

Market Rules

Chapter 2

Participation



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1. Introduction

1.1 Introduction

1.1.1 This Chapter sets forth:

- 1.1.1.1 the procedures pursuant to which persons may apply to the *IESO* for authorization to participate in the *IESO-administered markets* or to cause or permit electricity to be conveyed into, through or out of the *IESO-controlled grid*;
- 1.1.1.2 the prudential, technical and other requirements which must be met by prospective *market participants* and by *market participants*;
- 1.1.1.3 the fees payable by prospective *market participants* and by *market participants*; and
- 1.1.1.4 the terms and conditions upon which a *market participant* may cease to be a *market participant*.

1.2 Participation

1.2.0 A person who has been issued a *licence* by the *OEB* pursuant to Part V of the *Ontario Energy Board, 1998*, is subject to all *market rules* relating to the activities authorized by such *licence* and all other applicable *market rules*.

1.2.1 No person shall participate in the *IESO-administered markets* or cause or permit electricity to be conveyed into, through or out of the *IESO-controlled grid* unless that person has been authorized by the *IESO* to do so pursuant to this Chapter, provided however that this section 1.2.1 shall not apply to require any authorization in respect of physical loop flows inadvertently arising as a result of transactions between entities located outside the *IESO control area*.

1.2.2 No person shall be authorized by the *IESO* to participate in the *IESO-administered markets* or to cause or permit electricity to be conveyed into, through or out of the *IESO-controlled grid* unless the *IESO* is satisfied:

- 1.2.2.1 on the basis of the certification, tests, and inspections referred to in section 6.2, that the person satisfies the technical requirements referred to in that section applicable to all *market participants*;

- 1.2.2.2 that the person, if it applies to participate in the *IESO-administered markets/real-time markets*, will ~~either~~ satisfy the applicable prudential support requirements of Appendix 2.3 and any other financial requirements set forth in the ~~market rules applicable to all market participants and the IESO-administered market in which the person wishes to participate, or in the case of a capacity market participant, satisfy the capacity prudential support requirements in section 5B;~~
- 1.2.2.3 that the person ~~agrees has to be bound by these market rules by executing executed the a participation agreement and filed same with the IESO;~~
- 1.2.2.4 that the person holds a *licence* permitting the person to engage in one or more of the activities described in section 57 of the *Ontario Energy Board Act, 1998*, unless:
- a. the person is exempt by regulation enacted pursuant to the *Ontario Energy Board Act, 1998* from the obligation to hold such a *licence*; or
 - b. the person is not engaging in an activity for which the person requires a *licence* pursuant to section 57 of the *Ontario Energy Board Act, 1998*; and
- 1.2.2.5 [Intentionally left blank – section deleted]
- 1.2.2.6 on the basis of the documentation referred to in section 3.1.2.2, that the person, if it applies for authorization as a *market participant* other than for authorization to participate solely as a ~~financial market participant~~ one or a combination of (i) a *virtual trader*; (ii) a *TR participant*; or (iii) a *capacity auction participant*:
- a. is registered for the federal harmonized value-added tax system under Part IX of the *Excise Tax Act* (Canada); or
 - b. is resident in Canada and is, by virtue of *applicable law*, not liable to pay the federal harmonized value-added tax imposed under Part IX of the *Excise Tax Act* (Canada).
- 1.2.2.7 that the person, if it applies for authorization to participate solely as one or a combination of:
- a. an *energy trader*; or
 - b. a *virtual trader*
- has disclosed to the IESO, all *market control entities* of the person.

- 1.2.2A [Intentionally left blank – section deleted]
- 1.2.3 A person who has been authorized by the *IESO* to participate in the *IESO-administered markets* or to cause or permit electricity to be conveyed into, through or out of the *IESO-controlled grid* may participate in the market or trading activities to which the authorization to participate relates.
- 1.2.4 A person who is authorized by the *IESO* to conduct *physical transactions* under this section 1.2, shall be authorized to participate in the *real-time market* and the *day-ahead market*.

2. Classes of Market Participants

- 2.1.1 ~~The following classes of~~ persons may apply for authorization to participate as one or more of the following classes of market participants in the *IESO-administered markets* or to cause or permit electricity to be conveyed into, through or out of the *IESO-controlled grid*:
- 2.1.1.1 *generators*;
 - 2.1.1.2 *distributors*;
 - 2.1.1.3 *wholesale sellers*;
 - 2.1.1.4 *wholesale consumers*;
 - 2.1.1.5 *retailers*;
 - 2.1.1.6 *transmitters*;
 - 2.1.1.7 [Intentionally left blank – section deleted] *financial market participants*;
 - 2.1.1.8 [Intentionally left blank – section deleted]
 - 2.1.1.9 [Intentionally left blank – section deleted]
 - 2.1.1.10 [Intentionally left blank – section deleted]

- 2.1.1.11 *capacity market participants;*
- 2.1.1.12 *capacity auction participants; and*
- 2.1.1.13 *electricity storage participants;*
- 2.1.1.14 *virtual traders; and*
- 2.1.1.15 *TR participants.*

