



**MARCH 30, 2023**

# 2023 Capacity Auction Enhancements

**Dale Fitzgerald**

Supervisor, Capacity Design &  
Integration

**Laura Zubyck**

Senior Advisor, Capacity Auction  
Administration

# Today's Discussion

- Continue discussion on administrative updates for the 2023 Capacity Auction and modifications to the design of the Performance Adjustment Factor
- Discussion on proposed amendments to the Market Rules and Market Manuals for the completed enhancement designs included in Stream 1
- Review upcoming key implementation milestones

# Agenda

- Key Stakeholder feedback and IESO Response
- Engagement Status Update – Stream 1
- Stream 1 Implementation
  - Process Recap
  - Market Rules and Market Manuals Feedback
  - Timelines – Stream 1 and 2
  - Implementation Details
- Engagement Status and Implementation Update – Stream 2
- Wrap-up and Next Steps



# Key Stakeholder Feedback and IESO Response

# Key Stakeholder Feedback and IESO Response

- A summary of feedback received from the January and February engagement sessions, and IESO response to feedback is posted on the [Capacity Auction Enhancements](#) engagement webpage.



# Engagement Status Update – Stream 1

# Final Design Updates – Stream 1

- **In-period Adjustment for HDR Resources**

- Following the January 2023 engagement session, stakeholders requested a 10% performance threshold be applied when determining in-period adjustment for hourly demand response (HDRs) resources to align with the threshold applied to the calculation of the performance adjustment factor and because a compliance dead band applies to dispatchable resources in the energy market.
- After careful consideration of the [feedback received](#), the IESO has revised the design of the in-period adjustment to include a 10% threshold and the relevant design memos have been updated accordingly.

# Final Stream 1 Design Memos

- [Stream 1 Design Memos](#) are now final, including updates to the following documents since the February engagement to include a 10% performance threshold for the in-period adjustment design for HDR resources:
  - [Design Memo 3.1 - Charges and True-ups](#)
  - [Design Memo 5.2 - HDR Capacity Qualification](#)
  - [Design Memo 6.3- Performance Thresholds](#)
  - [Illustrative examples for the in-period adjustment](#)
- Final 2023 design memos can be found on the [Capacity Auction Enhancements](#) engagement webpage. The final design memo on the Performance Adjustment Memo will also be posted here when ready.



# Market Rules and Manual Amendments – Stream 1

- Proposed amendments to the [Market Rules and Market Manuals](#) reflecting the 2023 Capacity Auction enhancements are posted for stakeholder review in advance of the IESO's Technical Panel process.
- A [reference guide](#) is available to help match the design enhancements with the relevant rules and manual amendments during the review process.

# Availability True-up - Illustrative Examples

- Following the January engagement session, stakeholders requested clarification on how the availability true-up mechanism is applied to HDRs with an in-period adjustment applied.
- In response to this stakeholder request, the IESO has posted the availability true-up examples document on the [Capacity Auction Enhancements](#) engagement webpage to provide overview and examples of application of the true-up mechanism.



# Stream 1 Implementation

# Process

## Design

- Design Memos provide the high-level "What", "How" and "Why"



## Implementation

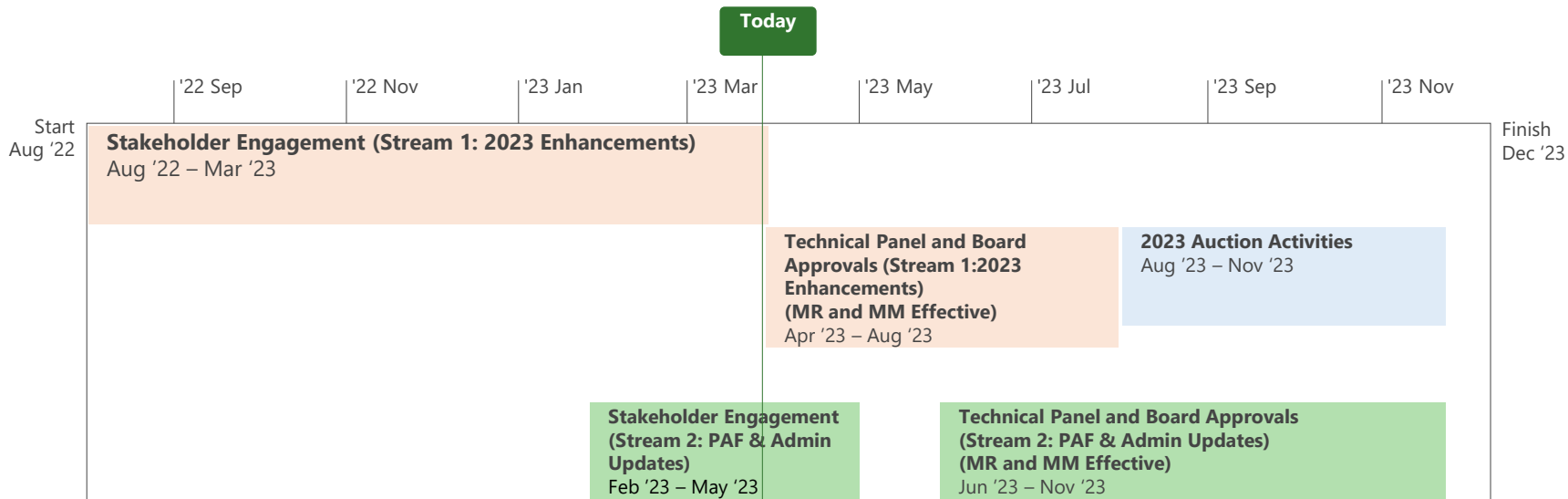
- Market Rules and Market Manuals provide the detailed "What" and "How"

