

Stakeholder Feedback and IESO Response

Capacity Auction Enhancements – October 25, 2022

Following the Capacity Auction Enhancements General and Technical Sessions (October 25, 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 recognize the benefits of the IESO's new proposal including better alignment of financial incentives with desired behaviour, closer alignment with other UCAP methodologies, and less sensitivity to the HDR standby price trigger.	<p>IESO thanks stakeholders for the feedback on the preferred approach and has proposed a response below to address these remaining concerns and requests.</p> <p>To provide greater certainty and to allow participants to better manage their auction participation, the IESO proposes to schedule the capacity auction testing week within the first two months of the obligation period. By providing greater certainty to auction participants regarding the timing of the capacity auction test, participants can better plan and</p>

Feedback	IESO Response
<p>Concerns remain regarding the significant concentration of risk around the Capacity Test. To mitigate this risk, stakeholders suggest allowing for tests to be re-scheduled under extraordinary circumstances such as:</p> <ol style="list-style-type: none"> 1. transmission outages, 2. forced outages due to equipment failure or, 3. pre-planned plant outages <p>Stakeholders also requested an enhancement be considered to enable aggregators to register multiple HDR resources per IESO zone, and any de-rating should occur at the facility or utility account level and should be applied as a kW cap rather than a percent de-rate.</p>	<p>prepare their resources to deliver their full capability during the test, including coordinating the timing of planned outages. While the IESO-scheduled testing week can be expected to occur within the first two months of the obligation period, the IESO will maintain the ability to schedule the testing week later in the obligation period, if necessary. The IESO will include this statement within the Capacity Auction documentation and present it for review in the January 2023 engagement materials.</p> <p>With regards to the extraordinary scenarios that stakeholders believe would warrant rescheduling of the testing week, some of these scenarios are covered by the Allowable Exceptions already drafted in Design Memo 2.0 - Testing Framework and in section 5.3.3 of the draft version of Market Manual 12 posted on the Capacity Auction Enhancements engagement webpage.</p> <p>The Allowable Exceptions are outages caused by a third party, which could include (1) transmission outages, and force majeure events. (2) Planned outages can be better coordinated now that participants have greater clarity on when the capacity testing week can be expected to be scheduled. (3) Forced outages due to equipment failure represent unreliable capacity that the IESO is aiming to avoid procuring with the introduction of a capacity qualification process and revised testing framework. De-rates due to forced outages are accounted for in the capacity qualification methodologies for other eligible resource types.</p> <p>Additional stakeholder engagement is 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 this new proposal 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>Applying de-rates at the facility or utility account level is the responsibility of the aggregator when determining the amount of demand response each contributor can be expected to contribute to the overall resource.</p>

Feedback	IESO Response
<p>A stakeholder is concerned that if the IESO schedules the only test week within the shoulder months, this could dramatically impact HDR performance and suggests the IESO create 4 capacity seasons to better enable all resources to provide the IESO with capacity values that reflect their ability to perform in each season.</p>	<p>HDR resources should only be offering capacity that can be reliably provided in all months of the currently defined obligation periods.</p> <p>IESO will not consider this for the 2023 Capacity Auction, but may consider investigating the benefits of shifting to a four-season capacity auction as part of the future auction enhancements discussion, if stakeholders believe there is significant benefit to ratepayers, participants, and the IESO.</p>
<p>Stakeholders requested confirmation about whether the current capacity charge will apply to the dispatch test and not the capacity test.</p> <p>Confirmation was also requested as to how the IESO plans on handling settlement of the in-period adjustment if data submissions from the capacity test occur after the end of the obligation period.</p>	<p>The current application of the capacity charge will not be changed as a result of the proposed design for the in-period adjustment. As outlined in Memo 2.0 – Testing Framework, Memo 3.0 – Charges and True-Ups, and draft amendments to Market Manual 12, the capacity charge will be applied when a resource fails to deliver its cleared ICAP, within the applicable performance threshold, during a capacity auction test.</p> <p>The dispatch charge will continue to apply to HDR resources that fail to follow dispatch instructions, including during market activations and the proposed Dispatch Test.</p> <p>The IESO has provided a document with some example scenarios to provide greater clarity and understanding to stakeholders on the in-period adjustment proposal and how it may interact with other existing and proposed capacity auction features.</p>
<p>Some stakeholders continue to disagree with the approach to HDR qualification that introduces a Standby Availability Charge for HDR resources.</p> <p>One stakeholder believed that the 3x availability penalty is reasonable and is an improvement from prior proposals.</p>	<p>IESO has revised its preferred proposal from the standby availability charge to the in-period adjustment based on discussions with stakeholders in this engagement. The IESO appreciates this feedback on the 3x availability penalty and the input stakeholders have provided to arrive at a proposed design for HDR qualification that reflects a balance of stakeholder and IESO input.</p>
<p>Stakeholders would like to better understand IESO’s issue with the</p>	<p>As noted in this October 8, 2020 Demand Response Working Group information session, bids from a significant percentage</p>