3. **Application for Authorization**

3.1. Application for Authorization

- 3.1.1 A person who wishes to be authorized by the *IESO* to participate in the *IESO-administered markets* or to cause or permit electricity to be conveyed into, through or out of the *IESO-controlled grid* must file a completed *application for authorization to participate* in accordance with the applicable market manual.
- 3.1.2 The application for authorization to participate shall be accompanied by:
 - 3.1.2.1 the non-refundable application fee established from time to time by the *IESO* to defray the costs of processing the application; and
 - 3.1.2.2 unless the *application for authorization to participate* is submitted in respect of an applicant that is applying for authorization to participate in the *IESO-administered markets* solely as a financial market one or a combination of (i) a virtual trader; (ii) a TR participant; or (iii) participant ~~or a capacity auction participant~~, either:
 - a. the federal harmonized value-added tax system registration number issued to the applicant by the Canada Customs and Revenue Agency; or
 - b. where the applicant is resident in Canada and is, by virtue of *applicable law*, not liable to pay the federal harmonized value-added tax under Part IX of the *Excise Tax Act* (Canada), such documentation as may be prescribed in the *Excise Tax Act* (Canada) or described in the policies of the Canada Customs and Revenue Agency to support the exemption from such liability to pay.

3.1.3 The *IESO* shall, within ten *business days* of receiving an *application for authorization to participate* or within such longer period of time as may be agreed between the *IESO* and the applicant, advise the applicant of any further information or clarification which is required in support of its application if, in the *IESO's* opinion, the application is:

3.1.3.1 incomplete; or

3.1.3.2 contains information with respect to which the *IESO* requires clarification.

3.1.4 If the further information or clarification which is requested by the *IESO* pursuant to section 3.1.3 is not provided to the *IESO's* satisfaction within fifteen *business days* of the request or within such longer period of time as may be agreed between the *IESO* and the applicant, the applicant will be deemed to have withdrawn the *application for authorization to participate*.

~~3.1.85~~ An applicant or *market participant* shall forthwith advise the *IESO* of any circumstances which result or are likely to result in a change in the information provided in the *application for authorization to participate* or in any updates thereto.

~~3.1.9~~ [Intentionally left blank — section deleted]

~~3.1.106~~ The *IESO* shall establish, maintain, update and *publish*:

~~3.1.106.1~~ a list of all *market participants* and a list of all *applications for authorization to participate* filed with the *IESO*;

~~3.1.106.2~~ a list of all *market participants* that will cease to be *market participants* and the time that each listed *market participant* will cease to be a *market participant*;

~~3.1.106.3~~ a list of all *market participants* that are the subject of a *suspension order* or a *termination order* and the time at which the rights of each listed *market participant* was suspended or terminated; and

~~3.1.106.4~~ a list of all *market participants* that are the subject of an order referred to in section 6.5.1 of Chapter 3, and the time at which such order became effective in respect of each listed *market participant*.

4. Orders Authorizing Participation

4.1. Authorization Orders

~~3.1.54.1.1~~ The *IESO* shall, within twenty *business days* of receipt of the *application for authorization to participate* or of the further information or clarification requested under section 3.1.3, whichever is the later, or within such longer period of time as may be agreed between the *IESO* and the applicant, The *IESO* shall by order authorize or may by order conditionally authorize ~~the-an~~ applicant to participate in the *IESO-administered markets* or to cause or permit electricity to be conveyed into, through or out of the *IESO-controlled grid*, on such terms and conditions as the *IESO* considers appropriate, if:

4.1.1.1 for a conditional order, the *IESO* is satisfied that the applicant meets the requirements set out in section 1.2.2.2; or

~~3.1.5-14.1.1.2~~ for an order other than a conditional order, the *IESO* is satisfied that the applicant meets the requirements set out in section 1.2.2 applicable to the applicant; and

~~3.1.5.2~~ the applicant has filed with the *IESO* an executed *participant agreement*, in such form as shall be established by the *IESO*, pursuant to which the applicant agrees to be bound by and comply with the *market rules*, provides the certification referred to in section 6.2.1 and certifies that it has adequate qualified employees or other personnel and organizational and other arrangements that are sufficient to enable the applicant to perform all of the functions and obligations applicable to *market participants*, the class of *market participant* of which the applicant forms part and the *IESO-administered market* in which the applicant wishes to participate.

4.1.2 The *IESO* shall issue an order made pursuant to section 4.1.1 in accordance with the following timelines:

4.1.2.1 within twenty *business days* of receipt of the applicant's *application for authorization to participate* or of the further information or clarification requested under section 3.1.3, whichever is the later; or

4.1.2.2 within such longer period of time as may be agreed between the *IESO* and the applicant.

