



Market Rule Amendment Proposal Form

Part 1 Market Rule Information

Identification No.:	MR-00453-R00
Subject:	Market Renewal Program - Prudential Security
Title:	Market Renewal Program - Prudential Security and Physical Transactions
Nature of Proposal:	<input checked="" type="checkbox"/> Alteration <input checked="" type="checkbox"/> Deletion <input checked="" type="checkbox"/> Addition
Chapter:	2
Appendix:	
Sections:	5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8
Sub-sections proposed for amending:	5.1.1, 5.1.2 (deleted), 5.1.3 (new), 5.1.3.1 (new), 5.1.3.2 (new), 5.1.3.3 (new), 5.1.3.4 (new), 5.1.3.5 (new), 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.6, 5.2.7, 5.2.7A (new), 5.2.8, 5.2.9, 5.2.10 (new), 5.3.1, 5.3.2, 5.3.3, 5.3.3A (new), 5.3.4, 5.3.4.1, 5.3.4.2, 5.3.4.3, 5.3.5, 5.3.6, 5.3.7 (deleted), 5.3.8, 5.3.8.1, 5.3.8.2, 5.3.8A, 5.3.8B, 5.3.9, 5.3.10A, 5.3.10A.1, 5.3.10A.2, 5.3.10C (new), 5.3.11, 5.3.11.2, 5.3.11.3, 5.3.11.4, 5.3.12, 5.4.1, 5.4.2, 5.5.1, 5.5.1.1a, 5.5.1.1b, 5.5.1.2a, 5.5.1.2b, 5.6.1, 5.6.2, 5.6.3, 5.6.4, 5.6.5, 5.6.6, 5.6.7 (new), 5.7.1, 5.7.2, 5.7.2.1b, 5.7.2A (new), 5.7.3A, 5.7.3B, 5.7.5, 5.8.1, 5.8.1A, 5.8.2A (deleted), 5.8.3, 5.8.4, 5.8.5, 5.8.6, 5.8.6.1, 5.8.6.3 (new), 5.8.8

Part 2 Proposal History

Version	Reason for Issuing	Version Date
1.0	Draft for Stakeholder Review	October 13, 2020

Approved Amendment Publication Date:	
Approved Amendment Effective Date:	

Part 3 Explanation for Proposed Amendment

Provide a brief description of the following:

- 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*.

Part 4 Proposed Amendment

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Chapter 2

5. Prudential Requirements

5.1 Purpose and Application

5.1.1 ~~This Section 5, 5B, 5C and 5D sets forth the nature and amount of *prudential support* that must be provided by *market participants* as a condition of participation in the *real-time markets* or *the day-ahead market*, as the case may be, or of causing or permitting electricity to be conveyed into, through or out of the *IESO-controlled grid*, and the manner in which *market participants* must provide and maintain such *prudential support* on an on-going basis in order to protect the *IESO* and minimize the impact of payment defaults on *market participants* from payment defaults. *Market participants* participating in the *IESO-administered markets* solely as a *capacity market participant* or *capacity auction participant* with a *capacity obligation* shall be subject only to the *capacity prudential support* requirements in section 5B.~~

5.1.2 ~~[Intentionally left blank – section deleted] The *IESO* shall review the *prudential support* requirements set out in this chapter at least once every three years. The first review shall be completed no later than September 30, 2010.~~

Application

5.1.3 The rules governing *prudential support* in this Chapter 2 apply to *market participants* in the manner set out below:

Physical Transactions and/or Virtual Transactions

- 5.1.3.1 Sections 5.1 and 5.2 shall apply to *market participants* authorized to conduct one or any combination of:
- a. *physical transactions in the day-ahead market;*
 - b. *physical transactions in the real-time market; or*
 - c. *virtual transactions in the day-ahead market, except for subsection 5.2.6.*

Physical Transactions

- 5.1.3.2 Subject to subsection 5.1.3.4, sections 5.3 to 5.8 shall apply to *market participants* authorized to conduct one or any combination of:
- a. *physical transactions in the day-ahead market; or*
 - b. *physical transactions in the real-time market.*

Virtual Transactions

- 5.1.3.3 Subject to subsection 5.1.3.4, section 5C shall apply to *market participants* authorized to conduct *virtual transactions* in the *day-ahead market*.

Physical Transactions and Virtual Transactions

- 5.1.3.4 Section 5D shall apply to *market participants* authorized to conduct both *physical transactions* and *virtual transactions*. Sections 5 and 5C shall also apply, as appropriate, to *market participants* authorized to conduct both *physical transactions* and *virtual transactions*, except for sections 5.4, 5.6, 5C.2 and 5C.4.

Capacity Auctions

- 5.1.3.5 *Market participants* participating in the *IESO-administered markets* solely as a *capacity market participant* or *capacity auction participant* with a *capacity obligation* shall be subject only to the *capacity prudential support* requirements in section 5B.

5.2 Market Participant Obligations

- 5.2.1 Each *market participant* shall initially and continually satisfy the obligations set forth in this section 5.2 with regard to the provision of *prudential support* as a condition of participating in (i) *physical transactions in the real-time markets* or (ii) *physical transactions* or *virtual transactions in the day-ahead market* or (iii) of causing or permitting electricity to be conveyed into, through or out of the *IESO-controlled grid*.
- 5.2.2 Each *market participant* shall provide to the *IESO* and at all times maintain *prudential support* the value of which is not less than the *market participant's applicable prudential support obligations*. For this purpose, the aggregate value of the *prudential support* shall be equal to the value of the undrawn or unclaimed amounts of *prudential support* provided by the *market participant*.

- 5.2.3 No *market participant* that is required pursuant to section 5.3.9 or section 5C.5.1 as the case may be, to provide *prudential support* shall participate in the *real-time markets* or the *day-ahead-market* or cause or permit electricity to be conveyed into, through or out of the *IESO-controlled grid* unless that *market participant* satisfies the *prudential support* requirements of this section, section 5C and Appendix 2.3.
- 5.2.4 Each *market participant* shall provide to the *IESO*, on an ongoing basis, such information as the *IESO* may reasonably require for the purpose of determining that *market participant's maximum net exposure* for *physical transactions* and *virtual transactions*.
- 5.2.5 If *prudential support* previously provided to the *IESO* by a *market participant* pursuant to section 5.7 (the "*existing support*") or 5C.5 is due to expire or terminate and, upon expiry or termination of the *existing support*, the total *prudential support* held by the *IESO* in respect of that *market participant* will be less than the *market participant's applicable prudential support obligations* then, at least ten *business days* prior to the time at which the *existing support* is due to expire or terminate, the *market participant* must provide to the *IESO* a replacement *prudential support* which will become effective no later than the expiry or termination of the *existing support*, such that the total *prudential support* provided is equal to the *market participant's prudential support obligation*.
- 5.2.6 Where a *market participant's prudential support obligation* for *physical transactions* has been reduced pursuant to section 5.8 and the relevant credit rating is revised or the relevant payment history has changed, whether under section 5.8 or otherwise, such as to result in an increase in the *market participant's prudential support obligation* then, within five *business days of any such change*, the *market participant* must provide to the *IESO* additional *prudential support* such that the total *prudential support* provided for *physical transactions* is equal to the *market participant's prudential support obligation* for *physical transactions* when calculated on the basis of the revised credit rating or payment history.
- 5.2.7 Where any part of the *prudential support* provided by a *market participant* otherwise ceases to be current or valid for any reason, the *market participant* must immediately so notify the *IESO* and provide to the *IESO*, within two *business days*, a replacement *prudential support* such that the total *prudential support* provided is at least equal to the *market participant's applicable prudential support obligations*.
- 5.2.7A Notwithstanding any other provision of the *market rules*, the *IESO* may exercise its rights in accordance with section 6.3.3.2 of Chapter 3 and Appendix 2.3 of this Chapter over any amount of *prudential support* that has been provided by a *market participant* or a person providing *prudential support* on behalf of that *market participant* irrespective of whether the *prudential support* was provided for the purpose of satisfying a *prudential support obligation* for *physical transactions* or a *prudential support obligation* for *virtual transactions*.
- 5.2.8 If, as a result of the *IESO* exercising its rights over the~~under~~ a *prudential support*

provided by a *market participant* in accordance with section 6.3.3.2 of Chapter 3 and Appendix 2.3, the remaining *prudential support* held by the *IESO* in respect of that *market participant* is less than the *market participant's applicable prudential support obligations*, the *market participant* must, within five *business days* of receiving notice of the exercise by the *IESO* of such rights, provide the *IESO* with additional *prudential support* such that the total *prudential support* provided is equal to the *market participant's applicable prudential support obligations*.

5.2.9 A *market participant* to which a *margin call* has been issued pursuant to section 5.4.2, 5C.2.2, or 5D.3.2 shall respond to such *margin call* in accordance with section 5.6, 5C.4 or 5D.4, as the case may be.

5.2.10 For the purpose of section 5, a *retailer* shall be deemed to be an *energy trader*.

5.3 Calculation of Participant Trading Limit, Default Protection Amount and Maximum Net Exposure for Physical Transactions

Maximum Net Exposure

5.3.1 The *IESO* shall determine, for each *market participant* intending to conduct *physical transactions*, subject to section 5.6.5, a *maximum net exposure for physical transactions* as the sum of the *market participant's trading limit for physical transactions*, the *market participant's default protection amount for physical transactions* and amounts, if any, for which the *market participant* is liable under section 2.5.4 of Chapter 7.

Self Assessed Trading Limit

5.3.2 Subject to section 5.3.3, each *market participant* intending to conduct *physical transactions* shall determine and submit to the *IESO*, using forms and procedures as may be established by the *IESO* in the applicable *market manual*, the amount of its *self-assessed trading limit* at least ~~7 business days~~ prior to the start of any *energy market billing period*, even if that *self-assessed trading limit* is zero.

- 5.3.2.1 [Intentionally left blank]
- a. [Intentionally left blank]
 - b. [Intentionally left blank]

- 5.3.2.2 [Intentionally left blank]
- a. [Intentionally left blank]
 - b. [Intentionally left blank]

5.3.2A [Intentionally left blank]

- 5.3.2A.1 [Intentionally left blank]
- a. [Intentionally left blank]
 - b. [Intentionally left blank]

5.3.2A.2 [Intentionally left blank]

a. [Intentionally left blank]

b. [Intentionally left blank]

5.3.2A.3 [Intentionally left blank]

5.3.3 The *self-assessed trading limit* submitted by a *market participant* under section 5.3.2 shall be applicable for the remainder of the current and all future energy market billing periods until a revised *self-assessed trading limit* is submitted by that *market participant* to the *IESO* in accordance with the provisions of section 5.3.2. If a *market participant* submits a *self-assessed trading limit* pursuant to section 5.3.2, that *self-assessed trading limit* shall, subject to section 5.3.3A ~~as of the next energy market billing period,~~ supersede any previous *self-assessed trading limit*, and the previous *self-assessed trading limit* shall not be applicable to any such future *energy market billing periods*.

5.3.3A A market participant's revised self-assessed trading limit submitted in accordance with section 5.3.3 shall take effect once the IESO confirms receipt of any additional prudential support, as required by the IESO.

