

Memorandum



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To: IESO BOARD OF DIRECTORS

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

Date: June 26, 2023

Re: 2023 Capacity Auction Enhancements – Stream 1 (MR-00476-R00)

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-00476-R00) that will implement a series of enhancements to the 2023 Capacity Auction. The proposed Market Rule Amendments were recommended by the Technical Panel at its June 13th, 2023 meeting. All Technical Panel members voted to recommend, but for the member representing the Demand Response constituency, who abstained.

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 1

In the coming years, the Capacity Auction will be 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 1 are intended to improve resource performance as well as further enhance competition to contribute to ratepayer value as auction targets increase.

The following design enhancements are recommended for the 2023 Capacity Auction Enhancements – Stream 1.

Enhancement #1: Capacity Qualification

The IESO recommends introducing a capacity qualification process for all eligible resources. During the pre-auction period, resources will be required to submit an installed capacity (“ICAP”) value for qualification of each resource. The IESO will then adjust the ICAP using a resource-specific capacity qualification methodology to derive an unforced capacity (“UCAP”) value that will represent the maximum quantity that the resource may offer into the auction. In particular, non-hourly demand response resources will have one methodology applied, where an availability de-rating factor is used to derive the UCAP based on historical performance. Hourly Demand Response (“HDR”) resources have a different methodology applied, because of the absence of historical performance information, but are subject to an equivalent in-period cleared UCAP adjustment.

Enhancement #2: Performance Assessment Framework Modifications

The IESO recommends revising the performance assessment framework in order to provide greater flexibility to participants to demonstrate they can perform to the capacity amounts they submitted during the capacity qualification process. The intent of the updates to the performance assessment framework is to better define the performance requirements and introduce a testing process that is carried out consistently across resource types.

The key design elements of the revised testing framework are:

- Resources will be given five business days to schedule and conduct their own capacity test.
- Resources will be given 10 business days' notice prior to the capacity test week.
- Resources will be required to deliver to their cleared ICAP, within the applicable performance threshold.
- Performance thresholds for what constitutes a successful capacity test are being modified. HDR resource performance thresholds will be reduced to 10% from 20%, while all other resources will have a 5% performance threshold.
- Allowable exceptions to the capacity test provide an opportunity to re-schedule the testing week, for example, third party outage, force majeure.
- IESO has discretion to dispatch test resources by scheduling them in the energy market to verify their ability to comply with dispatch based on submitted bids and offers.

The IESO is also recommending to introduce two new true-up payments – the availability true-up payment and the capacity charges true-up payment. The availability true-up payment is intended to allow resources to recover availability charges incurred if that resource bids/offers in excess of its capacity obligation, over the duration of the obligation period. The capacity charges true-up payment ensures that the total charges incurred in an obligation period do not exceed availability payments in the same obligation period.

Lastly, the IESO is proposing to introduce an Hourly Demand Resource (“HDR”) contributor outage solution. Stakeholders have raised concerns that a contributor on a forced outage may negatively affect the HDR baseline calculation and subsequent performance assessment. As a result, the IESO has developed an approach where an HDR resource can declare an outage of a contributor and

have that contributor removed from their baseline calculation, thereby providing relief to their performance assessment. Declaring a contributor outage is at the discretion of HDR resources

Enhancement #3: Demand Curve

The demand curve parameters - the reference price and the maximum auction clearing price that the IESO uses to clear capacity in the auction, originally set in 2015, have been reviewed and updated to better reflect current market conditions. The reference price was updated from \$413/MW-day ICAP to \$644/MW-day UCAP, and the maximum auction clearing price has been updated to 1.5x the reference price. These updates to the auction reference price and the shift from ICAP to UCAP should more accurately reflect the value the resources are actually providing.

At the June 13th, 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-00476-R00: 2023 Capacity Auction Enhancements – Stream 1 with an effective date of July 19, 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 Rationale

c. Stakeholder feedback summary, stakeholder engagement and Technical Panel

d. Consumer Impact Assessment

e. Resolution

f. Draft Board Reasons