~~4.2-14.1.3~~ An conditional order issued pursuant to section 4.1.1 ~~that is conditional solely on the satisfaction of the requirements set out in section 1.2.2.1, section 1.2.2.4, or both,~~ shall:

~~4.2.1.14.1.3.1~~ stipulate the date by which the applicant must satisfy the requirements of section 1.2.2.1, section 1.2.2.4 or both, as the case may be conditions; and

~~4.2.1.24.1.3.2~~ no longer be conditional at such time as the IESO notifies the applicant that:

a. ~~the applicant has met the requirements of section 1.2.2.1, section 1.2.2.4 or both, as the case may be; and~~

b. ~~the IESO has received from the applicant the executed participation agreement referred to in section 4.1.1.2; and~~

~~4.2.1.3~~ lapse on the date referred to in section ~~4.2.1.1~~ 4.1.3.1 if the applicant has not, prior to that date, received from the IESO ~~the~~ notification that the applicant has fulfilled all conditions set out in the order. A lapsed order shall be deemed to constitute an order denying the applicant authorization to participate in the IESO-administered markets or to cause or permit electricity to be conveyed into, through or out of the IESO-controlled grid as of the date it lapses referred to in section 4.2.1.2.

4.1.4 The IESO may, at any time and in its sole discretion, amend a conditional order issued pursuant to section 4.1.1 to include an additional condition, to remove a condition, or to extend the date stipulated pursuant to section 4.1.3.1.

4.1.5 A person to whom a conditional order relates may request, in accordance with the applicable market manual, that the IESO extend the date stipulated pursuant to section 4.1.3.1 if a condition of the order cannot be met due to circumstances beyond the person's control or influence.

4.1.6 The IESO may terminate or suspend a conditional order issued pursuant to section 4.1.1 at any time if the IESO determines that:

4.1.6.1 there are material reliability or operational risks in maintaining the order;

4.1.6.2 the person to whom the order relates failed to address or complete a condition of the order; or

4.1.6.3 the person to whom the order relates fails to comply with the applicable market rules.

4.1.7 If an order issued pursuant to section 4.1.1 is terminated or suspended or lapses, the person to whom the order relates may submit a request to the *IESO* in accordance with the applicable *market manual* to extend or renew the order.

4.1.83.1.6 Subject to section 4.1.1, ~~if the *IESO* is not satisfied that an applicant meets the requirements set out in section 1.2.2 the *IESO* shall, within twenty *business days* of receipt of the *application for authorization to participate* or of the further information or clarification requested under section 3.1.3, whichever is the later, or within such longer period of time as may be agreed between the *IESO* and the applicant, by order deny the applicant authorization to participate in the *IESO-administered markets* or to cause or permit electricity to be conveyed into, through or out of the *IESO-controlled grid*.~~

~~3.1.5A~~ — [Intentionally left blank — section deleted]

~~3.1.5B~~ — [Intentionally left blank — section deleted]

~~3.1.5B.1~~ — [Intentionally left blank — section deleted]

~~3.1.5B.2~~ — [Intentionally left blank — section deleted]

~~3.1.5C~~ — [Intentionally left blank — section deleted]

~~3.1.5C.1~~ — [Intentionally left blank — section deleted]

~~3.1.5C.2~~ — [Intentionally left blank — section deleted]

~~3.1.6~~ — Subject to section 4.1.1, if the *IESO* is not satisfied that an applicant meets the requirements set out in section 1.2.2 the *IESO* shall, within twenty *business days* of receipt of the *application for authorization to participate* or of the further information or clarification requested under section 3.1.3, whichever is the later, or within such longer period of time as may be agreed between the *IESO* and the applicant, by order deny the applicant authorization to participate in the *IESO-administered markets* or to cause or permit electricity to be conveyed into, through or out of the *IESO-controlled grid*.

~~3.1.7~~ — A person who wishes to dispute an order of the *IESO* made pursuant to section 3.1.5, 3.1.6, or 4.1.1 shall follow the dispute resolution procedures set forth in section 2 of Chapter 3.

~~3.1.8~~ — An applicant or *market participant* shall forthwith advise the *IESO* of any circumstances which result or are likely to result in a change in the information provided in the *application for authorization to participate* or in any updates thereto.

~~3.1.9 [Intentionally left blank — section deleted]~~

~~3.1.10 The IESO shall establish, maintain, update and publish:~~

~~3.1.10.1 a list of all *market participants* and a list of all *applications for authorization to participate* filed with the IESO;~~

~~3.1.10.2 a list of all *market participants* that will cease to be *market participants* and the time that each listed *market participant* will cease to be a *market participant*;~~

~~3.1.10.3 a list of all *market participants* that are the subject of a *suspension order* or a *termination order* and the time at which the rights of each listed *market participant* was suspended or terminated; and~~

~~3.1.10.4 a list of all *market participants* that are the subject of an order referred to in section 6.5.1 of Chapter 3, and the time at which such order became effective in respect of each listed *market participant*.~~

~~3A. [Intentionally left blank — section deleted]~~

~~4. Conditional Authorization~~

~~4.1 Conditional Authorization Order~~

~~4.1.1 Within twenty *business days* of receipt of an *application for authorization to participate* or of the further information or clarification requested under section 3.1.3, whichever is the later, or within such longer period of time as may be agreed between the IESO and the applicant, the IESO may, if it is satisfied that the applicant meets the requirements set out in section 1.2.2.2, by order conditionally authorize the applicant to participate in the *IESO-administered markets* or to cause or permit electricity to be conveyed into, through or out of the *IESO-controlled grid*, on such terms and conditions as the IESO considers appropriate, until such time as the applicant has:~~

