

Feedback Form

White Paper Part II: Exploring Expanded DER Participation in the IESO-Administered Markets – November 19, 2020

Feedback Provided by:

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Following the November 19, 2020 webinar to discuss Part II of the Exploring Expanded DER Participation in the IESO-Administered Markets white paper, the IESO is seeking feedback from participants on the draft paper, including on the participation options, which will inform planning for future work to enable DERs. The IESO will work to consider feedback and incorporate comments as appropriate and post responses on the engagement webpage.

The referenced presentation can be found under the November 19, 2020 entry on the [Innovation and Sector Evolution White Paper Series webpage](#).

Please provide feedback by December 10, 2020 to engagement@ieso.ca. Please use subject: *Feedback: DER White Paper*. To promote transparency, this feedback will be posted on the [Innovation and Sector Evolution White Paper Series webpage](#) unless otherwise requested by the sender.

Thank you for your time.

DER Participation in IAMs

Topic	Feedback
Which of the options would be most effective to encourage DER participation in the IAMs? Why?	<p data-bbox="695 226 1406 302">#5 Creating a Participation Model for Aggregated Non-Dispatchable Generation</p> <p data-bbox="695 348 1520 699">Significant portion of DERs are non-dispatchable. While many microFIT and small facilities could more easily convert to net metering, there may be fewer options and other barriers for larger non-dispatchable facilities, which would represent a significant portion of currently installed DERs. In the near-term, consideration should be given to establishing a participation model that would allow this group of non-dispatchable generation to participate in IAMs so that their capacity can be more effectively used.</p> <p data-bbox="695 745 1271 779">#6 Permitting alternative forms of telemetry</p> <p data-bbox="695 825 1484 1094">Most DERs on the distribution system are not market participants. To interact with the IESO in the IESO-Administered Markets (IAMs), they would need to make modifications/upgrades to meet telemetry, reliability and dispatch requirements. Need to consider reasonable cost options for requiring DERs to provide telemetry data need to participate in IAMs.</p> <p data-bbox="695 1140 1406 1173">#8 Enhancing transmission-distribution interoperability</p> <p data-bbox="695 1220 1511 1610">IESO dispatch needs to account for distribution system constraints, as distributors will occasionally need to constrain DER operation to prevent negative impacts to the distribution system. Coordination with distributors will also be important for bridging the various stages to integrate DERs in IAMs. Distributor tools and DER telemetry already collected by (as well as customer relationship) should be leveraged where possible to effectively enable DER participation in IAMs. Duplication of effort and resources should be avoided at the T-D interface.</p>

Potential Impacts to Stakeholders

Topic	Feedback
Are there additional potential impacts to stakeholders that have not been explored in the white paper?	Customer Engagement/Education – In general, most DER resources operate under feed-in-tariff contracts. As a result, they have a limited understanding of the IAMs and will not have an appreciation of the requirements and obligations associated with participating. The IESO should consider how it supports the education and transition of operators of such resources.

Implementation Considerations

Topic	Feedback
Are there additional implementation considerations that have not been explored in the white paper?	<p>Cyber Security – The IESO should consider the cyber security requirements that would need to be met at the DER and aggregator level to ensure the reliability/security of the IAMs.</p> <p>Aggregators – The roles and requirements for aggregators may need further definition and clarity as the scope of eligible resources expands. Considerations include what types of services they will be able to provide and whether distributors can act as aggregators to enable participation of smaller resources.</p> <p>UCAP (unforced capacity) – how will this be determined exactly for the significant number of smaller resources that could participate in IAMs</p> <p>Rate Design – On page 19, the report mentions the use of net-metering configurations by customers to avoid residential rates as an alternative to participation in the IAMs. Hydro One notes that residential distribution rates currently have a fully fixed rate design and that the rate design for commercial & industrial customers is currently under consideration at the OEB. When it analyses the scope of future potential market participation, the IESO should consider the impact of existing rate design on customer decision-making.</p>

Looking Ahead to Implementation

Topic	Feedback
Which wholesale products/services would DER owners/aggregators seek to provide in the IAMs if these options were implemented in the future? Using what technologies? Are there specific options that would allow these products/services to be offered?	

General Comments/Feedback

Hydro One notes that enhanced coordination with distributors is a common element identified in the White Paper for enabling the majority of the options for enhanced DER participation in the IAMs. Hydro One agrees and believes that utilities are in the best position to assess the impacts of DERs on the distribution system. Distributors must operate their systems reliably and should have an increasing role in the connection and operation of DERs in order to preserve reliability of the grid. Hydro One notes that many of the jurisdictions cited by the IESO in the White Paper have come to similar conclusions and have already begun investigating or implementing increased roles for distributors in reviewing and approving the siting of DERs.

The IESO's desire for increased visibility of DERs is a common theme throughout the report. Hydro One notes that as visibility is increased so are the associated enabling costs. The White Paper mentions that implementation of the recommendations will require additional resources for the IESO throughout the report.¹ Hydro One notes that in most instances, a similar requirement for additional resources would result for distributors as increased DER participation would mean an increase in assessments of connection requests and overall coordination with the IESO by the distributor. When assessing the optimal cost/benefit balance for the various options presented, it's important that the IESO and stakeholders focus on the overall impact to system costs rather than just the impacts on the IESO. Hydro One is supportive of the IESO's plans to conduct a further analysis of the ability of proposed options to encourage new participants in the wholesale markets. Such an analysis will prove informative and determining the appropriate cost/benefit balance.

Hydro One looks forward to further engagements on these matters as the IESO further develops and evaluates the proposed options.

¹ For example, page 25.