

### Market Rule Amendment Proposal Form

### Part 1 - Market Rule Information

Identification No.:	MD 00475 D00		
identification No	MR-00475-R00		
Subject:	2023 Capacity Auction Enhancements		
Title:	2023 Capacity Auction Enhancements		
Nature of Proposal:	□ Alteration □ Deletion □ Addition		
Chapter:	7, 9 and 11		
Appendix:	N/A		
Sections:	Chapter 7: 18 and 19		
	Chapter 11: Definitions		
Sub-sections	Chapter 7: 18.2, 18.2A, 18.3, 18.5, 18.6, 18.8, 18.9, 19.4, 19.5,		
proposed for	19.7, 19.9, 19.9B, and 19.11		
amending:	Chapter 11: Definitions		
Current Market Rules	48.1		
Baseline:			

### Part 2 - Proposal History

Version	Reason for Issuing	Version Date
1.0	Draft issued for stakeholder review	October 21, 2022

### Approved Amendment Publication Date:

### Approved Amendment Effective Date:

#### Part 3 - Explanation for Proposed Amendment

Provide a brief description that includes some or all of the following points:

- The reason for the proposed amendment and the impact on the *IESO-administered markets* if the amendment is not made.
- Alternative solutions considered.
- The proposed amendment, how the amendment addresses the above reason and impact of the proposed amendment on the *IESO-administered markets*.

#### Summary

In preparation for the 2023 Capacity Auction, the IESO is proposing to amend the market rules to make a series of enhancements related to the Capacity Auction.

#### Background

Capacity auctions help meet Ontario's reliability needs in a cost effective manner while allowing the IESO to adjust to changing system needs. With planned enhancements over time, the capacity auction is expected to attract a broader mix of resources, enabling the IESO to further increase competition and improve resource reliability and market performance.

Additional information on the Capacity Auction can be found on the IESO's Capacity Auction webpage.

#### Discussion

#### **Chapter 7**

- 18.2 Updated to require that participants submitted a capacity qualification request and receive an *unforced capacity* value equal to or greater than 1 MW.
- 18.2A New subsection added for capacity qualification and the calculation of *unforced* capacity.
- 18.3 Updated to reflect the change in requirements from *enrolled capacity* to *unforced capacity*.
- 18.5 Updated to reflect the change in defined terms from *enrolled capacity* to *unforced capacity*
- 18.6 Updated to reflect the change from *enrolled capacity* to *unforced capacity*.
- 18.8 Updated to include *cleared UCAP* and *cleared ICAP* in post-auction publications.
- 18.9 Updated to reflect the change in defined terms from *enrolled capacity* to *unforced capacity*.
- 19.4 The Capacity Auction Testing for Hourly Demand Response Resources sub-section is being updated to reflect the proposed changes to the testing framework.
- 19.5 The Capacity Auction Testing for Capacity Dispatchable Load Resources sub-section is being updated to reflect the proposed changes to the testing framework.
- 19.7 The Capacity Auction Testing for Capacity Generation Resources sub-section is being updated to reflect the proposed changes to the testing framework.

- 19.9 The Capacity Auction Testing for System-Backed Capacity Import Resources sub-section is being updated to reflect the proposed changes to the testing framework.
- 19.9B The Capacity Auction Testing for Generator-Backed Capacity Import Resources subsection is being updated to reflect the proposed changes to the testing framework.
- 19.11 The Capacity Auction Testing for Capacity Storage Resources sub-section is being updated to reflect the proposed changes to the testing framework.

#### Chapter 11

Updated and/or added the following defined terms: availability de-rating factor capacity auction capacity test capacity auction dispatch test capacity auction eligible generation resource capacity auction eligible storage resource capacity auction offer capacity obligation capacity qualification request cleared ICAP cleared UCAP demand response energy bid installed capacity (ICAP) over committed capacity performance adjustment factor unforced capacity (UCAP)

### Part 4 - Proposed Amendment

### **Chapter 7**

#### **Participation in Capacity Auctions** 18.2

- 18.2.1 No person may participate in a *capacity auction* nor receive a *capacity obligation* unless that person has:
  - 18.2.1.1 been authorized by the *IESO* as a *capacity auction participant* in accordance with section 3 of Chapter 2 and in accordance with the applicable *market manual*;

- 18.2.1.2 submitted to the *IESO* a capacity qualification requestenrolled capacity, using forms and procedures as may be established by the *IESO* in the applicable market manual; and
- 18.2.1.3 no less than five *business days* prior to the date on which a *capacity auction* is to be conducted, provided to the *IESO* a *capacity auction deposit,* in one or both of the forms set forth in section 18.4.
- 18.2.2 The following provisions of the *market rules* shall not apply to a *capacity auction* participant that is authorized by the *IESO* to participate only in a *capacity auction* with an *hourly demand response resource*:
  - 18.2.2.1 Chapters 4, 5, and 6;
  - 18.2.2.2 Chapter 7 other than this section 18; and
  - 18.2.2.3 Chapters 8 and 10.
- 18.2.3 A *capacity auction participant* who obtains a *capacity obligation* shall apply to become authorized by the *IESO* as a *capacity market participant* in accordance with section 3 of Chapter 2.

