

# Feedback Form

## Capacity Auction – September 18, 2024

### Feedback Provided by:

Name: Heather Sears

Title: VP, Market Services

Organization: Workbench Energy

Email: [REDACTED]

Date: October 1, 2024

Following the Capacity Auction Enhancements Webinar on September 18, 2024, the Independent Electricity System Operator (IESO) is seeking feedback and comments on the items discussed during the session. The webinar presentation and recording can be accessed from the [Capacity Auction Engagement web page](#).

To promote transparency, feedback submitted will be posted on the Capacity Auction Engagement webpage unless otherwise requested by the sender.

- ☐ **Yes – there is confidential information, do not post**  
☒ **No – comfortable to publish to the IESO web page**

**Please submit feedback to [engagement@ieso.ca](mailto:engagement@ieso.ca) by October 2, 2024.**

## Testing and Emergency Activation Results

Question	Stakeholder Feedback
Do you have any comments regarding the summer 2024 testing results?	<u>We are pleased to see the improvement in test results as a result of the well-stakeholdered updated program rules.</u>

Do you have any comments regarding the summer 2024 emergency activation results?

#### Capacity Generation & Import Resources

Understanding that to preserve sensitive or confidential information, IESO has to aggregate results between generation and imports, it would still be beneficial overall to understand whether generation-backed imports are providing the value that internal, clean, emissions-free resources would otherwise provide. The results of the 2023 auction did lead to some internal Ontario resources not receiving obligations despite their bids being economic because IESO reached some global limits, having selected generation-backed imports.

#### HDR

Unlike generation or storage resources, HDR is variable. Commercial and Industrial loads' demands change as a function of markets unrelated to electricity. These variable loads strive to participate in the capacity auction and market in such a way as to provide the product IESO seeks and have proven success through the testing framework.

The design of the capacity program encourages HDR resources to bid into the auction load that can be reliably curtailed throughout a 6-month period. This will result in obligations that are often undersized in comparison to available real-time curtailment, resulting in over-delivery during tests. However, the erosion of baselines due to the high 15 of 20 methodology and in-day adjustment factor means that a real-time curtailment may measure, by program rules, a lower curtailment than was actually achieved. This discrepancy will exist as long as the baseline methodology and capacity market framework maintains the penalties and incentives in the current design.

Additionally, the IESO has designed the HDR resource with very strong incentives for the resources to provide at least their obligation during both test and emergency activations. For those resources who have overperformed, the program as currently designed provides only downside (in the form of penalties and test failures) to increasing their daily bid above their cleared ICAP and no upside (there is no opportunity for being paid for the delivered MWs). As discussed during the program design and acknowledged by the IESO, this leads many participants to

Question	Stakeholder Feedback
	provide a larger reduction than their obligation as a direct result of the IESO's design decisions which encourage conservatism in participant's assumptions on amount of curtailment they will provide. If the IESO wants to see alternative behaviours, it is important to first look at the structure of the HDR program to ensure it aligns with the IESO's goals.

## 2025 Enhancements

Question	Response
Do you have any comments regarding the enhancement prioritization for 2025?	We appreciate the acceleration of the tie-break mechanism and believe it could be implemented as early as the 2024 auction.

## Physical-Virtual Obligation Transfers: Proposal

Question	Response
Do you have any feedback on the current proposal to enable obligation transfers between physical-virtual resource types?	We support this adjustment. We believe that the timeline of this implementation does not need to align with annual auction timelines, but can be implemented at any time within an obligation period.
Is there any other information the IESO should consider including in the final high-level design?	<p>Enabling transfers between dispatchable and non-dispatchable resources, as well as between physical and virtual resources, will open up the pool of available transferees.</p> <p>Further work can be done to enhance the pool of transferees through consideration of the qualification of participants that did not participate in the auction, but have and can demonstrate the ability to accept a transfer, to provide prudential support, and to authorize as CMP beyond the annual auction timelines.</p>

## Review Buy-out Charge: Proposal

Question	Response
----------	----------

Do you have any feedback on the current proposal to amend the way in which the buy-out charge is calculated?	<p>We understand the incentive to review this buy-out charge, and agree that the value of capacity must be respected.</p> <p>Enabling balancing auctions or enhancing transfer capability to include resources that did not participate in the capacity auction would work in concert with the buyout penalty to achieve this common goal.</p>
Would an increase in prudential requirements to cover the risk of a participant defaulting on the buy-out charge? Would this create challenges for participation in the Capacity Auction? If so, describe how.	<p>This would create challenges in two ways:</p> <p>First, it penalizes participants who are reliable participants and have no history of buy-out. If IESO were to increase prudential requirements, it would have to be done selectively as a function of a CMP's history, and not as an incremental barrier to participation for new or existing CMPs who have no performance or buy-out history.</p> <p>To participate directly in the IESO Capacity Auction and Market, the prudential process has proven to be complex and challenging. There should be a threshold of prudential support below which IESO will accept collateral other than an LC, allowing participants to avoid holding small LCs, updating values year-over-year, or adding incremental LCs on top of existing prudential support held by IESO for market participation.</p>

