

Transmission-Distribution Coordination Working Group (TDWG) **DRAFT**

Terms of Reference

Overview

To support both transmission and distribution level reliability, Transmission-Distribution (T-D) coordination processes are 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. The IESO, Local Distribution Companies (LDCs), and DER(A) participants 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. If distribution services are also sought from DER(A), 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 has launched the Transmission-Distribution Coordination Working Group (TDWG) to work closely with LDCs and other stakeholders to inform T-D coordination in support of the IESO's [DER Market Vision and Design Project](#) (MVDP). The project seeks to introduce new participation models for DER(A) integration into the IESO's wholesale market by 2026/2027 and will identify approaches and criteria for implementing more sophisticated participation models that will form the basis of future DER integration efforts.

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 new DER(A) participation models that the IESO has committed to implement in its Enabling Resources Work Plan published in December 2021.

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

Objectives

T-D coordination is a key design area for the DER integration and stakeholders have requested focused engagement on this topic. The TDWG will provide a forum for in-depth engagement on T-D coordination.

The objective of the TDWG is to support the IESO, LDCs, and owners and aggregators of distributed energy resources (DER(A)) in developing implementation-ready¹ operational coordination protocols. These protocols will detail the actions to be taken and information to be shared by the parties, ensuring the effective and

¹ The protocols are expected to be implementation-ready in the sense that they outline the actions to be taken and information to be shared by the parties in sufficient detail for the IESO to develop market rules/manuals and for the IESO, LDCs, and DER(A) to understand the impact to their operations.

reliable operation of DER(A) as they participate in the IESO-Administered Markets (IAMS) and as DER(A) may provide services to the distribution system as Non-Wires Alternative (NWA) solutions.

The coordination protocols are expected to form the basis of new rules and/or manuals for the IESO's wholesale market that will support the new DER(A) participation models that the IESO has committed to implement in its Enabling Resources Work Plan published in December 2021.

The TDWG aims to outline operational coordination for the following scenarios:

1. DER(A) providing wholesale services as per the IESO Market Vision Project's [foundational](#) and [enhanced](#) participation recommendations.
2. DER(A) providing services to the distribution system, utilizing DER(A) as distribution non-wires alternatives.
3. DER(A) that, if permitted, provide both wholesale services and services to the distribution system.
4. DERs that are not actively participating in any services.

It is expected that feedback and insights from the TDWG will periodically be shared at the DER MVDP engagement, and likewise, outcomes from that engagement will be shared with the TDWG. In particular, the DER MVDP engagement process will be used to share the protocols with the IESO's broader stakeholder community.

While recognizing the potential of policy and regulatory changes in Ontario's electricity sector, the scope of the TDWG is limited to the development of implementation-ready operational coordination protocols and assessment of the flexibility to adapt coordination if the environment evolves. Furthermore, the TDWG's scope generally does not include long-term system planning or long-term procurement of electricity resources.

The TDWG will be in place until Q4 2024. If there is follow-on work beyond this timeline, the IESO may, in consultation with TDWG members, establish new objectives and extend the TDWG. If so, the IESO will specify in writing the new or amended 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 and interested parties 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 organizations
- 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

The TDWG conducts regular meetings to facilitate collaboration and progress towards the development of operational coordination protocols. The following key aspects outline the process for conducting meetings and capturing essential information:

- Notice of meetings will be provided at least one month in advance. The aim will be to hold meetings on a bi-monthly basis (every two months). Additional ad-hoc meetings may also be held as necessary. All meetings will be accessible 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.
- 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 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 materials and 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 and the IESO 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, including the IESO, will be asked to provide the submissions within two weeks (or other agreed upon timeframe) 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.
- The IESO 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.

Appendix – Membership List

[NTD: will be inserted into the final TOR document]

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