

Stakeholder Feedback and IESO Response

Capacity Auction Enhancements – November 22, 2022

Following the Capacity Auction Enhancements General Session (November 22, 2022), the Independent Electricity System Operator (IESO) invited stakeholders to provide feedback on the materials presented.

The IESO received feedback from the following stakeholders:

- Advanced Energy Management Alliance
- Voltus Energy Canada Ltd.

This feedback has been posted on the Capacity Auction Enhancements engagement webpage.

Note on Feedback Summary and IESO Response

The IESO appreciates the feedback received from stakeholders. The table below responds to the feedback received and is organized by each topic. This document is provided for information purposes only. It does not constitute, nor should it be construed to constitute, legal advice or a guarantee, offer, representation or warranty on behalf of the IESO.

Engagement Topic 5.0 - Qualification: HDR Resources

Feedback	IESO Response
Stakeholders raised concerns on the implementation of the capacity qualification methodology for HDR resources that includes a future application of a performance adjustment factor (PAF) and an in-period obligation adjustment. Stakeholders believe that this proposal concentrates the risk around the capacity test by applying multiple penalties for one test and does not reflect on a resources'	<p>IESO is continuing to review and consider stakeholder feedback on the PAF design and will schedule additional engagement sessions to have further discussion on this design element.</p> <p>Overall, the methodologies for HDR and non-HDR capacity qualification aim to achieve transparency, accuracy and fairness across resource types while recognizing the unique characteristics of the specific resource participation model. The IESO's design for HDR capacity qualification was developed in close consultation with DR stakeholders and</p>

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<p>availability to deliver on another day.</p> <p>Stakeholders believe that the PAF does not achieve IESO’s goal of system reliability.</p>	<p>was revised multiple times after consideration of stakeholder feedback provided earlier in this stakeholder engagement.</p> <p>The IESO disagrees with the assertion that multiple penalties will be applied based on the results of a single test. The PAF is a performance de-rate based on historical capacity test performance data that applied to all resources in the capacity qualification process. The in-period adjustment adjusts the obligation and payments for HDR resources equal to what the resource actually delivered during a capacity test, if the resource did not deliver to its obligation/cleared UCAP. The capacity charge is the existing non-performance charge applied to any resource for failure to deliver to its obligation. The IESO is not proposing any changes to the capacity charge as part of the 2023 Capacity Auction enhancements.</p> <p>In response to DR stakeholder feedback that the current qualification and obligation assessment framework concentrates risk around the capacity test, the IESO will issue the notice to conduct the capacity test during the first two months of the obligation period (May – June in the summer obligation period and November – December for winter obligation period). Providing greater certainty regarding when the capacity test will be conducted will allow participants to better prepare their resources for the self-scheduled capacity testing week. Additionally, participants have sufficient opportunity to take appropriate measures to conduct a successful capacity test as the revised testing framework allows participants the ability to conduct multiple self-scheduled tests within the testing week. The IESO will also include this statement within the Testing Framework design memo and present it for review in the January 2023 engagement materials.</p>
<p>Stakeholders suggested that if the IESO proceeds with implementation of a PAF that will impact a resources’ future obligation, additional enhancements should be incorporated into the design enhancements to enable greater for flexibility in managing Demand</p>	<p>IESO conducted internal due diligence around the stakeholder request to enable more than one HDR resource per zone as well as provisions for monthly buy-outs.</p> <p>Allowing participants the flexibility to buy-out of their obligations monthly would change the capacity product the IESO is procuring through the auction, which is a 6-month summer and winter product. Changes of this nature should be carefully considered within the context of the objectives of the auction, potential impacts to ratepayers and the reliability of</p>

