Market Rule Amendment Proposal

PART 1 – MARKET RULE INFORMATION

Identification No.:	MR-00401			
Subject:	General			
Title:	Removal of the Capacity Reserve and Energy Forward Market			
Nature of Proposal:	☒ Alteration	☒ Deletion	☐ Addition	
Chapter:	1, 2, 3, 5, 7, 8, 9, 11	Appendix:	2.2	
Sections:	Various			
Sub-sections proposed for amending:	Various			

PART 2 – PROPOSAL HISTORY

Version	Reason for Issuing	Version Date
1.0	Draft for Technical Panel Review	January 8, 2013
2.0	Publish for Stakeholder Review and Comment	January 17, 2013
3.0	Submitted for Technical Panel Vote	February 7, 2013
4.0	Recommended by Technical Panel; Submitted for IESO Board Approval	February 14, 2013
5.0	Approved by IESO Board	April 11, 2013

Approved Amendment Publication Date:	April 11, 2013
Approved Amendment Effective Date:	May 3, 2013

PART 3 – EXPLANATION FOR PROPOSED AMENDMENT

Provide a brief description of the following:

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

Summary

It is proposed to delete section 10 of Chapter 5 – The Capacity Reserve Market, section 3 of Chapter 8 – The Energy Forward Market, section 4.4A of Chapter 1 – Deferral of Capacity Reserve Market and Energy Forward Market and Consequential Interpretation Provisions, and all references to the Capacity Reserve and Energy Forward Markets within the market rules.

Background

Refer to MR-00401-Q00

Discussion

The Capacity Reserve Market and Energy Forward Market were introduced into the market rules upon market opening, but to date neither market has been developed in Ontario. Applications for Capacity Reserve and an Energy Forward market are no longer incorporated into IESO tool builds. As such, it is proposed to delete section 10 of Chapter 5 – The Capacity Reserve Market, section 3 of Chapter 8 – The Energy Forward Market, section 4.4A of Chapter 1 – Deferral of Capacity Reserve Market and Energy Forward Market and Consequential Interpretation Provisions, and all references to the Capacity Reserve and Energy Forward Markets within the market rules.

If the need arises for an Energy Forward Market or a Capacity Reserve Market in the future the IESO will, at that point, develop and implement market rules that would be designed based upon IESO Board direction, stakeholder involvement and industry best practices to fit the specific needs of the IESO controlled grid.

Italicize Defined Terms – Chapter 5 Section 12.15:

Consequential to the references to the Energy Forward Market in section 12.1.5 of Chapter 5, which will be deleted, the following defined terms will be italicized within section 12.1.5:

- Market participant, dispatch data, physical bilateral contract data, TR bids, TR offers, and TR market.

PART 4 – PROPOSED AMENDMENT

The Deferral of the Capacity Reserve Market & Energy Forward Market

Chapter 1

4.4 Coming into Force and Transitional Provisions

4.4.1 Subject to subsection 32(7) of the *Electricity Act, 1998*, the sections of the *market rules* identified in Appendix 1.1 come into force on the dates specified in Appendix 1.1 and~~, except as otherwise provided in section 4.4A,~~ the remaining sections of the *market rules* come into force on the date on which subsection 26(1) of the *Electricity Act, 1998* is proclaimed into force.

……..

4.4A ~~Deferral of Capacity Reserve Market and Energy Forward Market and Consequential Interpretation Provisions~~

4.4A.1 ~~Implementation of the *capacity reserve market* shall be deferred beyond the date referred to in section 4.4.1 and, accordingly, section 10 of Chapter 7 shall not come into force until such date as may be determined by the *IESO Board*.~~ [Intentionally left blank – section deleted]

4.4A.2 ~~Until such time as section 10 of Chapter 7 comes into force in accordance with section 4.4A.1, the *market rules* and all policies, guidelines or other documents referred to in section 7.7.1 or 7.7.3 shall be construed and applied:~~ [Intentionally left blank – section deleted]

4.4A.2.1 ~~in a manner consistent with the deferred coming into force provided for in section 4.4A.1;~~ [Intentionally left blank – section deleted]

4.4A.2.2 ~~without regard to references to:~~ [Intentionally left blank – section deleted]

a. ~~the capacity reserve market, capacity reserve, capacity reserve price, capacity reserve quantity, capacity reserve ratio or maximum capacity reserve price or MCRP;~~ [Intentionally left blank – section deleted]

b. ~~$AQCR_{k,h}^{m,t}$, $CAPRSC_{k,h}$, $CRSSD_{k,h}$, $QCAPR_{k,h}^{m}$, $PCAPR_{h}^{m}$, $CROSF_{k,h}^{m,t}$, $CCRO_{k,h}^{m,t}$, $ACRO_{k,h}^{m,t}$, $TCRSC_{k,r,H}^{T}$ or to the narrative descriptions of any such terms; or~~[Intentionally left blank – section deleted]

c. ~~any other term or phrase of a like nature to those referred to in section 4.4A.2.2(a) or 4.4A.2.2(b) and the application of which is contingent on the coming into force of the section referred to in section 4.4A.1; and~~[Intentionally left blank – section deleted]

