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:___Electricity Utility Association _____ Contact Name: ____Lynn Williams_____ 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.

Question	Feedback
Would the draft options presented in the posted presentation enhance DER participation in the IAMs?	• **Generally speaking, yes, the proposed draft options would increase the ability of DERs to participate in the IESO-Administered Market (IAM), and could provide new options to customers seeking to reduce their energy costs or additional revenue streams.** • **The IESO suggests that decreasing the size threshold (Option 1) would be challenging from an IESO tool's perspective and would potentially require capping the number of resources eligible in this category or restricting ability to provide certain services. The EDA suggests that the IESO further explore whether there are economic barriers associated with market registration (e.g., metering , dispatch desk, etc.) that might continue to be a barrier at this level. Generally speaking, smaller-scale resources tend to participate in retail-level programs like net metering. It may be more appropriate to explore revised incentive models for small-scale resources (e.g., value of DERs) for resources at this scale. Further, LDCs may be in a better position to increase visibility of resources operating at this level as opposed to the IESO.** • **The EDA supports the clarification of the rules and improving communications with respect to the current aggregation rules (Option 2). This could be implemented alongside market rule**

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	changes associated with the Market Renewal Program (e.g., clean-up amendments). • **With respect to aggregation boundaries (Option 3), the IESO could potentially consider LDC boundaries as a factor. Larger LDCs may currently span across different IESO transmission zones, and therefore, the IESO could consider existing planning boundaries as well. We note that there are trade-offs the IESO must consider, as restricting or changing aggregation boundaries could impact ease of participation for customers (i.e., certain customers with operations across boundary lines). The EDA is intrigued by this option and is interested in further coordination with the IESO in respect of "distribution factors" that could be used for modelling at multiple nodes.** • **The IESO is considering modifying aggregation composition (Option 4) to enable multiple resource types within the same aggregation. The EDA supports further exploration of this option given the likelihood that future non-wires alternatives (NWAs) leveraged by LDCs could consist of a combination of resources (e.g., demand response, energy efficiency, storage, solar, CHP, etc.) rather than a single-resource solution.** • **With respect to aggregations with non-dispatchable resources (Option 5), it is acknowledged that this would provide better**

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	visibility to the IESO (e.g., forecasts/schedules). Currently, solar and wind resources greater than 5 MW must register to provide meteorological and other forecast data to the IESO. The EDA suggests that it is likely to be cost prohibitive to require smaller-scale resources to provide data to the IESO; however, aggregated data from resources operating in close proximity to one another could be useful to inform IESO dispatch. There is a potential benefit of coordination with LDCs to leverage the use of this data for distribution system operation in areas that have high penetration of DERs. • **The EDA is interested in exploring the role for LDCs to deliver telemetry data (Option 6). We suggest that it would be reasonable to consider how information could be shared with LDCs for the purpose of distribution system operations (e.g., operations of local NWAs).** • **The EDA acknowledges that enhancing T-D interoperability (Option 7) is strongly aligned with the EDA's Power to Connect vision and roadmap. In particular, the top priority identified by the EDA is the need for LDC investments in grid visibility. If LDCs take on the functions of a Fully Integrated Network Orchestrator, it would be appropriate to coordinate intra-day with respect to distribution level constraints impacting DERs.**

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	• **The EDA has also recognized the importance of identifying and communication system needs (Option 8) in its recently released report Connecting Devices: A Best Practice Guide for Standardized Distributed Energy Resource Connections. In our report, we recommend increasing the availability of information related to connection capability.**
Are there other implementation considerations the IESO should be aware of?	• **The IESO should ensure coordination with the OEB in the development of options. In particular, the EDA notes the potential for overlap as it relates to the OEB's current proceedings on Responding to DERs and Utility Remuneration (i.e., new roles and responsibilities for LDCs).** • **With respect to the value of DERs, the IESO should clarify how the introduction of locational marginal prices (LMP) will impact DERs. We note that the IESO (nor the OEB) has provided clarity with respect to if/how LMPs would be applied to distribution-connected generation (i.e., non-market participant generators). Today, in the absence of an IESO contract, distribution-connected generation not participating in the IESO market would receive the hourly Ontario energy price. With the implementation of Market Renewal, it is unclear whether LMP or the "Ontario zonal price" would apply in the future.** • **The IESO continues to focus on capacity auctions as the sole mechanism to secure resources. We recognize that the IESO has**

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	postponed the planned stakeholder meeting with respect to Resource Adequacy, which was proposed to explore alternative complementary mechanisms to be used along-side capacity auctions. Where new DERs are procured, it may be reasonable to consider different competitive mechanisms.
Are there other options the IESO should be exploring in the second DER white paper?	• **The IESO could consider "microgrids" or customers that consist of multiple sub-metered units (e.g., university campuses, hospital campus, new community developments.) For example, a microgrid may consist of a distribution-connected load customer with embedded generation, storage or controllable loads.** • **The Market Renewal Program establishes a new Price Responsive Load (PRLs) category. This white paper should explore the new options that may be available for customers with behind-the-meter DERs that may be further enabled through the establishment of PRLs. In the IESO's Day Ahead Market High Level Design, the IESO indicated that LDCs may be prohibited from becoming a PRL (although the IESO Market Rules would not expressly restrict this.) It could be possible for a portion of a non-dispatchable load to become a partial PRL.**

General Comments/Feedback:

The EDA recognizes the significant undertaking the IESO is pursuing with respect to enabling DERs and acknowledges the efforts that the IESO has made to identify potential options to enhance interoperability with LDCs. Throughout this submission, we have indicated areas of alignment with the EDA's vision paper. For example, we continue to advocate for the need for LDC investment in grid visibility, and we believe that LDCs are in the best position to fulfill new responsibilities related to the integration of DERs.

Finally, we acknowledge that the IESO's 2020 Annual Planning Outlook, which indicates that capacity needs will arise as early as 2023, also recognizes the role of energy efficiency, DERs and energy storage can play in meeting resource adequacy needs. For this reason, the IESO's white paper is timely in considering how to best leverage DERs going forward to meet system needs.