

Phase 1 Engagement Summary Report

Date: April 14, 2021

IESO York Region Non Wires Alternatives Demonstration Project

Engagement Initiated: December 2019

Engagement Description

The IESO, with support from Natural Resources Canada, is undertaking a demonstration in York Region to explore market-based approaches to secure energy and capacity services from distributed energy resources (DERs) for local and system level needs, while coordinating across the electricity system. A key objective of the IESO York Region Non-Wires Alternatives (NWA) Demonstration project is to better understand the potential of using DERs in place of traditional infrastructure by enabling them to operate in real-world applications. The demonstration will leverage both existing and new resources in southern York Region, where electricity demand is growing and is expected to exceed system capability over the next 10 years. The project is funded through the IESO's Grid Innovation Fund and Natural Resources Canada, and will be delivered by Alectra Utilities, the local distribution company in York Region.

Development of the project is being informed by two IESO-led white papers, one of which describes how transmission and distribution systems will need to function and interact with each other in a high-DER future. The second paper considers different market-based approaches for procuring DERs, explores how the resources can operate to meet local needs and wholesale market needs, and outlines the coordination required to ensure they can do both without adversely impacting reliability.

The IESO York Region NWA Demonstration Project engagement was launched to ensure stakeholders understood the initiative and had the opportunity to provide feedback to inform the design of the demonstration's first Local Capacity Auction (LCA) that was held in November of 2020 and its associated upcoming Local Energy Auctions (LEAs) to commence on May 1, 2021.

In a similar way, the engagement for the second phase of the Project will ensure stakeholders understand the enhancements being implemented as part of the Project's second phase and give

them an opportunity to provide feedback to inform the design of the demonstration's second LCA, to be held in late 2021, and its associated 2022 LEAs.

Engagement Objective

The objective of this engagement is to ensure stakeholders understand the initiative, and have the opportunity to provide feedback to inform the design of the demonstration. To date, this includes feedback on the demonstration's timelines and resource eligibility, distribution locational marginal pricing, demonstration project rules and participation agreements.

Engagement Approach

This stakeholder engagement continues to be a public engagement process and is being conducted in accordance with the IESO's approved [engagement principles](#). The approach for this engagement initiative includes opportunities to provide input through various channels such as in-person meetings, webinars, and written feedback. All materials, including feedback and commentary from stakeholders, and IESO responses to feedback are posted on the dedicated IESO engagement webpage for this initiative.

Conclusion

Stakeholders actively participated and provided feedback throughout the engagement thus far, helping to shape the demonstration and the success of its first phase. Organizations including CanSIA, Electricity Distributors Association, Energy Storage Canada, Hydro One Networks Inc, and Power Workers Union provided feedback on behalf of their company or membership.

The IESO hosted an initial webinar on December 12, 2019 to present the demonstration project concept design to stakeholders. The demonstration concept design was supported by the two white papers, intended to explore options and considerations. Highlights from these papers, and how they informed the concept design, were also presented.

The December webinar presented the concept design at a high level, and stakeholder feedback helped further shape the design. Much of the stakeholder feedback received following the webinar directed the concept design and solidified elements of the originally proposed concept design. Additional stakeholder feedback resulted in adjustments to the concept design, including participant eligibility, timelines and revenue stacking. Specifically, the following adjustments and revisions were made in response to stakeholder feedback:

- Participation in IESO-Administered Markets (IAMs): intent is to facilitate where commitment periods do not overlap (i.e. during winter periods)
- Participation of LDC-owned DERs: DERs owned and/or operated by LDC or affiliates that are unrelated to the host LDC will be eligible to participate
- Competition: focus on maximizing participation by removing barriers
- Revenue stacking: allow revenue stacking while avoiding duplication of compensation
- Hourly Demand Response (HDR): alignment with IESO's existing HDR participation model

- Success metrics include: compliance with dispatch instructions, meeting local and system level needs, transmission-distribution interoperability, and identification of potential future rule/process changes

Stakeholders also submitted feedback and considerations for the two supporting white papers, which were finalized and published in June and July of 2020.

The above pieces of feedback and considerations with respect to the concept design were incorporated into the draft Demonstration Project Rules which were then presented to stakeholders in a July 23, 2020 webinar. Responding to stakeholder feedback received previously, additional information was presented to stakeholders on participation obligations and distribution locational marginal pricing (DLMP) to inform stakeholders on the concepts behind the demonstration's proposed local energy price formation. Following the webinar, stakeholders submitted feedback on the draft Demonstration Project Rules and the proposed project timelines. The following adjustments and revisions were made in response to stakeholder feedback:

- Responding to a stakeholder seeking clarification on behind-the-meter natural gas facility participation, IESO updated Article 5.1 Meter Data in the Contract to clarify that such a facility would be eligible to participate as a Demand Response Resource.
- Sections 2.2.1 and 2.4.1 of the Demonstration Project Rules were amended to clarify that a customer that is a Direct Participant must have User Rights over a DER (rather than ownership).
- The assessment of Test Activations was added to the settlement exhibit in the draft Contract.
- Section 7.3 Test Activation Payments language was amended to clarify the Test Activation Payment Rate will be \$0.25/kWh.
- Additional sections in the Demonstration Project Rules were updated to:
 - permit smaller control group size depending on the Local Capacity Obligation
 - allow a load facility that is participating in the Energy Efficiency Auction to also participate in the Demonstration
 - reflect that Change Requests will not be limited to one-to-one changes of Contributor DERs (but that one Contributor DER can be replaced with many Contributor DERs and vice versa)
- The definition of 'In-service date' was confirmed to be: The date that a DER, which was not previously operational, is in the case of a Gas-Fired Resource or a Storage Resource, commissioned and synchronized to the DSO's Distribution System such that it is capable of Delivering Energy to, or withdrawing Energy from, the DSO's Distribution System in compliance with Laws, and in the case of a Demand Response Resource, connected to the DSO's Distribution System via the Connection Point such that it is capable of Reducing Energy from the DSO's Distribution System in compliance Laws.

While many stakeholders indicated the demonstration dates were manageable, a number of stakeholders suggested the timelines may preclude new resources from participating. However, as the Demonstration is being implemented under NRCAN's Smart Grid Program, it must abide by the

program's timelines, under which the project must be completed in 2022. It is anticipated that the demonstration will involve material participation from existing resources or resources already under development. For new DER installations with longer lead times that do not meet the timelines of the first Local Capacity Auction, there may be an opportunity to participate in the second Local Capacity Auction taking place in 2021.

As the final stakeholder engagement activity, the IESO posted drafts of the standard Contracts for stakeholder feedback, with one version for Aggregators, and the other for Direct Participants. The IESO did not receive any stakeholder feedback on the standard Contracts.

The engagement of Phase 1 of the IESO's York Region NWA Demonstration Project was concluded with the posting of the Final Demonstration Project Rules on September 14, 2020, and the final standard Contracts on October 13, 2020. Thank you to all stakeholders for your participation. All materials will continue to be available on the [York Region NWA engagement webpage](#). We look forward to the continued engagement as we enter the second phase of the Project.

Appendix

Related information:

- [Innovation and Sector Evolution White Paper Series Webpage](#)
- [Non-Wires Alternatives Using Energy and Capacity Markets](#)
- [Development of a Transmission-Distribution Interoperability Framework](#)
- [YRDemo.com](#)