

Market Rule Amendment Proposal Form

Part 1 - Market Rule Information

Identification No.:	MR-00469-R00
Subject:	2022 Capacity Auction Enhancements
Title:	2022 Capacity Auction Enhancements
Nature of Proposal:	<input checked="" type="checkbox"/> Alteration <input type="checkbox"/> Deletion <input checked="" type="checkbox"/> Addition
Chapter:	7, 9 and 11
Appendix:	N/A
Sections:	Chapter 7: 18 and 19 Chapter 9: 4 Chapter 11: Definitions
Sub-sections proposed for amending:	Chapter 7: 18.1A, 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
2.0	Draft issued for stakeholder review	February 10, 2022
3.0	Issued for technical panel review	April 12, 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 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

18.1A – Update to the point in time rules to allow for an amendment to the market rules pertaining to the capacity auction where the proposed amendment expressly excludes the application of sections 18.1A.1 and 18.1A.2.

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*.

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 sub-section 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 *generator-backed capacity import resource defined terms*.

Sub-sections 4.7J.2.1B and 4.7J.2.1C have been added to the Capacity Obligation Availability Charges section which will allow for the application of a charge in the amount of ten times the availability charge when the *IESO* has issued an advisory notice that there is the potential for the declaration or has declared an *emergency operating state*.

A new sub-section, 4.7J.2.1D, has been added for a new Standby Availability Charge. This charge will apply to HDR resources that fail to submit energy offers in the amount of their *capacity obligation* in the day-ahead commitment process or in the pre-dispatch.

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*.

A new sub-section, 4.7J.2.7, has been added for Capacity Import Call Failure Charges

A new sub-section, 4.7J.2.8, has been added for Capacity Deficiency Charges

A new sub-section, 4.7J.6, has been added for the new Availability Charge True-Up.

A new sub-section, 4.7J.7, has been added that will provide a true-up payment to a capacity market participant where the total amount of all non-performance charges pursuant to section 4.7J.2, excluding charges pursuant to section 4.7J.2.2, assessed to a capacity auction resource for an obligation period exceeds the total of all availability payments.

Chapter 11

Updated and/or added the following defined terms:

capacity auction capacity test

capacity auction dispatch test

capacity auction eligible generation resource

capacity auction eligible storage resource

capacity auction offer

capacity auction zonal constraints

capacity import call

capacity obligation

capacity qualification request

cleared ICAP

cleared UCAP

demand response energy bid

forward period

generator-backed capacity auction eligible import resource

generator-backed import contributor

generator-backed capacity import resource

installed capacity (ICAP)

market price

offer

over committed capacity

system-backed capacity auction eligible import resource

system-backed capacity import resource

unforced capacity

Part 4 - Proposed Amendment

Chapter 7

18.1A Capacity Auction – Transitional Market Rules

18.1A.1 For the purposes of participation in a *capacity auction*, *market rules* and *market manuals* that specifically concern *capacity auction* participation, the satisfaction of *capacity obligations*, or the performance of requirements directly related to that participation, shall remain in effect from the date of the *capacity auction* until the end

of its associated *commitment period*, except as otherwise provided in sections 18.1A.1.1 and 18.1A.3.

- 18.1A.1.1 ~~Notwithstanding sections 18.1A.1, in the case where a *capacity auction* is a *demand response auction*, the *market rules* and applicable *market manuals* that shall remain in effect until the end of the associated *commitment period*, in accordance with 18.1A.1, shall be the *market rules* and applicable *market manuals* in effect at the start of that *demand response auction*'s associated *commitment period*. Nothing in this section 18.1A shall limit the effectiveness of a *market rule amendment* or *market manual amendment* that expressly excludes the application of sections 18.1A.1 and 18.1A.2.~~
- 18.1A.2 Except as otherwise provided in sections 18.1A.1.1 and 18.1A.3, Changes to the *market rules* and applicable *market manuals* that specifically concern *capacity auction* participation, the satisfaction of *capacity obligations*, or the performance of requirements directly related to that participation, and which are brought into effect between the date of a given *capacity auction* and the end of its associated *commitment period*, shall be applicable to subsequent *capacity auctions* and their associated *commitment periods*.
- 18.1A.3 ~~Notwithstanding sections 18.1A.1 and 18.1A.2,~~ Nothing in this section 18.1A shall limit the effectiveness of an *urgent rule amendment*.
- 18.1A.4 The *IESO* shall maintain a *published* archive of *market rules* and applicable *market manuals* in effect on the date of a *capacity auction* for a period of 2 years following the end of its associated *commitment period*.