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<p>Response portfolios. These enhancements may include;</p> <ol style="list-style-type: none"> 1. Monthly buy-outs, 2. Multiple aggregated resources per zone 	<p>the system, and other enhancements proposed by stakeholders such as a shift to four, seasonal obligation periods. IESO is willing to explore this as part of upcoming discussions on future enhancements to the capacity auction.</p> <p>Additional stakeholder engagement is also required to understand the potential benefits of enabling multiple HDR resources per zone to stakeholders and the IESO, how these additional resources would be utilized by resource owners, and how effective implementation could be achieved. Considering this, the IESO will not be including these new proposals in the enhancements for the 2023 Capacity Auction, and instead will include this topic in future auction enhancements discussions expected to begin in early 2023</p>
<p>A stakeholder has requested the IESO to consider the benefit of avoided transmission and distribution losses in HDR qualification that behind-the-meter resources provide to the system.</p>	<p>IESO is not considering designing a process to calculate avoided line losses for each demand response resource at this time. IESO stated in the July 2021 SE Response to Feedback Document that accounting for line losses would require significant changes to the modelling of virtual resources and other measurement considerations. As part of future auction enhancements discussions expected to begin in early 2023, DR stakeholders may wish to outline the potential benefits to ratepayers, the system, and participants this proposal may provide for consideration.</p>
<p>A stakeholder is concerned about testing resources during the shoulder months as this will lead to HDR Aggregators being forced to clear at their minimum capacities and not their average capacities. Tests should occur in weather conditions that reasonably mimic conditions when a real HDR event could occur.</p>	<p>The ICAP value submitted into the Capacity Auction should reflect the maximum expected capability in MWs of a resource given ambient temperature and operating conditions, as specified by the Capacity Auction Participant. The IESO has made clear since the original 2022 Capacity Auction Enhancements Design Document was published that all Capacity Auction Participants should account for some uncertainty of these conditions, or generally the ability to achieve this maximum capability, during a capacity test. For example, if a gas-fired facility is tested in the spring or summer, it may not be able to generate the same maximum capability that it can generate during the colder, winter months when it is operating more efficiently due to ambient conditions.</p> <p>The IESO believes that providing greater certainty regarding when the capacity test will be conducted, in addition to the</p>

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	two weeks' notice that is already contemplated in the design, will allow participants the opportunity to better prepare their resources to successfully perform to their cleared ICAP during the self-scheduled capacity testing week.
A stakeholder requested clarification regarding the in-period adjustment design and whether the IESO would consider reversing the in-period adjustment if a resource performs at or above its UCAP during a subsequent activation. Reference was made to ConEd's Commercial System Relief Program (CSRP) which sets payments for each period based on a resource's performance in the most recent activation.	The request to consider incorporating the results of subsequent activations, in addition to capacity test activations, would introduce significant additional complexity into the design of the in-period adjustment. The time lag between a test/activation event, and the data being made available to the IESO for settlement and accounting of available supply in IESO real-time operations will need to be considered to ensure alignment with the purpose of the in-period adjustment. IESO intends to conclude the discussion on this topic in order to meet the implementation timelines for the 2023 capacity auction. However, this can be brought up as a part of upcoming discussions on future enhancements to the capacity auction.

Illustrative Examples on In-period Adjustment Proposal

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Stakeholders requested clarification on whether an in-period adjustment will be applied to a resource if the resource delivers its cleared ICAP value within the performance threshold of 10% but fails to deliver its cleared UCAP.	Since the in-period adjustment proposal is designed as an alternative to the availability de-rate for an HDR resource and no other resources are afforded a performance threshold before an availability de-rate is applied, HDR resources would be at an unfair advantage if a performance threshold were to apply to the in-period adjustment. Therefore, IESO will not allow any performance threshold when calculating the in-period adjustment for an HDR resource if it fails to deliver to its cleared UCAP value. The IESO encourages stakeholders to review the final Design Memo for HDR Qualification, which will include the most accurate description of the HDR qualification design element.
In the Illustrative examples document that was posted on the IESO website, IESO had stated that if a participant does not successfully schedule a capacity test for a	IESO does not agree with stakeholder suggestion to cap the in period adjustment for an HDR resource to 25% for failure to deliver below 25% of its cleared UCAP or for failure to submit test data to the IESO within the prescribed timeline. This would be inconsistent with the availability de-rate design