### 18.2A Capacity Auction - Capacity Qualification

- 18.2A.1 For each *capacity auction*, the *IESO* shall determine the *unforced capacity* for each *capacity auction participant* where:
  - 18.2A.1.1 the *unforced capacity* for a *capacity auction eligible generation resources* shall be calculated as:

 $\underline{UCAP} = \underline{ICAP} \times \underline{availability\ de\text{-rating\ factor}} \times (1 - \underline{performance}$   $\underline{adjustment\ factor})$ 

18.2A.1.2 the *unforced capacity* for a *capacity auction eligible storage resources* shall be calculated as:

 $\underline{UCAP = ICAP \times availability \ de-rating \ factor \times (1 - performance \ adjustment \ factor)}$ 

18.2A.1.3 the *unforced capacity* for a *capacity dispatchable load resources* shall be calculated as:

 $\underline{UCAP} = \underline{ICAP} \times \underline{availability\ de\text{-rating\ factor}} \times (1 - \underline{performance}$   $\underline{adjustment\ factor})$ 

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18.2A.1.4 the *unforced capacity* for a *system-backed capacity auction eligible import resources* shall be calculated as:

UCAP = ICAP

18.2A.1.5 the *unforced capacity* for a *generator-backed import contributor* shall be calculated as:

18.2A.1.5.1 Where the generator-backed import contributor is a generation facility:

 $\underline{UCAP} = \underline{Externally Accredited UCAP} \times (1 - \underline{performance adjustment} factor)$ 

Where:

External Accredited UCAP is the accredited UCAP rating from an external jurisdiction provided by the capacity auction participant in the capacity qualification request

18.2A.1.5.2 Where the *generator-backed import contributor* is a *electricity storage facility*:

 $\underline{UCAP} = \underline{ICAP} \times \underline{availability\ de\text{-rating\ factor}} \times (1 - \underline{performance\ adjustment\ factor})$ 

- 18.2A.2 A capacity auction resource must have a minimum unforced capacity of 1MW.
- 18.2A.3 The *IESO* shall notify each *capacity auction participant* of its *unforced capacity* as determined by the *IESO* according to the timelines specified in the pre-auction report.

### 18.3 Calculation of Capacity Auction Deposits

- 18.3.1 Upon receipt of *enrolled capacity* Based on the full *unforced capacity* determined in accordance with section 18.2A.1.2, the *IESO* shall determine for each *capacity auction participant*, a *capacity auction deposit* for a *capacity auction* as specified in the applicable *market manual*.
- 18.3.2 The *IESO* shall review the *capacity auction deposit* of a *capacity transferee* upon receipt of a request for a *capacity obligation* transfer in accordance with section 18.9.1. As a result of a transfer request, the *IESO* may increase the *capacity auction deposit* of a *capacity transferee* and the *IESO* shall notify the *capacity transferee* of any such increase.

18.3.3 Where the amount of a *capacity auction deposit* provided by a *capacity auction participant* exceeds the amount required by the *IESO*, the *IESO* shall return the excess amount to the *capacity auction participant* within five *business days* of such a request from the *capacity auction participant*. Otherwise, that amount shall be held by the *IESO* and shall form part of that *capacity auction participant's capacity auction deposit* for its participation in a subsequent *capacity auction*.

### 18.5 Capacity Auction Parameters

18.5.1 The *IESO* shall conduct *capacity auctions* at least on an annual basis to acquire *capacity* for a future one-year *commitment period*. In each *capacity auction* the *IESO* shall acquire *auction capacity* for each *obligation period* as specified in the applicable *market manual*.

