

Memorandum



To: IESO BOARD OF DIRECTORS

From: Michael Lyle, Vice President, Legal Resources and Corporate Governance, Chair of the Technical Panel

Date: September 28, 2023

Re: 2023 Capacity Auction Enhancements – Stream 2 (MR-00477-R00)

Independent Electricity System Operator
1600-120 Adelaide Street West
Toronto, ON M5H 1T1
t 416.967.7474
www.ieso.ca

Purpose of Item: Approval

Executive Summary:

The IESO is seeking a decision from the IESO Board of Directors on a proposed Market Rule Amendment (MR-00477-R00) that will implement a series of enhancements to the 2023 Capacity Auction. The proposed Market Rule Amendment was recommended by the Technical Panel at its September 12th, 2023 meeting. The Technical Panel voted unanimously to recommend the proposed Market Rule Amendment to the IESO Board.

Background:

In the IESO's Resource Adequacy Framework (the "Framework"), the Capacity Auction serves as the short term procurement mechanism, helping to flexibly 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](#).

In order to enhance the reliability and market performance of acquired capacity resources, the IESO has engaged with stakeholders to design enhancements to the participation model and performance assessment criteria for the 2023 Capacity Auction (collectively, “2023 Capacity Auction Enhancements”). A collaborative approach to stakeholder engagement on the 2023 Capacity Auction Enhancements has resulted in a set of design enhancements that will achieve the IESO’s objectives while also incorporating stakeholder proposals.

Proposal and Analysis

Objectives of the 2023 Capacity Auction Enhancements – Stream 2

The Capacity Auction is an increasingly important component of the Framework as Ontario’s capacity procurement targets steadily grow. The reliability of Capacity Auction resources is important as the IESO must have confidence that the amount of capacity that each resource is expected to contribute to resource adequacy is able to perform to its obligations. With that in mind, the 2023 Capacity Auction Enhancements - Stream 2 are intended to improve resource performance as well as provide increased clarity in the market rules.

The following design enhancements are recommended for the 2023 Capacity Auction Enhancements – Stream 2.

Enhancement #1: 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 that can be offered into the auction from each resource. Capacity qualification methodologies have been determined based on industry best practices and stakeholder input for each resource type eligible to participate in the auction. The proposed design encourages participants to submit accurate installed capacity (ICAP) values which can be verified during a Capacity Auction capacity test. 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 Performance Adjustment Factor (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](#)

Enhancement #2: Administrative clean up

The IESO is proposing to amend the portion of market rules, Chapter 9 (Settlements and Billing) 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 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 consistent with the style and formatting structure that is being implemented throughout Chapter 9 as part of the Market Renewal Program.

Technical Panel Recommendation

At the September 12th, 2023 Technical Panel meeting, the Technical Panel members voted to recommend the proposed market rules for adoption by the IESO Board. All Technical Panel materials including stakeholder feedback submissions and meeting minutes are available on the Technical Panel [webpage](#).

Next Steps / Implementation:

I recommend that the IESO Board of Directors accept the vote and recommendation of the Technical Panel to approve Market Rule Amendment MR-00477-R00: 2023 Capacity Auction Enhancements – Stream 2 with an effective date of October 23, 2023.

Michael Lyle

Cc: IESO Records

Encls.

- a. Market Rule Amendment Proposal form
- b. Technical Panel Materials
 - i. Memo to Technical Panel from IESO staff
 - ii. Technical Panel Member Vote and Rationale
- c. Stakeholder feedback summary, stakeholder engagement and Technical Panel
- d. Consumer Impact Assessment
- e. Resolution
- f. Draft Board Reasons