Demand Response Working Group

Final Communication – March 30, 2021

At the November 3, 2020 Stakeholder Advisory Committee (SAC) meeting, the IESO introduced plans to consolidate its advisory and working groups, including the Demand Response Working Group (DRWG), in favour of a streamlined engagement approach to support engagement planning and prioritization efforts. The IESO is proceeding with this plan, in part, by concluding the DRWG stakeholder engagement.

The DRWG was launched in 2014 as a forum for the IESO to engage with stakeholders on the evolution of DR from a contracted resource into the energy market, as well as to inform the development of pilots and the DR Auction stakeholder engagement. Following the completion of the first <u>Demand Response Auction</u>, the IESO established a new focus for the DRWG to an open membership forum with an enduring advisory role. DRWG stakeholders provided advice to the IESO to support the evolution of DR in the IESO-administered markets.

The table below summarizes the various initiatives the IESO has undertaken with stakeholder input and support since 2014 to evolve the DR participation model in Ontario.

Summary of Demand Response Initiatives

<u>Initiative</u>	Description
Enable residential DR participation in the Demand Response Auction (2016)	Hourly demand response (HDR) participation model updated with residential-specific baseline methodology, contributor management and other requirements to enable participation of aggregated residential loads
Enable emergency-use of HDR resources (2018)	Enabled greater utilization of HDR resources by adding them to the emergency operating state control actions (EOSCA) list and increasing the availability of HDR resources in the energy market at times of system need by modifying the trigger for a standby notice
DR potential initiative (2019)	Initiative to better understand DR potential in Ontario over the 2020s



Demand Response Pilot (2016-2017)	Launched the Demand Response Pilot to better understand the capabilities of DR resources to provide hourly load following and unit commitment services to the bulk power system
Introduced Out-of-market payments for HDR resources (2019)	Introduced out-of-market payments for test and emergency activations to reduce the financial risk associated with an out of market activation
DR Demonstration Projects (2016-2017, 2019-present)	Launched the Brant Local Demand Response Pilot and York Region NWA Demonstration Project to better understand capabilities of DR resources to address local wires constraints
Improved HDR Resource Data Submission Process (2019)	Changes to measurement data submission criteria and validation, editing and estimation (VEE) process for missing measurement data to reduce the cost of audit for DRMPs
Revised HDR Resource Testing Criteria (2019)	Introduced reduced duration testing for HDR resources that successfully demonstrate performance

Stakeholder Feedback Following February 12, 2021 DRWG Meeting

The final DRWG meeting was held virtually on February 12, 2021 to respond to stakeholder feedback received following the previous meeting held in December 2020 and present and seek stakeholder feedback on a draft list of prioritized market development initiatives for DR resources. Following this meeting, the IESO received one stakeholder feedback submission from the Advanced Energy Management Alliance (AEMA) to inform the finalization of this list. AEMA indicated support for the list of prioritized DR market development initiatives, specifically in-house Measurement & Verification (M&V) for residential DR and Distributed Energy Resources (DER). AEMA also indicated support for reducing the minimum DER aggregation size from 1 MW to 100 kW and creating a more centralized process for customer enrollment.

Provided below is a response to this stakeholder feedback and the final list of prioritized DR market development initiatives, which includes an indication of the next steps for each initiative.

IESO Response to Stakeholder Feedback

As summarized in the table below, IESO intends to engage stakeholders on the residential DR M&V initiative in Q3 2021. There will be an opportunity to address specific DER participation design proposals, including minimum size requirements and enrollment enhancements, through the work the IESO is undertaking related to enabling DER participation in the IESO-Administered Markets (IAMs). The IESO is working to publish a DER Roadmap in 2021, setting out approaches and timing for fully

enabling DER participation in the IAMs for all products and services they're technically capable of providing. More info will be provided in future IESO Bulletins and at the monthly IESO engagement days on opportunities for external stakeholders to provide input on the DER Roadmap.

Priority	Initiative	Engagement Next Steps	Timing
1	Review the accuracy of the baseline methodology for Commercial & Industrial (C&I) Hourly Demand Response (HDR) resources	The IESO will engage with stakeholders on this initiative through the Capacity Auction stream of the Resource Adequacy engagement. A high- level work plan for enhancements to the Capacity Auction was presented as part of the March 22 Resource Adequacy webinar.	A high-level work plan for enhancements to the Capacity Auction is included in the March 22 Resource Adequacy webinar materials. The IESO plans to present the draft scope and approach for the baseline methodology review at the April 20-22 engagement days.
2	Explore opportunities to enhance operational and planning confidence in HDR resource performance	The IESO will engage with stakeholders on this initiative through the Capacity Auction stream of the Resource Adequacy engagement. A high- level work plan for enhancements to the Capacity Auction was presented as part of the March 22 Resource Adequacy webinar.	The high-level work plan for enhancements to the Capacity Auction will include an indication of timing for this initiative.
3	Explore near-term opportunities to unlock flexibility from DR resources that leverage smaller DERs	The IESO is determining the optimal path forward for exploring near-term opportunities to unlock flexibility from DR resources backed by small DER.	An update will be provided to stakeholders on this initiative by end of Q2 2021.

Priority	Initiative	Engagement Next Steps	Timing
4	(M&V) leveraging Smart Metering Entity data	The IESO will hold individual stakeholder meetings with stakeholders interested in residential DR to gather further information to support this business case, and pending outcome of initial discussions, potentially establish a new engagement. To indicate interest in participating in these individual stakeholder discussions, please email <u>engagement@ieso.ca</u> .	be provided to stakeholders later in 2021.
5	Assess the benefits of enabling market participants to register up to two virtual C&I HDR resources per zone	The IESO will revisit this initiative in 2022 when outcomes from the other priority initiatives in this list have been explored further.	An update will be provided to stakeholders on this initiative in early 2022 when outcomes from the other priority initiatives in this list have been explored further.

Demand Response Working Group Concluded

The DRWG engagement forum is now concluded, however, discussions with stakeholders on the list of DR market development initiatives will continue as outlined in the table above. SAC meetings will continue to include a focus on IESO engagement planning and prioritization efforts, including market development opportunity discussions that have previously taken place in the DRWG, Market Development Advisory Group, Energy Storage Advisory Group, and other IESO advisory and working groups.

DR stakeholders should contact their IESO Customer Relations representative or the IESO DR Market Development team for any market participation questions and issues in the future, including those that may require stakeholder engagement.

The IESO would like to thank all stakeholders who have participated and contributed to meaningful discussion in this engagement forum over the years. We look forward to continue working and engaging with DR stakeholders in other IESO engagement forums.

All materials related to this engagement will continue to be available on the IESO website under <u>Completed Engagements</u>.