Other IESO Initiatives of Interest to the Energy Storage Community

Energy Storage Advisory Group May 20th, 2020



Expanding participation in Operating Reserve and Energy (EPOR-E)

- EPOR-E is a **scoping and assessment** exercise that will identify high-value projects to consider for future energy and operating reserve market implementation
- Phase 1 involved reviewing the requirements of each stage of the market registration process and identifying opportunities to align those requirements (e.g. dispatchability, telemetry, and certainty of response) with the participation models of the following resource types: DR, DERs*, Gas, Hybrid, Imports, Storage*, and Variable Generators
- The draft Phase 1 memo will be posted to the <u>engagement webpage</u> in June for stakeholder review and feedback

Note: DER development is the focus of the Innovation and Sector Evolution Whitepaper Series and directly-connected storage is the focus of the Energy Storage Advisory Group's (ESAG) Storage Design Project



White Paper Series: Exploring Expanded DER Participation in the IAMs

- The first white paper provided a working definition of DERs, principles for integrating DERs into the IAMs, participation models that are available in the IAMs today, barriers to enhanced participation, and an overview of DER integration efforts in other jurisdictions
- The second white paper will explore potential options to address the barriers for DERs that were identified in the first white paper to inform future market design work, and a draft will be presented to stakeholders for feedback in Q3 2020
- More information can be found in the <u>Innovation and Sector Evolution White Paper webpage</u>



Capacity Auction

- Given the impacts of COVID-19, the <u>IESO is deferring Capacity #1 to Q4 2020</u>, which will allow existing off-contract storage resources to participate using the registered dispatchable generator component to satisfy capacity obligations
- Further details on the capacity auction will be made available once the IESO has updated its planning forecasts in light of the COVID-19 impacts and is able to better determine the capacity needs for 2021



Development of a Transmission-Distribution Interoperability Framework whitepapers

- The IESO is initiating a demonstration in York Region to explore market-based approaches to secure services from distributed energy resources (DERs) for local needs, while coordinating across the electricity system.
- Demonstration concept design is supported by two white papers posted in draft on <u>Innovation</u> and <u>Sector Evolution White Paper Series webpage</u>:
 - 1. Development of a Transmission-Distribution Interoperability Framework
 - Explores models for coordination between Distribution System Operators (DSOs) and a transmission system operator (TSO) in a high-DER future
 - 2. Non-Wires Alternatives Using Energy and Capacity Markets
 - Explores market-based approaches to acquiring DERs used as NWAs in the context of DSO-TSO coordination models



IESO York Region Non-Wires Alternatives (NWA) Demonstration Project

The demonstration project will involve local capacity auctions that are targeted to take place in Q4 2020 and Q4 20201 with associated summer commitment periods of 2021 and 2022, respectively

- Alectra Utilities is supporting the project as a delivery partner and notionally acting as a distribution system operator (DSO)
- A <u>webinar</u> was held (and recorded) in December 2019 to provide an overview of the demonstration
- The demonstration's detailed design will be made available in early Q3 2020 for stakeholder feedback