Demand Curve, Zonal Constraints and Pre-Auction Reports

- 18.5.2 The *IESO* shall, in accordance with the applicable *market manual*, *publish* a preauction report in advance of each *capacity auction*, including the following *capacity auction* demand curve reference points:
- 18.5.2.1 a target capacity in accordance with section 18.1.2;
- 18.5.2.2 a capacity auction reference price;
  - 18.5.2.3 a maximum and minimum capacity auction clearing price;
  - 18.5.2.4 [Intentionally left blank section deleted]
  - 18.5.2.5 a maximum auction capacity limit at the maximum capacity auction clearing price that a capacity auction shall clear; and
  - 18.5.2.6 a maximum *auction capacity* limit that a *capacity auction* shall clear.
- 18.5.3 The *IESO* shall define *capacity auction zonal constraints* for each *capacity auction* and the *IESO* shall *publish*, in the pre-auction report, those requirements as specified in the applicable *market manual*.
- 18.5.4 The *IESO* shall specify and *publish* in the pre-auction report the following timelines associated with a *capacity auction*:
  - 18.5.4.1 the deadline to submit <u>a capacity qualification request</u> the amount of enrolled capacity the capacity auction participant is willing to provide pursuant to section 18.2.1.2;
  - 18.5.4.1A the date on which the *IESO* shall notify a *capacity auction participant* of its *unforced capacity*;

- 18.5.4.2 the deadline for a *capacity auction participant* to submit a *capacity auction deposit* in accordance with section 18.2.1.3;
- 18.5.4.3 the dates <u>in on</u> which a *capacity auction participant* may submit capacity auction offers for a *capacity auction*;
- 18.5.4.4 the period over which the *IESO* shall conduct the *capacity auction*; and
- 18.5.4.5 the date of *capacity auction* post-auction reporting in accordance with sections 18.8.1 and 18.8.2.
- 18.5.5 The *IESO* shall define the total *auction capacity* that may be provided by all *system-backed capacity import resources* and *generator-backed capacity import resources* in a *capacity auction* for each *obligation period*. The *IESO* shall publish, in the preauction report, these requirements as specified in the applicable *market manual*.
- 18.5.6 The *IESO* shall define the total *auction capacity* that may be provided by all *system-backed capacity import resources* and *generator-backed capacity import resources* on each applicable *intertie* in a *capacity auction* for each *obligation period*. The *IESO* shall publish, in the pre-auction report, these requirements as specified in the applicable *market manual*.

### 18.6 Capacity Auction Offers

- 18.6.1 A capacity auction offer:
  - 18.6.1.1 may be submitted or revised by the *capacity auction participant* on the dates specified in accordance with section 18.5.4 and the applicable *market manual*;
  - 18.6.1.2 shall only be applicable to the *obligation periods* for which a *capacity auction participant* has submitted a *capacity auction offer*, in accordance with the applicable *market manual*; and
  - 18.6.1.3 shall be time stamped by the *IESO* when received.
- 18.6.2 A *capacity auction offer* shall only be submitted in respect of a given *capacity auction* if:
  - 18.6.2.1 the *capacity auction participant* complies with the *capacity auction participant* requirements in section 18.2.1; and
  - 18.6.2.2 the *capacity auction participant* has not been disqualified from full or partial participation in the *capacity auction* pursuant to sections 19.4.8, 19.5.4, 19.7.4, 19.9.4 or 19.11.4.

- 18.6.3 A *capacity auction offer* may include up to twenty *price-quantity* pairs for each *obligation period* and shall comply with the following:
  - 18.6.3.1 the *capacity auction offer* shall be for and applicable over an entire *obligation period* associated with a *capacity auction*;
  - 18.6.3.2 the *capacity auction offer* price in any *price-quantity* pair shall:
    - be expressed in dollars and whole cents per MW-day of *auction capacity* to be provided in each hour of the *availability window* throughout the *obligation period* associated with that *capacity auction*;
    - be greater than or equal to \$0.00/MW-day;
    - not exceed the applicable maximum capacity auction clearing price;
       and
    - increase as the associated *capacity auction offer* quantity increases.
  - 18.6.3.3 the *capacity auction offer* quantity in any *price-quantity* pair shall be expressed in MW to not more than one decimal place and the total offered quantity shall not exceed the *enrolled\_unforced\_capacity* of the *capacity auction resource*, determined through the submission of *auction capacity* that a *capacity auction participant* is willing to provide in accordance with section 18.2.1.2; and
  - 18.6.3.4 the *capacity auction offer* shall indicate whether the *capacity auction* participant is willing to clear a *capacity auction* with the full amount of auction capacity offered in a lamination or a partial amount of the auction capacity offered in a lamination, in accordance with the applicable market manual.

