TDWG – Deliverables and Work Plan June 16, 2023 **DRAFT**

The Transmission-Distribution Coordination Working Group (TDWG) has been established to support the Independent Electricity System Operator (IESO), Local Distribution Companies (LDCs), and owners and aggregators of distributed energy resources (DER(A)) in developing operational coordination protocols. These protocols will detail the actions to be taken and information to be shared by the parties, ensuring the effective and 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, including the use of DER(A) as distribution Non-Wires Alternative (NWA) solutions.

This document outlines the expected deliverables for the TDWG and expectations for developing a work plan. The format of the deliverables is expected to be memo-style documents. Accountability for the deliverables will be divided between the IESO and other TDWG members to ensure effective collaboration and timely completion.

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

	Deliverable	Description	Leads
A.	Coordination Protocols	Develop implementation-ready protocols ¹ for the IESO, LDCs and DER(A) coordinating under the Total Distribution System Operator (T-DSO) and Dual Participation DSO (DP-DSO) models, as well as other models as established with the TDWG.	IESO
B1.	Functional Assessment	Identify distributors' operational functions, capabilities, and cost differences analyzed across several dimensions, including under the T-DSO and DP-DSO models. Other potential dimensions include DER(A) participating in distribution services only and distribution plus wholesale services, low and high DER(A) penetration, etc.	[TBD]
B2.	Communication Assessment	For each coordination model, map coordination interfaces among IESO, LDCs and DER(A), detailing exchanged data (e.g., telemetry, market offers, etc.), including the existing methods ² used, options for new methods, and an initial assessment of potential new options.	[TBD]

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.

² E.g., Inter-Control Center Communications Protocol (ICCP), IEEE 2030.5, Online IESO, etc.



1

	Deliverable	Description	Leads
В3.	Shared Platform Concept	Develop a concept ³ for a "one-stop" shop data sharing platform that seeks to streamline operational information exchange for the purposes of coordination. Support the inclusion of the shared platform concept in all the other deliverables as appropriate.	[TBD]
B4.	Architectural Assessment	Identify IESO and LDC reliability needs related to T-D coordination, review IAMs participation requirements and obligations, and examine coordination models from both market design and architectural perspectives ⁴ . Assess the potential flexibility for the evolution of coordination models.	IESO

Deliverables B1 through to B4 are intended to provide technical analysis and contextual information for the coordination protocols that will be detailed in deliverable A. There are significant interdependencies across the deliverables, which the respective leads will need to manage effectively. For instance, the lead for deliverable B3 Shared Platform Concept will need to collaborate with other leads to incorporate the shared platform concept in the respective deliverables.

Deliverable Management and Support

Effective coordination and sufficient resourcing are essential for the successful execution of deliverables to support the objectives of the TDWG. The following outlines the expectations for managing the deliverables led by both the IESO and other TDWG member organizations.

- Deliverable leads: Deliverables that are not led by the IESO will be assigned to a member organization of the TDWG to take the lead on.
- Approach autonomy: Deliverable leads will have autonomy to determine the approach for their respective deliverable while regularly providing updates and findings to the TDWG to seek input and guidance.
- Deliverable SOW: Leads will develop a brief description of the expected deliverable and the plan for delivering it, serving as a high-level statement of work (SOW) to set clear expectations.
- Collaboration: Deliverable leads will coordinate meetings with relevant TDWG members, as needed, to gather input and receive support for advancing their deliverable.
- Sub-groups: Leads may form a dedicated sub-group consisting of other TDWG members to collaborate on developing the deliverables.
- Resource commitments: Deliverable leads are responsible for dedicating sufficient staff, subject
 matter experts, and other necessary financial/non-financial resources to ensure timely submission of
 high-quality deliverables.
- IESO support: The IESO will provide support to all leads taking accountability of a deliverable, e.g., offering IESO input in areas such as system reliability, wholesale market, and IESO data interfaces.

³ Concept development is envisioned to include potential scope, technical specifications, implementation options, timelines, cost estimates, scalability considerations, etc.

⁴ Potentially using the IESO's market renewal <u>principles</u> and the architectural principles captured in the Development of a Transmission Distribution Interoperability Framework <u>white paper</u> developed by ICF for the IESO

- Leads' consulting support: Deliverable leads have the option to engage consultants, with costs being borne by the leads, to receive additional support and expertise for their deliverable.
- IESO's consulting support: The IESO also has a limited consulting budget to help support the deliverables, which will be discussed with the leads as part of developing the deliverable SOWs.
- IESO cover letters: For all of the deliverables, the IESO will prepare cover letters to be included at the beginning of the deliverable memos.

A Flexible Work Plan

A flexible work plan will be developed based on the high-level statement of work (SOW) for all the deliverables, as provided by the leads. The work plan will outline touchpoints within planned TDWG meetings for each deliverable, ensuring input, guidance, and coordination across the group. While serving as a guide for TDWG meetings, the work plan will remain flexible to accommodate changes, evolving priorities, and emerging needs inherent in the development process of the deliverables.

[NTD: Insert Work Plan once developed]