TDWG Meeting #17 Introduction

Ali Golriz, Supervisor, Market and Sector Evolution, IESO

Today's Agenda

The agenda for today's meeting is:

- TDWG introduction [20 min]

- A: Final T-D Coordination Protocols Report Overview [40 minutes]

- B1: Functional Assessment – Final Presentation [1 hour]

- Lunch [1 hour]

- B2: Communication Assessment – Final Presentation [1 hour]

- B3: Shared Platform Concept – Final Presentation [1 hour]

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

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Action Log

Date	Action	Resolution
May 27, 2025	IESO to circulate final Deliverable A report, final draft reports for the other deliverables, and meeting notes among TDWG members by June 10, 2025	
May 27, 2025	TDWG members to provide comments via feedback form and send to engagement@ieso.ca by July 11, 2025	
May 27, 2025	IESO to post meeting materials to the TDWG webpage by July 18, 2025	
May 27, 2025	Final Deliverable reports posted to the TDWG webpage	
May 27, 2025	TDWG members notified via email that final Deliverable reports are available	

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TDWG Overview (Recap)

- Transmission-distribution coordination better integrates distributed energy resources and aggregators (DER/A) in IESO market/system operations as well as in distribution networks

- Distribution System Operators (DSOs), DER/A participants, and IESO will need to share information in a timely manner and ensure there is sufficient awareness among the parties

   - E.g., visibility into outages, limits on DER/A, and instructions to DER/A, etc.

- In this context, the IESO launched the Transmission-Distribution Coordination Working Group (TDWG) in 2022 to work closely with distributors and other stakeholders

- TDWG's objective is to support the development of operational T-D coordination protocols for DER/A participating in the wholesale market

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T-D Protocol Cases (Recap)

- The protocols will detail the actions to be taken and data to be shared by parties, ensuring the effective and reliable operation as DER/A:

    - participate in IESO's day-ahead and real-time markets

    - may provide services to the distribution system

- The TDWG aims to outline operational coordination for the following cases:

1. DERs that are **not participating** in any services	2. DER/A providing **distribution services**	3. DER/A providing **wholesale services**	4. DER/A providing **both** wholesale and distribution **services**

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TDWG Deliverables (Recap)

- TDWG produced four deliverables, led and supported by different working group members

A. Coordination Protocols	B1. Functional Assessment	B2 Communication Assessment	B3. Shared Platform Concept
Develop protocols for DER/A providing both distribution level and wholesale energy services	Analyze distributors' operational functions, capabilities, and costs across multiple dimensions	Map coordination interfaces and data exchanges for each coordination model	Develop concept for a "one-stop" shop data sharing platform for coordination
Lead: IESO	Leads: Alectra & Toronto Hydro	Lead: Hydro One	Lead: Alectra
Subgroup: Hydro One, Essex, Alectra	Subgroup: Elexicon, NSWG*, Rodan, IESO, Powerconsumer	Subgroup: Alectra, Essex, IESO, NSWG	Subgroup: Hydro One, IESO, Rodan, Powerconsumer

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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
10	Dec 2023	B1. Functional Assessment A. T-D Reliability for Bulk Power System

Mtg #	Date	Major Topic(s)
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
16	Dec 2024	B1. Work Packages Updates B3. Focus Group Workshop Debrief EPRI J-Scan on DER-Provided Grid Services

Final TDWG Meeting

- This marks the final meeting of the TDWG

  - Deliverable A, developed by IESO staff, is finalized, and final report will be circulated

  - Draft Deliverables B1, B2, and B3, developed by the Deliverable Leads, will be presented today and finalized based on feedback received during and following this meeting

  - TDWG members will be notified once all final Deliverables are posted

- **THANK YOU** to all working group members for your valuable commitment, contributions, insights, and collaboration

- Together, we've significantly advanced DER/A integration and T-D coordination

Next Steps

- Insights from TDWG Deliverables are expected to inform and support sector innovation in the near term and the long term

- TDWG's work will be input into and support other initiatives

OEB's DSO Capabilities Consultation	Define a policy framework and set expectations for electricity distributors regarding the development of DSO capabilities.
IESO's Enabling Resources Program (ERP)	Integrate storage, hybrid resources, and dispatchable DER/A into the IESO-administered markets, tools, and processes.
IESO Market and Sector Evolution	Beyond the Enabling Resource Program, the IESO will continue to consider opportunities to advance the integration of DERs and DSOs.

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Thank You

ieso.ca

1.888.448.7777

customer.relations@ieso.ca

engagement@ieso.ca

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