Feedback Form

Transmission-Distribution Coordination Working Group (TDWG) – December 14, 2023

Feedback Provided by:

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Following the December 14, 2023 Transmission-Distribution Coordination Working Group meeting, the IESO is seeking feedback on a number of questions related to transmission-distribution coordination.

Please provide feedback by January 11, 2024 to engagement@ieso.ca. Please use subject header: *TDWG*. To promote transparency, this feedback will be posted on the TDWG webpage unless otherwise requested by the sender.

The IESO will work to consider and incorporate comments as appropriate and provide responses at the next TDWG meeting. Thank you for your contribution.

Topic	Feedback
Deliverable B1: Architecture – DSO processes / systems Does the DSO Architecture present an accurate overview of the systems and functions required for a DSO? Is there anything that is missing in terms of functions or systems that you would like to see captured?	The assumptions made in the "Proposed DSO Architecture – Operational Elements" whether a system is 'existing', an 'enhancement' to existing capabilities, or 'net new' is not likely representative of all LDCs. For illustration, many LDCs may not have what is considered an Advanced Distribution Management System or Geographic Information System per the Architecture Definitions as an 'existing capability'. Understanding that these may be classified as "core utility modernization activities" (slide 4), Essex encourages deeper exploration of these definitions to provide 'core' and advanced elements of the definitions, since they are material in the functional assessment as a basis for DSO functions. Essex agrees in general that the following systems/functions would be required for a DSO: - Short Term Forecasting - load and generation at operational timelines, such as intra-day or day-ahead, - Long Term Forecasting - planning timelines, - Geographic Information System – accurate system model and operating maps which enable physics-based engineering/ "Power System Analysis", - Power System Analysis – near-real time analysis for impact of loads (including market dispatched DERs), protection coordination, constraints, etc., - Asset Demographics – independently collected or retrieved from a central Asset Register, - Distribution Management System – field information (SCADA, ICCP, etc) and outage management (at the very least detection to inform system model), - Meter Data Management System, - Customer Information System, and - Decision-Making, like the concept of the 'Whole System Coordinator', a DSO will need a logical model to generate outputs to markets and analyze them against determined criteria (for example, Local and System Benefit-Cost matrices or an OEB-approved formula). To highlight, Essex believes a major requirement of DSO functions will be operational knowledge of proposed IESO dispatches in the DSO's network. To discern distribution network constraints and potential needs, IAM activity will be highly material. This should be emphasized in functional definitions.

Topic	Feedback
Deliverable A: Presentation on IESO T-D related reliability Are there other aspects of bulk power system reliability that should be highlighted in support of T-D coordination protocols?	

General Comments/Feedback