~~4.1.1.1 satisfied the requirements set out in section 1.2.2.1, section 1.2.2.4 or both, as the case may be; and~~

~~4.1.1.1A [Intentionally left blank—section deleted]~~

~~4.1.1.2 filed an executed *participation agreement*, in such form as shall be established by the *IESO*, pursuant to which the applicant agrees to be bound by and comply with the *market rules*, provides the certification referred to in section 6.2.1 and certifies that it has adequate qualified employees or other personnel and organizational and other arrangements that are sufficient to enable the applicant to perform all of the functions and obligations applicable to *market participants*, the class of *market participant* of which the applicant forms part and the *IESO-administered market* in which the applicant wishes to participate.~~

~~4.1.2 [Intentionally left blank—section deleted]~~

~~4.2 Effect and Term of Order~~

~~4.2.1 An order issued pursuant to section 4.1.1 that is conditional solely on the satisfaction of the requirements set out in section 1.2.2.1, section 1.2.2.4, or both, shall:~~

~~4.2.1.1 stipulate the date by which the applicant must satisfy the requirements of section 1.2.2.1, section 1.2.2.4 or both, as the case may be;~~

~~4.2.1.2 no longer be conditional at such time as the *IESO* notifies the applicant that:~~

~~a. the applicant has met the requirements of section 1.2.2.1, section 1.2.2.4 or both, as the case may be; and~~

~~b. the *IESO* has received from the applicant the executed *participation agreement* referred to in section 4.1.1.2; and~~

~~4.2.1.3 lapse on the date referred to in section 4.2.1.1 if the applicant has not, prior to that date, received from the *IESO* the notification referred to in section 4.2.1.2.~~

~~4.2.2 An order issued pursuant to section 4.1.1 shall:~~

~~4.2.2.1 where the *IESO* provides the notification referred to in section 4.2.1.2, be deemed to constitute the order authorizing the applicant to participate in the *IESO-administered markets* or to cause or permit electricity to be conveyed into, through or out of the *IESO-controlled grid*, on any other terms and conditions noted in the order issued~~

~~pursuant to section 4.1.1, as of the date of receipt by the applicant of such notification; or~~

~~4.2.2.2 — where such order lapses in accordance with section 4.2.1.3, be deemed to constitute an order denying the applicant authorization to participate in the *IESO-administered markets* or to cause or permit electricity to be conveyed into, through or out of the *IESO-controlled grid* as of the date referred to in section 4.2.1.3.~~

~~4.2.3 — [Intentionally left blank — section deleted]~~

~~4.2.3.1 — [Intentionally left blank — section deleted]~~

~~4.2.3.2 — [Intentionally left blank — section deleted]~~

~~4.2.3.3 — [Intentionally left blank — section deleted]~~

~~4.2.3.4 — [Intentionally left blank — section deleted]~~

~~4.2.4 — [Intentionally left blank — section deleted]~~

~~4.1.9~~ A conditional order shall be deemed to constitute the order authorizing the applicant to participate in the *IESO-administered markets* or to cause or permit electricity to be conveyed into, through or out of the *IESO-controlled grid* as of the date the applicant receives notification from the IESO that the applicant has fulfilled all the conditions of the order.

~~4.2.54.1.10~~ A person to whom a *registered facility* is transferred ~~as contemplated by in accordance with~~ section 2.5 of Chapter 7, shall be deemed to be a *market participant* as of the commencement of the first *trading day* following completion of the transfer and shall expeditiously pursue and complete the conditions precedent to becoming fully authorized as required by this Chapter.

~~4.1.11 3.1.7~~ A person who wishes to dispute an order of the *IESO* made pursuant to section 3.1.5, 3.1.6, or 4.1.1 shall follow the dispute resolution procedures set forth in section 2 of Chapter 3.

5. Prudential Requirements

5.1 Purpose and Application

- 5.1.1 ~~This~~ Sections 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 the (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, section 5C.5.1, or section 5D.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, section 5D 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*”), 5C.5, or 5D.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 obligation*.
- 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 ~~under over the 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 ~~the real-time market~~ physical transactions 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 an energy trader that is 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]

c. [Intentionally left blank]

i. [Intentionally left blank]

ii. [Intentionally left blank]

d. [Intentionally left blank]

e. [Intentionally left blank]

i. [Intentionally left blank]

ii. [Intentionally left blank]

5.3.4B.2 [Intentionally left blank]

a. [Intentionally left blank]

- b. [Intentionally left blank]
- c. [Intentionally left blank]
 - i. [Intentionally left blank]
 - 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 ~~a 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, electricity storage resource, dispatchable load, or price responsive load, the applicable Regulated Price Plan supply cost or its equivalent published by the OEB greater of (i) the hourly locational marginal price in the day-ahead market or (ii) the hourly average locational marginal price in the real-time market;
- or
- 5.3.10A.2 for a ~~metered~~ market participant that is a distributor or non-dispatchable load, the applicable Regulated Price Conventional Meter Tier 1 price or its equivalent published by the

~~OEB~~ greater of (i) the Ontario zonal price in the day-ahead market or (ii) the hourly 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 ~~shall~~ may 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 a 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 that is not 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 ~~non-metered market participants~~ an 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 Commission 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 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 2.1.1.14 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
≥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:

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 for energy 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.

