

Stakeholder Feedback and IESO Response

Capacity Auction Enhancements

Following the Capacity Auction Enhancements Webinar on September 18, 2024, the Independent Electricity System Operator (IESO) invited stakeholders to provide comments and feedback on the materials presented.

The presentation materials and stakeholder feedback submissions have been posted on the IESO [Capacity Auction engagement webpage](#). Please reference the material for specific feedback as the information below provides excerpts and/or a summary only.

Testing and Emergency Activation Results

Stakeholder Feedback	IESO Response
<p>Stakeholders indicated that they want to understand how generation-backed imports (GBI) performed during emergency activations, while also preserving sensitive or confidential information. Stakeholders also indicated that HDR resources performed quite well during the June 19, 2024 emergency activation.</p> <p>Stakeholders also believe that real-time curtailment may be understated as a result of the current baseline methodology and in-day adjustment factor. Stakeholders also noted that HDR resource obligations are often undersized in comparison to available real-time curtailment, resulting in over-delivery during tests or emergency activations. In addition, stakeholders noted that there are currently no incentives for resources to increase real-time bids above the resource's cleared ICAP value since HDR resources are not paid for over-delivered capacity during emergency activations.</p>	<p>Thank you for feedback related to summer 2024 emergency activation results.</p> <p>When reporting on future emergency activations, the IESO can consider ways to include import activation results in an aggregated category that preserves commercially sensitive or confidential information. We are not able to provide any additional information on 2024 emergency activations due to the risk of revealing confidential, market participant-specific information.</p> <p>As discussed during recent engagement sessions, the IESO's proposed 2026 enhancements includes a focus on incentivizing more accurate and reliable performance from Capacity Auction resources, including during emergency</p>

	events. The IESO will plan to discuss how design of HDR participation requirements influences performance, including the considerations indicated in this feedback.
--	---

2025 Enhancements

Stakeholder Feedback	IESO Response
<p>Stakeholders appreciated the IESO's prioritized focus on the tie-break solution and believe that the tie-break mechanism can be implemented for the 2024 auction.</p> <p>Stakeholders believe that addressing any outstanding questions related to the data submission audit is a key priority to complete in 2025.</p>	<p>The IESO appreciates stakeholder support for the accelerated investigation of the tie-break solution and will aim to implement this change for the 2025 Capacity Auction.</p> <p>The IESO understands the concerns from stakeholders regarding the data audit and is considering options to address these concerns. Proposals will be brought forward in a future engagement.</p>

Physical-Virtual Obligation Transfers: Proposal

Stakeholder Feedback	IESO Response
<p>Stakeholders acknowledged their support for this initiative but recommended that it could be implemented at any time in the obligation period, and did not need to align with annual auction timelines. In addition, stakeholders recommended that transfers should be enabled for resources that did not qualify capacity in the pre-auction period.</p>	<p>Thank you for feedback and support of this enhancement.</p> <p>Changes to the obligation transfer process will require internal implementation processes and testing to ensure a seamless and reliable launch. In addition, any required changes to market rules/manuals need to align with annual auction timelines for consistency with the point-in-time rules that are operative on the first day of the auction period for each annual Capacity Auction.</p> <p>Under the proposed enhancement, transfers of capacity obligations will only occur between resources that have completed the annual capacity qualification process. In addition, the transferee must have surplus qualified</p>

Stakeholder Feedback	IESO Response
	<p>capacity available to accept the transfer. For clarity, capacity that has been qualified but was not offered or did not clear and become part of an obligation in the auction would be considered surplus qualified capacity. The participant who has qualified this capacity would therefore be an eligible transferee for that surplus qualified capacity.</p>

Review Buy-out Charge: Proposal

Stakeholder Feedback	IESO Response
<p>Stakeholders noted that the buy-out process is often the only method of balancing resource portfolios prior to the start of the obligation period. Stakeholders believe that the IESO's high-level design was too punitive, with too much additional financial burden on participants seeking to buy-out of an obligation. Stakeholders recommended an alternate formula for the buy-out charge that meets the objective of the IESO of increasing the charge while preventing it from being drastically misaligned with similar charges assessed in other jurisdictions.</p> <p>Stakeholders also noted that balancing auctions or enabling transfers to resources that did not qualify capacity in the pre-auction period would also be beneficial enhancements for the IESO to consider.</p>	<p>Thank you for your feedback and recommendation.</p> <p>After review of this stakeholder suggestion, the IESO agrees with the modified stakeholder proposal and believes it represents a modest increase to the charge amount that is expected to establish a greater incentive for participants to fulfill their commitments while not also creating an incentive for participants to exploit other means to avoid the buy-out process altogether.</p> <p>The IESO acknowledges the buy-out process can sometimes be a necessary, last-resort option available to participants to balance their commitment in the event it cannot be fulfilled or a transfer arranged. Recognizing that this stakeholder suggestion achieves both the IESO's objectives for this enhancement and considers stakeholder concerns, the IESO has revised the draft design from the September engagement to reflect the stakeholder suggestion which will modify the percentage value in the buy-out charge. Please refer to the design memo</p>