Minimum Trading Limit

5.3.4 Subject to section 5.6.5, the *IESO* shall establish a *minimum trading limit for physical transactions* for each *market participant* intending to conduct physical transactions as follows:

5.3.4.1 the *minimum trading limit for physical transactions* for a ~~metered-market participant that is not an energy trader,~~ shall be equal to the *IESO's* estimate of the ~~metered-market participant's~~ net settlement amounts, excluding estimated settlement amounts associated with virtual transactions and a transmission rights, assuming ~~7~~seven days of participation by way of physical transactions in the real-time market and assuming all energy injected or withdrawn is transacted through physical transactions~~the real-time market~~. The *IESO* may use a greater number, up to and including 49 days, of participation in physical transactions~~the real-time market~~ for the determination of a ~~metered-market participant's~~ *minimum trading limit for physical transactions* if that ~~metered-market participant that is not an energy trader~~ was subject to more than one *margin call* per *energy market billing period* in respect of physical transactions, provided that any such *margin call* is not the result of a price spike;

a. [Intentionally left blank]

b. [Intentionally left blank]

c. [Intentionally left blank]

5.3.4.2 the *minimum trading limit* for *physical transactions* ~~for a market participant~~ an *energy trader* ~~that is not a metered market participant~~ that has conducted *physical transactions* for *energy* for at least three previous *billing periods* shall be equal to 25% of the *IESO's* estimate of the *market participant's* net *settlement amounts* for the upcoming *energy market billing period* associated with *physical transactions*. In estimating this net *settlement amount*, the *IESO* shall, subject to section 5.3.4.3, use an average of the actual net *settlement amounts* for the ~~3~~ three most recent *energy market billing periods* in which that market participant has conducted *physical transactions* ~~for *energy*~~ ~~transacted in the real-time market~~. The *IESO* may use a greater percentage, up to and including 100%, of the estimated *market participant's* net *settlement amounts* for the determination of a *market participant's* *minimum trading limit* for *physical transactions* if that *market participant* was subject to more than one *margin call* in respect of *physical transactions* per *energy market billing period*, provided that any such *margin call* is not caused by a price spike; and

- a. [Intentionally left blank]
- b. [Intentionally left blank]

5.3.4.3 the *minimum trading limit* for *physical transactions* ~~for a market participant~~ ~~that is an *energy trader*~~ ~~not a metered market participant~~ who has not conducted *physical transactions* for *energy* for at least three previous *billing periods*, ~~transacted for at least 3 months in the real-time market~~, shall be equal to the greater of:

- i. 25% of the absolute value of the *market participant's* estimate of its net *settlement amount* for the upcoming *energy market billing period*. Such a *market participant* shall provide to the *IESO*, an estimate of its net settlement amount for the upcoming energy market billing period ~~at least 7 business days prior to the start of applicable energy market billing period~~. The *IESO* may adjust the market participant's minimum trading limit at any time if that market participant's actual net settlement amounts for the current billing period are projected to differ significantly from the estimate provided; or
- ii. \$25,000.

5.3.4A [Intentionally left blank]

5.3.4A.1 [Intentionally left blank]

- a. [Intentionally left blank]
- b. [Intentionally left blank]

5.3.4A.2 [Intentionally left blank]

5.3.4B [Intentionally left blank]

5.3.4B.1 [Intentionally left blank]

- a. [Intentionally left blank]
- b. [Intentionally left blank]
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5.3.4B.2 [Intentionally left blank]

- a. [Intentionally left blank]
- b. [Intentionally left blank]
- c. [Intentionally left blank]
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 - ii. [Intentionally left blank]
- d. [Intentionally left blank]
- e. [Intentionally left blank]
 - i. [Intentionally left blank]
 - ii. [Intentionally left blank]

5.3.4C [Intentionally left blank]

Establishing Market Participant Trading Limit

5.3.5 Upon receipt of a *market participant's self-assessed trading limit* under section 5.3.2, the IESO shall use the greater of the following two amounts for that *market participant's trading limit* for physical transactions for the remainder of the current or upcoming energy market billing period:

5.3.5.1 the *market participant's minimum trading limit* for that *energy market billing period* as determined pursuant to section 5.3.4; or

- 5.3.5.2 the *market participant's self-assessed trading limit* submitted under section 5.3.2.
- 5.3.6 If a *market participant* does not provide a *self-assessed trading limit* within the timelines ~~as~~ specified in section 5.3.2, the *IESO* shall use the greater of the following two amounts for that *market participant's trading limit for physical transactions* for the remainder of the current or upcoming energy market billing period:
- 5.3.6.1 the *market participant's minimum trading limit* for that *energy market billing period* as determined pursuant to section 5.3.4; or
- 5.3.6.2 the *market participant's trading limit for physical transactions* in effect for the current *energy market billing period*.
- 5.3.6.3 [Intentionally left blank]
- 5.3.6.4 [Intentionally left blank]
- 5.3.6.5 [Intentionally left blank]
- 5.3.6A [Intentionally left blank]
- 5.3.7 ~~[Intentionally left blank – section deleted] Once a *market participant's trading limit* has been established pursuant to section 5.3.5 or 5.3.6, that *market participant* is not permitted to change or request a change to that *trading limit* during the upcoming *energy market billing period*.~~

Establishing Market Participant Default Protection Amount

- 5.3.8 The *IESO* shall, for each *energy market billing period*, establish a *default protection amount for physical transactions* for each *market participant* intending to conduct physical transactions as follows:
- 5.3.8.1 for a ~~*metered market participant*~~ that is not an *energy trader*, its *default protection amount* shall be equal to the *IESO's* estimate of the ~~*metered market participant's net settlement amounts*~~ for that *energy market billing period*, excluding estimated *settlement amounts* associated with *virtual transactions* and ~~*transmission rights*~~, assuming 21 days of participation ~~in the *real-time market* by way of *physical transactions*~~, and assuming all *energy* injected or withdrawn is transacted through *physical transactions*~~the *real-time market*~~; and
- 5.3.8.2 for a ~~*market participant*~~ that is an *energy trader* not a ~~*metered market participant*~~, the *default protection amount* shall be equal to the *minimum trading limit* for that *market participant* for that *energy market billing period* as determined by the *IESO* pursuant to section 5.3.4.2 or section 5.3.4.3, as applicable.

Adjusting Trading Limit and Default Protection Amount for Physical Bilateral Contracts

- 5.3.8A A ~~metered market participant~~ that is not an *energy trader* with a credit rating of BBB- or higher, subject to any adjustment under section 5.8.2, may request that its *minimum trading limit* and *default protection amount*, in respect of *physical transactions*, be calculated by removing the *energy* quantities associated with the ~~participant's market~~ *participant's physical bilateral contracts* registered with the *IESO* provided it submits to the *IESO* the quantity and duration of the applicable *physical bilateral contracts* and it notifies the *IESO* immediately upon a change in the quantity or duration of the *physical bilateral contracts* including the termination of any of the contracts.
- 5.3.8B If the conditions of 5.3.8A are met the *IESO* shall determine the ~~metered market participant's~~ *minimum trading limit* and *default protection amount*, in respect of *physical transactions*, assuming all *energy* injected or withdrawn is transacted through the *day-ahead market* or *real-time market* net of *energy* quantities associated with those *physical bilateral contracts*.

Requirement to Provide Prudential Support

- 5.3.9 If a *market participant's maximum net exposure for physical transactions*, as calculated by the *IESO*, is zero or negative, the *market participant* is not required to provide any form of *prudential support for physical transactions* to the *IESO*. If a *market participant's maximum net exposure for physical transactions*, as calculated by the *IESO*, is positive, the *market participant* must provide an amount of *prudential support* to the *IESO* equal to its *prudential support obligation for physical transactions*.

Price Bases Used for Determining Minimum Trading Limit and Default Protection Amount

- 5.3.10 The *IESO* shall estimate the net *settlement amounts* for a *market participant* referred to in sections 5.3.4 and 5.3.8 initially based on information provided to the *IESO* by the *market participant* in its *application for authorization to participate* and subsequently using such information as the *IESO* may reasonably require for that purpose and, in each case, on the price bases referred to in 5.3.10A, and the *IESO's estimated market prices* for all other applicable charges for the relevant *energy market billing period*.
- 5.3.10A When calculating the *minimum trading limit* and the *default protection amount* for ~~metered market participants other than energy traders~~ in sections 5.3.4, 5.3.8 and 5.3.8B respectively, the *IESO* shall establish and use as its price basis the following:
- 5.3.10A.1 for a ~~metered market participant other than a distributor~~ that is associated with a *generation resource facility*, *dispatchable load*, or *price responsive load*, the applicable *Regulated Price Plan* supply cost or its equivalent published by the *OEB* greater of (i) the average hourly locational marginal price in the *day-ahead market* or (ii) the average locational marginal price in the *real-time market*; or

5.3.10A.2 for a ~~metered market participant~~ that is ~~associated with a distributed non-dispatchable load~~, the applicable Regulated Price Conventional Meter Tier 1 price or its equivalent published by the ~~OEB~~ greater of (i) the average Ontario zonal price in the *day-ahead market* or (ii) the average Ontario zonal price in the *real-time market*.

5.3.10B The *IESO* shall annually review each price basis referred to in section 5.3.10A. The *IESO* shall modify the applicable price basis if it has increased or decreased by 15% or more from the price basis used by the *IESO*.

5.3.10C The *IESO* may, in determining the price basis in accordance with section 5.3.10A, use any applicable prices published by the *OEB*.

Reviewing and Modifying Trading Limits, Default Protection Amount and Maximum Net Exposure

5.3.11 The *IESO* ~~may~~ shall review the *minimum trading limit* for *physical transactions* where applicable, and the *trading limit*, *default protection amount* and *maximum net exposure*, for *physical transactions*, of each *market participant* in circumstances that include as follows:

5.3.11.1 prior to the start of each *energy market billing period*;

5.3.11.2 within two *business days* after a *market participant's actual exposure* for *physical transactions* exceeds the *trading limit* for that *market participant*;

5.3.11.3 within two *business days* after it receives notice of any changes to the status of a *market participant* as compared to such status that was in effect when the *market participant's maximum net exposure* for *physical transactions* was last calculated if the *IESO* determines that the change in such status would have a material impact on the *market participant's maximum net exposure*;

5.3.11.4 when the *IESO* has adjusted a *market participant's minimum trading limit* for *physical transactions* pursuant to section 5.3.4.3; and

5.3.11.5 when the *IESO* has adjusted its price basis under section 5.3.10B.

5.3.12 The *IESO* may change the *minimum trading limit*, *trading limit*, *default protection amount*, *maximum net exposure* or the *prudential support obligation*, for *physical transactions*, for a *market participant* at any time as a result of a review conducted pursuant to section 5.3.11 and shall promptly notify the *market participant* of any such change. Any change to a *market participant's minimum trading limit*, *trading limit*, *default protection amount*, *maximum net exposure* or *prudential support obligation*, in respect of *physical transactions* shall apply with effect from such time, not being earlier than the time of notification of the changed *minimum trading limit*, *trading limit*, *default protection amount*, *maximum net exposure* or *prudential support obligation* to the *market participant*, as the *IESO* may specify in the notice. The *market participant* must

supply the *IESO*, within five *business days* of the effective date of the change, any additional *prudential support* for *physical transactions* that may be required as a result of an increase in the *market participant's prudential support obligation* that results from such change.