### 18.8 Post-Auction Notification and Publication

- 18.8.1 The *IESO* shall, as soon as practicable following the conclusion of a *capacity auction*, *publish* the following in accordance with the applicable *market manual*:
  - 18.8.1.1 the capacity auction clearing price;
  - 18.8.1.2 the amount of *auction capacity* that has been acquired in each electrical zone;
  - 18.8.1.3 those capacity auction participants who received a capacity obligation and all respective capacity obligations; and
- $18.8.1.4 \quad \text{the } \frac{\textit{enrolled capacity}}{\textit{enrolled capacity}} \frac{\textit{cleared UCAP}}{\textit{of each capacity auction participant.}}$  Public  $IMO\_FORM\_1087v12.10$

18.8.2 The *IESO* shall, following the conclusion of a *capacity auction*, issue post-auction reports to each *capacity auction participant* by the date specified in the pre-auction report, to detail the *capacity auction offers* that have cleared in the *capacity auction* and the associated *capacity obligations* and *cleared ICAPs* for each *obligation period* in accordance with the applicable *market manual*.

18.8.2.1 the *cleared ICAP* will be calculated as:

$$cleared\ ICAP = cleared\ UCAP \times (\frac{1}{1-performance\ adjustment\ factor}) \times \left(\frac{1}{availability\ de-rating\ factor}\right)$$

### 18.9 Capacity Obligation Transfers

- 18.9.1 A *capacity transferor* may, subject to *IESO* approval and in accordance with the applicable *market manual*, request a transfer of all or a portion of its *capacity obligation* to a *capacity transferee* provided that the following criteria are met:
  - 18.9.1.1 the quantity to be transferred does not exceed the difference between the capacity transferee's enrolled unforced capacity, and its existing capacity obligation for the applicable obligation period;
    - 18.9.1.1.1 for the purposes of 18.9.1.1, the <u>enrolled unforced capacity</u> refers to the <u>enrolled unforced capacity</u> received by the <u>capacity transferee</u> in the <u>obligation period</u> for which the quantity is being transferred.
  - 18.9.1.2 the *capacity transferor* provides written confirmation to the *IESO* from the *capacity transferee* of its willingness to accept the transfer of a *capacity obligation* from the *capacity transferor*;
  - 18.9.1.3 the *capacity obligation* transfer shall consist of the same attributes (e.g. physical or virtual), as detailed in the applicable *market manual*, as the *capacity transferor's capacity obligation*;
  - 18.9.1.4 the quantity to be transferred is in increments of 0.1MW, and the resulting *capacity obligations* for both the *capacity transferor* and *capacity transferee* following the transfer shall be 0 MW, or greater than or equal to 1 MW; and
  - 18.9.1.5 [Intentionally left blank section deleted]
  - 18.9.1.6 [Intentionally left blank section deleted]
  - 18.9.1.7 [Intentionally left blank section deleted]

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- 18.9.1.8 *capacity obligation* transfers must not result in the violation of any constraint as defined in the pre-auction report
- 18.9.1A Where the *capacity obligation* is transferred between zones, the *capacity transferee* shall be settled based upon the *capacity auction clearing price* received by the *capacity transferor* when the *capacity obligation* first cleared the *capacity auction* in accordance with the applicable *market manual*.
- 18.9.2 For each transfer request that satisfies the criteria in section 18.9.1, the *IESO* shall determine the *capacity transferee's* revised *capacity auction deposit* and/or *capacity prudential support obligation*, as applicable, in accordance with section 18.3.2 and section 5B.3.3 of Chapter 2.
- 18.9.3 The *capacity transferee* shall provide the *IESO*, within five *business days* of receiving notification from the *IESO* or within such a longer period of time as may be agreed between the *IESO* and the *capacity transferee*, any additional *capacity auction deposit* and/or *capacity prudential support obligation* that may be required as a result of a transfer request.
- 18.9.4 After the revised *capacity auction deposits* and/or *capacity prudential support* obligations have been satisfied by the *capacity transferee*, the *IESO* shall notify the *capacity transferor* and *capacity transferee* of its approval or rejection, and the *IESO* shall *publish* updated post-auction reports pursuant to section 18.8.