Stakeholder Feedback	IESO Response
	<p>that will be posted prior to the November engagement session for more details.</p> <p>The IESO intends to continue engaging with stakeholders on additional potential options under the Commitment Management Options enhancement package following the conclusion of engagement on the 2025 Capacity Auction enhancements. At this time, the value and significant scope of investigating a rebalancing auction is outweighed by the potential benefits of other enhancements that are being prioritized for investigation.</p>
<p>Stakeholders noted that increasing prudential requirements could be a barrier to participation in the auction, since it adds additional financial burden. In addition, stakeholders recommended that in some circumstances the IESO should accept collateral (instead of a letter of credit) as prudential.</p>	<p>The IESO recognizes and understands the concerns around increasing the prudential requirements. There will be no changes to the current capacity auction prudential requirements under the updated design. Please refer to the posted design memo for additional details.</p> <p>Please note, a letter of credit is the only form of prudential accepted by IESO.</p>

Review Deposit and Forfeiture Rules: Proposal

Stakeholder Feedback	IESO Response
<p>Stakeholders supported this enhancement.</p>	<p>Thank you for your feedback and support of this enhancement.</p>

New Dispatchable Load Registration

Stakeholder Feedback	IESO Response
<p>Stakeholders recommended that resources intending to become a dispatchable load after clearing the auction as a virtual resource should not be required to register and qualify capacity twice (i.e., once for each new/old resource type).</p> <p>Stakeholders also noted that only one deposit should be required for a virtual resource that will transfer its obligation to a new dispatchable load resource type post-auction. In addition, stakeholders recommended that auction deposits should be based on the quantity of capacity offered into the auction instead of the total quantity of capacity that was qualified in the pre-auction period.</p> <p>As the value of capacity to the IESO increases, stakeholders believe that the IESO should focus on enhancing opportunities to participate in the auction, remove barriers, encourage reliable participation, and streamline the auction authorization/qualification process.</p>	<p>Thank you for your feedback. This enhancement will require the registration of two resources prior to the auction due to the unique capacity qualification and registration differences between the existing non-dispatchable load/physical hourly demand response (HDR) resource, and the newly registered dispatchable load resource. In response to previous stakeholder suggestions on this enhancement, the IESO will only require a single deposit for the two capacity auction resources in scope of this enhancement.</p> <p>The deposit calculation cannot be based on a resource's auction bid quantities since they are not known prior to the auction when the deposit is required. A resource's qualified MWs are expected to be the closest representation of a resource's capability and therefore, an appropriate basis for the deposit calculation.</p> <p>The IESO agrees and welcomes future engagement to streamline and simplify Capacity Auction participation, where possible, as it is broadly aligned with the Capacity Auction Enhancements objective statement.</p>

High-Level Design (HLD): Capacity Auction Participation Model for Wind and Solar Resources

1. Draft HLD: Capacity Qualification

Stakeholder Feedback	IESO Response
Stakeholders indicated that the IESO should also consider allowing other capacity auction resource (CAR)	Thank you for providing feedback on these items. The IESO seeks to

Stakeholder Feedback	IESO Response
<p>types to use historical meter data, including from emergency activations, in the previous obligation period to demonstrate that the resource can deliver to its cleared ICAP instead of completing a capacity test in each obligation period.</p> <p>Stakeholders recommended that availability charges should be applicable to VG resources. Stakeholders also indicated that availability charges should be based on the VG's scheduled capacity in each obligation hour, and not the offered capacity, since the process for scheduling VG resources is unique compared with other market resources.</p>	<p>enable participation from VG resources in a way that is equitable and competitive with all other capacity resource types while also recognizing their unique characteristics. The Capacity Auction qualification methodologies for all resources, including VG resources, were developed through engagement with stakeholders and consider the unique attributes of each resource type.</p> <p>The primary reason for the recommended VG installed capacity (ICAP) submission and assessment process is due to the fuel type, unique characteristics and technical limitations of this resource type, that prevents them from reliably completing the self-scheduled capacity test. In prior feedback, stakeholders argued that a self-scheduled four-hour capacity test was not appropriate for VG resources, and that historical performance should be used to qualify VG resources. IESO subject matter experts also agreed imposing the current capacity test for VG resources was not appropriate given their characteristics.</p> <p>The Capacity Obligation Availability Charge (CT 1315) will be applied to variable generation resources in the same manner as it is currently applied to all other resources.</p> <p>Applying the availability charge based on a resource's schedule, instead of offers, would be a significant departure from current capacity market design and is</p>

