

DR ENHANCEMENTS UPDATE

Demand Response Working Group

April 20, 2018

Purpose

- To provide a modified proposal to improve the value of HDR resources

RECAP

Maximizing Value of DR

- IESO is interested in increasing utilization of HDR resources to ensure it can maximize its value to the system
 - For the 2017 DR Auction, the IESO has added HDR resources to the EOSCA list
 - For the 2018 DR Auction, the IESO identified two areas for utilization improvement, focused on scheduling flexibility

1. Reduce Minimum Dispatch Duration

- *Reduce 4 hour block*

2. Increase Real-Time Availability

- *Eliminate standby notice*

Maximizing Value of DR

- Stakeholders supportive of decreasing minimum dispatch duration
- Stakeholders voiced concern with immediate elimination of the standby notice given current business processes
- In response to current stakeholder feedback the IESO reviewed 3 options to *modify* the current standby trigger to improve real-time availability:
 - one-hour schedule-based trigger
 - \geq \$100 price-based trigger
 - \geq \$200 price-based trigger

1. Minimum Dispatch Duration

March 1 Proposal to DR Stakeholders

The IESO proposed to change the HDR resource's dispatch duration from a four-hour block to a one-up-to-four hour block

Current HDR Activation Protocol

1. Standby Notice:

4-hour schedule required for a standby



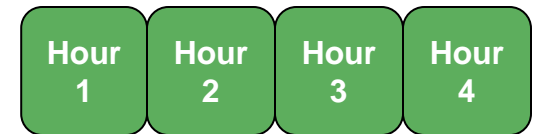
2. Activation:

4-hour schedule required for an activation



3. Duration:

DR activated for 4 hour blocks



Proposed Change

1. Standby Notice:

1-hour trigger required for a standby



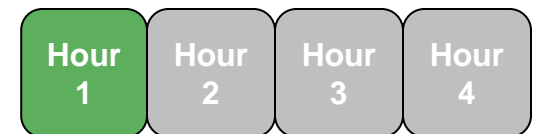
2. Activation:

1-hour schedule required for an activation



3. Duration:

DR activated for 1 up-to 4 hour block



1. Minimum Dispatch Duration

March 1 Proposal to DR Stakeholders

IESO Rationale

- Reduces threshold for HDR activation in response to system needs
 - HDR could be activated to meet a 1, 2, 3 or 4 hour need (rather than the current 4-hour block); activations would continue to be limited to once per day
 - HDR resources must still be capable of providing a 4-hour response but can be activated for shorter durations
 - Helps transition HDR towards future ICA requirements
- Stakeholders were supportive of this proposal

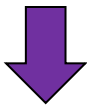
2. Real-Time Availability

March 1 Proposal to DR Stakeholders

The IESO proposed to change the standby notice trigger to a \$100 price-based trigger.

1. Standby Notice:

At least 1-hour is \geq \$100 trigger price required for a standby by 7am



2. Activation:

Activate when *at least* 1 hour scheduled for DR ~2.5hrs prior



3. Duration:

DR activated for up to 4 hours based on schedule when 1st hour activated



- A standby notice is issued for a resource when its respective pre-dispatch shadow price is equal to or greater than \$100 for an hour during the availability window prior to 7am of the dispatch day

2. Real-Time Availability

March 1 Proposal to Stakeholders

IESO Rationale

- Increases value of HDR resources
 - Increased number of standby notices issued means an increase in real-time availability of HDR resources during times of system need
 - Changes to utilization criteria to facilitate activation when needed was encouraged by the Market Surveillance Panel's May 2017 report
 - Helps to increase availability in real-time without significantly impacting participation
 - Helps transition HDR resources towards future ICA requirements

Stakeholder Feedback

Stakeholder feedback on proposed \$100 trigger

1. Standbys are currently a core part of how DR participants communicate with contributors
 - Aggregators advise that they currently use standbys (issued by 7am) to signal to their customers to prepare their operations for activation
 - Customers will become frustrated and may start to ignore standby notifications if they don't lead to subsequent activations
2. Concern that increase in standbys with \$100 trigger without activation will increase costs –and cause confusion to customers
 - Increased standbys may negatively impact contributor participation
3. One stakeholder proposed phasing in price trigger starting at \$200 and moving to \$100 the following year
4. Question about “ideal” number of standby notices for a commitment period

IESO Response to Stakeholder Feedback

- The IESO continues to advocate ‘de-linking’ standbys and activations (i.e. the perception that standbys will likely result in a subsequent activation)
 - Need to separate the concept of ‘availability’, which is a capacity product, with ‘activation’ which is about real-time energy balancing.
- No ‘ideal’ or ‘target’ number of standbys
 - Ideal design would ensure DR availability for all hours of the availability window

Summary

- The IESO believes shortening the minimum dispatch duration and moving to a price-based trigger for standby will significantly improve the value of HDR resources in the short-term and help support transition to the ICA over the long-term
- Based on stakeholder feedback, the IESO is considering taking a phased approach on the standby trigger price, which would use a \$200 trigger for the 2018 DR Auction and then a \$100 trigger for the 2019 DR Auction
- Stakeholders are requested to provide any additional feedback to engagement@ieso.ca before the next DRWG meeting scheduled for May 3

Timeline for May 2019 Changes

- The IESO plans on bringing draft Market Rules to Technical Panel at the May 22 TP meeting
- Changes are targeted to be in place for the next Auction in December 2018

TP process

