

Market Rule Amendment Proposal Form

Part 1 - Market Rule Information

Identification No.:	MR-00469-R0		
Subject:	2022 Capacity Auction Enhancements		
Title:	2022 Capacity Auction Enhancements		
Nature of Proposal:	□ Alteration □ Deletion □ Addition		
Chapter:	7, 9, 11		
Appendix:	N/A		
Sections:	Chapter 7: 18 and 19 Chapter 9: 4 Chapter 11: Definitions		
Sub-sections proposed for amending:	Chapter 7: 18.2, 18.2A, 18.3, 18.4, 18.5, 18.6, 18.8, 18.9, 19.1, 19.4, 19.5, 19.7, 19.8, 19.9, 19.9A, 19.9B, and 19.11 Chapter 9: 4.7J Chapter 11: Definitions		
Current Market Rules Baseline:	46.1		

Part 2 - Proposal History

Version	Reason for Issuing	Version Date
1.0	Draft issued for preliminary stakeholder review	Dec. 7, 2021

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 2022 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*.
- 18.4 Cross references in sub-section 18.4.4 have been updated.
- 18.5 Updated to reflect the change in defined terms from *enrolled capacity* to *unforced capacity* and for the addition of *system-backed capacity import resources* and *generator-backed capacity import resources*
- 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*.
- 19.1 Updated eligible resource types to include *system-backed capacity import resource* and *generator-backed capacity import resource*.

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- 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.
- 19.8 Updated the defined term *capacity import resource* to system-backed *capacity import* resource.
- 19.9 Updated the defined term *capacity import resource* to system-backed *capacity import* resource. The Capacity Auction Testing for System-Backed Capacity Import Resources subsection is being updated to reflect the proposed changes to the testing framework.
- 19.9A New section has been added for Eligibility Requirements for Generator-Backed Capacity Import Resources.
- 19.9B New section has been added for Energy Market Participation for Generator-Backed Capacity Import Resources.
- 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 9

Section 4.7J has been updated with system-backed capacity import resource and generatorbacked capacity import resource defined terms.

An additional sub-section has been added to the Capacity Obligation Availability Charges section which will allow for the application of a charge in the amount of ten (10) times the availability charge when the IESO has issued an advisory notice that there is the potential for the declaration of an emergency operating state.

A new sub-section has been added for the new Availability Charge True-Up.

The Capacity Obligation Capacity Charges section has been updated to reflect the change in the capacity auction testing framework and to specify that capacity auction participants will be tested to their cleared ICAP.

Chapter 11

Updated and/or added the following defined terms:

capacity auction capacity test

capacity auction dispatch test

capacity auction offer

capacity auction zonal constraints

capacity obligation

capacity qualification request

cleared ICAP

cleared UCAP

forward period

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generator-backed capacity auction eligible import resource generator-backed capacity import resource installed capacity (ICAP) system-backed capacity auction eligible import resource system-backed capacity import resource unforced capacity

Part 4 - Proposed Amendment

Chapter 7

18.2 Participation in Capacity Auctions

- 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
 - 18.2.1.2a received from the *IESO* an *unforced capacity* equal to or greater than 1

 MW pursuant to the capacity qualification process described 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* according to the capacity qualification process described in the applicable *market manual*.
- 18.2A.2 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 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. The capacity auction deposit shall be based on the full unforced capacity value.
- 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*.

18.4 Capacity Auction Deposits

In the event a *capacity auction participant* has not satisfied the applicable eligibility requirements specified in sections 19.2, 19.3, or 19.6, 19.8, 19.9A, or 19.10 of Chapter 7 prior to the start of the applicable *obligation period* and has not elected to buy-out the *capacity obligation* in accordance with section 4.7J.3 of Chapter 9, the *IESO* shall revoke the *capacity obligation* and the *capacity auction participant* shall, at the *IESO*'s sole discretion, forfeit its *capacity auction deposit*.