5.4 Monitoring of Actual Exposure and Trading Limit for Physical Transactions

5.4.1 If at any time the *actual exposure* for *physical transactions* of a *market participant* that is not also a *virtual trader*, is equal to or exceeds 70% and is less than 100% of the *market participant's trading limit*, the *IESO* shall inform the *market participant* of that fact unless the *market participant* has opted for the *no margin call option* pursuant to section 5.6.4. The *market participant* may, but is not required to, make a cash payment to be applied to reduce its *actual exposure* or take other action to prevent its *actual exposure* from reaching its *trading limit*. No interest shall be paid on any such payment.

5.4.1.1 [Intentionally left blank]

5.4.1.2 [Intentionally left blank]

5.4.2 If at any time the *actual exposure* for *physical transactions* of a *market participant* that is not also a *virtual trader*, equals or exceeds the *market participant's trading limit* for *physical transactions*, the *IESO* shall issue to the *market participant* a *margin call* unless the *market participant* has opted for the *no margin call option* pursuant to section 5.6.4.

5.4.2.1 [Intentionally left blank]

5.4.2.2 [Intentionally left blank]

5.4.3 [Intentionally left blank]

5.5 Calculation of Actual Exposure for Physical Transactions

5.5.1 For the purposes of section 5.4, a *market participant's actual exposure* for *physical transactions* shall be a dollar amount determined by the *IESO* each *business day*, in accordance with the applicable *market manual*, and shall be ~~a dollar amount which is~~ equal to:

5.5.1.1 the aggregate of:

- a. all amounts payable by the *market participant* in respect of *physical transactions* for *billing periods* prior to the current *billing period* which remain unpaid by the *market participant*, whether or not the payment date thereof has yet been reached; and
- b. the *IESO's* reasonable estimate of the aggregate hourly and non-hourly *settlement amounts* payable by the *market participant* in respect of ~~transactions~~ *physical transactions* which have already occurred in the current *billing period*;

5.5.1.2 less the aggregate of:

- a. all amounts payable to the *market participant* in respect of physical transactions for billing periods prior to the current *billing period* which remain unpaid, whether or not the payment date thereof has yet been reached; and
- b. the *IESO's* reasonable estimate of the aggregate hourly and non-hourly *settlement amounts* payable to the *market participant* in respect of ~~transactions~~physical transactions which have already occurred in the current *billing period*.

5.6 Margin Call Requirements and the No Margin Call Option for Physical Transactions

5.6.1 A *market participant* that is not also virtual trader, must satisfy a *margin call* in respect of physical transactions within the time prescribed in section 5.6.2 by paying a portion of the amount payable or which will become payable in respect of the previous or current *energy market billing period*, in accordance with Chapter 9, in an amount sufficient to reduce the *market participant's actual exposure* to no more than the dollar equivalent of 75% of the *market participant's trading limit*. No interest shall be paid on such payments.

5.6.1.1 [Intentionally left blank]

5.6.1.2 [Intentionally left blank]

5.6.2 The time within which a *margin call* in respect of physical transactions must be satisfied under section 5.6.1 shall be by 4:00 pm on the second *business day* following the date of the *margin call*.

5.6.3 For the purposes of the *market rules*, a payment made pursuant to section 5.6.1 shall be applied first to the amount outstanding for physical transactions with respect to the earliest *billing period* under the *market rules* and, if the amount outstanding under the *market rules* in respect of that *billing period* is less than the amount of the payment, then the excess shall be applied to the next earliest *billing period* for physical transactions in respect of which there is an amount outstanding under the *market rules* and so on until there is no excess.

5.6.4 Subject to section 5.6.7, A *market participant* shall not be subject to the *margin call* requirements of sections 5.6.1 and 5.6.2, subject to *IESO* approval, if it elects to use the *no margin call option* using forms and procedures as may be established by the *IESO* in the applicable *market manual*.

5.6.5 The *IESO* shall determine the ~~*market participant's maximum net exposure*~~ for physical transactions of a market participant other than an energy trader, that has selected the *no margin call option*, based on 70 days of market activity and assuming all of the *market participant's energy* ~~is injected or withdrawn~~ is transacted through the real-time market physical transactions. For ~~an non-metered market participants that are not metered market participants~~ energy trader that has selected the no margin call option,

the *IESO* shall determine *maximum net exposure* for *physical transactions* based on an estimate of 100% of ~~their~~its *net settlement amount* for the upcoming energy market billing period. A *market participant* that has elected the *no margin call option* shall not have a *trading limit*.

5.6.6 Other than *small distributors*, any *market participant* that elects to use the *no margin call option* shall not be eligible for reductions in its *prudential support obligations* pursuant to section 5.8.

5.6.7 A *market participant* shall not be eligible to use the *no margin call option* if it is authorized to conduct both *physical transactions* and *virtual transactions*.

5.7 Obligation to Provide Prudential Support for Physical Transactions

5.7.1 Each *market participant* must meet its obligation under this section 5 to provide and maintain *prudential support* for *physical transactions* by providing to the *IESO* and maintaining *prudential support*, the value of which is equal to the *market participant's prudential support obligation* for *physical transactions*.

5.7.2 A *market participant's prudential support obligation* for *physical transactions* must be met through the provision to the *IESO* and the maintenance of *prudential support* in one or more of the following forms:

5.7.2.1 a guarantee or irrevocable commercial letter of credit, which in both cases must be in a form acceptable to the *IESO* and provided by:

- a. a bank named in a Schedule to the *Bank Act*, S.C. 1991, c.46 with a minimum long-term credit rating of "A" from a major bond rating agency as identified in the list referred to in section 5.8.7; or
- b. a credit union licensed by the Financial Services Regulatory Authority~~Commission~~ of Ontario with a minimum long-term credit rating of "A" from a major bond rating agency as identified in the list referred to in section 5.8.7.

5.7.2.2 a guarantee in a form acceptable to the *IESO* provided by a person, other than an *affiliate* of the *market participant*, having a credit rating from a major bond rating agency identified on the list referred to in section 5.8.7;

5.7.2.3 marketable securities in the form of Canadian Government treasury bills. Such treasury bills shall be valued as cash at their current market value less 2 percent to take into account the potential eroding effects of interest rate increases;

5.7.2.4 subject to section 5.7.4 and 5.7.4A, a guarantee in a form acceptable to the *IESO* provided by a person that is an *affiliate* of the *market participant* and that has a credit rating from a major bond rating agency identified on the list referred to in section 5.8.7; and/or

- 5.7.2.5 cash deposits made with the *IESO* by or on behalf of the *market participant* provided that that *market participant* meets the following criteria:
- a. the *market participant* was already meeting its *prudential support obligation* in whole or in part through a cash deposit on November 4, 2004; and
 - b. the *market participant's prudential support obligation* was less than or equal to \$200,000 on November 4, 2004 and remains less than or equal to \$200,000 thereafter.

5.7.2A A *market participant* who has previously provided *prudential support* for *physical transactions* in accordance with subsections 5.7.2.2 or 5.7.2.4, who thereafter intends to become authorized as a *virtual trader* in accordance with subsection 2.1.1.13 of Chapter 2, shall provide the *IESO* with replacement *prudential support* for *physical transactions*. Such replacement *prudential support* for *physical transactions* shall be dated no earlier than January 1, 2023.

5.7.3 For the purposes of sections 5.7.2.1 and 5.7.2.2, the *IESO* shall establish, maintain, update as required and *publish* a list of organizations eligible to provide the *prudential support* referred to in sections 5.7.2.1 and 5.7.2.2 and shall establish, for each such eligible *prudential support* provider, an aggregate limit of the *prudential support* that may be provided by that *prudential support* provider to *market participants*. If aggregate limits are reached for any of these eligible organizations, *market participants* will be required to obtain *prudential support* from other eligible organizations that are still within their respective *prudential support* limits.

5.7.3A Where a *market participant's prudential support obligation for physical transactions* is reduced pursuant to section 5.8.1, 5.8.1A, 5B.5.1 or 5B.5.1A, the *IESO* shall not accept a guarantee from an *affiliate* of the *market participant* pursuant to section 5.7.2.4, unless the *market participant* provides a letter from the applicable major bond rating agency identified in the list referred to in section 5.8.7, stating that the two ratings are not directly linked and are stand alone ratings in relation to each other.

5.7.3B The *IESO* shall not accept a guarantee from an *affiliate* of the *market participant* pursuant to section 5.7.2.4 if the *affiliate* is also a *market participant* and has obtained a reduction of its own *prudential support obligation for physical transactions* pursuant to section 5.8.1, 5.8.1A, 5B.5.1 or 5B.5.1A.

5.7.4 For *market participants*, other than a *distributor*, subject to sections 5.7.3A and 5.7.3B the *IESO* shall not accept a guarantee from a rated *affiliate* of the *market participant* pursuant to section 5.7.2.4 where the value of the guarantee exceeds the following;

Credit Rating Category of Affiliate using Standard and Poor's Rating Terminology	Maximum Amount which May be Guaranteed by Affiliate
AA- and above or equivalent	100% of <i>maximum net exposure</i> of all <i>market participants</i> guaranteed by <i>affiliate</i>
A-, A, A+ or equivalent	Greater of 90% of <i>maximum net exposure</i> or \$37,500,000 of all <i>market participants</i> guaranteed by <i>affiliate</i>
BBB-, BBB, BBB+ or equivalent	Greater of 65% of <i>maximum net exposure</i> or \$15,000,000 of all <i>market participants</i> guaranteed by <i>affiliate</i>
BB-, BB, BB+ or equivalent	Greater of 30% of <i>maximum net exposure</i> or \$4,500,000 of all <i>market participants</i> guaranteed by <i>affiliate</i>
Below BB- or equivalent	0

5.7.4.A For *distributors*, subject to sections 5.7.3A and 5.7.3B the *IESO* shall not accept a guarantee from a rated *affiliate* of the *market participant* pursuant to section 5.7.2.4 where the value of the guarantee exceeds the following:

Credit Rating Category of Affiliate using Standard and Poor's Rating Terminology	Maximum Amount which May be Guaranteed by Affiliate
AA- and above or equivalent	100% of <i>maximum net exposure</i> of all <i>market participants</i> guaranteed by <i>affiliate</i>
A-, A, A+ or equivalent	Greater of 95% of <i>maximum net exposure</i> or \$45,000,000 of all <i>market participants</i> guaranteed by <i>affiliate</i>
BBB-, BBB, BBB+ or equivalent	Greater of 80% of <i>maximum net exposure</i> or \$22,500,000 of all <i>market participants</i> guaranteed by <i>affiliate</i>
BB-, BB, BB+ or equivalent	Greater of 55% of <i>maximum net exposure</i> or \$7,500,000 of all <i>market participants</i> guaranteed by <i>affiliate</i>
Below BB- or equivalent	0

5.7.5 The minimum terms and conditions that shall be included in the *prudential support for physical transactions* shall be as follows:

5.7.5.1 *prudential support* provided in accordance with sections 5.7.2.1, 5.7.2.2 and 5.7.2.4 shall be obligations in writing;

5.7.5.2 *prudential support* provided in accordance with sections 5.7.2.3 and 5.7.2.5 shall be obligations reflected in a written instrument in a form acceptable to the *IESO*;

5.7.5.3 *prudential support* provided in accordance with sections 5.7.2.1, 5.7.2.3 and 5.7.2.5 shall constitute valid and binding unsubordinated obligations to pay to the *IESO* amounts in accordance with its terms which relate to the obligations of the relevant *market participant* under the *market rules*; and

5.7.5.4 *prudential support* provided in accordance with sections 5.7.2.1 to 5.7.2.5 shall permit drawings or claims by the *IESO* on demand to a stated certain amount.