# 19. Capacity Market Participants with Capacity Obligations

### 19.4 Energy Market Participation for Hourly Demand Response Resources

### **Capacity Auction** Testing for Hourly Demand Response Resources

- 19.4.11 The *IESO* may, in accordance with the applicable *market manual*, direct a *capacity market participant* with a *capacity obligation* to perform a <u>capacity auction dispatch</u> test activation testing for each hourly demand response resource up to a maximum of two test activations per obligation period. to verify that a
- 19.4.11A The IESO may, in accordance with the applicable market manual, direct a capacity market participant with a capacity obligation to perform a capacity auction capacity test for each hourly demand response resource to verify that load reduction to at least the cleared ICAP capacity obligation can be satisfied for a duration specified in the applicable market manual by the capacity market participant. The capacity auction

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- capacity test shall occur within a five (5) business day testing window determined by the IESO. The IESO shall provide notification to a capacity market participant of the capacity auction capacity test no less than ten business days prior to the first day of the testing window.
- 19.4.12 If a capacity market participant fails activation testing a capacity auction dispatch test or a capacity auction capacity test performed pursuant to section 19.4.11 or 19.4.11A, the capacity market participant shall be subject to non-performance charges in accordance with the applicable market manual. Failure duringof activation testing a capacity auction dispatch test or a capacity auction capacity test shall be considered a breach of the market rules and may result in sanctions in accordance with section 6.2 of Chapter 3.
- 19.4.13 The *IESO* shall provide a *capacity market participant* day-ahead notification of test-a <u>capacity auction dispatch test</u> activations pursuant to section 19.4.11 and the test activation shall occur within the *availability window* of an *obligation period*.
- 19.4.14 The <u>capacity auction dispatch test</u> test activation shall occur in accordance with the hourly demand response resource activation process specified in this section 19.4.
- 19.4.15 The *hourly demand response resource* shall be entitled to compensation for valid <u>capacity auction dispatch tests</u>test activations conducted during a *commitment period* pursuant to this section 19.4 and in accordance with the applicable *market manuals*.

### 19.5 Energy Market Participation for Capacity Dispatchable Load Resources

### **<u>Capacity Auction</u>** Testing for Capacity Dispatchable Load Resources

- 19.5.7 The *IESO* may, in accordance with the applicable *market manual*, direct a *capacity dispatchable load resource* to perform activation testing a *capacity auction dispatch*test for each resource up to a maximum of two activation tests per *obligation period* to verify that the *capacity dispatchable load resource* is capable of complying with dispatch instructions.
- 19.5.7A The IESO may, in accordance with the applicable market manual, direct a capacity market participant with a capacity obligation to perform a capacity auction capacity test for each capacity dispatchable load resource to verify that load reduction to at least the cleared ICAP a capacity obligation can be satisfied for a duration specified in the applicable market manual by the capacity market participant. The capacity auction capacity test shall occur within a five (5) business day testing window determined by the IESO. The IESO shall provide notification to a capacity market participant of the capacity auction capacity test no less than ten business days prior to the first day of the testing window.

- If a capacity market participant fails a capacity auction dispatch test or a capacity auction capacity test activation testing performed pursuant to section 19.5.7 or 19.5.7A, the capacity market participant shall be subject to non-performance charges in accordance with the applicable market manual. Failure during activation testing a capacity auction dispatch test or capacity auction capacity test shall be considered a breach of the market rules and may result in sanctions in accordance with section 6.2 of Chapter 3.
- 19.5.9 The *IESO* shall provide a *capacity dispatchable load resource* day-ahead notification of test-a *capacity auction dispatch test* activation and the test activation shall occur within the *availability window* of an *obligation period*.
- 19.5.10 The <u>capacity auction dispatch test</u> test activation shall occur in accordance with the <u>dispatch instructions</u> for a <u>dispatchable load facility</u> specified in this section 19.5.
- 19.5.11 The *capacity dispatchable load resource* shall not be entitled to compensation for any costs related to any valid *capacity auction dispatch test* test activation conducted during an *obligation period* pursuant to this section 19.5.

### 19.7 Energy Market Participation for Capacity Generation Resources

### **Capacity Auction** Testing for Capacity Generation Resources

- 19.7.7 The *IESO* may, in accordance with the applicable *market manual*, direct a *capacity market participant* to perform activation testing a *capacity auction dispatch test* for each *capacity generation resource* up to a maximum of two activation tests per *obligation period* to verify that athe *capacity generation resource* is capable of complying with *dispatch instructions*.
- 19.7.7A The IESO may, in accordance with the applicable market manual, direct a capacity market participant with a capacity obligation to perform a capacity auction capacity test for each capacity generation resource to verify that energy injection to at least the cleared ICAP verify that a capacity obligation can be satisfied for a duration specified in the applicable market manual by the capacity market participant. The capacity auction capacity test shall occur within a five (5) business day testing window determined by the IESO. The IESO shall provide notification to a capacity market participant of the capacity auction capacity test no less than ten business days prior to the first day of the testing window.
- 19.7.8 If a capacity market participant fails an a capacity auction dispatch test or a capacity auction capacity test test performed pursuant to section 19.7.7 or 19.7.7A, the capacity market participant shall be subject to non-performance charges in accordance with the applicable market manual. Failure during a capacity auction

