

Transmission-Distribution Coordination Working Group (TDWG)

Terms of Reference

Overview

To support both transmission and distribution level reliability, Transmission-Distribution (T-D) coordination processes are needed to better integrate DERs in wholesale system and market operations. The IESO, Local Distribution Companies (LDCs), and DER participants will need to share information in a timely manner and ensure there is sufficient awareness (e.g., with respect to outages, limits on DERs, and dispatch of DERs, etc.) among the parties. If distribution services are also sought from DERs, then T-D coordination processes will also be needed to ensure there are no conflicting instructions, double counting, or other unintended consequences).

In this context, the IESO is launching the Transmission-Distribution Coordination Working Group (TDWG) to work closely with LDCs and other stakeholders to inform the [DER Market Vision and Design Project](#). The Project is a key focus area of IESO's DER integration activities and is what much of the near-term DER Roadmap efforts build towards. The Market Vision and Design Project is separated into two key phases. In the first phase, the DER Market Vision Project (MVP) will explore new, "foundational" participation models for DER integration into wholesale markets and will identify approaches and criteria for implementing more sophisticated models that will form the basis of future DER integration efforts. In the second phase, the DER Market Design Project (MDP) will design and implement the foundational participation models from the MVP.

These terms of reference are intended to provide guidelines for the TDWG to support effective working group sessions to meet the stated objectives.

Objectives & Deliverables

T-D coordination is a key design area for the DER MVP and a topic for which stakeholders have requested focused engagement. The TDWG will provide a forum for

in-depth engagement on T-D coordination. The objective of the TDWG is to support the IESO in developing conceptual coordination protocol(s) that detail the communications among the IESO, LDCs, and DER participants in the IESO-Administered Markets by Q1 2023 and will be input into the final DER MVP report. The coordination protocol(s) will be developed for both the Dual Participation and Total DSO coordination models, and will be shared with the IESO's broader stakeholder community through the DER MVP engagement process throughout 2022, prior to finalizing foundational DER participation models by Q1 2023. The conceptual coordination protocol(s) are expected to form the basis of new rules for the IESO-administered markets that will need to be put in place to support the new DER participation models that the IESO has committed to implement by 2026 (i.e. the DER MDP) per the IESO's Enabling Resources Work Plan published in December 2021.

The TDWG will be in place from Q1 2022 through Q1 2023. If there is follow-on work beyond this timeline, the IESO may, in consultation with TDWG members, establish new objectives and extend the TDWG beyond Q1 2023. If so, the IESO will specify in writing the new objectives and extended duration for the TDWG efforts.

Membership

Membership on the working group is open to representatives of distribution and transmission companies as well as other stakeholders with knowledge of grid operations, planning and/or DER integration. Membership of the group will include active members as well as observers.

Expectations of active members include:

- Contribute to materials development and review materials in advance of meetings
- Actively participate in scheduled meetings and contribute to discussion topics
- Bring forward perspectives/relevant initiatives from respective organisations
- Commitment to problem solving, collaboration and exchange of ideas

Representatives from the Ontario Energy Board, Ministry of Energy, and Natural Resources Canada will attend TDWG meetings as observers. Observers will have the opportunity to contribute to discussions but will primarily attend for informational purposes.

A list of the TDWG's membership is provided in the Appendix.

Organization and Administration of Meetings

- Notice of meetings will be provided at least one month in advance. Meetings are expected to take place on a quarterly basis. Additional ad-hoc meetings may also be held as necessary. All meetings will be held virtually.

- IESO staff will chair and facilitate the meetings.
- Meeting materials will be made available to the working group at least one week in advance of meetings. Materials will be posted on the IESO's TDWG engagement page.
- The IESO will take meeting notes with a focus on actionable items and their resolution.
- Draft meeting notes will be available within two weeks following a meeting in order for TDWG members to review.
- Members will have three weeks to provide feedback following a TDWG meeting (via the IESO's standard Feedback Form).
- The IESO will finalize the meeting notes upon receipt of feedback. Final meeting notes, including any accompanying written submissions from TDWG members, will be posted on the engagement page within one month of a meeting.
- Meetings will not be recorded. Only the meeting notes and other materials, as deemed necessary by the IESO, will be posted to the TDWG engagement page.
- Members may, from time-to-time, be requested to provide written submissions to support their positions in order for all TDWG members and the IESO to clearly understand the merits of the issue at hand and any solution being proposed. Members will be asked to provide the submissions within two weeks in these instances.
- In some instances, members may be requested to share confidential or proprietary information of their respective organizations to investigate issues. In these instances, feedback will be summarized and/or aggregated to protect any confidential information.

Appendix – Membership List

Organization	Representative	Member Status
Independent Electricity System Operator (IESO)	Ali Golriz (Chair) Dina Shoukri (Vice-Chair)	Active
Ontario Energy Board (OEB)	Raj Pattani Chris Cincar	Observer
Ministry of Energy	Bryan Pelky Ryan Zade Kirby Calvert	Observer
Natural Resources Canada (NRCan)	Thomas Levy	Observer
Toronto Hydro	Hani Taki	Active
Entegrus Powerlines Inc	Matthew Meloche	Active
Hydro One	James McGowan Dr. Muhammad Mueen John Penaranda	Active
Alectra Utilities	Bob Braletic Fanny Guevara	Active
Grandbridge Energy (formerly Energy + Inc)	Umar Waqas	Active
Oakville Hydro and Oakville Enterprises Companies	Jeff Mocha	Active
Essex Powerlines Corp	Imtiaz Ahmed	Active
Enwin Utilities Ltd.	Jim Brown	Active
Hydro Ottawa	Raed Abdullah	Active
Halton Hills Hydro Inc.	Alex Grypstra	Active
Elexicon Energy	Faisal Habibullah Muhammad Usman Khalid	Active
Electricity Distributors Association (EDA)	Abdul Muktadir Kathryn Farmer Brittany J Ashby	Active
Grand Council Treaty #3	Michelle Shephard	Active
Anwaatin Inc.	Don Richardson	Active
Survalent	Young Ngo	Active
Opus One	Marco Wong Dina Subkhankulova	Active
Open Access Technology International, Inc. (OATI)	Farrokh Rahimi	Active
I-EMS Group Ltd	Ashkan Rahimi-Kian	Active
NODES	Svein Jörgen Sofia Eng	Active
Energy Storage Canada, AEMA and CanREA	Travis Lusney	Active
Peak Power	Nikola Saric	Active
Versorium Energy Ltd.	Chris Codd	Active
Quanta Technology LLC	Elli Ntakou	Active

Guidehouse	Pedro Torres-Basanta	Active
Toronto Metropolitan University (formerly Ryerson University)	Bala Venkatesh	Active
University of Waterloo	Kankar Bhattacharya	Active
Electric Power Research Institute (EPRI)	Majid Heidarifar Tanguy Hubert	Active