

Demand Response Working Group

September 4 Meeting

Following the IESO's presentations at the September 4th Demand Response Working Group (DRWG) meeting on the Hourly Demand Response (HDR) Testing, Measurement Data Submission, Contributor Management and DR Audit proposals, stakeholders were invited to provide comments and feedback on the proposals. The IESO received feedback from:

- Advanced Energy Management Alliance (AEMA)

The September 4th presentations and stakeholder feedback are posted on the [DRWG webpage](#).

Note on Feedback Summary

The IESO appreciates the feedback received from stakeholders on these proposals. This stakeholder feedback is important to the collaborative approach the IESO is committed to in discussions with the DRWG regarding the continued evolution of demand response in the IESO-administered markets. Below, the IESO has provided a summary of specific feedback or questions that require a response at this time, as well as the IESO response.

Stakeholder comments and IESO responses

Theme

M&V/Data Submission – Proposal: Proposal #1: Measurement Data Submission Process

Stakeholder

AEMA

Summary of Feedback

AEMA supports moving to data submission for activation months only. AEMA recommends that there be a 60 day requirement for collecting and submitting measurement data for months in which there was not an activation.

AEMA also recommends that the same VEE methodology be applied to this data for activation months as when measurement data needs to be estimated.

IESO Response

Thank you for the feedback. Please refer to the November 12 Demand Response Working Group materials, posted on the [stakeholder engagement webpage](#), for a discussion on how this feedback was considered.

Theme

M&V/Data Submission – Proposal: Proposal #2: VEE Process – issues outside control of DRMP

Stakeholder

AEMA

Summary of Feedback

AEMA supports a process to handle external factors preventing the receipt of measurement data; however AEMA does not support the proposal to use a contributor's peak consumption as the measurement of their "load reduction" during an activation. This is overly punitive as it will in most cases result in a vastly negative contribution to the resource's measured load reduction.

Given that the measurement data can be unavailable for reasons outside of a DRMP's control, AEMA proposes a VEE process of submitting 'zero kWh' for the contributor in question during both the baseline window and the activation window. This would ensure that the contributor provides no contribution to the measured load reduction during activation rather than a vastly negative contribution. DRMP's should be expected to manage this risk accordingly when registering contributors to meet a Capacity Auction obligation.

IESO Response

Thank you for the feedback. Please refer to the November 12 Demand Response Working Group materials, posted on the [stakeholder engagement webpage](#), for a discussion on how this feedback was considered.

Theme

M&V/Data Submission – Proposal: Proposal #3: DR Audits

Stakeholder

AEMA

Summary of Feedback

To allow businesses to move forward, the IESO should adopt a policy of conducting audits within one year of a given settlement month. After this time, outside of an investigation, settlement periods should be considered final.

AEMA continues to oppose the highly burdensome requirement of collecting LDC statements when LDC internal data should be sufficient for assessing the accuracy of submitted measurement data.

IESO should solicit input on how to address the potential concerns with removing the requirement for a LDC statement as part of the audit. If a statement is to be used, AEMA is concerned that the method for calculating 'peak demand' employed by LDCs or by the IESO could result in an apparent discrepancy for data that is otherwise within the 1% tolerance threshold identified by the IESO.

AEMA requests that before the audit process is finalized, that the IESO provide a full example audit to stakeholders (including data, statements, calculation, etc.) to show exactly how measurement data will be assessed as having being within the tolerance threshold during an audit, including the implications if the tolerance threshold is found not to have been met. Without seeing an example of how IESO intends to apply the full proposed audit procedure, AEMA cannot support the IESO's Audit proposal.

IESO Response

Thank you for the feedback. Please refer to the November 12 Demand Response Working Group materials, posted on the [stakeholder engagement webpage](#), for a discussion on how this feedback was considered.

Theme

HDR Testing Proposal

Stakeholder

AEMA

Summary of Feedback

Based on the understanding of the proposal for HDR Resource Testing, AEMA supports the proposed changes that establish eligibility for shorter test duration. However, AEMA is willing to continue to have discussions with IESO staff at the DRWG to ensure that the testing regime meets the needs of the IESO, while not adding additional and unnecessary costs to the DRMP and their contributors. Our understanding of the proposals:

- Settlement of event day will remain unchanged
- Participants are:
 - Eligible for a 1-hour test going forward, and
 - Will not be tested again in the period if the most recent 4 hour test was $\geq 85\%$ of the full capacity obligation (i.e. the amount cleared in the auction within deadband).

Once qualified for the 1 hour test, failing to achieve 85% of the full capacity obligation in a subsequent test will result in going back to a 4-hour test duration.

IESO Response

Thank you for the feedback. The IESO has provided a table in an appendix below that outlines various HDR test scenarios including different HDR test responses and the associated impact on future testing of that HDR resource.

Appendix: HDR Testing Proposal Scenarios

Summary of HDR Testing Proposal

1. An HDR's performance during testing will be assessed primarily based on capacity delivered during each hour of the activation period.
2. An HDR resource that successfully delivers its full capacity obligation during a four-hour activation (non-test-based¹ or test based) will be subsequently tested for a one-hour duration, otherwise, the four-hour duration requirement remains for the subsequent test.
3. An HDR resource's test will be maintained at a one-hour duration if the following criteria are met:
 - a. HDR resource has demonstrated successful delivery of bid quantity in all activations (non-test-based or test-based) since qualifying for reduced testing, where the bid quantity must be equal to its full obligation in at least one of two most recent activations (non-test-based or test-based).
 - b. HDR resource has not increased its capacity obligation by more than 5 MW from the last successful four-hour activation (non-test-based or test-based).
4. A second test within an obligation period will not be required if an HDR resource successfully delivers its full obligation through a non-test-based or test-based activation during that obligation period.