- **Market Rules** and **Market Manuals** govern a participant's obligations in the Capacity Auction.
- **Market Rules** are subject to Technical Panel review and recommendation, and IESO Board approval.
- **Market Manuals** are provided during the Technical Panel process and are subject to IESO management approval and further stakeholder review as part of the baseline process.

# Market Rule and Manual Feedback

- The IESO is requesting feedback to ensure the 2023 design enhancements are accurately reflected in the proposed amendments to the Market Rules and Market Manuals.
- Revisions to the Market Rules and Market Manuals language brought forward through feedback will be reviewed and, if required, incorporated prior to the Technical Panel Vote to Post in May.

# High-Level Implementation Timeline – Stream 1 and 2



# Implementation Details (1 of 6)

- The following implementation details are reflected in the proposed amendments to the Market Rules and Market Manuals:
  - Prudential treatment with in-period UCAP adjustment
  - Posting timeline for future pre-auction reports
  - Re-calculation of cleared ICAP following transfers or buy-outs
  - Update to calculation of capacity auction deposits
  - Capacity test allowable exceptions

## Implementation Details (2 of 6)

- **Design Enhancement:** In-period UCAP Adjustment (HDRs)
- **Implementation Detail:** Prudential Treatment
  - In the case that an in-period UCAP adjustment has been applied, the prudential support may be reduced. The participant may receive the excess prudential back after the in-period UCAP adjustment charge has been received by the IESO.
  - If a participant buys-out of all or a portion of an obligation prior to the capacity test being assessed, the IESO will refund any excess prudential after the test results are released and any in-period UCAP adjustment charge funds are received, if applicable. ([Market Rules, Chapter 7](#))



## Implementation Details (3 of 6)

- **Design Enhancement:** Capacity Qualification
- **Implementation Detail:** Pre-Auction Report
  - Currently, the IESO must post the pre-auction report at least 2 months prior to the capacity auction. With the introduction of capacity qualification, it must be posted earlier.
  - For the 2023 auction and future auctions, the pre-auction report will be posted prior to the opening of the capacity qualification submission window.
  - ([Market Manual 12: Capacity Auctions](#))

## Implementation Details (4 of 6)

- **Design Enhancement:** Capacity Qualification
- **Implementation Detail:** Transfers and Buy-outs
  - In the case of capacity obligation transfer or a partial buy-out, the cleared ICAP of the resource will be re-calculated using the revised capacity obligation and any availability de-rate applied at the time of capacity qualification.
  - ([Market Manual 12: Capacity Auctions](#))

# Implementation Details (5 of 6)

- **Design Enhancement:** Capacity Qualification (Deposit)
- **Implementation Detail:** Business Days
  - The deposit calculation currently uses the number of business days in an obligation period in the equation. Due to IT system limitations, this will need to be updated to a static number and will reflect the average number of business days in an obligation period (125).
  - $3\% \times (\text{total UCAP} \times \text{maximum auction clearing price/MW-business day}) \times 125 \text{ business days}$
  - ([Market Manual 12: Capacity Auctions](#))

# Implementation Details (6 of 6)

- **Design Enhancement:** Capacity Test
- **Implementation Detail:** Allowable Exceptions
  - There are currently allowable exceptions to capacity auction non-performance charges in Market Manual 5.5, including the capacity charge. With the new capacity testing framework, these exceptions now exist for the test itself and have been removed from Market Manual 5.5 for the capacity charge. The exceptions remain for other capacity auction non-performance charges.
  - ([Market Manual 12: Capacity Auctions](#), [Market Manual 5.5: Physical Markets Settlement Statements](#))



# Engagement Status and Implementation Update – Stream 2

# Performance Adjustment Factor (PAF) Feedback

- During the February engagement session, the IESO proposed an update to the design of the PAF to use capacity test data from the previous summer obligation period and most recently completed winter obligation period to determine a PAF in each resource's capacity qualification methodology.