## Review Deposit and Forfeiture Rules: Proposal

Question	Response
<p>Do you have any feedback on the current proposal to eliminate the obligation forfeiture process?</p> <p>Are there other ways the IESO could screen participants during the pre-auction period to verify a participant's likelihood to fulfill a capacity obligation?</p>	<p>The proposal does not seem unreasonable.</p> <p>IESO has more insight into capacity buy-outs than most stakeholders.</p>

## New Dispatchable Load Registration

Question	Response
<p>Do you have any comments regarding the formalization of the registration process for new dispatchable load resources?</p> <p>Would you pursue this option to become dispatchable with the understanding that deposits must be posted for each capacity auction resource during qualification, which can be returned upon request following the completion of the registration process?</p> <p>Is there any other information the IESO should consider including in the final high-level design?</p>	<p>Please review the obligation to post multiple deposits if qualifying two variations of one resource, when only one bid will be submitted.</p> <p>This situation is parallel to the scenario where a participant qualifies a capacity for the auction that is greater than what is ultimately bid. In that case, the IESO requires the deposit be submitted for the qualified capacity. IESO should consider enabling a CAP to submit an auction deposit commensurate with the bid quantity, not qualified quantity.</p> <p>—</p> <p>As the value of capacity to IESO increases, the focus should move to enhancing opportunities to participate, removing barriers, and encouraging reliable participation.</p> <p>The timelines for authorization, qualification, deposit and participation in the auction are such that engagement with IESO must start 4-5 months ahead of the auction, and 9-10 months ahead of the obligation period.</p> <p>Enabling alternative mechanisms to qualify as a CMP without unsatisfied pre-auction qualified capacity would enable a more robust capacity transfer process, minimizing buy-out risk.</p> <p>Alternatively, streamlining the process and enabling more frequent auctions, or short-term balancing auctions may serve to satisfy the objective of reliable capacity.</p>

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

### 1. Draft HLD: Capacity Qualification

Question	Response
Do you have any feedback regarding the proposed capacity qualification methodology for variable generation (VG) resources?	Loads are also variable, with the markets for products fluctuating over time, with electrical loads at sites varying with production schedules and activities, with

	<p>heating/cooling load varying across a day, week, month, season, etc.</p> <p>If IESO is able to develop a qualification methodology that is favourable for variable generation, it should be considered as a methodology for variable loads as well.</p> <p>During the IESO's presentation on the rationale for the VG resource participation design, the IESO stated that using the VG's proven performance from verified meter data in the previous season is adequate for determining the PAF and consistent for the current Capacity Auction design principals. Given this view, we feel it is important to explore applying the same logic to the other resource types that participate in the auction. If other resources have also demonstrated their ability to meet their ICAP in the previous season with verified meter data, it seems consistent treatment should apply to those resources and have their ICAP set to 1.0 without the requirement for completing the Capacity Test in the new period. This logic could also be applied to HDR resources which have received market or emergency activations in the previous period as that provides the IESO with direct, verifiable performance data of equivalent quality to the VG's meter data.</p> <p>Additionally, during the presentation, there was discussion of how Availability Charges will apply to the VG resources. In order to ensure a level playing field across resource types, it is important that the IESO maintains the application of the same Availability Charges which apply to all other resources in the Capacity Auction. Specifically, the Availability Charges should apply to the scheduled capacity in each obligation hour for VG resources and not the offered capacity since the process for scheduling VG resources is unique compared with other market resources.</p> <p>Overall, we feel it is important to maintain competitive balance in the Capacity Auction across resource types and continue to apply the concepts as fairly and transparently as possible while recognizing the unique characteristics of various resources.</p>
--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## 2. Draft HLD: Capacity Testing and PAF