5.8 Reductions in Prudential Support Obligations for Physical Transactions

5.8.1 Subject to section 5.8.2, the *prudential support obligation for physical transactions* of a rated *market participant*, other than a *distributor*, may be reduced relative to the *market participant's maximum net exposure for physical transactions* by an amount equal to the monetary value prescribed, by the table below, to a credit rating from a major bond rating agency identified in the list referred to in section 5.8.7 issued and in effect in respect of the *market participant*.

Credit Rating Category using Standard and Poor's Rating Terminology	Allowable Reduction in Prudential Support
AA- and above or equivalent	100% of <i>maximum net exposure</i>
A-, A, A+ or equivalent	Greater of 90% of <i>maximum net exposure</i> or \$37,500,000
BBB-, BBB, BBB+ or equivalent	Greater of 65% of <i>maximum net exposure</i> or \$15,000,000
BB-, BB, BB+ or equivalent	Greater of 30% of <i>maximum net exposure</i> or \$4,500,000
Below BB- or equivalent	0

5.8.1A Subject to section 5.8.2, the *prudential support obligation for physical transactions* of a rated *distributor* may be reduced relative to the *market participant's maximum net exposure for physical transactions* by an amount equal to the monetary value prescribed, by the table below, to a credit rating from a major bond rating agency

identified in the list referred to in section 5.8.7 issued and in effect in respect of the *market participant*.

Credit Rating Category using Standard and Poor's Rating Terminology	Allowable Reduction in Prudential Support
AA- and above or equivalent	100% of <i>maximum net exposure</i>
A-, A, A+ or equivalent	Greater of 95% of <i>maximum net exposure</i> or \$45,000,000
BBB-, BBB, BBB+ or equivalent	Greater of 80% of <i>maximum net exposure</i> or \$22,500,000
BB-, BB, BB+ or equivalent	Greater of 55% of <i>maximum net exposure</i> or \$7,500,000
Below BB- or equivalent	0

5.8.2 Any recommendation to move a *market participant* to "credit watch negative" by any of the major bond rating agencies identified in the list referred to in section 5.8.7 shall be deemed to automatically result in a one-notch reduction in terms of the credit rating (for example, from BBB+ to BBB) of that *market participant* for the purpose of determining the *market participant's prudential support obligation*.

5.8.2A ~~[Intentionally left blank – section deleted.]The operation of section 5.8.2 shall be suspended for *distributors* as of November 19, 2002, until February 14, 2003 or until such other date as may be determined by a resolution of the *IESO Board*. The management of the *IESO* shall monitor and report to the *IESO Board* on the credit situation of *distributors* and other *market participants* and the *IESO Board* shall modify the suspension of section 5.8.2 (or, if appropriate, shall expand the scope of the suspension) if the credit situation changes in a way that makes such modification desirable.~~

5.8.3 Subject to section 5.8.6, the *prudential support obligation* for *physical transactions* of a *market participant* may be reduced relative to the *market participant's maximum net exposure* for *physical transactions* or, where applicable, relative to the otherwise applicable *prudential support obligation* calculated in accordance with section 5.3.4B, by an amount equal to the monetary value ascribed, in accordance with section 5.8.4 or 5.8.5, to the *market participant's* historical good payment history in Ontario, which shall be assessed by the *IESO* on the basis of:

5.8.3.1 evidence provided by the *market participant* as to the continuous purchase of electricity by the *market participant* prior to the effective date of the *IESO-administered markets* during which time no call for collateral was issued to

that *market participant* to protect the supplier from the risk of a payment default by that *market participant*;

5.8.3.2 verification of the evidence referred to in section 5.8.3.1 by the *IESO*; and

5.8.3.3 the *market participant's* payment history in the *IESO-administered markets* provided that the *market participant's* payment history includes no *event of default*.

5.8.4 The *IESO* shall determine the dollar amount of any allowable reduction in the *prudential support obligation* for *physical transactions* of an unrated *market participant*, other than a *distributor*, by an amount equal to the monetary value prescribed, by the table below:

Good Payment History Categories for Non-Distributors	Allowable Reduction in Prudential Support
≥6 years	Lesser of 50% of <i>maximum net exposure</i> or \$12,000,000
≥5 years, <6 years	Lesser of 30% of <i>maximum net exposure</i> or \$7,500,000
≥4, <5 years	Lesser of 25% of <i>maximum net exposure</i> or \$6,000,000
≥3, <4 years	Lesser of 20% of <i>maximum net exposure</i> or \$4,500,000
≥2, <3 years	Lesser of 15% of <i>maximum net exposure</i> or \$3,000,000
<2 years	0

5.8.5 If the *market participant* is an unrated *distributor*, the *IESO* shall determine the dollar amount of any allowable reduction in the *market participant's prudential support obligation* for *physical transactions* by an amount equal to the monetary value prescribed, by the table below:

Good Payment History Categories for Distributors	Allowable Reduction in Prudential Support
≥6 years	Lesser of 80% of <i>maximum net exposure</i> or \$14,000,000
≥5 years, <6 years	Lesser of 65% of <i>maximum net exposure</i> or \$9,000,000

Good Payment History Categories for Distributors	Allowable Reduction in Prudential Support
≥4, <5 years	Lesser of 45% of <i>maximum net exposure</i> or \$7,500,000
≥3, <4 years	Lesser of 35% of <i>maximum net exposure</i> or \$6,000,000
≥2, <3 years	Lesser of 25% of <i>maximum net exposure</i> or \$4,500,000
<2 years	0

For purposes of this section 5.8.5, the historical payment history of a *distributor* that is the transferee under a transfer by-law made pursuant to subsection 145(1) of the *Electricity Act, 1998* shall be deemed to include the historical payment history of the *distributor* whose licence has been transferred to the transferee under such by-law. For purposes of this section 5.8.5, the historical payment history of a *distributor* that is the successor at law to two or more *distributors*, shall be deemed to include the historical payment history of the predecessor *distributors*.

5.8.6 The following restrictions shall apply to the provision of reductions in a *market participant's prudential support obligation for physical transactions* as provided for under sections 5.8.1, 5.8.1A, ~~and~~ 5.8.3 and 5.8.8:

5.8.6.1 subject to the last paragraph of section 5.8.5, a *market participant* shall not be entitled to a reduction in its *prudential support obligation* pursuant to section 5.8.3 using the payment history of an *affiliate*; ~~and~~

5.8.6.2 a *market participant* that has a credit rating from a major bond rating agency identified in the list referred to in section 5.8.7 shall not be entitled to a reduction in its *prudential support obligation* under section 5.8.3; ~~and~~:

5.8.6.3 an *energy trader* shall not receive a reduction to its *prudential support obligation for physical transactions* pursuant to section 5.8.1 until the *energy trader* has conducted transactions in the *IESO-administered markets* for at least three previous *billing periods*;

5.8.7 For the purposes of this chapter, the *IESO* shall establish, maintain, update as required and *publish* a list of major bond rating agencies eligible to provide the credit ratings mentioned throughout.

5.8.8 The *IESO* shall reduce the *prudential support obligation for physical transactions* of a *distributor* by an amount equal to 60% of the *distributor's* collection of *prudential*

support, in the forms specified in section 5.7.2.1, 5.7.2.2, 5.7.2.3, or 5.7.2.4, from the *distributor's* customers. In order to qualify for this reduction in *prudential support obligation* the *distributor* shall provide the *IESO* with an affidavit attesting to the amount of *prudential support* of the types specified in this section which the *distributor* has collected from its customers attached to which by way of exhibits shall be copies of bank statements showing any cash deposits and any applicable letters of credit, guarantees, or Government of Canada T-bills held as *prudential support*. The *IESO* shall first deduct the *distributor's* collection of *prudential support* from the *distributor's* customers before applying any other *prudential support obligation* deductions in respect of *physical transactions*.

Part 5 – IESO Board Decision Rationale

Insert Text Here



Market Rule Amendment Proposal Form

Part 1 Market Rule Information

Identification No.:	MR-00453-R01
Subject:	Market Renewal Program – Prudential Security
Title:	Market Renewal Program – Prudential Security and Virtual Transactions
Nature of Proposal:	<input type="checkbox"/> Alteration <input type="checkbox"/> Deletion <input checked="" type="checkbox"/> Addition
Chapter:	2
Appendix:	
Sections:	New: 5C.1, 5C.2, 5C.3, 5C.4, 5C.5, 5C.6
Sub-sections proposed for amending:	New: 5C.1.1, 5C.1.2, 5C.1.3, 5C.1.4, 5C.1.5, 5C.1.6, 5C.1.7, 5C.1.8, 5C.1.9, 5C.1.9.1, 5C.1.9.2, 5C.1.10, 5C.1.11, 5C.1.12, 5C.1.12.1, 5C.1.12.2, 5C.1.12.3, 5C.1.12.4, 5C.1.12.5, 5C.1.12.6, 5C.1.13, 5C.2.1, 5C.2.2, 5C.2.3, 5C.3.1, 5C.3.1.1, 5C.3.1.2, 5C.3.2, 5C.4.1, 5C.4.2, 5C.4.3, 5C.4.4, 5C.5.1, 5C.5.2, 5C.5.2.1, 5C.5.3, 5C.6.1

Part 2 Proposal History

Version	Reason for Issuing	Version Date
1.0	Draft for Stakeholder Review	October 13, 2020

Approved Amendment Publication Date:	
Approved Amendment Effective Date:	

Part 3 Explanation for Proposed Amendment

Provide a brief description of the following:

- 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*.

Part 4 Proposed Amendment

Chapter 2

5C. Virtual Transactions

5C.1 Calculation of Participant Trading Limit, Default Protection Amount and Maximum Net Exposure for Virtual Transactions

Maximum Net Exposure

5C.1.1 The IESO shall determine, for each virtual trader, a maximum net exposure for virtual transactions as the sum of the virtual trader's trading limit for virtual transactions and the virtual trader's default protection amount for virtual transactions.

Maximum Daily Trading Limit

5C.1.2 Each virtual trader intending to conduct virtual transactions shall determine and submit to the IESO, using forms and procedures as may be established by the IESO in the applicable market manual, the absolute value of its maximum daily trading limit (in MWh).

5C.1.3 The maximum daily trading limit submitted by a virtual trader under section 5C.1.2 shall be applicable for the current and all future billing periods until a revised maximum daily trading limit is submitted by that virtual trader to the IESO in accordance with section 5C.1.2. If a virtual trader submits a maximum daily trading limit pursuant to section 5C.1.2, that maximum daily trading limit shall, subject to section 5C.1.4, supersede any previous maximum daily trading limit, and the previous maximum daily trading limit shall not be applicable to any such future billing periods.

5C.1.4 A virtual trader's revised maximum daily trading limit submitted in accordance with section 5C.1.3 shall take effect once the IESO confirms receipt of any additional prudential support, as required by the IESO.

