is needed for a thorough assessment. It was noted that the feedback questions ask for some further information, and the value of a survey of distributors was discussed.
- A question regarding the potential use of Internet Protocol (IP) for backhaul communications was raised. James McGowen offered to follow-up on the question after consulting with the relevant Hydro One subject matter experts.

#### **Agenda Item 2:** Deliverable B4 - Workshop on key definitions for TDWG Deliverables

- On behalf of the IESO, Surhud Vaidya and Lorenzo Kristov from the ICF team, facilitated a workshop that aimed to clarify key definitions, establish a common understanding and ensure consistency across the five TDWG deliverables.
- The format of the workshop involved the ICF team reviewing each key definition and inviting TDWG members to engage in discussion and provide feedback, while the ICF team took notes.
- The definitions for distributed energy resource (DER), distribution system operator (DSO), DER aggregator (DERA), and neutral market facilitator (NMF) sparked discussion.
- In particular, there was considerable discussion regarding how the definition of NMF relates to the definitions of DSO, independent DSO, DSO aggregator, etc. It was agreed that a standalone agenda item on the NMF concept would be beneficial in one of the coming TDWG meetings.
- TDWG members were asked to provide detailed written comments in addition to the verbal feedback provided during the workshop.
- The IESO and ICF team committed to providing an updated version of the working definitions document within a week of the TDWG meeting, alongside the meeting notes. TDWG members were asked to use the updated document to provide written comments.

## 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
Oct 27, 2023	IESO to circulate meeting notes among TDWG members by Nov 3, 2023	Notes circulated Nov 3, 2023
Oct 27, 2023	TDWG members to provide comments and send to <a href="mailto:engagement@ieso.ca">engagement@ieso.ca</a> by Nov 17, 2023	2 submissions received
Oct 27, 2023	IESO to post all meeting materials to the TDWG webpage by Nov 24, 2023	Materials posted on Nov 21, 2023
Dec 8, 2023	IESO to circulate meeting notes among TDWG members by Dec 15, 2023	Notes circulated Dec 15, 2023
Dec 8, 2023	TDWG members to provide comments and send to <a href="mailto:engagement@ieso.ca">engagement@ieso.ca</a> by Jan 5, 2024	
Dec 8, 2023	IESO to post all meeting materials to the TDWG webpage by Jan 12, 2024	
Dec 8, 2023	Deliverable B2 - Hydro One to follow up on use of Internet Protocol (IP) a method of communication.	
Dec 8, 2023	Deliverable B4 - IESO/Alectra to follow up on the concept of NMF as part of working definitions in.	