- <u>dispatch test or capacity auction capacity test</u> activation testing shall be considered a breach of the *market rules* and may result in sanctions in accordance with section 6.2 of Chapter 3.
- 19.7.9 The *IESO* shall provide a *capacity generation resource* that is not a *quick start facility* day ahead-notification up to one *business day* in advance of the <u>a capacity auction</u> dispatch test test activation and the <u>capacity auction dispatch test</u> test activation shall occur within the *availability window* of an *obligation period*.
- 19.7.9A The *IESO* shall provide a *capacity generation resource* that is a *quick start facility* notification at least one hour in advance of the dispatch hour of the <u>capacity auction</u> and the <u>capacity auction dispatch test</u> test activation shall occur within the *availability window* of an *obligation period*.
- 19.7.10 The <u>capacity auction dispatch test</u> test activation shall occur in accordance with the dispatch instructions specified in this section 19.7

### 19.8 Eligibility Requirements for System-Backed Capacity Import Resources

- 19.8.1 A *capacity market participant* is eligible to satisfy its *capacity obligation* with a *system-backed capacity import resource* provided that the *capacity market participant*:
  - 19.8.1.1 demonstrates to the satisfaction of the *IESO* that it can provide the *capacity obligation*, as specified in the applicable *market manual*;
  - 19.8.1.2 is authorized as a *market participant* eligible to import *energy*;
  - 19.8.1.3 is registered as a *boundary entity* pursuant to section 2.2.7; and
  - 19.8.1.4 has provided *prudential support* and *capacity prudential support* in accordance with section 5 of Chapter 2.

## 19.9 Energy Market Participation for System-Backed Capacity Import Resources

19.9.1 A capacity market participant satisfying its capacity obligation with a system-backed capacity import resource shall receive an availability payment during the obligation period, in accordance with this section and the applicable market manual.

Availability payments may be offset by non-performance charges in accordance with section 4.7J of Chapter 9.

#### **Dispatch of System-Backed Capacity Import Resources**

- 19.9.2 The *IESO* shall schedule a *system-backed capacity import resource* in the *energy market*, and issue *dispatch instructions* in accordance with Chapter 7.
- 19.9.3 A system-backed capacity import resource shall comply with IESO dispatch instructions in accordance with Chapter 7.
- 19.9.4 The *IESO* may disqualify from future participation in the *capacity auction* any *capacity market participant* that fails to schedule *energy* with the appropriate scheduling entity in order to satisfy its *capacity obligation* when called upon in accordance with this section 19.

### **Outage Notification Requirements for System-Backed Capacity Import Resources**

19.9.5 A *system-backed capacity import resource* shall reduce or remove its *offer* to reflect the maximum capacity that it reasonably expects it can provide in accordance with section 3.5.6.

### Activation Capacity Auction Testing for System-Backed Capacity Import Resources

- 19.9.6 The *IESO* may, in accordance with the applicable *market manual*, direct a *capacity market participant* to perform activation testing a capacity auction capacity test for each system-backed capacity import resource up to a maximum of two activation tests per obligation period to verify that the energy offer can be satisfied for a duration specified in the applicable market manual by the system-back capacity import resource.
- 19.9.7 If a *capacity market participant* fails an activation testa *capacity auction capacity test* performed pursuant to section 19.9.6, the *capacity market participant* shall be subject to non-performance charges in accordance with the applicable *market manual*. Failure during activation testing acapacity auction capacity test shall be considered a breach of the *market rules* and may result in sanctions in accordance with section 6.2 of Chapter 3.
- 19.9.8 The *IESO* shall provide a <u>system-backed</u> capacity import resource notification at least two hours in advance of the dispatch hour of the <u>capacity auction capacity test</u> test activation and the <u>capacity auction capacity test</u> the test activation shall occur within the <u>availability window</u> of an <u>obligation period</u>.
- 19.9.9 The <u>capacity auction capacity test</u> test activation shall occur in accordance with the <u>dispatch instructions</u> specified in this section 19.9.

