Innovation and Sector Evolution White Paper Series – Feedback Form

Exploring Expanded Distributed Energy Resource (DER) Participation in the IESO Administered Markets (IAMs): Part 2: Options and Considerations for Enabling DER Participation

Webinar Date: January 30, 2020

Date Submitted: *2020/02/13*	**Feedback Provided By:** Company Name: Hydro One Networks Inc. Contact Name: Henry Andre, Director – Pricing and Load Forecasting Contact Email: [redacted]

On January 30, 2020 the IESO held a public webinar on the DER white paper series, presenting draft high-level options and considerations to enhance DER participation in the IAMs. The IESO is now seeking feedback on these draft options. This feedback will be used to help determine which options and approaches are more fully explored in the second DER white paper. The IESO will work to consider and incorporate comments as appropriate and post responses on the engagement webpage.

The referenced presentation can be found under the January 30th, 2020 entry on the Innovation and Sector Evolution White Paper Series Engagement Webpage.

Please provide feedback by February 13, 2020 to engagement@ieso.ca. Please use subject: *Feedback: Innovation White Paper Series - Part 2: Options and Considerations for Enabling DER Participation*. To promote transparency, this feedback will be posted on the Innovation and Sector Evolution White Paper engagement page unless otherwise requested by the sender.

Thank you for your time.

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Question	Feedback
Would the draft options presented in the posted presentation enhance DER participation in the IAMs?	
Are there other implementation considerations the IESO should be aware of?	As a general comment, the implementation considerations for each of the draft options appear to presuppose a Total Transmission System Operator (TSO) market framework with the IESO acting at the Total TSO. Given that the future market structure has not yet been determined, the IESO may also wish to consider how different market structures will impact the benefits and implementation of the proposed options. Specific comments for individual options are provided below. <u>Option #1: Adjusting the minimum size threshold</u> As the size of a resource decreases, the relative cost of market participation (e.g. registration, metering, etc.) likely increases. The IESO may wish to consider how the cost of participation should inform the selection of minimum threshold to balance: (i) the desire for increased participation, (ii) the need for additional investment at the IESO to enable that participation and (iii) the likelihood of resources being economically viable as a direct participant. <u>Option #3: Modifying aggregation boundaries</u> The IESO may wish to consider whether there any material complications introduced with respect to scheduling and settlement of

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	multi-nodal aggregated resources where sub-resources may be operating in multiple zones with different locational marginal prices. <u>Option #6: Permitting alternative telemetry sources</u> The IESO may also wish to consider how its telemetry requirements could be aligned with the data that typically is available to utilities through their operational systems (e.g. SCADA, DERMS) to minimize the need for duplicative investment by the IESO, utilities and market participants. <u>Option 7: Enhancing T-D Interoperability</u> Hydro One notes that the IESO identified that an enhanced T-D interoperability framework will only impact aggregated participation models. Hydro One believes that direct participation models may also be impacted to the extent that scheduling and dispatch of market participants is coordinated with LDCs to ensure local reliability is preserved. This broader view should inform any further investigations into implementation considerations in the new White Paper.
Are there other options the IESO should be exploring in the second DER white paper?	

General Comments/Feedback:

Hydro One has reviewed the draft options and believes that they are generally appropriate. Hydro One notes that there is some degree of overlap between the proposed options. For example, an adjustment to the minimum size threshold (option #1) or permitting alternative telemetry sources (option #6) will likely require an enhanced T-D interoperability framework (option #7) in order to protect reliability of the system and ensure that bids for market participants actually reflect the local operating realities at the distribution level. Similarly, the creation of a participation model for aggregated non-dispatchable generation (option #5) will likely require or be subject to any clarifications of aggregation rules and processes, as well as, any proposed changes to modifying aggregation boundaries and compositions (options #2, 3, and 4). The IESO may wish to also investigate the interdependencies between the proposed options in order to inform and prioritize future work as the IESO looks to implement any options which are deemed to be viable.