

Hourly Demand Response Out-of-Market Activation Payments

Technical Panel

August 13, 2019

Purpose

- Review the potential for out-of-market payments for Hourly Demand Response (HDR) resources during certain types of activations
- Initial assessment has concluded that:
 - Compensation is appropriate during HDR test activations or emergency activations as they can occur at a price below bid price of an HDR resource
 - Treatment is consistent for other energy market resources (i.e. dispatchable loads)
- Payments are being proposed to compensate Hourly Demand Response (HDR) during out-of-market activations for:
 - Capacity based test activations
 - Emergency Operating State Control Action (EOSCA) activations

Issue Recap

- HDR is intended to meet those very rare days when energy is needed to help meet Ontario's system needs (i.e., typically 1 day in 10 year planning criteria for a broad provincial need)
 - As such, testing is critical to build confidence that this resource is able to deliver their commitment during periods of extreme need
- HDR resources can be tested up to twice per commitment period
 - In order to be tested, they must be activated out-of-market
 - In this circumstance they may be required to curtail when according to the market price, they would be better off consuming
- Currently, HDR resources reflect their expected costs for out-of-market planned test activations in their DR Auction offer prices
- As HDR resources move to compete with other non demand side resources, the way in which these out-of-market costs are recovered could potentially impact market efficiency

Out of Market Costs

- When other resource types (dispatchable load, generator, import) are dispatched out-of-market they are eligible for some form of “make-whole-payment”
 - A make-whole-payment may apply when a participant faces a shortfall between their resource bid/offer price and the revenue earned through market clearing prices
 - The payment restores the participant to the financial situation they would have been in as implied by their bids/offers
- HDR resources are not currently entitled to receive a make-whole payment for out of market activations

Out-of-Market Activations

Testing

- HDR is not a day-to-day energy market resource so testing is required to prove its capability to reduce consumption
- Testing is also important to build confidence that this resource is able to deliver their commitment
- Can be tested up to twice per commitment period

EOSCA

- The EOSCA list is a table of control actions that are available to the IESO leading up to and during an “emergency operating state”
- Allows the IESO to take “out-of-market” actions to maintain reliability
- The list of control actions include: recalling outages, run short of operating reserve, curtail exports, shed load, activating HDR
- More information on the EOSCA list can be found in [Market Manual 7.1, Appendix B](#)

Engagement with DRWG

- The IESO has raised this market enhancement to the Demand Response Working Group (DRWG)
- At a June 19 DRWG meeting, the IESO identified three high-level approaches to compensation for an hourly resource activated out-of-market:
 - 1) Using energy bids as representative costs
 - 2) Historical precedents, such as Capacity-Based Demand Response (CBDR) activation payments
 - 3) Identify costs on individual or type of resource basis

Stakeholder Feedback

Stakeholders provided the following feedback on the proposed approaches to out-of-market cost recovery for HDR resources:

- Do not support the resource-specific approach due to complexity and administrative burden
- Fixed price approach appears arbitrary
- Support using bid as basis for out-of-market payments

Note: additional stakeholder feedback was requested by August 6th

Next Steps

- Proposed Market Rule Development and Implementation Timeline
 - August 13: Overview of proposal to Technical Panel (Education Item)
 - September 4: DRWG Meeting to introduce draft Market Rules and Manuals concepts
 - September 24: TP vote to post draft rule amendments for broader stakeholder comment
 - October 22: TP vote to recommend the draft rule amendments to the IESO Board
 - November 27: Review and approval by the IESO Board of Directors
 - December 20: Market Rules effective

Targeting to have the compensation framework in place for the May 2020 obligation period