4.4A.2.3 ~~with such grammatical changes, including but not limited to the continued application of the words "and", "or" or "and/or" at the end~~

~~of any given section, as may be required to give effect to the provisions of sections 4.4A.2.1 and 4.4A.2.2.~~ [Intentionally left blank – section deleted]

4.4A.3 ~~Implementation of the *energy forward market* shall be deferred beyond the date referred to in section 4.4.1 and, accordingly, section 3 of Chapter 8 shall not come into force until such date as may be determined by the *IESO Board* and *published* by the *IESO* which date shall not be earlier than the first day of the thirteenth calendar month following the *market commencement date*, calculated from the first day of the calendar month immediately following the month in which the *market commencement date* occurs.~~ [Intentionally left blank – section deleted]

4.4A.4 ~~Until such time as section 3 of Chapter 8 comes into force in accordance with section 4.4A.3, the *market rules* and all policies, guidelines or other documents referred to in section 7.7.1 or 7.7.3 shall be construed and applied:~~ [Intentionally left blank – section deleted]

4.4A.4.1 ~~in a manner consistent with the deferred coming into force provided for in section 4.4A.3;~~ [Intentionally left blank – section deleted]

4.4A.4.2 ~~without regard to references to:~~ [Intentionally left blank – section deleted]

a. ~~the energy forward market;~~ [Intentionally left blank – section deleted]

b. ~~$FMQS_{k,h}$, FMP_h, $NFMSC_{k,h}$ or to the narrative descriptions of any such terms; or~~[Intentionally left blank – section deleted]

c. ~~any other term or phrase of a like nature to those referred to in section 4.4A.4.2(a) or 4.4A.4.2(b) and the application of which is contingent on the coming into force of the section referred to in section 4.4A.3; and~~[Intentionally left blank – section deleted]

4.4A.4.3 ~~with such grammatical changes, including but not limited to the continued application of the words "and", "or" and "and/or" at the end of any given section, as may be required to give effect to the provisions of sections 4.4A.4.1 and 4.4A.4.2 without otherwise altering the scope or interpretation of the relevant section.~~ [Intentionally left blank – section deleted]

4.4A.5 ~~Notwithstanding sections 5.4.1, 6.3.1, 7.7.2 and 7.7.3, no person shall be required to comply with the *market rules* or with any policies, guidelines or other documents referred to in section 7.7.1 or 7.7.3 to the extent that such compliance would be inconsistent with section 4.4A.2 or 4.4A.4.~~ [Intentionally left blank – section deleted]

4.4A.6 ~~Nothing in this section 4.4A shall be interpreted as affecting:~~ [Intentionally left blank – section deleted]

4.4A.6.1 ~~the obligation of a person that wishes to participate in the *capacity reserve market* or the *energy forward market*, once implemented, to obtain authorization to so participate, to obtain the registration of all applicable *facilities*, or both, in accordance with all applicable provisions of these *market rules* and of all policies, guidelines or other documents referred to in section 7.7.1 or 7.7.3; or~~[Intentionally left blank – section deleted]

4.4A.6.2 ~~the obligation of the *IESO* to process any applications for such authorization to participate, for such registration of *facilities*, or both, in accordance with all applicable provisions of these *market rules* and of all such policies, guidelines or other documents as and from:~~ [Intentionally left blank – section deleted]

a. ~~the date *published* by the *IESO* as being the date on which it will commence receiving any such applications in respect of participation in the *capacity reserve market*; and~~[Intentionally left blank – section deleted]

b. ~~the date *published* by the *IESO* as being the date on which it will commence receiving any such applications in respect of participation in the *energy forward market*.~~ [Intentionally left blank – section deleted]

……..

References to the Capacity Reserve Market

Chapter 5

7.3.2 Any information derived from the s*ecurity* and *adequacy* assessment process shall be used to provide a basis for informing *market participants* about expected conditions on the *IESO-controlled grid* and in the *IESO-administered markets*. It is expected that the information will trigger appropriate responses under other market processes, such as *outage* coordination, and transmission investment planning~~, and the activation of the *capacity reserve market*~~.

……..

