

Brant Local DR Pilot Update

Demand Response Working Group

April 6, 2017

Background

- The Brant Local DR Pilot is an exploratory opportunity identified in the Brant Area Integrated Regional Resource Plan (IRRP)
- The pilot is intended to test the use of DR as a Non-Wires Alternative (NWA) to assist with local capacity needs
- Specifically, NWA resources are sought as an interim solution to relieve overloading on the 115 kV Brant-Powerline sub-system (peak demand \approx 150 MW) under certain contingency situations
- The test opportunity is short-lived, as additional capacity provided by transmission reinforcements are expected to be in place in 2019
- The IESO, with input from local LDCs (Energy+, Brantford Power and Hydro One Distribution) and stakeholders, developed a local DR pilot request for proposals and service agreement for the Brant area
- This pilot will potentially serve as a reference for similar future initiatives

Pilot Objectives

- **Strategic/Planning aspect:** Develop a framework and mechanism for securing DR as Non-Wires Alternatives identified through regional plans, including identifying barriers, costs and opportunities.
- **Economic/Market aspect:** Test the economic viability of NWA's to provide value relative to "wires" alternatives, including the testing of cross-participation in various IESO revenue-making opportunities.
- **Operational aspect:** Test the physical capabilities to provide T&D investment deferral, including: activation triggers, usage frequency, usage duration, and other characteristics.
- **Commercial aspect:** Develop a process that allows interested parties to understand the opportunity, understand commercial terms (that balance risk/reward) and allows effective project development.

Some Design Considerations

- While the IESO is piloting a NWA initiative, the long term model may entail the LDCs securing NWA resources
 - Process for NWAs (or local capacity) could be aligned with system-level auction
- The pilot draws heavily from the Demand Response Auction
 - The same baselining methodology as the auction was used in the pilot
 - Pilot makes use of a similar set of non-performance charges as the auction
 - In specific areas being piloted, it is necessary to employ new approaches
- The needs of the sub-system targeted by the pilot are different than the needs of the overall system (i.e. as signalled by the energy market price)
- The pilot makes use of out-of-market dispatch based on the conditions of the Brant sub-system
 - Pilot participants have the option of participating in the IESO Administered Markets in addition to the pilot, however it is not a requirement
 - To limit dispatch risk on pilot participants, the contract stipulates a maximum of 20 activations

Summary of RFP & Contract

- The RFP was intended to procure DR resources for one year (June-Sept 2017), and we anticipated running the RFP a second time on similar terms for 2018.
- To be eligible to participate in the RFP, DR projects must
 - Be connected to the Brant TS and/or Powerline MTS
 - Be available on Business Days from June 1 to September 29
 - Be available from 3PM to 7PM (Core Curtailment Block)
 - Have capacity of 1MW or more and less than or equal to 15MW
 - Secure Contributor Confirmations totalling 50% of the project capacity
 - Not be subject of a long-term contract with IESO or other government agency
- A formula was developed to evaluate proposals based on proposed project price and the selection of any optional curtailment blocks (i.e. 11AM to 3PM and/or 7PM to 11PM)
- The Service Agreement outlines that Standby Notices can be issued by 07:00 EST on a Business Day and Activation Notices have to be issued at least 2.5 hours prior to an Activation Period

RFP & Contract Process Timelines

Historical:	
Aug 2016	Communication and Questionnaire
Oct 2016	Posted Draft RFP and Service Agreement
Nov 2016	Stakeholder Webinar and Feedback
Dec 1, 2017	Posted Final RFP and Service Agreement
Feb 1, 2017	Deadline for proposal submission
Planned/Prospective:	
Mar 2017	Service Agreement awards
May 2017	Certification Tests
Jun 1, 2017	Guaranteed Service Commencement Date
Sep 29, 2017	End of Contract Service Term
Q3 2017	RFP for Jun–Sep 2018 service

RFP Results

- The pilot was structured as two annual RFPs in order to provide an opportunity for the IESO to enlist additional participants that did not have sufficient time to develop projects and participate in the first RFP
- The RFP submission window closed on February 1, 2017 and the IESO did not receive proposals
- Several considerations may have contributed:
 - Insufficient marketing/awareness
 - Minimum project size of 1 MW
 - Limited pool of contributors (i.e. ~150MW of peak load)
 - Tight RFP process timelines
 - RFP required higher level of project development
 - Short-lived opportunity

Questions & Next Steps

- A few specific questions for feedback:
 - General feedback on the first round process and reasons for lack of participation
 - If the IESO were to proceed with a second round what improvements could be made to increase participation?
 - Are there any key barriers to developing a project/submitting a proposal?
- Happy to receive written comments or have conference call/in-person meeting
 - Kindly contact us via BrantDR@ieso.ca to make arrangements
- Feedback will be considered in decide whether to proceed with a second round