Stakeholder Feedback and IESO Response

Capacity Auction Enhancements

Following the March 21, 2024, Capacity Auction Enhancements engagement, the 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 stakeholder engagement webpage for this engagement. Please reference the material for specific feedback as the below information provides excerpts and/or a summary only.

Market Manual and Market Rule Updates

Do you have any comments regarding the presented Market Manual administrative updates?

Stakeholder Feedback

Stakeholders indicated the update to the term 'delivered MW' used in Table 3-3 of Market Manual 12 (MM12) is not administrative in nature and the IESO's intent to determine this based on the lowest hourly delivered MW from the four-hour capacity test was not the intended design understood by demand response stakeholders.

mechanisms with different formulas.

The description of 'delivered MWs' and how it is used in the In-Period Cleared UCAP Adjustment formula is contained within the section dedicate to describing that specific formula. The description of 'delivered MWs' as used in the PA

Stakeholders also noted that the term 'delivered section dedicated to describing that specific MW' was used twice in MM12. The second instance, formula. With that said, the IESO will take this in section 5.3.4, had a different definition for its use feedback into consideration when proposing market manual language to ensure the different determinations of 'delivered MWs' for each of

IESO Response

There is a different meaning for the term 'delivered MW' for the Performance Adjustment Factor (PAF) and the In-Period Cleared UCAP Adjustment because they are two different mechanisms with different formulas.

The description of 'delivered MWs' and how it is used in the In-Period Cleared UCAP Adjustment formula is contained within the section dedicated to describing that specific formula. The description of 'delivered MWs' as used in the PAF formula will continue to be contained within the section dedicated to describing that specific formula. With that said, the IESO will take this feedback into consideration when proposing market manual language to ensure the different determinations of 'delivered MWs' for each of these mechanisms is clear.



Stakeholders indicated their belief that charge type 1318 - Capacity Obligation - Capacity Charge, as outlined in market manual 5.5. section 1.6.26.3.5, was based on an averaged four-hour performance interval.

The IESO will plan to discuss this further with stakeholders at the upcoming May 23, 2024, engagement session.

Stakeholders recommend that the definition for 'delivered MW' in Table 3-3 should match the definition in section 5.3.4 which is based on average resource performance over the four-hour test period.

Do you have any comments regarding the proposed correction to update the cleared ICAP calculation in Market Rule Ch. 7 to incorporate the PAF?

Stakeholders indicated that a resource's ICAP MW value should be offered into the capacity and energy markets, and that the resource's UCAP should be calculated from its cleared ICAP MW value.

As outlined in Market Rule chapter 7, section 3.3.8, Capacity Auction resources should offer resource capability to accurately reflect the capacity available each day. Offers can be above or below the resource's obligation, depending on the day.

A market participant is responsible for updating its bids/offers accordingly if the resource's expected delivery or withdrawal differs from its pre-dispatch schedule.

2024 Enhancements

Stakeholder Feedback

Do you have any comments regarding the prioritized 2024 enhancements?

Stakeholders are supportive of reviews related to the reference price, HDR standby price trigger, and virtual zonal limits, and the principles outlined in Ontario. It is difficult to say, generally, how the in the March 2024 engagement presentation. Stakeholders specifically acknowledged the IESO's non-emitting resource due to the various engagement efforts on virtual zonal limits. Stakeholders indicated specific questions/comments as outlined under the following headings.

1. Reference Price Review;

IESO Response

Thank you for providing feedback on these items.

Reference Price:

The reference price is set based on the net cost of new entry (Net CONE) of a particular technology reference price would be affected by moving to a technology types that are considered 'nonemitting', what factors go into the Net CONE analysis, and what the requirements were for the procurement that determine the Net CONE. The IESO has determined that adopting a reference price aligned with the Net CONE of a newly-built resource in Ontario is appropriate as that price

How would the reference price be affected by moving to a non-emitting resource? Will the reference price go up or down?

2. HDR Standby Price Trigger Review;

Stakeholders asked about the impacts of the Market Renewal Program (MRP) on the HDR standby price trigger (SPT). Specifically, how might it be different in the four demand forecast areas being implemented post-MRP.

3. Virtual Zonal Limits Review;

Stakeholders recommended that IESO prioritize reviewing the virtual zonal limits ahead of the 2024 Capacity auction and requested a confirmation of timelines for the review.

represents the theoretical long-run marginal cost of supply that Capacity Auction prices should eventually converge to. The results of the LT1 RFP will provide valuable information and will give us a better understanding of the Net CONE for certain resource types in Ontario that can support analysis on what the representative technology should be for this year's and future auctions.

Virtual Zonal Limits:

In the upcoming May 2024 engagement session, the IESO will provide updates on activities focused on the 2024 auction. For this year's auction, the IESO is reviewing the virtual zonal limits for the West and Niagara zones that were constrained in the 2023 auction. The IESO requested additional contributor information such as existing and potential contributors' grid connection point locations within the West and Niagara zones to attempt to more accurately map those contributor locations and how they could affect grid reliability in those areas. This analysis is feasible this year because it will not include any changes to tools, systems or processes and will support the IESO's determination of whether the virtual zonal limits in these zones can be modified in advance of the November 2024 auction. The IESO will provide a status update of this work in May, and the objective is to communicate our findings in July in advance of the release of the pre-auction report. Additionally, the IESO will investigate a long-term solution to alleviate virtual zonal limits, with a target implementation for the 2026 auction.

HDR Standby Price Trigger Review:

With respect to MRP-related impacts, the predispatch shadow price report will be retired and will no longer be active in the new post-MRP market. There will be a new day-ahead market results report that will contain similar day-ahead locational marginal prices (LMP) that will serve the same purpose. For additional information, please refer to the MRP <u>Implementation Engagement</u> webpage.