Feedback	IESO Response
<p>October 2022 stakeholder proposal to use the lowest capacity offered from historical HDR bids from the most recent seasonal obligation period to establish the Availability De-rate. IESO has stated that those bids can't be relied upon. AEMA would like to see the data which indicates to the IESO that bids are not accurate enough to be relied upon and would be interested to discuss with the IESO ideas to improve bid accuracy to meet IESO's requirements.</p>	<p>of HDR resources were reduced after receiving standby and activation notices and in some instances, delivered performance did not align with either the original or reduced bid amounts. IESO also observed similar behaviour during recent capacity tests in June and October 2022. This behaviour suggests standing bids submitted by HDR resources may not be reflective of actual capability. More details of the June and October 2022 capacity test results will be provided in an early 2023 engagement session.</p> <p>In response to this stakeholder proposal, IESO conducted analysis on 2021 HDR historical bid data to determine the potential availability de-rates that would result from use of this data as suggested under the proposal. Representative availability de-rates were calculated for a sample of 31% of all participating HDR resources by dividing the lowest resource-specific MW bid amount by the highest. For almost half (45%) of the resources sampled, there were no bid changes which would result in no availability de-rate. For the remainder of HDR resources sampled, representative availability de-rates varied between 6% and 97%. This analysis and the bidding behaviour and performance demonstrated in the capacity test results indicate that the use of historical bid data to determine an availability de-rate in capacity qualification would introduce a high degree of variability, inconsistency and poor reliability for HDR resources.</p>
<p>A stakeholder noted the HDR qualification proposal fails to consider the benefit of avoided transmission and distribution losses that behind-the-meter resources provide.</p>	<p>IESO is not considering designing a process to calculate avoided line losses for each demand response resource at this time. As stated previously, accounting for line losses would require significant changes to the modelling of virtual resources and other measurement considerations.</p>