Minimum Trading Limit

5C.1.5 The IESO shall establish a minimum trading limit for virtual transactions for each virtual

trader equal to the IESO's estimate of the virtual trader's net settlement amounts, assuming two days of participation in the day-ahead market. The IESO may use a greater number, up to and including seven days of participation in the day-ahead market for the determination of a virtual trader's minimum trading limit for virtual transactions, if that virtual trader was subject to more than one margin call per billing period.

Establishing Trading Limits for Virtual Transactions

5C.1.6 For *virtual transactions*, the IESO established *minimum trading limit* determined in accordance with section 5C.1.5 shall be the *trading limit for virtual transactions* for that *virtual trader* for the current or upcoming *billing period*.

Establishing Default Protection Amounts for Virtual Transactions

5C.1.7 The IESO shall, for each *billing period*, establish a *default protection amount for virtual transactions* for each *virtual trader* equal to the IESO's estimate of the *virtual trader's net settlement amounts*, assuming seven days of participation in the *day-ahead market*.

Requirement to Provide Prudential Support

5C.1.8 If a *virtual trader's maximum net exposure for virtual transactions*, as calculated by the IESO, is zero or negative, the *virtual trader* is not required to provide any form of *prudential support for virtual transactions* to the IESO. If a *virtual trader's maximum net exposure for virtual transactions*, as calculated by the IESO, is positive, the *virtual trader* must provide an amount of *prudential support* to the IESO equal to its *prudential support obligation for virtual transactions*.

Price Delta Used for Determining Minimum Trading Limit and Default Protection Amount

5C.1.9 For purposes of calculating the *minimum trading limit for virtual transactions* and the *default protection amount for virtual transactions*, the IESO shall calculate the price delta ($\Delta DAP_{VT}, ARTP_{VT}$) as follows:

5C.1.9.1 The price delta ($\Delta DAP_{VT}, ARTP_{VT}$) will be the absolute value of the difference between the day-ahead virtual zonal *energy price* (DAP_{VT}) and the hourly average real-time virtual zonal *energy price*, and consider up to the 97th percentile based on the IESO's repository of three years of historical data from all applicable *virtual transaction zonal trading entities* within the *IESO-administered markets*, subject to subsection 5C.1.9.2;

5C.1.9.2 Until three years of historical data is available, the price delta ($\Delta DAP_{VT}, ARTP_{VT}$) shall be estimated by the IESO based on relevant proxies and deemed to mean the "interim price delta" ($\Delta DAP_{VTI}, ARTP_{VTI}$). The interim price delta may consider, but will not be limited to the following:

- a. shadow prices from the day-ahead commitment process and the *real-time market*.

- b. price delta information from *day-ahead markets* and *real-time markets* in neighbouring jurisdictions;
- c. temporal weightings of the data used to calculate the day-ahead and real-time price delta.

5C.1.10 The *IESO* shall review the price delta referred to in section 5C.1.9, at least once annually. The *IESO* shall modify the applicable price delta if it has increased or decreased by 15% or more from the price delta used by the *IESO*.

5C.1.11 The *IESO* shall *publish* annually the price delta described in section 5C.1.9.

Reviewing and Modifying Trading Limits, Default Protection Amount and Maximum Net Exposure

5C.1.12 The *IESO* may review the *minimum trading limit, trading limit, default protection amount* and *maximum net exposure*, for *virtual transactions*, of each *virtual trader* in circumstances that include:

5C.1.12.1 prior to the start of each *energy market billing period*;

5C.1.12.2 within two *business days* after a *virtual trader's actual exposure* for *virtual transactions* exceeds the *virtual trader's trading limit* for *virtual transactions*;

5C.1.12.3 within two *business days* after it receives notice of any changes to the status of a *virtual trader* as compared to such status that was in effect when the *virtual trader's maximum net exposure* for *virtual transactions* was last calculated if the *IESO* determines that the change in such status would have a material impact on the *virtual trader's maximum net exposure* for *virtual transactions*;

5C.1.12.4 when the *IESO* has adjusted a *virtual trader's minimum trading limit*, if the *virtual trader* was subject to more than one *margin call* per *billing period*, pursuant to section 5C.1.4; and

5C.1.12.5 when the *IESO* has adjusted the price delta under section 5C.1.9.

5C.1.12.6 when a *virtual trader* submits a revised *maximum daily trading limit* in accordance with section 5C.1.3.

5C.1.13 The *IESO* may change the *minimum trading limit, trading limit, default protection amount, maximum net exposure* or the *prudential support obligation*, for *virtual transactions*, for a *virtual trader* at any time as a result of a review conducted pursuant to section 5C.1.12 and shall promptly notify the *virtual trader* of any such change. Any change to a *virtual trader's minimum trading limit, trading limit, default protection amount, maximum net exposure* or *prudential support obligation* for *virtual transactions* shall apply with effect from such time, not being earlier than the time of notification of the changed *minimum trading limit*,

trading limit, default protection amount, maximum net exposure or prudential support obligation for virtual transactions to the virtual trader, as the IESO may specify in the notice. The virtual trader must supply the IESO, within five business days of the effective date of the change, any additional prudential support for virtual transactions that may be required as a result of an increase in the virtual trader's prudential support obligation that results from such change.

5C.2 Monitoring of Actual Exposure and Trading Limit for Virtual Transactions

5C.2.1 If at any time the actual exposure for virtual transactions of a virtual trader that is not authorized to conduct physical transactions, is equal to or exceeds 70% and is less than 100% of the virtual trader's trading limit for virtual transactions, the IESO shall inform the virtual trader of that fact. The virtual trader may, but is not required to, make a cash payment to be applied to reduce its actual exposure or take other action to prevent its actual exposure from reaching its trading limit. No interest shall be paid on any such payment.

5C.2.2 If at any time the actual exposure for virtual transactions of a virtual trader that is not authorized to conduct physical transactions, equals or exceeds the virtual trader's trading limit for virtual transactions, the IESO shall issue to the virtual trader a margin call in respect of virtual transactions. Upon issuance of a margin call, the IESO shall reject subsequent virtual trader bids and offers for virtual transactions until the virtual trader satisfies the margin call in accordance with section 5C.4.1;

5C.2.3 The IESO shall reject a virtual trader's bids and offers in respect of a virtual transaction, in the circumstances provided by in sections 2.6.7.5 and 2.6.7.6 of Chapter 7A.

5C.3 Calculation of Actual Exposure for Virtual Transactions

5C.3.1 For the purposes of 5C.2 and 5D.2.2, a virtual trader's actual exposure for virtual transactions shall be a dollar amount determined by the IESO each business day, in accordance with the applicable market manual, and shall be equal to:

5C.3.1.1 the aggregate of:

- a. all amounts payable by the virtual trader in respect of virtual transactions for billing periods prior to the current billing period which remain unpaid by the virtual trader, whether or not the payment date thereof has yet been reached; and
- b. the IESO's reasonable estimate of the aggregate hourly and non-hourly settlement amounts payable by the virtual trader in respect of virtual transactions which have already occurred in the current billing period;

5C.3.1.2 less the aggregate of:

- a. all amounts payable to the virtual trader in respect of virtual transactions for billing periods prior to the current billing period which remain unpaid, whether or not the payment date thereof has yet been reached; and

- b. the IESO's reasonable estimate of the aggregate hourly and non-hourly settlement amounts payable to the virtual trader in respect of virtual transactions which have already occurred in the current billing period.

5C.3.2 The IESO shall publish daily, a price delta for the purposes of calculating the daily cumulative actual exposure for virtual transactions. This price delta will be the absolute value of the difference between the day-ahead virtual zonal energy price (DAP_{VT}) and the hourly average real-time virtual zonal energy price, calculated to the 97th percentile observed for the 30 calendar days prior to the given trading day of the current year, and 30 calendar days prior and after the same trading day and month for the prior 24 months for each of the virtual zones.

5C.4. Margin Call Requirements for Virtual Transactions

5C.4.1 A virtual trader that is not also authorized to conduct physical transactions shall satisfy a margin call in respect of virtual transactions within the time prescribed in section 5C.4.3 by paying a portion of the amount payable or which will become payable in respect of the previous or current energy market billing period, in accordance with Chapter 9, in an amount sufficient to reduce the virtual trader's actual exposure for virtual transactions to no more than the dollar equivalent of 75% of the virtual trader's trading limit for virtual transactions. No interest shall be paid on such payments.

5C.4.2 The time within which a margin call in respect of virtual transactions must be satisfied under section 5C.4.1 shall be by 4:00 pm on the second business day following the date of the margin call.

5C.4.3 For the purposes of the market rules, a payment made pursuant to section 5C.4.2 shall be applied first to the amount outstanding for virtual transactions with respect to the earliest billing period under the market rules and, if the amount outstanding under the market rules in respect of that billing period is less than the amount of the payment, then the excess shall be applied to the next earliest billing period for virtual transactions in respect of which there is an amount outstanding under the market rules and so on until there is no excess.

5C.4.4 Upon receipt of a margin call payment in respect of virtual transactions in accordance with section 5C.4.1, the IESO shall reinstate the virtual trader's ability to conduct virtual transactions.

5C.5 Obligation to Provide Prudential Support for Virtual Transactions

5C.5.1 Each virtual trader must meet its obligation under this section 5C to provide and maintain prudential support for virtual transactions by providing to the IESO and maintaining prudential support, the value of which is equal to the virtual trader's prudential support obligation for virtual transactions.

5C.5.2 A virtual trader's prudential support obligation for virtual transactions must be met through the provision to the IESO and the maintenance of prudential support in one or more of the following forms:

5C.5.2.1 a guarantee or irrevocable commercial letter of credit, which in both cases must be in a form acceptable to the IESO and provided by:

- a. a bank named in a Schedule to the *Bank Act*, S.C. 1991, c.46 with a minimum long-term credit rating of "A" from a major bond rating agency as identified in the list referred to in section 5C.5.3; or
- b. a credit union licensed by the Financial Services Regulatory Authority of Ontario with a minimum long-term credit rating of "A" from a major bond rating agency as identified in the list referred to in section 5C.5.3.

5C.5.3 For the purposes of sections 5C.5.2.1, the IESO shall establish, maintain, update as required and *publish* a list of organizations eligible to provide the *prudential support* referred to in sections 5C.5.2.1 and shall establish, for each such eligible *prudential support* provider, an aggregate limit of the *prudential support* that may be provided by that *prudential support* provider to *virtual traders*. If aggregate limits are reached for any of these eligible organizations, *virtual traders* will be required to obtain *prudential support* from other eligible organizations that are still within their respective *prudential support* limits.

5C.6 Reductions in Prudential Support Obligations for Virtual Transactions

5C.6.1 Subject to the IESO's approval, a *virtual trader* that is a *market creditor* based on its *physical transactions* as a *generator*, that has achieved *market creditor* status in its most recent six *energy market billing periods*, may receive a reduction to its *prudential support obligation* for *virtual transactions* as calculated by the IESO, by an amount up to 75% of the average amount that the IESO owes to the *virtual trader* during the relevant six *billing periods*.