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5B. Capacity Prudential Requirements

5B.1 Purpose

5B.1.1 This section 5B sets forth the nature and amount of *capacity prudential support* that must be provided by *market participants* that are either *capacity auction participants* or *capacity market participants* as a condition of delivering on a *capacity obligation*, and the manner in which such *market participants* must provide and maintain *capacity prudential support* on an on-going basis, in order to protect the *IESO* and *market participants* from payment defaults.

5B.1.2 The *IESO* shall review the *capacity prudential support* requirements set out in this chapter at least once every three years, as part of the review of the *prudential support* requirements pursuant to section 5.1.2.

5B.2 Market Participant Obligations

5B.2.1 Each *market participant* shall initially and continually satisfy the obligations set forth in this section 5B.2 with regard to the provision of *capacity prudential support* as a condition of delivering on a *capacity obligation*.

5B.2.2 No *market participant* that is required to provide *capacity prudential support* shall participate in the *real-time markets* or cause or permit electricity to be

conveyed into, through or out of the *IESO-controlled grid* unless that *market participant* satisfies the requirements of this section 5B.2.

- 5B.2.3 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 capacity prudential support obligation*.
- 5B.2.4 If *capacity prudential support* previously provided to the *IESO* by a *market participant* is due to expire or terminate, and upon expiry or termination of the existing *capacity prudential support*, the total *capacity prudential support* held by the *IESO* in respect of that *market participant* will be less than the *market participant's capacity prudential support obligation*, then at least ten *business days* prior to the time at which the existing security is due to expire or terminate, the *market participant* must provide to the *IESO* replacement *capacity prudential support* which will become effective no later than the expiry or termination of the existing collateral, such that the total *capacity prudential support* provided is at least equal to the *market participant's capacity prudential support obligation*.
- 5B.2.5 Where a *market participant's capacity prudential support obligation* has been reduced pursuant to section 5B.5 and the relevant credit rating is revised or the relevant payment history has changed, such as to result in an increase in the *market participant's capacity prudential support obligation*, then within five *business days*, the *market participant* must provide to the *IESO* additional *capacity prudential support* such that the total *capacity prudential support* provided is at least equal to the *market participant's capacity prudential support obligation* when calculated on the basis of the revised credit rating or payment history.
- 5B.2.6 Where any part of the *capacity 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*, replacement *capacity prudential support* such that the total *capacity prudential support* provided is at least equal to the *market participant's capacity prudential support obligation*.
- 5B.2.7 If the *IESO* draws upon part or all of a *market participant's capacity prudential support* in accordance with section 6.3.3.2 of Chapter 3 and the remaining *capacity prudential support* held by the *IESO* in respect of that *market participant* is less than the *market participant's capacity prudential support obligation*, the *market participant* must, within five *business days* of receiving notice from the *IESO*, provide the *IESO* with additional *capacity prudential support* such that the total *capacity prudential support* provided is at least equal to the *market participant's capacity prudential support obligation*.

5B.3 Calculation of Capacity Prudential Support Obligations

- 5B.3.1 The *IESO* shall determine, in accordance with the applicable *market manual*, for each *market participant*, a *capacity prudential support obligation* for each *obligation period*, based on a percentage of the highest monthly availability payment, less any allowable reductions pursuant to section 5B.5.
- 5B.3.2 The *IESO* shall review the capacity prudential support obligation of each market participant as follows:
- 5B.3.2.1 prior to the start of each *obligation period*;
 - 5B.3.2.2 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 capacity prudential support* was last calculated; or
 - 5B.3.2.3 as a result of either a change in or loss of a *market participant's* credit rating or good payment history reduction calculated in accordance with section 5B.5.
- 5B.3.3 The *IESO* may change the *capacity prudential support obligation* for a *market participant* at any time as a result of a review conducted pursuant to section 5B.3.2, and shall promptly notify the *market participant* of any such change. Any change to a *market participant's capacity prudential support obligation* shall apply with effect from such time, not being earlier than the time of notification of the change 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 *capacity prudential support* that may be required as a result of an increase in the *market participant's capacity prudential support obligation* that results from such change.

5B.4 Obligation to Provide Capacity Prudential Support

- 5B.4.1 Each *market participant* must provide to the *IESO* and maintain *capacity prudential support*, the value of which is at least equal to the *market participant's capacity prudential support obligation*. The aggregate value of the *capacity prudential support* shall be equal to the value of the undrawn or unclaimed amounts of *capacity prudential support* provided by the *market participant*.
- 5B.4.2 A *market participant's capacity prudential support obligation* must be met through the provision to the *IESO* and the maintenance of *capacity prudential support* in the following form:

- 5B.4.2.1 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 an *IESO* acceptable major bond rating agency as identified in the list referred to in section 5B.5.7; or
 - b. a credit union licensed by the Financial Services Commission of Ontario with a minimum long-term credit rating of “A” from an *IESO* acceptable major bond rating agency as identified in the list referred to in section 5B.5.7.
- 5B.4.3 The following provisions shall apply to a guarantee or irrevocable letter of credit provided in section 5B.4.2.1:
- 5B.4.3.1 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;
- 5B.4.3.2 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 by the *IESO*;
- 5B.4.3.3 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;
- 5B.4.3.4 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 *capacity 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 *capacity 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

