



NOVEMBER 23, 2021

Capacity Auction Performance Assessment Procedures

Purpose

- IESO has proposed some changes to the current availability assessment and testing procedures as well as the implementation of Performance Adjustment Factors for Capacity Auction Resources as part of the 2022 Capacity Auction Enhancements under the 'Improved Performance' Workstream

Context

- The IESO has identified a reliability need emerging mid to late this decade (2025-2030)
- Concerns related to non-performance of capacity resources under the current framework will require further stakeholder discussion
 - IESO plans to share performance results from the latest obligation period in the near future
- Design enhancements proposed for the capacity auction will be reflected within other procurement mechanisms in order to meet the broader Resource Adequacy framework objectives

Performance Assessment

ORIGINAL PROPOSAL

- During the August engagement, IESO initially proposed a capacity charge equal to two months' availability payment for failure to deliver on cleared ICAP during emergency operating state control action (EOSCA) activation.
- However, based on further discussion and stakeholder feedback, IESO has decided to revise this proposal to ensure it better aligns with the objective of incenting availability at times of acute need.

Performance Assessment

REVISED PROPOSAL

- In a circumstance where the IESO has issued a system emergency advisory, such as NERC Energy Emergency Alert (EEA-1) or when a resource has been put on stand-by, an hourly availability performance charge equal to 10x the availability payment will apply
- The higher availability performance charge will remain in place until the end of the availability window for which the standby is applicable or end of the system emergency advisory declaration

Performance Assessment

RATIONALE

- The higher availability performance charge better signals the need for capacity resources to be available at times of acute system need which is a key objective of capacity acquisition.



Implementation of Performance Adjustment Factor (PAF)

Implementation of PAF

- A key aspect of the capacity qualification design is to incorporate historic performance to verify the capability of a resource (via a performance adjustment factor - 'PAF')
- Stakeholders have asked that PAFs be applied on a 'go-forward' basis
- Based on the stakeholder feedback, IESO has decided to apply seasonal PAFs to all resources starting with the December 2023 Auction (based on assessed performance during upcoming 2021 capacity auction associated commitment period)
- The design document will be revised to incorporate this design modification which will also be reflected in market rules and manuals



Testing Procedures

Context

- The IESO has considered the current testing procedures in place for the Capacity Auction which have been largely unchanged since the original Demand Response Auction
- The proposals are meant to better align testing procedures and processes with performance objectives while also reflecting what we have heard from stakeholders

Current Testing Procedures

- IESO has the discretion to schedule up to two “test” activations per obligation period for all cleared capacity resources
- If the participants fail to deliver according to the prescribed assessment criteria, they are subject to non-performance charges and compliance referrals

Proposed Capacity Testing Procedure

- Capacity Resources will be required to demonstrate their ability to get scheduled to their cleared ICAP within an IESO-determined **Capacity Test window** once per obligation period
- IESO will communicate when the 5-day capacity test window will take place during the obligation period (details will be issued at least 5-business days in advance of the first day of the testing window)
- Resources must get scheduled by submitting bids/offers prices to ensure a schedule is received (submit price taker offers/bids)

Proposed Capacity Testing Procedure, continued

- Resources will be assessed to the performance duration requirements applicable to their individual resource types as specified in the Market Manuals (including the 5% and 10% thresholds for dispatchable resources and Hourly Demand Response respectively)
- Scheduled delivery must be within the availability window
- The resource will be required to notify the IESO no more than two business days from the end of the testing window with the details of the intervals/hours for which they were scheduled to allow the IESO to conduct performance assessments

Proposed Capacity Testing Procedure, continued

- Hourly Demand Response (HDR) and Dispatchable Load Resources will be exempted from the Demand Response Bid Threshold for the testing window to allow them to submit bids to help ensure receipt of an activation
- As this will be an 'in-market' activation, resources will not be eligible for any out-of-market payments
- All other aspects of the assessment (capacity performance charge and use for future performance adjustment factor) remain in place

Dispatch Testing

- In addition, the IESO will continue to have the ability to conduct testing of a participants' ability to deliver their scheduled energy or load curtailments (as is the case today) based on submitted bids and offers (up to twice per obligation period).
- Resources scheduled 'out-of-market' will be eligible for out-of-market payments.
- No capacity charge assessment will be applied to the dispatch tests