# Performance Adjustment Factor (PAF) Feedback

- As part of the feedback submitted, stakeholders suggested a modification to the PAF design, summarized by the IESO as follows:
  1. If the submitted ICAP is less than or equal to the capacity delivered during the most recent capacity test, then no PAF is applied.
  2. If the submitted ICAP is greater than or equal to the ICAP cleared in the last capacity auction, then a PAF is applied, as outlined in Design Memo 10.0 - Performance Adjustment Factor
  3. If the submitted ICAP is less than the ICAP cleared in the last auction, and greater than the capacity delivered during the most recent seasonal capacity test, then a PAF is applied such that the UCAP is equal to the capacity delivered in that capacity test.

## Stream 2 - Final Design Updates

- The IESO has evaluated this PAF design modification and has the following observations:
  - Provides the opportunity for participants to submit ICAP values that are supported by the recent test performance data and does not penalize them for doing so
  - Builds upon the existing PAF design which is well understood by stakeholders due to extensive engagement
  - Does not require extensive design and implementation revisions to incorporate into a final PAF design
  - Does not introduce system reliability risks if incorporated into the PAF design



## Stream 2 - Final Design Updates (2)

- Based on these observations, the IESO review the design of the PAF based on the suggestion from stakeholders.
- The final PAF design will be reflected in the following design documents, which will be posted to the engagement webpage in advance of the April engagement session:
  - Design Memo 10.0 - Performance Adjustment Factor
  - Illustrative examples for the PAF

# Re-cap: Administrative Updates

- The administrative updates to the Capacity Auction will consist of:
  1. Drafting style updates to the Capacity Auction sections of Ch. 9 of the market rules and Market Manual 5.5.
  2. Possible alignment updates to Market Manual 12 because of the Ch. 9 updates, as well as general clean-up revisions.
  3. Updates to some participation mechanics for generator-backed import resources because of lessons learned from the 2022 Capacity Auction.
- In today's engagement session, we will focus on administrative update #2 (generator-backed imports).

# Generator-Backed Imports (1)

- **Design Element:** Outage Management
- **Current Design:** a generator-backed import resource must submit an outage to the IESO for approval prior to receiving approval from their host jurisdiction.
- **Update:** there may be cases where a backing generator has received approval for an outage from their host jurisdiction for an outage occurring in a future obligation period prior to participating in Ontario's capacity auction. As such, a participant does not need to obtain the IESO's approval for any outages that received approval from the host jurisdiction prior to the capacity auction. If the resource clears the capacity auction, the participant must inform the IESO of the outage.

## Generator-Backed Imports (2)

- **Design Element:** Attestation
- **Update:** Participants with generator-backed import resources must confirm with their host jurisdiction that the capacity being offered into the capacity auction can be removed from the control-area's planning or real-time timeframes. This must be attested to by the participant in the pre-auction period, during the submission of the capacity qualification request.



# Wrap-up and Next Steps

# Next Steps

- Stakeholders are invited to submit questions and comments on the following items to [engagement@ieso.ca](mailto:engagement@ieso.ca) by April 13, 2023:
  - Proposed amendments to the Market Rules and Market Manuals reflecting the Stream 1 enhancements
  - Proposed administrative updates for generator-backed import resources
  - Revisions to the Performance Adjustment Factor design
- After considering feedback on the Stream 1 draft MR/MM amendments, they will be presented to the Technical Panel on the following dates:
  - April 18 – Education Item
  - May 16 – Vote to Post
  - June 13 – Vote to Recommend

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# Thank You

[ieso.ca](http://ieso.ca)

1.888.448.7777

[customer.relations@ieso.ca](mailto:customer.relations@ieso.ca)

[engagement@ieso.ca](mailto:engagement@ieso.ca)



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# Appendix



# Market Rule/Manual Release Schedule

Stream	Design Enhancement	Draft Document Review	Status		
1	<ul style="list-style-type: none"> <li>Capacity Qualification (non-HDR) (design memo 1.1)</li> <li>Testing Framework (design memo 2.1)</li> <li>Charges and True-Ups (design memo 3.1)</li> </ul>	March 2023	Posted		
	<ul style="list-style-type: none"> <li>Capacity Qualification (HDR) (design memo 5.2)</li> <li>HDR Contributor Outages (design memo 6.2)</li> <li>Performance Thresholds (design memo 6.3)</li> <li>Demand Curve Elements (design memo 7.1)</li> </ul>				
	<ul style="list-style-type: none"> <li>Administrative Updates</li> </ul>				
	<ul style="list-style-type: none"> <li>Qualification: Performance Adjustment Factor</li> </ul>			May 2023	In Progress