HDR Testing Proposal: Successful Delivery Criteria

Successful performance means the HDR resource delivers capacity for each hour of the activation period, within a 15% dead-band compared to its demand response bid quantity (e.g. at least 85% of the bid quantity must be delivered).

Successful deliver of bid quantity means if the HDR resource delivers capacity for each hour of the activation period, within a 15% dead-band compared to its demand response bid quantity (e.g. at least 85% of the bid quantity must be delivered).

Successful performance and delivery of bid-quantity will be determined using the following parameters:

- The load reduction across each 5-minute interval will be summed for each activation hour (all 12 intervals)
- The load reduction amount per 5-minute interval will be capped to 115% of HDR's energy bid quantity.

¹ Non-test-based activation can refer to in-market or emergency activations.

HDR Testing Proposal Scenarios

The following provides a guide with respect to the testing conditions that an HDR resource can expect for its next test (Column C). The next test conditions will be dependent on two conditions:

1. Whether the HDR resource qualified for reduced testing prior to the most recent activation (Column A). If the HDR resource qualified for reduced testing prior to its most recent activation, the conditions of the next test will further differ depending if the HDR resource successfully delivered its bid quantity or full obligation prior to the most recent activation and,
2. Performance results for its most recent activation (Column B).

Illustrative Examples

Case 3: An HDR resource that has not qualified for reduced testing prior to its most recent test (Column A) and has successfully delivered bid quantity for any required activation duration (i.e. bid quantity less than its full obligation (Column B)) will not qualify for reduced testing and will be tested for a duration of 4 hours for its next test (Column C).

Case 8: Prior to its most recent test, an HDR resource was qualified for reduced testing and successfully delivered bid quantity which was less than its full obligation (Column A). In its most recent activation, it also successfully delivered bid quantity which was less than its full obligation (Column B). The HDR resource will no longer qualify for reduced testing status and will be tested for a duration of 4 hours for its next test (Column C) because of the requirement to demonstrate successful performance in at least one of two most recent activations (non-test-based or test-based).

HDR Testing Proposal Scenarios

Case #1 – Column A: Conditions Prior to Most Recent Activation

Reduced Testing Status	Previous Activation Result Prior to Most Recent Activation
Not qualified for reduced testing.	N/A

Case #1 – Column B: Most Recent Activation (Non-test-based or Test-based)

Results	Bid Quantity
Successful performance during a four-hour test or four-hour non-test-based activation.	Equal to full capacity obligation

Case #1 – Column C: Next Test Activation Conditions (applicable to Column A and B)

HDR resource qualified for reduced testing status

- a. If activation was in the previous obligation period (HDR resource will be tested for one hour in the current obligation period).
- b. If activation was in the same obligation period – No further testing required in the current obligation period.

Case #2 – Column A: Conditions Prior to Most Recent Activation

Reduced Testing Status	Previous Activation Result Prior to Most Recent Activation
Not qualified for reduced testing.	N/A

Case #2 – Column B: Most Recent Activation (Non-test-based or Test-based)

Results	Bid Quantity
Successful performance during less than four-hour non-test-based activation.	Equal to full capacity obligation

Case #2 – Column C: Next Test Activation Conditions (applicable to Column A and B)

HDR resource does not qualify for reduced testing status. Next test will be for 4 hours.

Case #3 – Column A: Conditions Prior to Most Recent Activation

Reduced Testing Status	Previous Activation Result Prior to Most Recent Activation
Not qualified for reduced testing.	N/A

Case #3 – Column B: Most Recent Activation (Non-test-based or Test-based)

Results	Bid Quantity
Successful delivery of bid quantity for any required activation duration.	Less than full capacity obligation

Case #3 – Column C: Next Test Activation Conditions (applicable to Column A and B)

HDR Resource does not qualify for reduced testing status. Next test will be for 4 hours.

Case #4 – Column A: Conditions Prior to Most Recent Activation

Reduced Testing Status	Previous Activation Result Prior to Most Recent Activation
Qualified for reduced testing.	Successful delivery at full capacity obligation.

Case #4 – Column B: Most Recent Activation (Non-test-based or Test-based)

Results	Bid Quantity
Successful performance during a one-hour test or non-test-based activation (duration as dispatched).	Equal to full capacity obligation
Successful delivery of bid quantity for required activation duration.	Less than full capacity obligation.

Case #4– Column C: Next Test Activation Conditions (applicable to Column A and B)

If the most recent activation (Column B) represents the first activation of the obligation period, then there will be no further testing for the obligation period.

Otherwise, the most recent activation (Column B) occurred in the previous obligation period. Next test conditions are as follows:

- If change in obligation is less than 5MW since HDR resource qualified for reduced testing, the next test will be for 1 hour
- If change in obligation is greater than 5 MW since HDR resource qualified for reduced testing, the next test will be for 4 hours and HDR resource would need to re-qualify for reduced testing.

Case #5 – Column A: Conditions Prior to Most Recent Activation

Reduced Testing Status	Previous Activation Result Prior to Most Recent Activation
Qualified for reduced testing.	Successful delivery at full capacity obligation.

Case #5 – Column B: Most Recent Activation (Non-test-based or Test-based)

Results	Bid Quantity
Did not successfully deliver bid quantity for any required activation duration.	N/A

Case #5 – Column C: Next Test Activation Conditions (applicable to Column A and B)

HDR resource no longer qualifies for reduced testing. Next test will be for 4 hours.