Next Steps

- IESO is proposing to implement these changes as part of the December 2022 Capacity Enhancements
- Stakeholders are invited to submit questions and comments on the proposed testing criteria to engagement@ieso.ca by December 14, 2021



NOVEMBER 23, 2021

2022 Capacity Auction Administrative Updates

Capacity Auction Implementation Timeline

DRAFT AND STAKEHOLDER

APPROVE AND IMPLEMENT

Oct 21 SE
Introduce
Implementation
Timeline

Nov 23 SE
Discuss zonal
group limits,
point in time

Dec 15-17 SE
Present 1st draft
Market Rules
(MR) & Market
Manuals (MM)

Q1 2022
Jan SE
Present draft MR
and MM based on
feedback from Nov

Q2 2022
Feb SE
Present final draft
of MR and MM
before Technical
Panel

Q1/Q2 2022
March-June
Technical Panel
and Board
Approval

Q2 2022
Market Trial

Q3 2022
July
MR and MM
final and
baselined

Q3 2022
Pre-Auction
Period
begins

Recap

- In the October engagement session, the IESO discussed the transition from the design of the capacity auction to the implementation of the enhancements, which has now begun
- As part of the implementation activities, there are two administrative updates in addition to the fundamental enhancements:
 - Zonal Group Limits
 - “Point in Time” Rules

Zonal Limits: Background

In the current auction there are two sets of zonal capacity limits:

1. Virtual zonal limit, which is a MW limit per zone on the amount of capacity that can be secured from virtual (non-revenue metered) HDR resources (this limit does not set the price of a zone), and;
2. Total zonal limits, which is a MW limit per zone on the amount of capacity that can be secured across all resource types in a given capacity auction

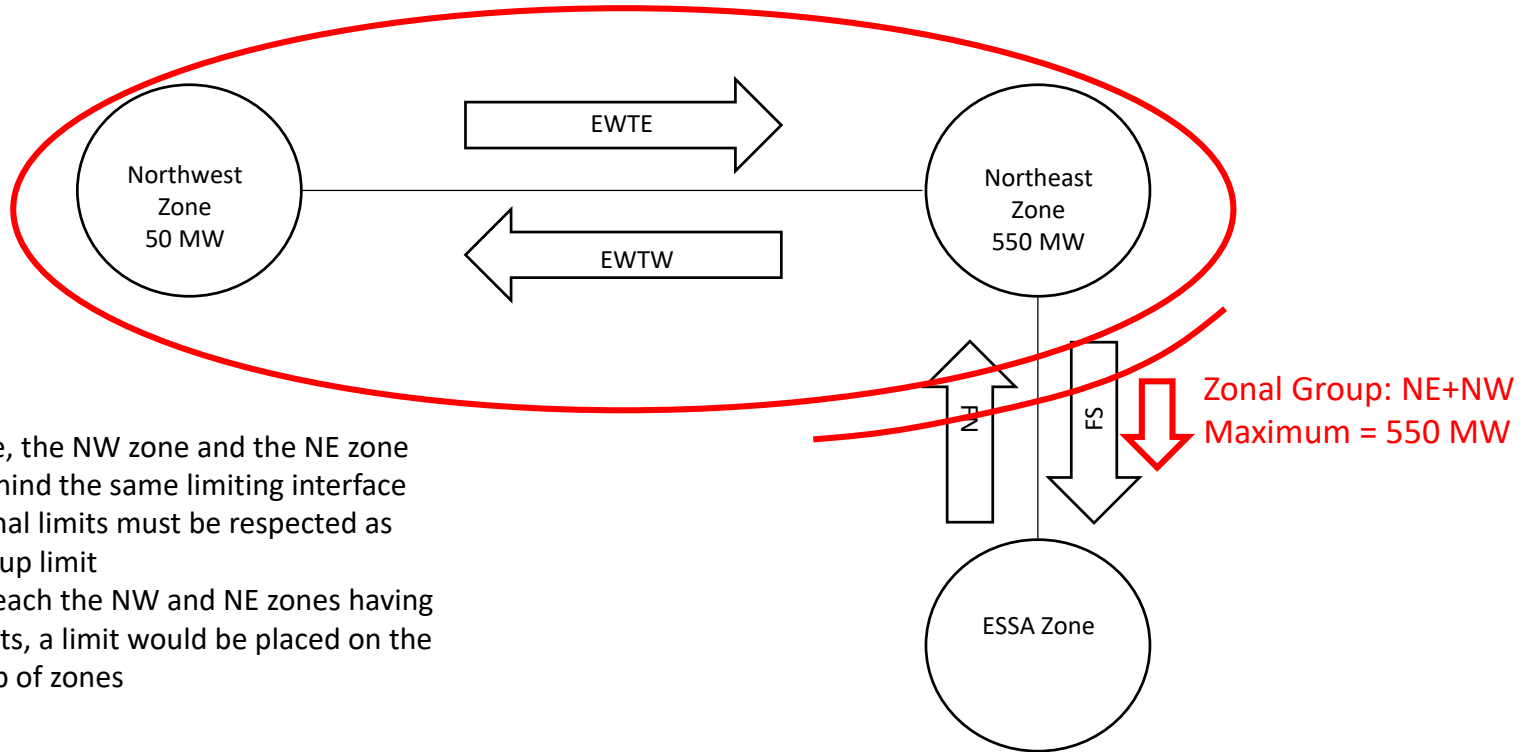
Zonal Limits: Background (cont'd)