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 request*~~enrolled *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

18.4.4 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 pre-auction 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;

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 ~~in~~on 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 pre-auction 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 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 ~~*enrolled-unforced capacity*~~ refers to the ~~*enrolled-unforced capacity*~~ received by the *capacity transferee* in the *obligation period* 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 *capacity auction dispatch 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 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 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 ~~during of 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~~ *capacity auction dispatch test* 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 *capacity auction dispatch test* ~~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 *capacity auction dispatch tests* ~~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

Capacity Auction 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.
- 19.5.8 If a *capacity market participant* fails ~~a test activation testing~~ the 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~~ a capacity auction dispatch test activation and the test activation shall occur within the *availability window* of an *obligation period*.
- 19.5.10 The capacity auction dispatch test ~~test~~-activation shall occur in accordance with the *dispatch instructions* for a *dispatchable load facility* 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 ~~at the 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~~ 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 ~~a capacity auction dispatch test test activation~~ and the capacity auction dispatch test ~~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 capacity auction dispatch test ~~test activation~~ and the capacity auction dispatch test ~~test activation~~ shall occur within the *availability window* of an *obligation period*.
- 19.7.10 The capacity auction dispatch test ~~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*. ~~capacity market participant.~~
- 19.9.7 If a *capacity market participant* fails ~~an activation test~~ a *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 *system-backed capacity import resource* notification at least two hours in advance of the dispatch hour of the *capacity auction capacity test* ~~test activation~~ and the capacity auction capacity test ~~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.

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.

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 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 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.7A, 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 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 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 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.

19.11.8 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 *capacity auction dispatch test* ~~test activation~~ and the *capacity auction dispatch test* ~~test activation~~ shall occur within the *availability window* of an *obligation period*.
- 19.11.10 The *capacity auction capacity test* ~~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*, *system-backed capacity import resource*, *generator-backed 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.

Capacity Obligation Augmented Availability Charges

- 4.7J.2.1B Where the *IESO* has issued an advisory notice that there is the potential for declaration or has declared an *emergency operating state*, a *capacity market participant* participating with an *hourly demand response resource* or a *capacity dispatchable load resource* shall be subject to an augmented 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 through to pre-dispatch or in the *real-time markets* as described in the applicable *market manual*.
- 4.7J.2.1C Where the *IESO* has issued an advisory notice that there is the potential for declaration or has declared an *emergency operating state*, a *capacity market participant* participating with *capacity generation resource*, *system-backed capacity import resource*, *generator-backed capacity*

import resource, or capacity storage resource shall be subject to an augmented 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 as described in the applicable market manual.

Capacity Obligation Standby Availability Charges

4.7J.2.1D A capacity market participant who has been issued a standby notice by the IESO in relation to an hourly demand response resource in accordance with section 19.4.2 of Chapter 7, shall be subject to a standby availability charge for every hour of the availability window in which it fails to submit demand response energy bids in the amount of their capacity obligation in the day-ahead commitment process or in the pre-dispatch hour as described in the applicable market manual. This charge shall not apply when the IESO has issued an advisory notice that there is the potential for declaration or has declared an emergency operating state.

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 data, including 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 demonstrate a load reduction to at least 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 system-backed capacity import resource or generator-backed capacity import resource that fails to ~~satisfy its capacity obligation~~ by 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.

Capacity Obligation Capacity Import 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 import call shall be subject to a capacity import call failure charge as specified in the applicable market manual.