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 a *capacity qualification request* 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*;
 - 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 Page 6 of 22 Public IMO_FORM_1087v12.10 REV-21-06

- 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 <u>system-backed</u> capacity import resources and <u>generator-backed capacity import resources</u> 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 <u>system-backed</u> capacity import resources and <u>generator-backed capacity import resources</u> on each applicable intertie in a <u>capacity auction</u> for each <u>obligation period</u>. The *IESO* shall <u>publish</u>, in the pre-auction report, these requirements as specified in the applicable <u>market manual</u>.

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 the *enrolled capacity cleared UCAP* of each *capacity auction participant*.
- 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*.

18.9 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]
 - 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

19.1 Purpose

- 19.1.1 This section details how a *capacity market participant* must satisfy a *capacity* obligation with a *capacity auction resource*.
- 19.1.2 *Capacity auction resources* eligible to satisfy a *capacity obligation* are:
 - 19.1.2.1 an hourly demand response resource;
 - 19.1.2.2 a capacity dispatchable load resource;
 - 19.1.2.3 a capacity generation resource;
 - 19.1.2.4 a system-backed capacity import resource; or
 - 19.1.2.5 a capacity storage resource; or
 - 19.1.2.6 a generator-backed capacity import resource.
- 19.1.3 [Intentionally left blank section deleted]

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 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 capacity test shall occur within a five (5) business day testing window determined by the IESO.
- 19.4.12 If a *capacity market participant* fails activation testing a test performed pursuant to section 19.4.11 or 19.4.11A, the *capacity market participant* shall be subject to nonperformance charges in accordance with the applicable *market manual*. Failure during 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 activations pursuant to section 19.4.11 and the test activation shall occur within the *availability window* of an *obligation period*. [Intentionally left blank section deleted]
- 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 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.
- 19.5.8 If a capacity market participant fails a test activation testingthe capacity auction dispatch test 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 activation and the test activation shall occur within the *availability window* of an *obligation period*. [Intentionally left blank section deleted]
- 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* 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 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.

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- 19.7.8 If a *capacity market participant* fails an a 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* dispatch test or capacity auction capacity test 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 <u>dispatch instructions</u> specified in this section 19.7

19.8 Eligibility Requirements for <u>System-Backed</u> Capacity Import Resources

- 19.8.1 A *capacity market participant* is eligible to satisfy its *capacity obligation* with a <u>system-backed</u> 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 <u>System-Backed</u> Capacity Import Resources

19.9.1 A capacity market participant satisfying its capacity obligation with a <u>system-backed</u> 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.

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

- 19.9.2 The *IESO* shall schedule a <u>system-backed</u> capacity import resource in the energy market, and issue dispatch instructions in accordance with Chapter 7.
- 19.9.3 A <u>system-backed</u> 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 <u>system-backed</u> 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 *cleared ICAP* can be satisfied for a duration specified in the applicable *market manual* by the *system-back capacity import resource.capacity market participant*.
- 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 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.
- 19.9.8 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 <u>capacity auction capacity test</u> the test activation shall occur within the availability window of an obligation period.
- 19.9.9 The *capacity auction capacity test* test activation shall occur in accordance with the *dispatch instructions* 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.

<u>Outage Notification Requirements for Generator-Backed Capacity Import</u> 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 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 activation in the neighbouring control area, on a date that falls within the first two months of the applicable obligation period and must submit data to the IESO confirming the capability of the generator-backed capacity import resource to inject its cleared ICAP into the control area in which it is located for up to 4 hours within the availability window.
- 19.9B.8 A capacity market participant that fails to submit data pursuant to section 19.9B.7A, in the form specified by the *IESO*, in a timely manner shall be subject to a capacity obligation administration charge pursuant to chapter 9 section 4.7J.2.3.
- 19.9B.9 If a capacity market participant fails a test performed pursuant to section 19.9B.7 or 19.9B.7A, the capacity market participant shall be subject to non-performance charges in accordance with the applicable market manual. Failure during 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

<u>Capacity Auction</u> 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 the *cleared ICAP capacity*

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- 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.
- 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 obligation period.
- 19.11.10 The <u>capacity auction dispatch test</u> test activation shall occur in accordance with the dispatch instructions specified in this section 19.11.