- 5B.4.3.5 by including a letter of credit as part of its *capacity 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*.
- 5B.4.4 For the purpose of section 5B.4.2.1, the *IESO* shall establish, maintain, and publish a list of organizations eligible to provide the *capacity prudential support* referred to in section 5B.4.2.1 and shall establish for each such eligible *capacity prudential support* provider, an aggregate limit of the *capacity prudential support* that may be provided by that *capacity prudential support* provider to *market participants*. If aggregate limits are reached for any of these eligible organizations, *market participants* will be required to obtain *capacity prudential support* from other eligible organizations that are still within their respective *capacity prudential support* limits.
- 5B.4.5 In the event that the *capacity prudential support* provided by a *market participant* is a greater amount than required by the *market rules*, the *IESO* shall, upon written request by the *market participant*, return to the *market participant* an amount equal to the difference between the value of *capacity prudential support* held by the *IESO* and the *capacity 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 all circumstances, the *IESO* shall return *capacity prudential support* only after all payments and charges for the final month of a *commitment period* have been settled.
- 5B.4.6 The minimum terms and conditions that shall be included in the *capacity prudential support* in accordance with section 5B.4.2.1 shall be as follows:
- 5B.4.6.1 *capacity prudential support* shall be obligations in writing;
- 5B.4.6.2 *capacity prudential support* 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
- 5B.4.6.3 *capacity prudential support* shall permit drawings or claims by the *IESO* on demand to a stated certain amount, including partial drawings or claims.
- 5B.4.7 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 *capacity prudential support* provided by the *market participant*, include setting-off and applying any and all *capacity prudential support* held 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*, including the costs, charges, expenses and fees described in section 5B.4.9.

- 5B.4.8 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 *capacity 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.
- 5B.4.9 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 *capacity 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*.

5B.5 Reductions in Capacity Prudential Support Obligations

- 5B.5.1 Subject to section 5B.5.2, the *IESO* may reduce the *capacity prudential support obligation* of a rated *market participant*, other than a *distributor*, by an amount equal to the monetary value prescribed by the table below, resulting from a credit rating from a major bond rating agency identified in the list referred to in section 5B.5.7 issued and in effect in respect of the *capacity market participant*.

Credit Rating Category using Standard and Poor's Rating Terminology	Allowable Reduction in Prudential Support
AA- and above or equivalent	100% of the <i>capacity prudential support obligation</i> before allowable reductions
A-, A, A+ or equivalent	Greater of 90% of the <i>capacity prudential support obligation</i> before allowable reductions or \$37,500,000
BBB-, BBB, BBB+ or equivalent	Greater of 65% of the <i>capacity prudential support obligation</i> before allowable reductions or \$15,000,000

Credit Rating Category using Standard and Poor's Rating Terminology	Allowable Reduction in Prudential Support
BB-, BB, BB+ or equivalent	Greater of 30% of the <i>capacity prudential support obligation</i> before allowable reductions or \$4,500,000
Below BB- or equivalent	0

5B.5.1A Subject to section 5B.5.2, the *IESO* may reduce the *capacity prudential support obligation* of a rated *distributor* by an amount equal to the monetary value prescribed by the table below, resulting from a credit rating from a major bond rating agency identified in the list referred to in section 5B.5.7 issued and in effect in respect of the *capacity market participant*.

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

5B.5.2 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 5B.5.7, 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 capacity prudential support obligation*.

5B.5.3 Where a *market participant's capacity prudential support obligation* reflects a reduction by reason of the *market participant's* credit rating from a major bond agency identified in the list referred to in section 5B.5.7, the *market participant* shall 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.

5B.5.4 Subject to section 5B.5.6, the *IESO* may reduce the *market participant's capacity prudential support obligation* in accordance with sections 5B.5.5 or 5B.5.5A based on the *market participant's* historical good payment history in the *IESO-administered markets*, provided that the *market participant's* payment history includes no *event of default*.

5B.5.5 The *IESO* shall determine the dollar amount of any allowable reduction in the *capacity prudential support obligation* 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 the <i>capacity prudential support obligation</i> before allowable reductions or \$12,000,000
≥5 years, <6 years	Lesser of 30% of the <i>capacity prudential support obligation</i> before allowable reductions or \$7,500,000
≥4, <5 years	Lesser of 25% of the <i>capacity prudential support obligation</i> before allowable reductions or \$6,000,000
≥3, <4 years	Lesser of 20% of the <i>capacity prudential support obligation</i> before allowable reductions or \$4,500,000
≥2, <3 years	Lesser of 15% of the <i>capacity prudential support obligation</i> before allowable reductions or \$3,000,000
<2 years	0