# 19.9A Eligibility Requirements for Generator-Backed Capacity Import Resources

- 19.9A.1 A capacity market participant is eligible to satisfy its capacity obligation with a generator-backed capacity import resource provided that the capacity market participant:
  - 19.9A.1.1 demonstrates to the satisfaction of the *IESO* that it can provide the *capacity obligation*, as specified in the applicable *market manual*;
  - 19. 9A.1.2 is authorized as a *market participant* eligible to import *energy* in association with a *boundary entity*;
  - 19.9A.1.3 has provided *prudential support* and *capacity prudential support* in accordance with section 5 of Chapter 2.

# 19.9B Energy Market Participation for Generator-Backed Capacity Import Resources

19.9B.1 A capacity market participant satisfying its capacity obligation with a generator-backed capacity import resource shall receive an availability payment during the obligation period, in accordance with this section and the applicable market manual. Availability payments may be offset by non-performance charges in accordance with section 4.7J of Chapter 9.

#### **Dispatch of Generator-Backed Capacity Import Resources**

- 19.9B.2 The *IESO* shall schedule a *generator-backed capacity import resource* in the *energy market*, and issue *dispatch instructions* in accordance with Chapter 7.
- 19.9B.3 A generator-backed capacity import resource shall comply with *IESO dispatch* instructions in accordance with Chapter 7.
- 19.9B.4 The *IESO* may disqualify from future participation in the *capacity auction* any *capacity market participant* that fails to schedule *energy* with the appropriate scheduling entity in order to satisfy its *capacity obligation* when called upon in accordance with this section 19.

### Outage Notification Requirements for Generator-Backed Capacity Import Resources

19.9B.5 A *generator-backed capacity import resource* shall reduce or remove its *offer* to reflect the maximum capacity that it reasonably expects it can provide in accordance with section 3.5.6.

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19.9B.6 A generator-backed capacity import resource shall comply with the outage notification requirements specified in the applicable market manual.

### **Capacity Auction Testing for Generator-Backed Capacity Import Resources**

- 19.9B.7 A capacity market participant satisfying its capacity obligation with a generator-backed capacity import resource must perform a capacity auction capacity testan activation test, in accordance with the applicable market manual, by scheduling an energy import into the IESO-administered market for at least one (1) hour that coincides with the timing of its scheduled four hour activation in the neighbouring control area, on a date that falls within the first two months of the applicable obligation period and by submitting data to the IESO to confirm the capability of the generator-backed capacity import resource to inject at least its capacity obligation cleared ICAP into the control area in which it is located for four consecutive hours within the availability window.
- 19.9B.8 *A capacity market participant* that fails to submit data pursuant to section 19.9B.7, in the form specified by the *IESO*, in a timely manner shall be subject to a capacity obligation administration charge pursuant to section 4.7J.2.3 of Chapter 9.
- 19.9B.9 If a capacity market participant fails an activation test a capacity auction capacity test performed pursuant to section 19.9B.7, the capacity market participant shall be subject to non-performance charges in accordance with the applicable market manual. Failure during an activation test a capacity auction dispatch test or a capacity auction capacity test shall be considered a breach of the market rules and may result in sanctions in accordance with section 6.2 of Chapter 3.
- 19.9B.10 The *capacity auction capacity test* shall occur in accordance with the *dispatch instructions* specified in this section 19.9B.

### 19.11 Energy Market Participation for Capacity Storage Resources

### **Capacity Auction** Testing for Capacity Storage Resources

- 19.11.7 The *IESO* may, in accordance with the applicable *market manual*, direct a *capacity market participant* to perform activation testing a *capacity auction dispatch test* for each *capacity storage resource* up to a maximum of two activation tests per *obligation period* to verify that a the *capacity storage resource* is capable of complying with *dispatch instructions*.
- 19.11.7A The *IESO* may, in accordance with the applicable *market manual*, direct a *capacity market participant* with a *capacity obligation* to perform a *capacity auction capacity*

test for each capacity storage resource to verify that energy injection to at least the cleared ICAP eapacity obligation can be satisfied for a duration specified in the applicable market manual by the capacity market participant. The capacity auction capacity test shall occur within a five (5) business day testing window determined by the IESO. The IESO shall provide notification to a capacity market participant of the capacity auction capacity test no less than ten business days prior to the first day of the testing window.

- 19.11.8 If a *capacity market participant* fails an activation a test performed pursuant to section 19.11.7 or 19.11.7A, the *capacity market participant* shall be subject to non-performance charges in accordance with the applicable *market manual*. Failure during activation a *capacity auction dispatch test* or *capacity auction capacity test* testing shall be considered a breach of the *market rules* and may result in sanctions in accordance with section 6.2 of Chapter 3.
- 19.11.9 The *IESO* shall provide a *capacity storage resource* notification at least one hour in advance of the dispatch hour of the <u>capacity auction dispatch test</u> test activation and the <u>capacity auction dispatch test</u> test activation shall occur within the <u>availability</u> window of an <u>obligation period</u>.
- 19.11.10 The <u>capacity auction capacity test</u> test activation shall occur in accordance with the <u>dispatch instructions</u> specified in this section 19.11.