Stakeholder Feedback	IESO Response
	<p>inconsistent with how the charge is applied to all other resources. The appropriateness of such a proposed change would need to be assessed for all resource types, not just VG resources. This is outside the scope of the 2025 Capacity Auction Enhancements work plan.</p> <p>Moreover, the availability de-rating factor (ADF) for VGs considers both outages (forced and planned) and their average historical availability due to lack of fuel. As such, VG resources are expected to be compensated commensurately for their availability through their UCAP values.</p>

2. Draft HLD: Capacity Testing and PAF

Stakeholder Feedback	IESO Response
<p>Stakeholders noted that the IESO did not fully explain the proposed VG qualification process. Specifically, they asked how a VG's demonstrated historical performance would be measured and why the availability de-rating factor (ADF) uses a median in the formula (instead of the mean).</p>	<p>Thank you for providing feedback on these items. Please refer to the design memo that will be posted prior to the November engagement session for additional details about the VG qualification process, including how a VG's demonstrated historical performance is measured.</p> <p>In general, the median is a more robust measure than the mean since it mitigates the impacts of outlier values in data sets.</p>

Stakeholder Feedback	IESO Response
<p>Stakeholders noted that it is important for auction resources with different characteristics to be treated equitably and emphasized that DR participants provide peak capacity to the grid.</p> <p>Stakeholders believe that VG capacity is non-incremental and already considered in the IESO's Annual Planning Outlook (APO). In addition, stakeholders noted that the setting of auction targets and zonal limits must ensure that capacity resources are not being excluded from the capacity market in favour of VG resources.</p>	<p>Thank you for providing feedback on these items. The IESO looks at overall resource adequacy needs identified in the IESO's Annual Planning Outlook (APO) as a first step to determine overall resource acquisition targets.</p> <p>The contribution of existing and committed resources is only considered until their contract or commitment period ends. As more existing resource contracts expire, including wind and solar resources, the IESO's overall supply needs increase. To meet these needs, the IESO then determines acquisition targets to allocate to each of the mechanisms within the IESO's Resource Adequacy Framework (RAF). As mentioned in previous engagement sessions, the Capacity Auction is expected to meet a growing share of these forecasted supply needs over the next several years, as the short-term, balancing mechanism in the Resource Adequacy Framework.</p>

3. Draft HLD: General Feedback

Stakeholder Feedback	IESO Response
<p>Stakeholders noted that future auction targets must enable the IESO to secure an appropriate mix of resources to provide both system value and grid reliability. Stakeholders also had questions about cross participation in the capacity auction and other IESO procurements. In addition, stakeholders asked the IESO to provide guidance about the number of potentially eligible VGs that could participate in the auction.</p>	<p>Thank you for providing feedback on these items.</p> <p>The IESO is preparing a number of competitive opportunities for existing wind and solar resources to extend operations for facilities that are approaching the end of their contracts, including enabling future Capacity Auction participation.</p> <p>Please refer to the IESO's 2024 Annual Planning Outlook (APO) and/or the IESO's Supply Overview webpage for more information about the number and timing</p>

	<p>of VG resources that are reaching their contract end dates.</p> <p>The VG design memo that will be posted prior to the November engagement session will include additional details about VG eligibility including cross participation in RFP procurements/contracts. For clarity, Capacity Auction eligible resources cannot hold a capacity obligation and a commitment under an IESO long- or medium-term RFP or bridging extension for the same period. Capacity Auction eligible resources can, however, hold a capacity obligation during the IESO long- or medium-term RFP forward period.</p>
--	---

High-Level Design: Auction Tie-Break Mechanism

Stakeholder Feedback	IESO Response
<p>Stakeholders generally supported this enhancement. Stakeholders believe that the high-level design (as presented at the September 2024 engagement session) may incentivize virtual HDR resources to offer capacity equal to the total zonal virtual limit to maximize the amount of capacity that clears in the auction.</p>	<p>Thank you for your comments. Design updates to mitigate this situation have been considered in the design.</p> <p>Please refer to the design memo that will be posted prior to the November engagement session.</p>
<p>Stakeholders believe that the proposed new tie-break mechanism will address concerns raised previously about tie-break results. Stakeholders indicated that the solution needs to consider the outcome of resulting capacity that is less than 1 MW, and thus ineligible to participate. Stakeholders also recommended considering more inputs to the tie-break solution in the longer term, including consideration of the resource's Performance Adjustment Factor (PAF) or other priority ranking in the tie-break methodology.</p>	<p>Thank you for these comments and suggestions. The auction engine optimization cannot result in awarding an obligation of less than 1 MW due to the existing minimum participation requirements in the IESO-administered market. For this reason, the tie-break solution will not allocate capacity to a tied offer if doing so results in a total capacity obligation of less than 1 MW.</p> <p>The longer-term suggestions identified will not be possible to implement for the 2025 auction. The IESO may consider longer-</p>

	term suggestions in future enhancement discussions.
--	---