Further updates on longer term enhancements and other potential impacts of MRP will be discussed as they become available, and as we move forward with stakeholder engagement and detailed design work. The upcoming annual Capacity Auction participant training scheduled for summer 2024 will include a module focused on MRP.

Do you have any comments regarding the timing of the 2024 enhancements?

Stakeholders indicated that proposed IESO timelines are insufficient/abbreviated for the virtual zonal limits review, and the administrative updates to the market rules and manuals that were presented in the March 2024 engagement meeting. Stakeholders also indicated that there should be sufficient time allotted to review the outcomes of the new testing procedures for Capacity Auction resources that come into effect in May 2024.

The IESO intends to dedicate time in engagement sessions later this year to share testing results and discuss participants' experience with the new testing framework. If additional enhancements to the testing framework are identified, these can be included within the Improve Performance enhancement targeted for the 2026 or later Capacity Auction.

2025 Enhancements

Stakeholder Feedback

Do you have any comments regarding the prioritization of the 2025 enhancements?

Stakeholders support a comprehensive demand

curve review and a reduction in the number of dispatch tests. Stakeholders recommend accelerating the review of multiple HDR resources per zone (moving it from 2026 to the 2025 enhancement stream timeline). Stakeholders recommend that the review of commitment management options should be a higher priority and should include the addition of short-term obligation buy-outs and the introduction of a rebalancing auction. In addition, buy-outs and rebalancing auctions would be conducted via competitive markets, and should not require administrative decisions from the IESO.

IESO Response

In response to the recommendation to make the review of commitment managements options a higher priority, this and the Multiple HDR resources per zone enhancement are highly complex in nature and will likely require several stakeholder engagement sessions, at minimum, to properly design a solution for these items before the process begins to make any required updates to market rules and manuals, IT systems/tools, and prudential/settlement systems.

Developing a rebalancing auction would require significant design, stakeholder engagement, and IT resources to properly develop and implement. The IESO's Capacity Auction is an annual prompt auction with a limited forward period of approximately five months between the auction clearing date and the start of the summer

In addition, stakeholders noted that timelines for an obligation/capacity transfer should be reviewed, and the approval process should be automated to reduce the overall duration. obligation period. At this time, the value this enhancement offers is outweighed by other enhancements that are being prioritized for investigation.

The existing buy-out process is intended for participants who can no longer fulfill their obligation, in whole or in part, for the remainder of an obligation period. Enabling short-term buyouts has been deemed not of sufficient value and not consistent with the enhancements objective statement at this time. Allowing short-term obligation buy outs could signal the IESO's willingness to procure resources that are not able to meet a six-month seasonal obligation. The benefits of investigating more flexible capacity transfers, offers greater value based on the enhancements objective statement. Further context can be provided at the next stakeholder engagement session in May 2024 regarding the time and resource constraints that helped to determine the IESO's prioritization of these enhancements.

Thank you for your feedback suggestion to review the capacity transfer timelines and process. The IESO will plan to include this in our upcoming engagement discussions.

2026 Enhancements

Stakeholder Feedback	IESO Response
Do you have any comments regarding the prioritization of the 2026 enhancements?	Thank you for providing feedback on these items.
Stakeholders indicated that they want to better understand the proposed changes to the capacity qualification methodologies and improving participant performance workstreams that are currently scheduled for the 2026 enhancement stream.	The IESO has not yet finalized the scope of these two enhancement workstreams indicated, (Regular Review of UCAP Methodologies, and Improve Performance). These details will become clearer as we move forward with engagement on these items.
Stakeholders support the addition of wind and solar resources in future capacity auctions to	The IESO agrees that there is sufficient data and operational experience from existing wind and

increase liquidity and to help grow the auction's capacity target at a more economic price. Stakeholders recommend that wind and solar should be allowed to participate in the 2025 auction since they are already operational in the IESO-administered market.

solar resources to develop a capacity auction participation framework however, some details still need to be discussed through stakeholder engagement before these resources can be enabled prior to the capacity qualification process takes place in late summer or early fall for the November auction of each year.

The IESO welcomes ongoing feedback on these longer-term enhancements. Please continue to monitor engagement activities and updates on detailed design as they are released.

Other Enhancements

Stakeholder Feedback

Do you have any comments or new information you would like to share with the to loss factors for HDR resources. The IESO will IESO regarding the enhancements that are not currently being considered?

Stakeholders indicated that loss factors should be included in the delivered capacity for HDR resources as this would result in a significant increase in the delivered MW value. Stakeholders provided additional details about how loss factors are accounted for in other jurisdictions. Stakeholders recommend that IESO should transition HDR settlements to loss factor adjusted utility data instead of unadjusted data.

IESO Response

Thank you for providing detailed feedback related consider these details and follow up with stakeholders if there are any additional questions.

General Comments/Feedback

Stakeholder Feedback

1. Stakeholders recommended that the IESO align how internal generators and external generators are treated in the capacity qualification process, as indicated in the October 2023 and December 2023 feedback responses posted on the Capacity Auction Enhancements website.

- IESO Response: The IESO is willing to explore the details and benefits of this suggestion and other opportunities to increase participation and offered capacity into the Capacity Auction and will follow up with stakeholders for further information.
- 2. Stakeholders requested that the IESO provide details about pre-clearing offers (e.g., how many MWs by technology type were entered in the auction) to assist participants in preparing offers for subsequent auctions.
 - IESO Response: Please clarify if this is a request for offered MWs by technology type
 or qualified MWs by technology type. At this time, for confidentiality reasons, the IESO
 will not be releasing further auction information such as offer prices, zonal
 breakdowns, etc.