### **Chapter 11**

<u>availability de-rating factor</u> means a value which is assigned to a <u>capacity auction resource</u> based on its historical availability and is calculated for each <u>capacity auction resource</u> type as specified in the applicable <u>market manual</u>.

<u>capacity auction capacity test</u> means a test conducted by the <u>IESO</u> in which <u>capacity auction</u> <u>resources</u> are evaluated on their ability to successfully provide <u>energy</u> or reduce load equal to their <u>cleared ICAP</u> as specified in the applicable <u>market manual</u>;

<u>capacity auction dispatch test</u> means a test conducted by the <u>IESO</u> in which <u>capacity auction</u> <u>resources</u> are evaluated on their ability to successfully respond to <u>dispatch</u> instructions as <u>specified in the applicable market manual;</u>

capacity auction eligible generation resource means a non-committed resource that is associated with a generation facility, which is also a connected facility at the commencement of the capacity enrollment qualification process for a given capacity auction, and which is registered as dispatchable with the *IESO* prior to the obligation period in accordance with the timelines specified in the applicable market manual;

capacity auction eligible storage resource means a non-committed resource associated with an electricity storage facility, which is also a connected facility at the commencement of the capacity enrollment qualification process for a given capacity auction, and which is registered as dispatchable with the IESO prior to the obligation period in accordance with the timelines specified in the applicable market manual;

capacity auction offer means an offer(s) from a capacity auction participant, in the form of a price-quantity pair(s), to provide auction capacity through a capacity auction resource for an applicable obligation period, reflecting the amount of auction capacity that the capacity auction participant can reliably and responsibly provide if received as a capacity obligation, and which offer amount is no greater than the capacity auction participant's enrolled unforced capacity;

capacity obligation means the amount of auction capacity cleared UCAP that a capacity market participant is required to provide from a particular capacity auction resource during each hour of the availability window of an obligation period;

<u>capacity qualification request</u> means a request submitted to the <u>IESO</u> by a <u>capacity auction</u> <u>participant</u> which includes the <u>installed capacity</u> and all other applicable information, using the forms specified by the <u>IESO</u>, for the determination of the <u>unforced capacity</u> of a <u>capacity auction</u> <u>resource</u> in the capacity qualification process specified in the applicable <u>market manual</u>;

<u>cleared ICAP</u> means an amount in megawatts of electricity in respect of a <u>capacity auction</u> <u>resource's cleared UCAP</u> and any applicable <u>performance adjustment factors</u> and <u>availability</u> <u>de-rating factors</u> as specified in the applicable <u>market manual</u>;

cleared UCAP means an amount in megawatts of electricity that a capacity auction resource cleared in a given capacity auction and adjusted for any applicable capacity obligation buy-outs or capacity obligation transfers;

demand response energy bid means a bid in the day-ahead commitment process and the real-time energy market, greater than the demand response bid price threshold, except during the capacity auction capacity test testing window, and less than the MMCP, by a capacity market participant entered for either a capacity dispatchable load resource or an hourly demand response resource to fulfill a capacity obligation availability requirement;

installed capacity or ICAP means the maximum amount in megawatts of electricity submitted by a capacity auction participant during the IESO's capacity qualification process and reflects a capacity auction resource's seasonal generation capability, load reduction capability, or interconnection import capability;

over committed capacity means capacity has been contracted to or otherwise obligated to be provided to the *IESO*, the OEFC, or another control area operator at any time during a given obligation period where the same capacity is included in a capacity obligation cleared ICAP held by a capacity market participant participating with a generator-backed capacity import resource:

performance adjustment factor means a value assigned to a capacity auction resource based on its historical performance during a capacity auction capacity test activation in the relevant summer or winter obligation period from two auctions prior and is calculated in accordance with the process set out in the applicable market manual;

enrolled unforced capacity or UCAP means an quantity amount in megawatts representing the maximum capacity auction offer that a capacity auction resource participant is willing able to offer to provide from a capacity auction resource for an applicable obligation period, as determined through the IESO's capacity qualification process and which corresponds to an amount submitted to the IESO by the capacity auction participant during the enrollment period of a relevant capacity auction and if applicable, satisfies any qualification criteria that may be set out in the applicable market manual;