- Under the previous “2B” capacity auction design work, the IESO introduced zonal group limits to stakeholders at the January 23, 2020 stakeholder engagement
- The zonal group limit modeling capability was not fully enabled due to the suspension of the capacity auction project in 2020
- We are now seeking to re-introduce this enhancement to stakeholders and fully enable it for the 2022 capacity auction

Zonal Group Limits – Enhancement

- Under this concept, a constraint is applied to a collection of zones that are located behind a single limiting interface
- The zonal group limit would apply to all resources located within any underlying zones within the grouping
- Being able to model zonal group limits avoids having to allocate the zonal group constraint to the underlying zones, which in turn would yield more economic outcomes from the auction by not artificially applying a lower constraint to a zone that otherwise would be higher
- Zonal group constraints will be published in the pre-auction report

Zonal Group Limit Example



- In this example, the NW zone and the NE zone are located behind the same limiting interface
- Each of the zonal limits must be respected as well as the group limit
- In addition to each the NW and NE zones having total zonal limits, a limit would be placed on the NW + NE group of zones

Price Setting

- If a zonal group constraint is reached, any zones in the group that have not reached their total zonal constraint will have their price set by the group constraint
- Price setting for the individual zones will remain

Next Steps

- Addition of zonal group constraints will be drafted into the Market Rules and Market Manuals which will be presented at the January 2022 stakeholder engagement session



2022 Capacity Auction Administrative Updates:

Point in Time

Point in Time: Background

- The IESO makes annual changes to the Capacity Auction Market Rules and Market Manuals to introduce enhancements or make administrative improvements to the auction
- Yearly cycle of changes means there could be overlap in versions of rules and manuals where a new set may come into effect during the obligation period of a previous auction
- Versioning strategy introduced in 2020 puts a “freeze” on rules and manual sections related to capacity auction participation that were in effect on the day of an auction until the end of its associated commitment period

Challenge

- The point in time provision has given the IESO and stakeholders clarity and assurance of the rules in place for a particular auction and its associated commitment period
- The implementation of Market Renewal presents a challenge to this versioning strategy:
 - The magnitude of changes being implemented in the market will have some effect on the capacity auction, some of which may not be clear in advance of its implementation;
 - The timing of the implementation of these changes may not line up with the first day of an auction and could fall in the middle of an obligation period, changing the way a participant satisfies their ongoing capacity obligation

Next Steps

- It will be necessary for the IESO to make changes to the point in time provisions to allow capacity auction participants to continue to satisfy their obligations under the new market structure
- IESO is seeking input from stakeholders on how the point in time rule could be enhanced to account for this impending change to the market
- Stakeholders are invited to submit feedback on this item to engagement@ieso.ca by December 14, 2021

Thank You

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