Question	Response
<p>Do you have any feedback regarding the proposal for VG resources to prove their maximum capability using historical performance data?</p>	<p>Qualification, Testing and Measurement. Feedback on each variable is outlined below.</p> <p><math>UCAP = ICAP \times ADRF \times PAF</math></p> <p><u>ICAP</u></p> <p>IESO stated on slide 59 that ICAP values are submitted by CAPs, "limited to the historically demonstrated performance in the most recent applicable seasonal obligation period and availability window". IESO did not clearly explain how that demonstrated performance is measured.</p> <p>Does this mean IESO uses the historical AQEI + Foregone Energy for availability windows for the summer and winter? Where a VG is new to the auction, is their historical performance from prior years included?</p> <p>Is IESO going to use average historical generation across the whole availability window, across a four-hour block, across a single hour, or will it be the minimum contribution hour across the whole availability window, a four our block, etc.</p> <p><u>Availability Derating Factor</u></p> <p>Can IESO explain why median is proposed in place of mean?</p> <p><u>PAF</u></p> <p>IESO will use PAF of 1 since the historical performance is accounted for in the ICAP. This is hard to evaluate until the ICAP calculation is better defined.</p>



<p>Are any of the proposed requirements incompatible with the performance capabilities of VG resources? If so, please indicate which requirements cannot be met and why they are incompatible with VG resources.</p>	<p>The concern is more around the equitable treatment of resources with different characteristics providing the same product. The capacity auction framework is clearly designed to procure 4-hour duration capacity on business days in the availability window. VG resources are typically procured as energy resources in PPA or E-PPA structures.</p> <p>Using the auction as a bridge between procurements is not unreasonable, however, it is important to recognize that for many auction participants, there is no other procurement opportunity. A DR participant that is not successful in the auction results in a loss of peak capacity to the grid.</p> <p>In attempting to align the characteristics of the technology into the existing definition of the product procured by the auction, IESO risks two things:</p> <ol style="list-style-type: none"> <li>1. Excluding resources providing incremental capacity to the grid by procuring non-incremental resources whose contributions are already considered in the IESO's APO.</li> <li>2. Introducing inequitable treatment of resources both in testing and in the allocation of performance charges, eroding trust and value of the capacity market.</li> </ol> <p>The setting of auction targets and zonal limits must ensure that capacity resources are not being excluded from the market in favour of resources that are not achieving the goal of the capacity auction: to secure peak capacity.</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

### 3. Draft HLD: General Feedback

Question	Response
<p>Is there any other information that the IESO should consider including in the final high-level design for VG resource participation in the Capacity Auction?</p>	<p>If IESO does move forward to enable VG resource participation in the Capacity Auction, IESO must ensure that the capacity auction targets are set to account for the variability inherent to incremental VG participation in order not to limit participation of resources with peaking capacity. To further prevent this risk, IESO should assess whether there are better fit opportunities to bridge these</p>

	<p>VG resources between contracts beyond the capacity auction framework.</p> <p>IESO should quantify for participants the potential volume of eligible VGs so that the attention given to this design is appropriate.</p> <p>Presumably, VGs are only participating in the capacity auction if they are unsuccessful in an MT procurement, or are seeking obligations outside of the bridging period.</p> <p>The MT program(s) open to VGs offer a 6-month bridge ahead of a May obligation period. VGs only fit into the capacity auction if their contracts expire more than 6 months ahead of May 2026, 2027, 2028.</p> <ul style="list-style-type: none"> <li>• A VG with a contract that expires in November to April that is successful in an MT procurement will be bridged with a contract extension.</li> <li>• A VG with a contract that expires in May – October may choose to seek a capacity obligation for the subsequent winter, and/or for a portion of the summer in which their contract expires.</li> <li>• A VG that is unsuccessful in the MT procurement may see the capacity auction as a bridge to the next MT opportunity. Whether the economics of this are reasonable is TBD.</li> </ul> <p>Will the capacity auction framework support these resources having partial summer obligations, so that they do not have to end their contract early? Or is the expectation that VGs will be ending their contract early to get a capacity obligation for the full summer?</p> <p>Surely there is a better, less complicated opportunity for IESO to secure VG resources between contracts than shoehorning them into a program design for a different product than the resource type provides.</p>
--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## High-Level Design: Auction Tie-Break Mechanism

Question	Response
Is the proposed tie-break mechanism more equitable than the current time stamp method?	Yes. Time stamp method doesn't achieve the goal.
Does the proposed tie-break mechanism solve concerns stakeholders have raised with past tie-break results?	<p>Let's get this in ASAP!!</p> <p>IESO needs to propose the mechanism to resolve the tie-break where a participant's resulting capacity is under 1 MW, therefore disqualified.</p> <p>IESO should consider in the longer term, more inputs into the tie-break mechanism to value previous period operation, whether it be by using the PAF as the tie breaker, including a PAF multiplier on the bid quantity, an inverse PAF multiplier on bid price, or some other kind of priority stacking in the tie-breaking methodology.</p>

## General Comments/Feedback