Chapter 9

4.7J Capacity Obligations

- 4.7J.1 The *IESO* shall remit an availability payment associated with a *capacity obligation*, if any, to the applicable *capacity market participant*, in the manner specified in the applicable *market manual*.
- 4.7J.2 A *capacity market participant* with a *capacity obligation* shall, in accordance with the applicable *market manual*, be subject to the following non-performance charges if the *capacity market participant* does not satisfy the requirements of its *capacity obligation*:

Capacity Obligation Availability Charges

- 4.7J.2.1 A capacity market participant participating with an hourly demand response resource or a capacity dispatchable load resource shall be subject to an availability charge for every hour of the availability window it fails to submit demand response energy bids in the amount of their capacity obligation in either the day-ahead commitment process or in the real-time energy market.
- 4.7J.2.1A A capacity market participant participating with a capacity generation resource, <u>system-backed</u> capacity import resource, <u>generator-backed</u> capacity import resource, or capacity storage resource shall be subject to an availability charge for every hour of the availability window in which it fails to submit energy offers in the amount of their capacity obligation in the day-ahead commitment process or in the pre-dispatch hour.
- 4.7J.2.1B Where the *IESO* has issued an advisory notice that there is the potential for declaration of an *emergency operating*, a *capacity market participant* participating with an *hourly demand response resource* or a *capacity dispatchable load resource* shall be subject to an availability charge in the amount of ten (10) times the availability charge determined under section 4.7J.2.1 for every hour of the availability window it fails to submit *demand response energy bids* in the amount of their *capacity obligation* in either the day-ahead commitment process through to pre-dispatch or in the *real-time markets*.
- 4.7J.2.1C Where the *IESO* has issued an advisory notice that there is the potential for declaration of an *emergency operating state*, a *capacity market* participant participating with capacity generation resource, *system-backed capacity import resource*, or capacity storage resource shall be subject to an availability charge in the amount of ten (10) times the availability charge determined under section

4.7J.2.1 for every hour of the availability window in which it fails to submit energy offers in the amount of their *capacity obligation* in the dayahead commitment process or in the pre-dispatch hour.

Availability Charge True-Up

- 4.7J.2.1D A capacity market participant that has been subject to the availability charge pursuant to section 4.7J.2.1 and 4.7J.2.1A shall be eligible to receive an availability charge true-up for every hour of the availability window throughout the obligation period in which its capacity auction resource offered an amount of energy in excess of its capacity obligation, up to a maximum amount set out in the applicable market manual.
- 4.7J.2.1E The *IESO* shall calculate the availability charge true-up for a *capacity*market participant at the end of the *obligation period* for any *capacity*auction resource that provided energy in excess of its capacity obligation

 pursuant to section 4.7J.2.1D. The availability charge true-up will be up to
 a maximum amount equal to the sum of availability charges assessed to
 the capacity auction resource during the obligation period.
- 4.7J.2.1F If a *capacity market participant* elects to be subject to the buy-out charge in accordance with section 4.7J.3, the availability charge true-up will be calculated using the *capacity market participant*'s revised *capacity obligation* for the remainder of the *obligation period* following the effective date of the buy-out.

Capacity Obligation Dispatch Charges

4.7J.2.2 A capacity market participant participating with an hourly demand response resource shall be subject to a dispatch charge for failure to comply with an activation notice received under section 19.4.5 of Chapter 7.

Capacity Obligation Administration Charges

4.7J.2.3 A capacity market participant participating with an hourly demand response resource or a generator-backed capacity import resource shall be subject to a demand response capacity obligation administration charge for failure to provide timely, accurate and complete measurement data to the IESO.

