

Memorandum

To: Technical Panel
From: Adam Cumming
Date: September 5, 2023
Re: MR-00477-R00 – 2023 Capacity Auction Enhancements – Stream 2

In the IESO’s Resource Adequacy Framework (the “Framework”), the Capacity Auction serves as the short term balancing mechanism, helping to secure capacity needed to meet Ontario’s resource adequacy needs. The Capacity Auction enables participation from a diverse range of resources that compete annually to be available for two six-month obligation periods (summer and winter). Additional information on the Capacity Auction can be found on the IESO’s Capacity Auction [webpage](#).

A collaborative approach to stakeholder engagement on the 2023 Capacity Auction Enhancements has resulted in a robust set of rules that will achieve the IESO’s objectives for the enhancements while incorporating numerous stakeholder proposals.

Objectives of the 2023 Capacity Auction Enhancements

The Capacity Auction is an important component of the Framework with auction targets projected to rise in the upcoming years. Consequently, the reliability of Capacity Auction resources is critical to the IESO and we must have confidence that capacity auction resources are able to perform to their obligations. With that in mind, the 2023 Capacity Auction Enhancements are intended to help improve resource performance as well as further enhance competition in order to provide ratepayer value.

In addition to the Stream 1 enhancements to the 2023 Capacity Auction that were previously recommended for approval by the Technical Panel at the June 2023 meeting, the following items are proposed for implementation in advance of the 2023 Capacity Auction as part of the second stream of enhancements (Stream 2):

Performance Adjustment Factor (PAF)

Beginning with the 2023 Capacity Auction, the IESO will be using a pre-auction capacity qualification process to determine an unforced capacity (UCAP) value for each resource that can be offered into the auction. Capacity qualification methodologies have been determined based on industry best practices and stakeholder input for each resource type eligible to participate in the auction. As part of capacity qualification, a resource's UCAP value, which represents the MW quantity, that each resource is expected to be able to contribute to the resource adequacy of the system, will be calculated using resource-specific performance and availability data. This calculation will include the use of a seasonal PAF that will incorporate capacity test performance data from the most recent applicable seasonal obligation period's capacity test.

The approach to qualifying capacity for all resources is generalized as follows:

$$\text{UCAP (MW)} = \text{ICAP (MW)} \times \text{Availability De-Rating Factor} \times \text{PAF}$$

A PAF will only impact a resource's capacity qualification if that resource did not pass its previous applicable capacity auction capacity test. If a resource passed the capacity auction capacity test or was not subject to a capacity auction capacity test in the relevant obligation period being used to assess the PAF, the PAF will have no impact on the UCAP calculation. The final PAF design encourages participants to submit accurate values into the Capacity Auction that can be reliably provided when needed.

Further detailed information on the PAF is available online: [Memo 10.1 – Performance Adjustment Factor](#)

Administrative clean up

The IESO is proposing to amend the portion of Chapter 9 associated with the Capacity Auction. This is being done to consolidate settlement rules, formulas, and associated variables into the Market Rules. Consolidating this information, which is currently spread across the Market Rules, Market Manuals, and Charge Types and Equations documents, is being done in response to stakeholder and Technical Panel member requests, and will improve clarity and the presentation of content for market participants.

This work is also being done to ensure the portion of Chapter 9 that is related to the Capacity Auction uses a style and formatting structure that is in line with the style and formatting

structure that is being implemented throughout Chapter 9 as part of the Market Renewal Program.

Stakeholder Feedback

In previous Technical Panel meetings, demand response and market participant Technical Panel members provided their support for the proposed market rule amendments and encouraged the IESO to continue engaging with stakeholders to improve Capacity Auction participation. The IESO committed to continuing to engage with stakeholders on enhancements to the Capacity Auction.

During the July 11, 2023 Technical Panel meeting, the Technical Panel voted to post the proposed market rule amendment (MR-00477-R00) for a period of two weeks for stakeholder comment. No stakeholder feedback was received during this period.

Prior to the July 11, 2023 Technical Panel meeting, Technical Panel members submitted feedback on the proposed market rule amendments. The following minor corrections were made in response to this feedback:

Chapter 7

18.2A.1.2 – removed improper pluralization from "a *system-backed capacity auction eligible import resources*"

18.2A.1.3 – corrections to italics

18.2A.3 - pluralized "resources"

19.4.21 – corrected subsection numbering

Chapter 9

3.1.10:

CACP^z_h – adjusted abbreviation to "\$/MWh"

CAEO^m_{h,k} – added clarification that *energy offers* are in "MW"

DRSQ^{ty}_{m,k,h} – added missing hyphens in "*real-time market*" and "*real-time schedules*"

HDRBP^m_{k,h} – corrected that the price component is in "\$/MWh"

HDRDC^m_{k,h} – corrected the bracket placements in the calculation formula.

HDRTAPR – corrected that the market test activation rate is in "\$/MWh"

4.7J.2.1B – added reference to *real-time market* in (c) and clarified the language in (d) explaining how subsequent hours shall be treated after a *capacity storage resource* receives a non-zero *energy dispatch instruction*.

4.7J.8.2 – removed duplicate of the word "shall"

Panel Action and Next Steps

The IESO recommends that the Technical Panel vote to recommend the proposed market rules amendment MR-00477-R00 to the IESO Board of Directors for consideration.

Accompanying Materials

- Market Rules Amendment Proposal Form - MR-00477-R00