

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 (when the final DER MVP report is expected to be published). The coordination protocol(s) developed will be shared with the IESO's broader stakeholder community through the DER MVP engagement process, prior to finalizing foundational DER participation models. 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 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 one week following a meeting in order for TDWG members to review. Members will have one week to provide feedback.
- 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.

Draft

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 | 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 |
| 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 | 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 |
| 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 |
| Ryerson University | Bala Venkatesh | Active |
| University of Waterloo | Kankar Bhattacharya | Active |
| Electric Power Research Institute (EPRI) | Majid Heidarifar Tanguy Hubert | Active |