Part 5 – IESO Board Decision Rationale

Insert Text Here



Market Rule Amendment Proposal Form

Part 1 Market Rule Information

Identification No.:	MR-00453-R02-
Subject:	Market Renewal Program – Prudential Security
Title:	Market Renewal Program – Prudential Security: Consolidated Actual Exposure and Monitoring
Nature of Proposal:	<input type="checkbox"/> Alteration <input type="checkbox"/> Deletion <input checked="" type="checkbox"/> Addition
Chapter:	2
Appendix:	
Sections:	New: 5D.1, 5D.2, 5D.3, 5D.4, 5D.5
Sub-sections proposed for amending:	New: 5D.1.1, 5D.2.1, 5D.2.2, 5D.3.1, 5D.3.2, 5D.3.3, 5D.4.1, 5D.4.2, 5D.4.3, 5D.4.4, 5D.5.1, 5D.5.1.1, 5D.5.1.2

Part 2 Proposal History

Version	Reason for Issuing	Version Date
1.0	Draft for Stakeholder Review	October 13, 2020

Approved Amendment Publication Date:	
Approved Amendment Effective Date:	

Part 3 Explanation for Proposed Amendment

Provide a brief description of the following:

- 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*.

Part 4 – Proposed Amendment

Chapter 2

5D Prudential Support for Market Participants Authorized to Conduct Both Physical Transactions and Virtual Transactions

5D.1 Purpose and Application

5D.1.1 This section 5D shall apply to a *market participant* that is authorized to conduct both *physical transactions*, and *virtual transactions*.

5D.2 Calculation of Consolidated Actual Exposure and Consolidated Trading Limit

5D.2.1 The consolidated *actual exposure* of a *market participant* shall be the sum of the *market participant's actual exposure* for *physical transactions* in accordance with section 5.5 and the *actual exposure* for *virtual transactions* in accordance with section 5C.3.

5D.2.2 The consolidated *trading limit* of a *market participant* shall be the sum of the *market participant's trading limit* for *physical transactions* in accordance with section 5.3 and the *trading limit* for *virtual transactions* in accordance with section 5C.1.5.

5D.3 Monitoring of Consolidated Actual Exposure and Consolidated Trading Limit

5D.3.1 If at any time the consolidated *actual exposure* of a *market participant* is equal to or exceeds 70% and is less than 100% of the *market participant's consolidated trading limit*, the *IESO* shall inform the *market participant* of that fact. The *market participant* may, but is not required to, make a cash payment to be applied to reduce its consolidated *actual exposure* or take other action to prevent its consolidated *actual exposure* from reaching its consolidated *trading limit*. No interest shall be paid on any such payment.

5D.3.2 If at any time the consolidated *actual exposure* of a *market participant* equals or exceeds the *market participant's consolidated trading limit*, the *IESO* shall issue to the *market participant* a consolidated *margin call*. Upon issuance of a consolidated *margin call*, the *IESO* shall reject subsequent *market participant bids* and *offers* for *virtual transactions* until the *market participant* satisfies the consolidated *margin call* in accordance with section 5D.4.1.

5D.3.3 The IESO shall reject a market participant's bids and offers in respect of a virtual transaction, in the circumstances provided by in sections 2.6.7.5 and 2.6.7.6 of Chapter 7A.

5D.4 Consolidated Margin Call Requirements

5D.4.1 A market participant must satisfy a consolidated margin call within the time prescribed in section 5D.4.2 by paying a portion of the amount payable or which will become payable in respect of the previous or current energy market billing period, in accordance with Chapter 9, in an amount sufficient to reduce the market participant's consolidated actual exposure to no more than the dollar equivalent of 75% of the market participant's consolidated trading limit. No interest shall be paid on such payments.

5D.4.2 The time within which a consolidated margin call must be satisfied under section 5D.4.1 shall be by 4:00 pm on the second business day following the date of the margin call.

5D.4.3 For the purposes of the market rules, a payment made pursuant to section 5D.4.1 shall be applied first to the amount outstanding with respect to the earliest billing period under the market rules and, if the amount outstanding under the market rules in respect of that billing period is less than the amount of the payment, then the excess shall be applied to the next earliest billing period in respect of which there is an amount outstanding under the market rules and so on until there is no excess.

5D.4.4 Upon receipt of a payment made in response to a consolidated margin call in accordance with this section 5D.4.1, the IESO shall reinstate the market participant's ability to conduct virtual transactions.

5D.5 Obligation to Provide Prudential Support for Market Participants Authorized to Conduct Both Physical Transactions and Virtual Transactions

5D.5.1 Market participants authorized to conduct both physical transactions and virtual transactions shall provide and maintain:

5D.5.1.1 prudential support for physical transactions, the value of which is not less than the market participant's prudential support obligation for physical transactions as calculated by the IESO in accordance with sections 5.3 and 5.8, and in the forms of prudential support for physical transactions specified in section 5.7; and

5D.5.1.2 prudential support for virtual transactions, the value of which is not less than the market participant's prudential support obligation for virtual transactions as calculated by the IESO in accordance with sections 5C.1 and 5C.6, and in the forms of prudential support for virtual transactions specified in section 5C.5.

Part 5 – IESO Board Decision Rationale

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Part 5 – IESO Board Decision Rationale

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Market Rule Amendment Proposal Form

Part 1 Market Rule Information

Identification No.:	MR-00453-R03
Subject:	Market Renewal Program – Prudential Security
Title:	Market Renewal Program – Prudential Security and Default Levies
Nature of Proposal:	<input checked="" type="checkbox"/> Alteration <input checked="" type="checkbox"/> Deletion <input type="checkbox"/> Addition
Chapter:	2
Appendix:	
Sections:	8.1, 8.2, 8.4, 8.6
Sub-sections proposed for amending:	8.1.3 (deleted), 8.1.4, 8.2.3, 8.2.3.2 (deleted), 8.2.3.5 (deleted), 8.2.3.6 (deleted), 8.2.3.8 (deleted), 8.4.1, 8.4.2, 8.4.2.2 (deleted), 8.4.2.4, 8.4.2.5 (deleted), 8.4.2.6 (deleted), 8.4.2.7, 8.6.1.1

Part 2 Proposal History

Version	Reason for Issuing	Version Date
1.0	Draft for Stakeholder Review	October 13, 2020

Approved Amendment Publication Date:	
Approved Amendment Effective Date:	

Part 3 Explanation for Proposed Amendment

Provide a brief description of the following:

- 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*.

Part 4 – Proposed Amendment

Chapter 2

8. Default Levy

8.1 Power to Impose Default Levy

- 8.1.1 The *IESO* shall be entitled to recover, by means of the imposition of a *default levy* on *non-defaulting market participants*, in accordance with this section 8, the aggregate of any amounts owing to the *IESO* under the *market rules* which have not been paid in full by the *defaulting market participant* and the costs and expenses reasonably incurred by the *IESO* in investigating the default in payment, in realizing on any applicable *prudential support* and in implementing the *default levy*.
- 8.1.2 The imposition of a *default levy* pursuant to this section 8 shall in no way waive, excuse or relieve a *defaulting market participant* of its obligations under the *market rules* and shall be without prejudice to:
- 8.1.2.1 such rights or remedies which the *IESO* may otherwise have to recover all amounts owing by the *defaulting market participant*; and
- 8.1.2.2 the right of the *IESO* to take such other action, including but not limited to the issuance of a *suspension order*, as may be provided for in these *market rules* in respect of the *defaulting market participant's* default in payment.
- 8.1.3 ~~[Intentionally left blank – section deleted] Where a *defaulting market participant* has defaulted in payment in respect of more than one *IESO-administered market*, the *IESO* shall impose separate *default levies* in respect of each such *IESO-administered market* in accordance with this section 8.~~
- 8.1.4 The provisions of this section 8 apply only to a default in payment by a *defaulting market participant* in the *real-time market* or the *day-ahead market*. Default in payment by a *defaulting market participant* in the *TR market* shall be addressed in accordance with the provisions of section 4 of Chapter 8.

8.2 Notice of First Default Levy

8.2.1 Where a *market participant* has failed to either remit or cause to be remitted to the *IESO settlement clearing account* the full amount due by that *market participant* by the close of *banking business* (of the bank at which the *IESO settlement clearing account* is held) on a *market participant payment date*:

8.2.1.1 [Intentionally left blank]

8.2.1.2 [Intentionally left blank]

8.2.1.3 the *IESO* may take such steps as may be permitted by section 6.14 of Chapter 9.

8.2.2 Where the *IESO* has issued a *suspension order* or *termination order* to a *defaulting market participant*, the *IESO* may:

8.2.2.1 issue a first *notice of default levy* in accordance with section 8.2.3; and

8.2.2.2 take such steps, if it has not already done so, as may be required to realize, in accordance with section 3 of Appendix 2.3, any *prudential support* held in respect of the *defaulting market participant* the right to realization of which is triggered by the default in payment at issue.

8.2.3 A first *notice of default levy* shall be issued to each *non-defaulting market participant* that participated in the *real-time market* or the *day ahead market* to which the default in payment by the *defaulting market participant* relates during the *billing period* to which such default relates and shall identify:

8.2.3.1 the name of the *defaulting market participant*;

8.2.3.2 ~~the *IESO-administered market* and the *billing period* in respect of which the default in payment by the *defaulting market participant* has occurred;~~ [Intentionally left blank]

8.2.3.3 the *defaulting market participant's default amount*, calculated in accordance with section 8.3.1;

8.2.3.4 the amount of the first *default levy* calculated in accordance with section 8.3.2;

8.2.3.5 ~~the value of all *prudential support* held in respect of the *defaulting market participant* the right to realization of which is triggered by the default in payment at issue;~~ [Intentionally left blank]

8.2.3.6 ~~the estimated amount of any second *default levy* that may have to be imposed pursuant to section 8.4 in the event of the inability by the *IESO* to realize all of the *prudential support* referred to in section 8.2.3.5 prior to the time noted in section 8.4.1~~ [Intentionally left blank]

8.2.3.7 the *non-defaulting market participant's* share of the first *default levy*, calculated in accordance with section 8.6.1; and

8.2.3.8 ~~the *non-defaulting market participant's* share of the estimated amount of any second *default levy* referred to in section 8.2.3.6. [Intentionally left blank]~~

8.2.4 The first *notice of default levy* shall be issued at least ten days prior to the date on which the *invoice* imposing the first *default levy* on *non-defaulting market participants* is issued by the *IESO* in accordance with section 8.6.2.

8.3 Calculation of Default Amount and First Default Levy

8.3.1 For the purposes of section 8.2.3.3, the *market participant's default amount* shall be the aggregate of:

8.3.1.1 the net *invoice* amount payable by the *defaulting market participant* for the *billing period* in respect of which payment has not been received within the time specified in section 8.2.2, exclusive of any amounts payable on account of financial penalties or damages; and

8.3.1.2 any *default interest* payable in respect of the amount referred to in section 8.3.1.1 that has accrued since the *market participant payment date* referred to in section 8.2.1 in accordance with section 6.14.3 of Chapter 9.

8.3.2 For the purposes of section 8.2.3.4, the amount of the first *default levy* shall be:

8.3.2.1 the aggregate of:

a. the *defaulting market participant's default amount*, calculated in accordance with section 8.3.1; and

b. any costs and expenses reasonably incurred to the date of issuance of the first *notice of default levy* by the *IESO* in investigating the default in payment to which the *default levy* relates, in realizing on any applicable *prudential support* held in respect of the *defaulting market participant* and in implementing the *default levy*;

8.3.2.2 less the aggregate unclaimed or undrawn dollar amount of all *prudential support* held in respect of the *defaulting market participant* the right to realization of which is triggered by the default in payment at issue.