Engagement Topic 7.0 – Demand Curve Review

Feedback	IESO Response
<p>Stakeholders are supportive of the process of updating the Demand Curve.</p> <p>Stakeholders are seeking clarity on how the UCAP for the reference technology was calculated. Specifically, whether the calculation is inclusive of the seasonal de-rate for a Gas CT plant in Ontario.</p> <p>Stakeholders are concerned that ICAP and nameplate capacity for the reference technology were used interchangeably in the development of the reference price, resulting in an incomplete or inaccurate update to the reference price.</p>	<p>The reference price developed in 2019 was based on the summer ICAP of the reference technology. The summer ICAP reflects the seasonal capability of the reference resource and was chosen over a seasonally differentiated reference price since Ontario’s peak capacity needs occur in the summer and therefore, it positions the demand curve to be able to attract the needed capacity under summer conditions while providing resources the opportunity to earn sufficient revenues for the entire year based on summer pricing. At that time, the IESO had considered seasonal demand curves but decided the extra complexity was not warranted for the value that could be achieved.</p> <p>The conversion from ICAP to UCAP assumes an Equivalent Forced Outage Rate on Demand (EFORd) of 5.13% based on the EFORd of the reference technology in Ontario, per the 2021 Annual Planning Outlook. The seasonal ICAP reflects the capability of the resource based on ambient conditions and the methodology for deriving EFORd for thermal generators accounts for both forced and planned outages and forced de-ratings.</p> <p>ICAP and nameplate capacity were not used interchangeably. The proposed reference price does take into account the seasonal impacts on operating capabilities of the reference technology’s ICAP.</p>
<p>Stakeholders agree changes to the demand curve should ensure competition from imports, but not at the risk of the growth of Ontario-based resources.</p>	<p>IESO’s objectives for the demand curve review are outlined in Design Memo 7.0 - Demand Curve Review and provided here:</p> <ol style="list-style-type: none"> 1. Procure sufficient capacity to meet incremental resource adequacy needs 2. Provide a stable and appropriate investment signal to market participants 3. Drive competition and ratepayer value <p>Updates to the demand curve are expected to provide the opportunity for higher clearing prices to attract more</p>

Feedback	IESO Response
	<p>capacity from all resource types during periods of greater capacity need and are not expected to impede the growth potential of Ontario-based resources. The results of the 2022 Capacity Auction demonstrate that by introducing greater liquidity and competition, the Auction has the ability to achieve competitive price outcomes with a diverse portfolio of resources while meeting growing target capacities. The target capacity continues to be set based on identified incremental capacity needs and are set independent of import limits.</p>
<p>Stakeholders believe the issue of target clearing volumes must also be addressed as capacity continues to be procured through alternative mechanisms, preventing the Capacity Auction from being the stable long-term investment signal that it is in many markets across North America.</p>	<p>The IESO’s annual capacity auction continues to demonstrate it is capable of procuring increasing amounts of capacity at competitive prices each year. As system needs continue to grow, the capacity auction will increasingly be relied upon to address needs during the transitional period, until other mechanisms begin their delivery periods. Once the other mechanisms have been executed, the capacity auction is expected to continue to serve primarily as a balancing mechanism, adapting on a season-to-season or year-to-year basis to changes in reliability needs that may be driven by planned outages, greater than expected demand growth, reductions in supply availability or delays in new resources reaching their commercial operation dates. Target capacity for the Capacity Auction will continue to be published in the Annual Acquisition Report.</p>

Market Rules and Manuals

Feedback	IESO Response
<p>Stakeholders indicated they would provide comments upon review of Batch 2 of the Market Rule Amendments for the 2023 Capacity Auction.</p>	<p>IESO thanks stakeholders for the feedback and looks forward to comments.</p>

General Comments

Feedback	IESO Response
<p>Stakeholders are concerned that any changes related to the HDR Measurement Data Audit will not go into effect until the 2024 Capacity Auction.</p>	<p>Due to the potential scope required to conduct a comprehensive review of the Measurement Data Audit program, IESO proposes to include discussions on this topic in future auction enhancements discussions expected to begin in 2023. The IESO will consider including further discussion on this topic through an engagement to address HDR-related topics that have been identified as outside the scope of the Capacity Auction Enhancement engagements. We expect to propose engagement plans in early 2023.</p>
<p>Stakeholders do not agree with IESO's assertion that a week-long contributor outage could have little to no impact on a resource's ability to perform during an event. Stakeholders provided an illustrative example of a scenario where the contributor has equipment on outage that prevents them from curtailing, but are still operating (i.e., consuming).</p>	<p>IESO thanks stakeholders for the illustrative example. As previously communicated, the contributor outage solution will address the main issues caused by large contributor forced outages as identified by stakeholders but is not meant to address every potential scenario that could occur. In this example, the undercredit for capacity delivered is due to the higher resource load on the day of activation and the 20% cap on the baseline adjustment from the in-day adjustment factor. In the revised proposal for contributor outages, IESO has more specifically defined what constitutes a forced outage, and indicates the maximum length of the outage is 15 calendar days.</p>