Feedback Form

Transmission-Distribution Coordination Working Group (TDWG) – May 16, 2022

Feedback Provided by:

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Specific Questions for Comment/Feedback

Торіс	Feedback
Are there any suggestions to improve the working definition of T-D interface?	
What communications take place between LDCs and third-party aggregators in real-time/near real-time today, if any?	Toronto Hydro provides Day-ahead standby notice to any participant in a Local Demand Response program. Toronto Hydro provides Activation notices on the day of a Demand Response event, at least 2-hours before the event. Toronto Hydro does not provide real- time instructions.

Any comments on the coordination models proposed to be explored in the TDWG?

Toronto Hydro supports the IESO's decision to investigate conceptual protocols for multiple coordination models. It is critical for the IESO to remain agnostic to the evolving role of the LDC with respect to the coordination of DERs within its service territory, and to enable a variety of feasible paths forward. We agree with the IESO that a Total TSO model is not a feasible path forward.

Toronto Hydro has two essential concerns with the materials presented at the 2^{nd} Working Group meeting.

First, we believe that the label of "Dual Participation" has been scoped too narrowly. For example, the NYISO considers dual participation as merely "the simultaneous enrollment of an individual resource to provide services to the NYISO-administered wholesale markets and to another entity (e.g. utility or host facility)".¹ On this definition, dual participation fundamentally means the same DER is participating in twosystems. To this end, the models the materials refer to as "Dual Participation Model" (slide 16), the Total DSO Model (slide 17) and the DSO Aggregator Model (slide 19) are all Dual Participation Models. The materials should be revised to reflect this broader definition so as to not create confusion among sector participants.

Second, Toronto Hydro submits that its Dual Participation Pilot approved through the OEB's Innovation Sandbox and the IESO's Grid Innovation Fund be added to the priority list of models.

Toronto Hydro's Benefit Stacking Tx/Dx Pilot will explore how customer-owned DERs can provide services to both the distribution grid and the bulk system utilizing an efficient

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	single pathway dual participation model that works with existing market mechanisms in the constrained Richview South area.
	To enable this pilot by year-end, protocols will need to be developed to: (1) allow Toronto Hydro to act as the interface in the Richview South area, aggregating DERs to provide local demand response ("LDR") services to address distribution system needs, while enabling the same resources to participate in the IESO's capacity auction; and, (2) allow the IESO to act as the interface for DERs that can offer wholesale market services in the areas of Toronto Hydro's service territory not participating in the pilot.
	As a version of the DSO Aggregator model outlined on slide-19, Toronto Hydro's GIF Dual Participation Pilot could lead to coordination protocols that improve optimization for the customer and the system by creating simpler, one-operator participation pathway. It can also unlock DER value at both the distribution and bulk system to address immediate, emerging need. As this work will be undertaken simultaneously with the TDWG, it would be advantageous to explore this model as part of this forum.
What are existing procedures for de-rating DERs or instructing DERs to go/remain offline? I.e. What conditions would warrant distributor "override" of DERs' schedules/dispatch from the IESO?	Generally, DERs are required to go offline when there is an outage and when there is a change to the feeder connected to the DER (i.e. abnormal condition). This is due to anti-islanding requirements as well as Protection & Control designs that enable the DER.

¹ New York Independent System Operator, *Distributed Energy Resources Market Design Concept Proposal*, (2017) at page 27.

Торіс	Feedback
Any feedback on the Hydro One Sub-Transmission System presentation?	
Any feedback on the Entegrus T-D Coordination Considerations presentation?	
Do EPRI's scenarios and methodology for the DER Scenarios & Modelling Study make sense? Any suggestions?	Toronto Hydro observes the proposed DER Scenarios & Modelling Study does not consider end-customer use of behind-the- meter DERs (the majority of which are dispatchable). Toronto Hydro suggests the Study also consider customer need for these resources, and balance that need against LDC/IESO need for these DER services at the bulk system or distribution level.

General Comments/Feedback