8.3.3 The first *default levy* shall be apportioned amongst and *invoiced* to *non-defaulting market participants* in accordance with sections 8.6.1 and 8.6.2.

8.4 Notice of Second Default Levy

8.4.1 Unless the amount of the first *default levy* is equal to the *defaulting market participant's default amount* the *IESO* shall, ~~on the seventh *business day* following the issuance of *invoices* imposing the first *default levy*,~~ issue a second *notice of default levy* or further successive default levy notices in accordance with section 8.4.2.

- 8.4.2 The second *notice of default levy* or successive residual *default levy* notices shall be issued to each *non-defaulting market participant* on whom a first ~~the~~ *residual default levy amount period* has been imposed and shall identify:
- 8.4.2.1 the name of the *defaulting market participant*;
 - 8.4.2.2 ~~the IESO-administered market and the billing period in respect of which the default in payment by the defaulting market participant has occurred;~~ [Intentionally left blank]
 - 8.4.2.3 the *defaulting market participant's* residual *default amount*, calculated in accordance with section 8.5.1;
 - 8.4.2.4 the aggregate amount of the first *default levy* or *default levies*;
 - 8.4.2.5 ~~the amount of any prudential support held in respect of the defaulting market participant that has been realized~~ [Intentionally left blank];
 - 8.4.2.6 ~~the amount of any prudential support held in respect of the defaulting market participant the right to realization of which is triggered by the default in payment at issue and that remains to be realized;~~ [Intentionally left blank]
 - 8.4.2.7 the amount of the ~~second~~ *residual default levy*, calculated in accordance with section 8.5.2; and
 - 8.4.2.8 the *non-defaulting market participant's* share of the second *default levy*, calculated in accordance with section 8.6.1.
- 8.4.3 The second *notice of default levy* shall be issued at least ten days prior to the date on which the *invoice* imposing the second *default levy* on *non-defaulting market participants* is issued by the *IESO* in accordance with section 8.6.2.

8.5 Calculation of Residual Default Amount and Second Default Levy

- 8.5.1 For the purposes of section 8.4.2.3, the *defaulting market participant's* residual *default amount* shall be:
- 8.5.1.1 the aggregate of:
 - a. the net *invoice* amount payable by the *defaulting market participant* for the *billing period* in respect of which payment has not been received as of the date of issuance of the second *notice of default levy*, exclusive of any amounts payable on account of financial penalties or damages; and
 - b. any *default interest* payable in respect of the amount referred to in section 8.5.1.1(a) that has accrued since the date of issuance of the first *notice of default levy* in accordance with section 6.14.3 of Chapter 9;
 - 8.5.1.2 less the aggregate of:
 - a. the amount of the first *default levy*; and

- b. any amount that has been recovered by the *IESO* since the date of issuance of the first *notice of default levy* under any *prudential support* held in respect of the *defaulting market participant*.

8.5.2 For the purposes of section 8.4.2.7, the amount of the second *default levy* shall be the aggregate of:

8.5.2.1 the *defaulting market participant's* residual *default amount*, calculated in accordance with section 8.5.1; and

8.5.2.2 any costs and expenses reasonably incurred by the *IESO* in investigating the default in payment to which the *default levy* relates, in realizing any applicable *prudential support* and in implementing the *default levy* since the date on which the first *default levy* was calculated.

8.5.3 The second *default levy* shall be apportioned and *invoiced* to *non-defaulting market participants* in accordance with sections 8.6.1 and 8.6.2.

8.6 Apportionment and Invoicing of Default Levy

8.6.1 For the purposes of sections 8.2.3.7 and 8.4.2.8, the amount of a *default levy* shall be apportioned amongst all *non-defaulting market participants* to whom a *notice of default levy* has been issued in accordance with sections 8.2.3 or 8.4.2 by allocating to each *non-defaulting market participant* a share of the *default levy* calculated as follows:

8.6.1.1 in the case of a *default levy* imposed in respect of a default in the *real-time market* or the *day ahead market*, the share allocated to each *non-defaulting market participant* shall be determined on the basis of the following formula:

<p>[<i>default amount</i> x (absolute value of the <i>non-defaulting market participant's</i> net <i>invoice</i> amount, exclusive of any amounts payable on account of financial penalties or damages, in the <i>real-time market</i> or the <i>day-ahead market</i> for the <i>real-time market</i> <i>billing period</i> to which the default in payment by the <i>defaulting market participant</i> relates)]</p>	<p>divided by</p>	<p>net transaction dollar amount</p>
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Where the *net transaction dollar amount* is:

<p>∑ the absolute value, in dollars, of each <i>market</i></p>	<p>Minus</p>	<p>the absolute value, in dollars, of the</p>
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<p><i>participant's net invoice amount, for the <u>real-time market</u> or <u>the day-ahead market</u> billing period to which the default in payment by the defaulting market participant relates</i></p>		<p><i>defaulting market participant's net invoice amount for such <u>real-time market</u> or <u>day-ahead market</u> billing period;</i></p>
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or

8.6.1.2 [Intentionally left blank – section deleted]

8.6.2 Subject to section 8.6.3, a *non-defaulting market participant's* share of a *default levy* shall be included in or with the first *invoice* scheduled to be issued to the *non-defaulting market participant* pursuant to Chapter 9 following the expiry of the time noted in section 8.2.4 or 8.4.3, as the case may be, in respect of each *IESO-administered market* to which the *default levy* relates.

8.6.3 Where, for any reason, no *invoice* is scheduled to be issued to a *non-defaulting market participant* to whom a second *notice of default levy* has been issued under section 8.4.2, the *IESO* shall issue an *invoice* to that *non-defaulting market participant* comprising the amount of that *non-defaulting market participant's* share of the second *default levy*. Any such *non-defaulting market participant* shall pay to the *IESO* the *invoice* amount on the second *business day* following receipt of the *invoice*.

8.7 Allocation of Default Levy

8.7.1 The *IESO* shall allocate amounts received from *non-defaulting market participants* in respect of a *default levy*:

8.7.1.1 first, to repay any short-term funds borrowed by the *IESO* pursuant to section 6.14.4 of Chapter 9 on account of the *defaulting market participant's* default in payment; and

8.7.1.2 [Intentionally left blank]

8.7.1.3 second, to the payment of amounts owed by the *defaulting market participant* to the *IESO* on account of the *IESO administration charge*.

8.7.2 Amounts received from *non-defaulting market participants* in respect of a *default levy* to cover the reasonable costs and expenses referred to in sections 8.3.2.1 and 8.5.2.2 shall be used to offset the *IESO administration charge*.

8.8 Other Recovery of Default Amounts

8.8.1 Notwithstanding the imposition of a *default levy*, the *IESO* shall take all reasonable steps to recover from the *defaulting market participant*, including by means of the realization of any *prudential support* held in respect of a *defaulting market participant* that has not been realized as at the date of calculation of a second *default levy*, all amounts owing to

the *IESO* under the *market rules*. The *IESO* may, but shall not be obliged to, follow the dispute resolution process set forth in section 2 of Chapter 3 for the purpose of obtaining such recovery.

- 8.8.2 Subject to section 8.8.3, any full or partial recovery made by the *IESO* pursuant to section 8.8.1 shall be distributed to each *non-defaulting market participant* that remitted payment to the *IESO* on account of a *default levy* on a prorated basis according to, and in an amount that does not exceed, the amount so remitted by the *non-defaulting market participant*. Where the *non-defaulting market participant* is, at the relevant time, still a *market participant*, any such amount shall appear as a credit on the next *invoice* scheduled to be issued to that *non-defaulting market participant* under Chapter 9. Where the *non-defaulting market participant* is no longer a *market participant* at the relevant time, any such amount shall be paid to the former *non-defaulting market participant* in such manner as the *IESO* determines appropriate.
- 8.8.3 In the event that the *IESO* cannot, after taking all reasonable steps to do so, locate a former *non-defaulting market participant* that has remitted payment to the *IESO* on account of a *default levy*, any amount that would otherwise be distributed to such former *non-defaulting market participant* under section 8.8.2 shall:
- 8.8.3.1 be allocated and distributed to other *non-defaulting market participants* in the manner described in section 8.8.2; or
- 8.8.3.2 where other *non-defaulting market participants* have already been reimbursed in respect of a *default levy* and are therefore not entitled to payment of any amounts under section 8.8.2, be used to offset the *IESO administration charge*.
- 8.8.4 Any costs and expenses reasonably incurred by the *IESO* in recovering amounts from a *defaulting market participant* under section 8.8.1 that have not been included in a *default levy* under section 8.3.2.1(b) or 8.5.2.2 shall be included in the *IESO administration charge*.

Part 5 – IESO Board Decision Rationale

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Market Rule Amendment Proposal Form

Part 1 Market Rule Information

Identification No.:	MR-00453-R04
Subject:	Market Renewal Program – Prudential Security
Title:	Market Renewal Program – Prudential Security: Additional Provisions Regarding Prudential Support
Nature of Proposal:	<input checked="" type="checkbox"/> Alteration <input type="checkbox"/> Deletion <input type="checkbox"/> Addition
Chapter:	2
Appendix:	2.3
Sections:	1, 2, 3
Sub-sections proposed for amending:	1.1, 1.2, 1.2.1, 1.3, 1.4, 1.5, 1.6, 1.7, 1.7.3, 1.9, 2.1, 2.1.1, 2.1.2, 3.1, 3.4

Part 2 Proposal History

Version	Reason for Issuing	Version Date
1.0	Draft for Stakeholder Review	October 13, 2020

Approved Amendment Publication Date:	
Approved Amendment Effective Date:	

Part 3 Explanation for Proposed Amendment

Provide a brief description of the following:

- 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*.

Part 4 – Proposed Amendment

Appendix 2.3 – Prudential Support

1. Additional Provisions Regarding Prudential Support

1.1 Determination of Prudential Support Obligations

Prior to participating in the *real-time markets* or the *day-ahead market*, the *IESO* shall deliver to each *market participant* a schedule, in the form set forth in the applicable *market manual*, setting out the determination by the *IESO* of that *market participant's prudential support obligations*, which shall be completed by the *IESO* on the basis of the determinations referred to in Section 5 of Chapter 2. Such schedule shall be effective until amended and replaced in accordance with this Appendix.

1.2 Provision of Prudential Support

Prior to participating in the *real-time markets* or *day-ahead market*, each market participant shall deliver to the *IESO*:

- 1.2.1 a schedule, in the form set forth in the applicable *market manuals* completed by the *market participant* setting out the *prudential support* with which the *market participant* has elected to satisfy its *prudential support obligation in respect of either or both physical transactions or virtual transactions* as set forth in the schedule delivered to it by the *IESO* referred to in section 1.1; and

- 1.2.2 the *prudential support* as set out in that schedule.

In the event that the sum of all *prudential support* provided by the *market participant* to the *IESO* is a greater amount than required by the *market rules*, the *IESO* shall, upon written request by the *market participant*, return (or direct the custodian to return) to the *market participant* an amount equal to the difference between the value of all *prudential support* then held by or on behalf of the *IESO* and the *prudential support obligation* of the *market participant* at that time. The *IESO* shall return such amount within five *business days* of the receipt of the request for the return of the amount from the *market participant*. In the event the *market participant* has posted one or more different types of *prudential support*, the *IESO* shall return the type of *prudential support* as directed by the *market participant*. Upon the return by the *IESO* to the *market participant* of the amount of any *prudential support*, any security interest or lien

granted on such *prudential support* will be released immediately and, to the extent possible, without any further action by either party.

