Transmission-Distribution Coordination Working Group
Meeting Notes

Meeting date: June 29, 2022
Meeting time: 9:00 – 12:00 p.m.
Meeting location: Microsoft Teams

Agenda Item 1: IESO Presentation

Inna Vilgan (IESO) and Ali Golriz (IESO) provided a summary of the transmission-distribution working group (TDWG) members' feedback from the previous meeting and expanded on a number of related topics, including a working definition of T-D interface, components of T-D coordination, the TDWG's deliverables and future meeting topics. Notable/actionable discussion (with responses in italics):

- In discussing the TDWG deliverables and future meeting topics, a working group member noted that in addition to the Joint Utilities of New York's Distribution System Platform (DSP) Communications and Coordination Manual and the ESIG illustration of a DER de-rate notification the working group could look at lessons from California's Electric Program Investment Charge to inform the development of the conceptual T-D coordination protocols. *Thank you for this suggestion. The IESO will review the Electric Program Investment Charge and follow up with the working group.*

- A working group member mentioned that it would be valuable to test the conceptual coordination protocols that will be developed to the greatest extent possible. *The IESO acknowledges that this will be an important step to undertake. There are currently a number of IESO Grid Innovation Fund pilot projects investigating T-D coordination (among other things).*

Agenda Item 2: EPRI Presentation re: Distribution Override Illustration

Nick Heine (EPRI) presented ESIG's illustration of DER de-rate notification, which included five steps that the group walked through together. The purpose of the scenario is to illustrate how a distributor would notify an aggregator of distribution outages and how the aggregator would in turn notify the ISO about reduced capability using CAISO market timelines, terminology, and processes. Notable/actionable discussion (with responses in italics):

- A working group member asked how the process would work with multiple aggregators. *The onus would be on the aggregator to adjust their bids based on the outage information from the distributor. If there are multiple aggregators managing contributor resources in an area that is out of service, then each aggregator would submit a de-rate notice to the ISO. This also means*

that the distributor would need to know which contributor resources comprise each aggregation and where the contributor resources are located on the distribution system.

- Another working group member asked about the coordination between a host distributor and embedded distributor, e.g. if a load transfer occurs within the embedded distributor how would the host distributor be informed? *The host distributor and embedded distributor would need a communication path as well, and while the IESO's intent is to capture this in override procedures developed as part of the TDWG's current scope, we do not anticipate examining service stacking across the four parties (i.e. the IESO, aggregator, host LDC, and embedded LDC).*

Agenda Item 3: IESO Presentation re: Outages

Roland Leduc (IESO) provided a presentation on the need to consider the IESO's planned and forced outage processes, including how to submit and report these outages. Notable/actionable discussion (with responses in italics):

- Some points that are of particular interest to the TDWG included:
    - The IESO's Market Renewal Program is not expected to result in changes to the IESO's current outage management processes
    - Market participants (e.g. DERs) must submit forced outage notifications when they occur and these will be addressed by the IESO immediately
    - Distributors, with embedded load or generation not registered with IESO, are required to notify the IESO in the event of changes that result in a change greater than 20 MW from the average weekday demand or supply
    - The IESO uses Purpose Codes to allow market participants to indicate the reason for the outage request. One of the purpose codes is transmission equipment derating.

Agenda Item 4: IESO Presentation re: Market Renewal Program

William Whiting, Megan Doner and Dennis Chellakudam (IESO) provided a presentation on the IESO's Market Renewal Program (MRP), including an overview, principles, benefits, and major changes that will be introduced, with a particular focus on the market timings. Notable/actionable discussion (with responses in italics):

- It was asked if the day-ahead process considers distribution constraints that might arise. *No, the IESO does not have visibility into the distribution system, and therefore the IESO's market processes would not consider distribution constraints without additional information. T-D coordination protocols will need to be in place so that either the LDC/DSO or the DER participant reflects distribution constraints in their offers to the wholesale market so that the distribution constraints are considered in the IESO's market processes.*

- Some points that are of particular interest to the TDWG with respect to the renewed market included:
    - The IESO's Day-Ahead Market (DAM) will have a 06:00-10:00 EPT bid/offer submission window with the resulting DAM schedule being published at 13:30 EPT.
    - The IESO's Real-Time Market (RTM) will allow bid/offer submissions up until the Mandatory Window, which is 2 hours prior to each real-time dispatch hour in the dispatch day (i.e. RT-2 hours)
    - Typically, most of the supply is scheduled in the DAM and the RTM is used to balance any deviations that occur between day-ahead and real-time

Action Item Summary

	Date	Action	Status	Assignee
1	29/06/2022	Feedback on July 20 TDWG materials (please use feedback form)	In-progress	TDWG members
2	29/06/2022	Provide presentations on italicized questions for feedback in our next TDWG meeting	In-progress	LDC TDWG members
3	29/06/2022	Re-visit T-D interface definition	In-progress	IESO