Capacity Obligation Capacity Charges

4.7J.2.4 Subject to section 19.4.5 of Chapter 7, a *capacity market participant* participating with an *hourly demand response resource* that fails to satisfy its *capacity obligation* demonstrate its ability to provide its *cleared ICAP*

- in response to an activation a capacity auction capacity test shall be subject to a capacity charge.
- 4.7J.2.5 Subject to section 7.5.3 of Chapter 7, a capacity market participant participating with either a capacity dispatchable load resource, a capacity generation resource or a capacity storage resource that fails to satisfy its capacity obligation demonstrate its ability to provide its cleared ICAP in response to an activation a capacity auction capacity test shall be subject to a capacity charge.
- 4.7J.2.6 Subject to section 7.5.8A of Chapter 7, a capacity market participant participating with a <u>system-backed</u> capacity import resource or <u>generator-backed</u> capacity import resource that fails to <u>satisfy its capacity obligation</u> <u>by-demonstrate its ability to provide its cleared ICAP</u> in response to <u>an activation a capacity auction capacity</u> test shall be subject to a capacity charge.

Capacity Call Failure Charges

4.7J.2.7 Subject to section 7.5.8A of Chapter 7, a *capacity market participant*participating with a *generator-backed capacity import resource* that fails

to satisfy its *capacity obligation* in response to a capacity call shall be subject to a capacity call failure charge.

Capacity Deficiency Charges

4.7J.2.8 Where the *IESO* has determined that capacity associated with a *capacity* obligation and associated cleared *ICAP* held by a capacity market participant participating with a generator-backed capacity import resource 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 it shall be subject to a capacity deficiency charge.

Chapter 11

<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> equal to their <u>cleared</u> <u>ICAP</u> as specified in the applicable market manual;

<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 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 auction zonal constraints means the minimum or maximum amount of auction capacity, or virtual demand response capacity that a capacity auction seeks to secure for a specific electrical zone or group of electrical zones as detailed by the IESO in each pre-auction report;

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;

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

<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 performance adjustment as specified in the applicable market manual;

<u>cleared UCAP</u> means an amount in megawatts of electricity that a <u>capacity auction resource</u> receives in a given <u>capacity auction</u>;

forward period means the period of time immediately beginning three (3) business days following a capacity auction, to the commencement of an obligation period;

generator-backed capacity auction eligible import resource means one or more generation units associated with a single boundary entity. Each generation unit represented by the generator-backed capacity import resource must be able to qualify capacity, be an existing in-service generation facility or storage facility that has been in operation for at least one year prior to the auction, be located in a neighbouring control area that has an agreement with the IESO to allow for the trade of capacity, be a resource type that is currently enabled to participate in the IESO's

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<u>capacity auction</u>, and be able to transmit <u>energy</u> from the <u>generation unit</u> to the Ontario border. No portion of the capacity that is being offered into the <u>IESO capacity auction</u> may be – in whole or in part – contracted to or otherwise obligated to be provided to the <u>IESO</u>, the OEFC, or another <u>control area operator</u> during the entire duration of a given <u>obligation period</u>;

generator-backed capacity import resource means a generator-backed capacity auction eligible import resource with a capacity obligation received in a given capacity auction in accordance with the applicable market manual;

installed capacity (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, load reduction capability, or interconnection capability;

<u>system-backed</u> capacity auction eligible import resource means a capacity auction resource associated with a <u>boundary entity</u> that is available to enroll capacity that a neighbouring <u>control</u> area operator is willing to allocate to Ontario, if a <u>capacity obligation</u> is secured, for the duration of the applicable <u>obligation period</u>, which capacity would be deemed to be supplied from the entire system of the neighbouring <u>control area</u>. The allocated capacity must not otherwise be – in whole or in part – contracted to or otherwise obligated to be provided to the *IESO*, the *OEFC*, or another <u>control area operator</u> during the entire duration of a given <u>obligation period</u>;

<u>system-backed</u> capacity import resource means a <u>system-backed</u> capacity auction eligible import resource with a capacity obligation received in a given capacity auction in accordance with the applicable market manual;

enrolled unforced capacity (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 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;