1.3 Reduction of Prudential Support Obligation for Physical Transactions for Credit Rating

Where the *market participant's prudential support obligation for physical transactions* reflects a reduction by reason of the *market participant's* credit rating from a major bond rating agency identified in the list of such agencies published by the *IESO*, the *market participant* covenants and agrees to advise the *IESO* in writing immediately upon the *market participant* becoming aware of either a change in or loss of the then current credit rating or the decision of the bond rating agency to place the *market participant* on "credit watch status" or equivalent. Where, as a result of either any such change or loss in the then current rating or the placing of the *market participant* on "credit watch status", the *market participant* is no longer entitled under the *market rules* to the same reduction by way of credit rating, the *IESO* shall deliver to the *market participant* an amended schedule setting out the *market participant's* revised *prudential support obligation for physical transactions*.

1.4 Prudential Support for Physical Transactions by way of a Third Party Guarantee

Prudential support for physical transactions in the form of a guarantee provided by a third party pursuant to section 5.7.2.2 or 5.7.2.4 of Chapter 2 shall provide for payment by the guarantor to the *IESO* on demand up to the amount stated in the guarantee. The only conditions on the ability of the *IESO* to draw on the guarantee shall be the delivery of copies of an unpaid invoice previously issued to the *market participant* and a certificate of an officer of the *IESO* that a specified amount is owing by the *market participant* to the *IESO* and that, in accordance with the provisions of the *market rules*, the *IESO* is entitled to payment of that specified amount as of the date of delivery of the certificate. Where the *market participant's prudential support* includes a guarantee provided by a third party that has a credit rating from a major bond rating agency identified in the list of such agencies published by the *IESO*, the *market participant* covenants and agrees to advise the *IESO* in writing immediately upon the *market participant* becoming aware of a change in or loss of the then current credit rating issued to the guarantor. Where as a result of the loss of such credit rating, the *market participant* is no longer entitled to meet its *prudential support obligation for physical transactions* in whole or in part through the provision of such a guarantee, the market participant must provide alternative *prudential support* within the time frame mandated in section 5.2 of Chapter 2.

1.5 Reduction of Prudential Support Obligation for Physical Transactions for Payment History

Where the *market participant's prudential support obligation for physical transactions* reflects a reduction by reason of evidence of the *market participant's* good payment history determined in accordance with sections 5.8.4 or 5.8.5 of Chapter 2 and, for any reason, the *market participant* is no longer entitled under the *market rules* to the same

amount of reduction by way of good payment history, the *IESO* shall deliver to the *market participant* an amended schedule setting out the *market participant's* revised prudential support obligation for *physical transactions*.

1.6 Prudential Support by way of Letter of Credit

Where a portion of the *market participant's prudential support* is in the form of a letter of credit pursuant to sections 5.7.2.1 or 5C.5.2.1 of Chapter 2, the following provisions shall apply:

- 1.6.1 the letter of credit shall provide that it is issued subject to either The Uniform Customs and Practice for Documentary Credits, 2007 Revision, ICC Publication No. 600 or The International Standby Practices 1998;
- 1.6.2 the *IESO* shall be named as beneficiary in each letter of credit, each letter of credit shall be irrevocable, partial draws on any letter of credit shall not be prohibited and the letter of credit or the aggregate amount of all letters of credit shall be in the face amount of at least the amount specified in its then current schedule;
- 1.6.3 the only conditions on the ability of the *IESO* to draw on the letter of credit shall be the occurrence of an *event of default* by or in respect of the *market participant* and a certificate of an officer of the *IESO* that the *IESO* is entitled to draw on the letter of credit in accordance with the provisions of the *market rules* in the amount specified in the certificate as at the date of delivery of the certificate;
- 1.6.4 the letter of credit shall either provide for automatic renewal (unless the issuing bank advises the *IESO* at least thirty days prior to the renewal date that the letter of credit will not be renewed) or be for a term of at least one (1) year. In either case it is the responsibility of the *market participant* to maintain the requisite amount of *prudential support*. Where the *IESO* is advised that a letter of credit is not to be renewed or the term of the letter of credit is to expire, the *market participant* shall arrange for and deliver alternative *prudential support* within the time frame mandated by the *market rules* so as to enable the *market participant* to be in compliance with the *market rules*; and
- 1.6.5 by including a letter of credit as part of its *prudential support*, the *market participant* represents and warrants to the *IESO* that the issuance of the letter of credit is not prohibited in any other agreement, including without limitation, a negative pledge given by or in respect of the *market participant*.

1.7 Prudential Support by way of Cash or Treasury Bills

Where any portion of the *market participant's prudential support* for *physical transactions* is in the form of treasury bills pursuant to section 5.7.2.3 of Chapter 2, the provision of such *prudential support* shall be reflected in a written instrument that is acceptable at the sole discretion of the *IESO* and the following provisions shall apply:

- 1.7.1 any such treasury bills shall be issued by the Government of Canada and for *IESO*

purposes shall be valued at their current market value from time to time less two (2%) percent to take into account the potential eroding effects of interest rate increases on the value of such treasury bills;

- 1.7.2 the *IESO* shall retain the services of a custodian which shall retain the treasury bills as agent for the *IESO* and not the *market participant*; and
- 1.7.3 any interest income paid by the treasury bill shall be apportioned to the benefit of the *market participant's prudential support for physical transactions*.

The *IESO* shall have no obligation to pay interest on the cash proceeds from the maturity of a treasury bill, or on any cash deposit held by the *IESO* in accordance with section 5.7.2.5 of Chapter 2.

1.8 Replacement Schedules

The *IESO* and the *market participant* may or, where required to enable the *market participant* to be in compliance with the *market rules*, shall from time to time deliver to one another one or more additional schedules, which schedules shall be in the form approved by the *IESO* from time to time. Where the *IESO* delivers to the *market participant* an additional schedule, each such schedule shall replace the preceding schedule, and shall be effective from the date of its delivery to the *market participant* for all purposes thereafter until such time as a subsequent amended schedule is delivered by the *IESO* to the *market participant*. Where any such amended schedule shows an increase in the *market participant's prudential support obligation* relative to the preceding schedule or requires the provision of alternative *prudential support*, the *market participant* shall deliver such additional or alternative *prudential support* as may be required so as to enable the *market participant* to be in compliance with the *market rules*. Where the *market participant* delivers an amended schedule, modified to reflect additional or alternative forms of *prudential support*, such amended schedule, provided that it is accompanied by such additional or alternative *prudential support*, shall replace the preceding schedule and shall be binding on the *market participant* for all purposes thereafter until such time as a subsequent amended schedule is delivered to the *IESO* by the *market participant*.

1.9 Dispute Resolution

If the *market participant* disagrees with the determination by the *IESO* of any of the amounts of *prudential support obligations* set out on a schedule and such dispute cannot be resolved by the *market participant* and the *IESO*, then the *market participant* shall submit the matter to dispute resolution under section 2 of Chapter 3.

Notwithstanding the initiation of the dispute resolution process, the *market participant* shall provide such additional *prudential support* as may be required in order to continue participating in the *real-time markets* or *day-ahead market* based on the determination by the *IESO* until the matter has been resolved.

2. Pledge of Prudential Support in the form of Cash or Treasury Bills

2.1 Pledge

Prudential support in the form of cash or treasury bills provided as part of the market participant's prudential support obligation for *physical transactions* in respect of the *market participant's* participation in the *real-time markets* and *day-ahead market* shall be held by or on behalf of the *IESO* (together with all accretions thereto, all income therefrom and proceeds thereof) and the *market participant* shall assign to the *IESO* all of its present and future right, title and interest in and to such cash and treasury bills as general and continuing collateral security and as a pledge to secure:

- 2.1.1 subject to section 13 of Chapter 1, all indebtedness, obligations and liabilities of any kind, now or hereafter existing, direct or indirect, absolute or contingent, joint or several, of the *market participant* to the *IESO* in respect of the *market participant's* participation in *physical transactions* in the *real-time markets* and the *day-ahead market*; and
- 2.1.2 all reasonable costs, charges, expenses and fees (including, without limiting the generality of the foregoing, reasonable legal fees on a solicitor and client basis) incurred by or on behalf of the *IESO*, in the enforcement of its rights under the *market rules* in respect of the participation by the *market participant* in the *real-time markets* and the *day-ahead market*.

3. Exercise of Rights and Remedies to Prudential Support

3.1 Exercise of Rights

Upon the occurrence of an *event of default*, the *IESO* shall be entitled to exercise its rights and remedies as set out in the *market rules*, or provided for at law or in equity. Without limiting the generality of the foregoing, such rights and remedies shall, in respect of the *prudential support* provided by the *market participant*, include setting-off and applying any and all *prudential support* held in the form of cash or treasury bills or proceeds of either cash or treasury bills against the indebtedness, obligations and liabilities of the *market participant* to the *IESO* in respect of the participation by the *market participant* in the *real-time markets* and *day ahead market*. When the *IESO* is reasonably certain that it will be issuing a first *notice of default levy* it shall *publish* the name of the *defaulting market participant*.

3.2 Remedies Cumulative

Each of the remedies available to the *IESO* under the *market rules* or at law or in equity is intended to be a separate remedy and in no way is a limitation on or substitution for any one or more of the other remedies otherwise available to the *IESO*. The rights and remedies expressly specified in the *market rules* or at law or in equity are cumulative and not exclusive. The *IESO* may in its sole discretion exercise any and all rights, powers, remedies and recourses available under the *market rules* or under any document comprising the *prudential support* provided by the *market participant* or any

other remedy available to the *IESO* howsoever arising, and whether at law or in equity, and such rights, powers and remedies and recourses may be exercised concurrently or individually without the necessity of any election.

3.3 Application of Prudential Support against Actual Exposure

Except as may be otherwise provided in the *market rules*, all moneys received in respect of the realization of the *prudential support* provided by the *market participant* may, notwithstanding any appropriation by the *market participant* or any other person, be appropriated to such parts of the *market participant's actual exposure or its other obligations*, any interest thereon owing pursuant to the *market rules* or the costs, charges, expenses and fees referred to in section 3.4 and in such order as the *IESO* sees fit, and the *IESO* shall have the right to change any appropriation at any time.

3.4 Payment of Expenses

The *market participant* agrees to pay to the *IESO* forthwith on demand all reasonable costs, charges, expenses and fees (including, without limiting the generality of the foregoing, legal fees on a solicitor and client basis) of or incurred by or on behalf of the *IESO* in the realization, recovery or enforcement of the *prudential support* provided by the *market participant* and enforcement of the rights and remedies of the *IESO* under the *market rules* or at law or in equity in respect of the participation by the *market participant* in the *real-time markets* and the *day-ahead market*.

3.5 Deficiency

If the proceeds of the realization of any *prudential support* provided by the *market participant* are insufficient to pay all of the *actual exposure* of the *market participant* or its other obligations to the *IESO*, the *market participant* shall forthwith pay or cause to be paid to the *IESO* any such deficiency. The *IESO* shall provide a calculation of any such deficiency to the *market participant*.

Part 5 – IESO Board Decision Rationale

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