5B.5.5A The *IESO* shall determine the dollar amount of any allowable reduction in the *capacity prudential support obligation* of an unrated *distributor* 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 the <i>capacity prudential support obligation</i> before allowable reductions or \$14,000,000
≥5 years, <6 years	Lesser of 65% of the <i>capacity prudential support obligation</i> before allowable reductions or \$9,000,000
≥4, <5 years	Lesser of 45% of the <i>capacity prudential support obligation</i> before allowable reductions or \$7,500,000
≥3, <4 years	Lesser of 35% of the <i>capacity prudential support obligation</i> before allowable reductions or \$6,000,000
≥2, <3 years	Lesser of 25% of the <i>capacity prudential support obligation</i> before allowable reductions or \$4,500,000
<2 years	0

5B.5.6 The following restrictions shall apply to the provision of reductions in a *market participant's capacity prudential support obligation* as provided for under sections 5B.5.1, 5B.5.1A, and 5B.5.4:

5B.5.6.1 a *market participant* shall not be entitled to a reduction in its *capacity prudential support obligation* pursuant to section 5B.5.4 using the payment history of an *affiliate*;

- 5B.5.6.2 a *market participant* that has a credit rating from a major bond rating agency identified in the list referred to in section 5B.5.7 shall not be entitled to a reduction in its *capacity prudential support obligation* under section 5B.5.4; and
- 5B.5.6.3 a *market participant's* reduction for either a credit rating or good payment history reduction shall be reduced by the amount of any reductions already granted to the *market participant* under section 5.8.

5B.5.7 For the purposes of this chapter, the *IESO* shall establish, maintain, and *publish* a list of major bond rating agencies eligible to provide the credit ratings mentioned in this section 5B.

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 (ΔDAP_{VT} , $ARTP_{VT}$) as follows:

5C.1.9.1 The price delta (ΔDAP_{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 (ΔDAP_{VT} , $ARTP_{VT}$) shall be estimated by the IESO based on relevant proxies and deemed to mean the “interim price delta” (ΔDAP_{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, and consider up 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 must 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*.

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.

6. Technical Requirements

6.1 Technical Requirements

6.1.1 Each *market participant*, *embedded generator*, *embedded electricity storage participant* and *embedded load consumer* shall, in addition to ensuring that its *facilities* and equipment meet all other applicable technical requirements set forth in these *market rules* ensure that its *facilities*:

6.1.1.1 meet the applicable technical requirements of Appendix 2.2; and

6.1.1.2 are capable of meeting the performance standards referred to in section 7.3.1.4, 7.3A.1.4, 7.4.1.2, 7.5.1.2 or 7.6.1.2, as the case may be, of Chapter 4.

6.2 Certification, Testing and Inspection for Authorization

- 6.2.1 Each person referred to in section 6.1.1 that applies for authorization as a *market participant* shall, as a condition of obtaining authorization as a *market participant* pursuant to section 3 or 4.1.1, certify to the *IESO* that its *participant workstation* complies with all applicable technical requirements set forth in Appendix 2.2.
- 6.2.2 Each person referred to in section 6.1.1 that applies for authorization as a *market participant* shall, as a condition of obtaining authorization as a *market participant* pursuant to section 3 or 4.1.1, successfully complete such testing and permit such inspection as the *IESO* may require for the purposes of testing or inspecting whether the person's *participant workstation* meets all applicable technical requirements set forth in Appendix 2.2.

6.3 Certification, Testing and Inspection for Registration of Facilities

- 6.3.1 Each *market participant* shall, as a condition of obtaining the registration of its *facility* and any associated resource or for using a boundary entity resource as a registered facility pursuant to section 2.2 of Chapter 7 or as a condition of obtaining approval to the aggregation of aggregate facilities resources:
- 6.3.1.1 provide the certifications referred to in sections 2.2.3.3 and 2.2.3.4 or in sections 2.3.2.4 and 2.3.2.5 of Chapter 7, as the case may be; and
- 6.3.1.2 successfully complete the testing and permit the inspection referred to in section 2.2.3.5 or 2.3.2.6 of Chapter 7, as the case may be.

7. Payment Default Procedure

- 7.1.1 The *events of default* relating to payment and either *prudential support*, *capacity prudential support*, as well as the rights and obligations of the *IESO* and *market participants* upon the occurrence of such *event of default*, are specified in section 6.3 of Chapter 3.

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 ~~[Intentionally left blank]the *IESO-administered market* and the *billing period* in respect of which the default in payment by the *defaulting market participant* has occurred;~~
- 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 ~~[Intentionally left blank]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;~~
- 8.2.3.6 ~~[Intentionally left blank]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;~~
- 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 ~~[Intentionally left blank]the non-defaulting market participant's share of the estimated amount of any second default levy referred to in section 8.2.3.6.~~

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 ~~[Intentionally left blank]the IESO administered market and the billing period in respect of which the default in payment by the defaulting market participant has occurred;~~
 - 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 ~~[Intentionally left blank]the amount of any prudential support held in respect of the defaulting market participant that has been realized;~~
 - 8.4.2.6 ~~[Intentionally left blank]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;~~
 - 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:

[<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> <u>or the <i>day-ahead market</i></u> 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)]	divided by	net transaction dollar amount
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Where the *net transaction dollar amount* is:

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

9. Withdrawal by a Market Participant

- 9.1.1 Provided that the *market participant* has requested that the *IESO* de-register or transfer any applicable *registered facilities* pursuant to section 2.4 or 2.5 of Chapter 7, a *market participant* shall notify the *IESO* in writing if it wishes to cease to be a *market participant*. The notice shall specify the date of the *trading day* upon which the *market participant* intends to cease to participate in the *IESO-administered markets* or to cause or permit electricity to be conveyed into, through or out of the *IESO-controlled grid*. The *trading day* specified shall not be earlier than the *trading day* on which:
- 9.1.1.1 the last of the *market participant's* applicable *registered facilities* is to be de-registered by the *IESO* and, where applicable, *disconnected* from the *IESO-controlled grid*, determined in accordance with section 2.4 of Chapter 7; or
 - 9.1.1.2 the registration of the last of the *market participant's* applicable *registered facilities* is to be transferred by the *IESO*, determined in accordance with section 2.5 of Chapter 7.
- 9.1.2 Upon receipt of the notice referred to in section 9.1.1, the *IESO* must *publish* and provide to all *market participants* a further notice stating that:
- 9.1.2.1 the *IESO* has received a notice under section 9.1.1; and

- 9.1.2.2 the person who gave the notice has stated that, from the end of the *trading day* specified in the notice, the person intends to cease participating in the *IESO-administered markets* or causing or permitting electricity to be conveyed into, through or out of the *IESO-controlled grid*.
- 9.1.3 The *markets participant* shall cease to participate in the *IESO-administered markets* or to cause or permit electricity to be conveyed into, through or out of the *IESO-controlled grid* no later than the end of the *trading day* specified in the notice given under section 9.1.1.
- 9.1.4 A *market participant* which has given a notice under section 9.1.1 shall cease to be a *market participant* on the date:
- 9.1.4.1 specified in the notice referred to in section 9.1.1;
- 9.1.4.2 on which the last of the *market participant's* applicable *registered facilities* is de-registered by the *IESO* and, where applicable, *disconnected* from the *IESO-controlled grid* pursuant to section 2.4 of Chapter 7;
- 9.1.4.3 on which the registration for the last of the *market participant's* applicable *registered facilities* has been transferred by the *IESO* pursuant to section 2.5 of Chapter 7;
- 9.1.4.4 on which all payments due to be paid by it or to it under the *market rules* have been made; or
- 9.1.4.5 the *market participant* has no further liability under section 2.5.4 of Chapter 7, whichever is the latest. Any *boundary entity resource* registered to be used by such *market participant* shall no longer be used by that market participant ~~be deemed to be de-registered by the IESO~~ as of such date.
- 9.1.5 A person who ceases to be a *market participant* shall remain subject to and liable for all of its obligations and liabilities as a *market participant* including, but not limited to, a liability under section 8 and an *adjustment period allocation* debit under Chapter 9, sections 6.6.8.2b and 6.8.5.3b resulting from an event that occurred while such person was a *market participant*, which were incurred or arose under the *market rules* prior to or on the *trading day* on which it ceases to be a *market participant* regardless of the date on which any claim relating thereto may be made.
- 9.1.6 [Intentionally left blank]

10. Market Participant Fees

- 10.1.1 The *IESO* shall not less than annually *publish* and notify *market participants* of the fees or schedule of fees payable by *market participants* and persons who apply for authorization to become *market participants*, including the application fee referred to in section 3.1.2.1. Such fees or schedule of fees shall be those approved by the *Ontario Energy Board* from time to time pursuant to section 25 of the *Electricity Act, 1998*.
- 10.1.2 The *IESO* shall recover the relevant fees from each *market participant* or prospective *market participants* in such manner as the *IESO* determines appropriate, including by means of the inclusion of the fees in a billing statement.
- 10.1.3 Each *market participant* or prospective *market participant* shall pay to the *IESO* the fees stated by the *IESO* to be payable by the *market participant* or prospective *market participant* by the date or dates specified for payment.

11.0 [Intentionally left blank – section deleted]

11.1 [Intentionally left blank – section deleted]

- 11.1.1 [Intentionally left blank – section deleted]
- a. [Intentionally left blank – section deleted]
- b. [Intentionally left blank – section deleted]
- 11.1.2 [Intentionally left blank – section deleted]
- 11.1.3 [Intentionally left blank – section deleted]
- 11.1.4 [Intentionally left blank – section deleted]
- 11.1.5 [Intentionally left blank – section deleted]
- 11.1.6 [Intentionally left blank – section deleted]

11.2 [Intentionally left blank – section deleted]

11.2.1 [Intentionally left blank – section deleted]

11.2.1.1 [Intentionally left blank – section deleted]

11.2.1.2 [Intentionally left blank – section deleted]

11.3 [Intentionally left blank – section deleted]

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11.4.2 [Intentionally left blank – section deleted]

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11.4.2.3 [Intentionally left blank – section deleted]

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11.4.3.1 [Intentionally left blank – section deleted]

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11.5 [Intentionally left blank – section deleted]

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11.5.2.1 [Intentionally left blank – section deleted]

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11.5.2.3 [Intentionally left blank – section deleted]

11.5.3 [Intentionally left blank – section deleted]

11.5.3.1 [Intentionally left blank – section deleted]

11.5.3.2 [Intentionally left blank – section deleted]

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