



JUL 26, 2024

TDWG Meeting #15 Introduction

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Today's Agenda

The agenda for today's meeting is:

- Introduction materials ('housekeeping') [10 min]
- B2: Future Communications to Support DSO / DER Markets [45 min]
- A: Highlighting Select Existing IESO Requirements Relevant to T-D Coordination [20 min]
- A: Service Stacking Protocols: Swim Lane Diagrams Walkthrough [1 hr]

As usual, TDWG will have an opportunity to provide feedback during and following the meeting.

Action Log

Date	Action	Resolution
Dec 8, 2023	B2 – Hydro One to follow up on use of future method of communication	Presenting Jul 26
May 31, 2024	IESO to circulate meeting notes among TDWG members by Jun 7	Sent Jun 7
May 31, 2024	TDWG members to provide comments via feedback form and send to engagement@ieso.ca by Jun 21	None received
May 31, 2024	IESO to post all meeting materials to the TDWG webpage by Jun 28	Posted Jun 28
Jul 26, 2024	IESO to circulate meeting notes among TDWG members by Aug 2	
Jul 26, 2024	TDWG members to provide comments via feedback form and send to engagement@ieso.ca by Aug 16	
Jul 26, 2024	IESO to post all meeting materials to the TDWG webpage by Aug 23	

TDWG Overview (Recap)

- T-D coordination is needed to better integrate distributed energy resources and aggregators (DER/A) in the IESO's wholesale market and system operations as well as in distribution networks
- Local distribution companies (LDCs), DER/A participants, and IESO will need to share information in a timely manner and ensure there is sufficient awareness (e.g., with respect to outages, limits on DER/A, and dispatch of DER/A, etc.) among the parties
- In this context, the IESO launched the Transmission-Distribution Coordination Working Group (TDWG) in 2022 to work closely with LDCs and other stakeholders
- TDWG's objective is to support the development of operational coordination protocols
- The coordination protocol(s) are expected to form the basis of new rules and/or manuals for the IESO's wholesale market that will support the DER/A participation

T-D Protocol Scenarios (Recap)

- The protocols will detail the actions to be taken and data to be shared by the parties, ensuring the effective and reliable operation as DER/A:
 - participate in IESO's wholesale market (i.e., day-ahead and real-time markets post-MRP*)
 - may provide services to the distribution system as non-wires alternatives (NWA)
- The TDWG aims to outline operational coordination for the following scenarios:

1. DER/A providing **wholesale services** as per the IESO Market Vision Project

2. DER/A providing services to the distribution system as **distribution NWAs**

3. DER/A that provide **both** wholesale and distribution **services**

4. DERs that are **not** actively **participating** in any services

* Market Renewal Program (MRP)

Past TDWG Meetings

Mtg #	Date	Major Topic(s)
1	Jan 2022	Introductory and background materials
2	May 2022	T-D definition and coordination models
3	Jun 2022	Override, outage, and IESO market processes
4	Sep 2022	New York's coordination manual
5	Nov 2022	Draft protocol for a Dual Participation model
6	Feb 2023	Draft protocol for a Total DSO model
7	Jun 2023	DSO operational functions workshop
8	Oct 2023	Draft Deliverables statements of work
9	Dec 2023	B2. Current state of communication B4. Definitions Workshop

Mtg #	Date	Major Topic(s)
10	Dec 2023	B1. Functional Assessment A. T-D Reliability for Bulk Power System
11	Feb 2024	B1. User/Process Journey Mapping
12	Mar 2024	A. Distribution Reliability Overview B2. Telemetry Requirements for DERs
13	Apr 2024	B2. IAM Communication Interfaces B3. Shared Platform Concept - Market Intel
14	May 2024	A. Draft Service Stacking Protocols B1. User/Process Journey Mapping B4. Working Terms & Definitions
15	Jul 2024	A. Draft Service Stacking Protocols A. Swim Lane Diagrams Walkthrough B2. Future State of Communication

TDWG Expected Deliverables

By the end of 2024, the TDWG will work to achieve the following:

Deliverable	Description	Leads	Sub-Group
A. Coordination Protocols	Develop implementation-ready protocols for three DSO coordination models (Total, Dual Participation and Market Facilitator DSO models)	IESO	Hydro One, Essex, Alectra
B1. Functional Assessment	Analyze distributors' operational functions, capabilities, and costs across multiple dimensions	Toronto Hydro + Alectra	Elexicon, Rodan, NSWG*, IESO, Powerconsumer
B2. Communication Assessment	Map coordination interfaces and data exchanges for each coordination model	Hydro One	Alectra, Essex, IESO, NSWG
B3. Shared Platform Concept	Develop concept for a "one-stop" shop data sharing platform for coordination	Alectra	Hydro One, IESO, Rodan, Powerconsumer
B4. Architectural Assessment	Assess coordination models from market design, architectural, and flexibility perspectives	IESO	Essex, Alectra, Rodan

* Non-wires Solutions Working Group (NSWG), represented by Power Advisory

Mtg #15 Feedback Questions

For A. Service Stacking Protocols: Swim Lane Diagrams Walkthrough

1. In your review, what are the strengths of draft report sections, and where do you see opportunities for improvement? Feel free to reference specific questions or provide general feedback.
2. 'T-D Protocols' word document review – We invite a detailed review of the document (this will not be posted publicly).

For A. Highlighting select existing IESO requirements relevant to T-D coordination

3. Are there any other requirements from IESO market rules/manuals that should be highlighted?
4. Are there any requirements from distribution system documentation that should be highlighted?

Mtg #15 Feedback Questions

For B2. Future Communications to Support DSO / DER Markets

5. Are there any other communication methods relevant to future grid operations that we should explore?

Please use the feedback form found under the Jul 26, 2024 entry on the [TDWG webpage](#) to provide feedback and send to engagement@ieso.ca by Aug 16, 2024

Thank You

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