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<p>resource within the IESO-determined capacity test window or fails to submit the test data to the IESO within the prescribed timeline, a PAF of 25% will be applied and resource will be deemed to have forfeited the entire obligation amount for the obligation period. Stakeholders suggested that the 25% de-rate should also be applied to the in-period adjustment and requested that the IESO clarify the intended design.</p>	<p>for non-HDR resources as the availability de-rates for non-HDR resources are not capped at any specific threshold. HDR resources would be at an unfair advantage if a floor of 25% were allowed and not allowed for non-HDR resources, therefore the IESO will not incorporate this into the final design.</p>
<p>A stakeholder also noted that the IESO should not be applying any de-rate at the resource level as it reflects a misunderstanding of how aggregated resources are formed and function. Instead, IESO should de-rate at the contributor level and the de-rate should be a kW cap rather than a percent de-rate</p>	<p>The IESO remains committed to the role of the aggregator as the entity responsible for managing all aspects of contributor activities. In the context of an HDR resource, the HDR capacity qualification design is not intended to discourage poor performing contributors from participating in any aggregator’s future portfolio. Rather, it is intended to incentivize the aggregator to assemble and maintain an HDR resource that can reliably provide the capacity obligation and maximum capability. IESO has no intention of assessing performance and de-rating contributors at the sub-resource level.</p>

Engagement Topic 6.0 - HDR Contributor Outages/6.1 – Performance Thresholds

Feedback	IESO Response
<p>Stakeholder provided an example that explained the impact of a contributor’s equipment outage on the contributor’s ability to deliver and impact of a weather sensitive load on the baseline and how this inhibits the participant from updating bids to properly reflect the resource performance on the day of activation. Stakeholder proposes that contributors with equipment outages also be considered eligible under the solution for outage</p>	<p>The solution is designed to address the specific scenario where a contributor’s outage negatively effects the baseline calculation during IDAF window due to load being absent and returning within one hour of the activation event. In the example stakeholder provided, the outage of the BMG contributor’s generator does not impact the load profile of the contributor. If the load on the day of activation is consistent with their historical load profile, performance would be accurately assessed without the solution. The resource’s underperformance was entirely due to weather sensitivity and IDAF’s 20% threshold, which is not part of the scope of contributor forced outage management solution.</p>

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<p>management under the forced contributor outage solution.</p>	<p>Based on the definition of contributor forced outage, this contributor will not qualify for outage management.</p> <p>However, if the load of a BMG type contributor was on outage during IDAF and returns after IDAF window, it would still qualify since their baseline would be negatively affected.</p>
<p>Stakeholders expressed concerns over the revised performance threshold. Stakeholders believe that in light of all other changes, the performance threshold changes are overly punitive which may result in reduced HDR resource participation in the Capacity Auction and limiting the growth of the HDR resource. Stakeholders suggest that the performance thresholds should be put on hold until they can be evaluated in conjunction with all other amendments.</p>	<p>The design element related to performance threshold changes has not changed since the original 2022 Capacity Auction Enhancements Design Document posted for public comment in October 2021. IESO has engaged with stakeholders on the design of a process to address the potential negative impacts of forced contributor outages on performance assessment related to the baseline calculation based on the assumption that resolution of this issue would address stakeholder concerns with the performance threshold changes. IESO has made engagement timelines and next steps clear and is not able to engage further on this issue given the timing of when this feedback is being provided.</p>

Engagement Topic 7.0 - Demand Curve Review

Feedback	IESO Response
<p>Stakeholders are generally supportive of the enhancements to the demand curve parameters. Stakeholders also requested clarity on information used to determine ICAP</p>	<p>IESO appreciates this supportive feedback from stakeholders.</p> <p>IESO had provided more information on the information used to determine ICAP in its response to stakeholder feedback document posted for the October engagement session. The document was posted on the IESO public website under the Capacity Auction Enhancement webpage on December 16, 2022.</p>