Capacity Obligation Capacity Deficiency Charges

- 4.7J.2.8 Where the IESO has determined that all of a portion of a capacity market participant's capacity obligation is over committed capacity it shall be subject to a capacity deficiency charge and the IESO shall revoke the portion of the capacity obligation that is over committed capacity.
- 4.7J.3 A *capacity market participant* or a *capacity auction participant* may elect to be subject to a buy-out charge for all, or a portion of, their *capacity obligation* in accordance with the applicable *market manual*, if they are unable to fulfill a *capacity obligation* for the remaining portion of a *obligation period*.
- 4.7J.4 At any time, the *IESO* may audit any submitted measurement data and supporting information and a *capacity market participant* shall provide such information in the time and manner specified by the *IESO*. If, as a result of such an audit, the *IESO* determines that actual measurement data and supporting information differed from the submitted measurement data and supporting information, the *IESO* shall recover from or distribute to a *capacity market participant* any resulting over or under payment, as applicable.
- 4.7J.5 The *IESO* shall remit a test activation payment or emergency activation payment for a valid test activation or emergency activation, respectively, of an *hourly demand response resource*, associated with a *capacity obligation*, if any, to the applicable *capacity market participant*, in the manner specified in the applicable *market manuals*.

Capacity Obligation Availability Charges True-Up Payment

4.7J.6 A capacity market participant that has been subject to the availability charge pursuant to section 4.7J.2.1 or 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 of energy set out in the applicable market manual. The maximum amount of the availability charge true-up payment is the sum of the availability charges assessed pursuant to section 4.7J.2.1 or 4.7J.2.1A to the capacity auction resource during the obligation period. 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 Capacity Auction Charges True-up Payment

4.7J.7 A capacity market participant shall be eligible to receive a capacity auction charges true-up payment for each capacity auction resource where the total amount of all non-performance charges pursuant to section 4.7J.2, excluding charges pursuant to section 4.7J.2.2, assessed to a capacity auction resource for an obligation period, exceeds the total of all availability payments determined according to section 4.7J.1 and true-ups payment pursuant to section 4.7J.6 for the same obligation period.

Chapter 11

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

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

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 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 import call means an energy import from an external control area that is supported by the capacity of a generation unit or the capacity for injection of an electricity storage unit within the external control area that has committed its capacity, or a portion thereof, to the IESO control area and that capacity has been called by the IESO in accordance with section 19.9 or 19.9B of Chapter 7;

capacity obligation means the amount of auetion-capacitycleared 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;

cleared ICAP means an amount in megawatts of electricity in respect of a *capacity auction resource's cleared UCAP* and any applicable performance adjustment and derate factors as specified in the applicable market manual;

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 testing, 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;

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* single. Each *generation unit* represented by the *generator-backed capacity import resource* must be a *generator-backed import contributors*. No portion of the capacity that is being offered into the *IESO capacity auction* may be *over committed capacity*;

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;

generator-backed import contributor means an existing in-service *generation facility* or *storage facility* associated with a *generator-backed capacity auction eligible import resource*, and which is located in a neighbouring *control area* that has an agreement with the *IESO* to allow for the trade of capacity, is able to qualify capacity through the capacity qualification process in accordance with the applicable market manual, has been in operation for at least one year prior to the *capacity auction*, is a resource type that is currently enabled to participate in the *IESO's capacity auction*, and is able to transmit energy from the *generation facility* or *storage facility* to the Ontario border;

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 capability, load reduction- capability, or ~~interconnection~~ import capability;

market price means the price of *energy* or *operating reserve* determined in the *real-time market* or the price of *auction capacity* determined in the *capacity auction* in accordance with the provisions of Chapter 7;

offer means a statement of the quantities of a commodity that a seller will provide at different market prices for that commodity in the *real-time market*, ~~or~~ the *procurement market*, or the capacity auction;

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 cleared ICAP held by a capacity market participant participating with a generator-backed capacity import resource;

system-backed capacity auction eligible import resource means a capacity auction resource associated with a boundary entity that is available to enroll capacity that a neighbouring control area operator is willing to allocate to Ontario, if a capacity obligation is secured, for the duration of the applicable obligation period, which capacity would be deemed to be supplied from the entire system of the neighbouring control area. 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 control area operator during the entire duration of a given obligation period;

system-backed capacity import resource means a system-backed 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;