Chapter 7

1.3.2 The *IESO* shall administer, in accordance with sections 3 to 8 ~~and 10,~~ the following *real-time markets* in an integrated fashion:

1.3.2.1 a market in *energy*, measured in MWh; and

1.3.2.2 a market in several classes of *operating reserve*, measured in MW~~;~~ ~~and~~.

1.3.2.3 ~~if activated by the *IESO Board*, a market in *capacity reserve*, measured in MW.~~ [Intentionally left blank – section deleted]

……..

2.2.2 A market participant may apply to register a facility or boundary entity as a registered facility:

2.2.2.1 for the delivery or withdrawal of specific *physical services* pursuant to the provisions of this section 2.2~~; and/or~~.

2.2.2.2 ~~for the offering of *capacity reserve* pursuant to the provisions of section 10.~~ [Intentionally left blank – section deleted]

……..

2.3.1A ~~The aggregation of *facilities* for the purpose of:~~ [Intentionally left blank – section deleted]

2.3.1A.1 ~~participating in a *capacity reserve* auction; and~~[Intentionally left blank – section deleted]

2.3.1A.2 ~~as described in section 10.2B.2, compliance by a *registered market participant* with the obligations of the *capacity reserve market*,~~ [Intentionally left blank – section deleted]

~~shall be governed by section 10.2.4.~~

……..

3.4.1 *Dispatch data* shall relate to a specified *dispatch hour* of the *dispatch day* and to a specified *registered facility*, shall comply with the applicable provisions of this section and sections 3.5 to 3.9 and shall take one of the following forms:

……..

3.4.1.4A for a *transitional scheduling generator*, a forecast schedule for the provision of *energy to the energy market*; and

3.4.1.4B for a *variable generator* that is a *registered market participant*, its *generation facility's* full capacity available for production determined in accordance with the applicable *market manual*~~; and~~.

3.4.1.5 ~~if the *capacity reserve market* has been activated pursuant to section 10.1.3, for all *registered facilities* providing *capacity reserve*,~~

an *offer* to provide *capacity reserve*. [Intentionally left blank – section deleted]

……..

10. The Capacity Reserve Market [Intentionally left blank – section deleted]

10.1 Purpose and Activation of the Capacity Reserve Market [Intentionally left blank – section deleted]

10.1.1 The *capacity reserve market* will, if activated, provide payments to *registered facilities* in addition to the payments for *energy* and *operating reserve* described in this Chapter, particularly during periods when system reserve margins are low. [Intentionally left blank – section deleted]

10.1.2 The provisions of sections 10.2 to 10.6 apply only after the *IESO Board* activates the *capacity reserve market* in accordance with section 10.1.3. [Intentionally left blank – section deleted]

10.1.3 The *IESO Board* may at its discretion activate the *capacity reserve market* where appropriate based on the annual or monthly assessments referred to in section 7.3 of Chapter 5 and considering such factors as, but not limited to, prospects for new generation in Ontario or neighbouring regions and assessments of the ability of demand-side responses and transmission options to relieve any expected *capacity reserve* shortages. Where the *IESO Board* activates the *capacity reserve market*, the *IESO* shall *publish* a notice to that effect no later than 60 days prior to the date of the first *capacity reserve* auction to be conducted in accordance with section 10.2A.1. [Intentionally left blank – section deleted]

10.1.4 Once the *IESO Board* activates the *capacity reserve market*, the *IESO* may not deactivate the *capacity reserve market* except by *amending* this section 10.1.4 in accordance with section 4 of Chapter 3. [Intentionally left blank – section deleted]

10.1.5 If the *IESO Board* activates the *capacity reserve market*, it shall at the same time determine and *publish* the value of the following parameters of the *capacity reserve market* after an analysis of the effects of different values: [Intentionally left blank – section deleted]

10.1.5.1 the *capacity reserve ratio*: this is a number greater than one (e.g., 1.2), by which the *IESO* will multiply the maximum forecast *demand* from the *IESO-controlled grid* for the applicable *obligation period* to

~~determine the *capacity reserve target* for the applicable *capacity reserve* auction. The *IESO* must apply the same *capacity reserve ratio*, as may be increased from time to time by the *IESO Board* in respect of a given *capacity reserve* auction, to all *hours* within the applicable *obligation period*. The *IESO Board* may increase the *capacity reserve ratio* at any time, but it may not decrease the *capacity reserve ratio* except by *amending* this section 10.1.5.1 in accordance with section 4 of Chapter 3; and~~ [Intentionally left blank – section deleted]

10.1.5.2 ~~the *maximum capacity reserve price* or *MCRP*: this price, in $/MW, is in respect of a given *capacity reserve* auction the maximum price that may be contained in an *offer* to provide *capacity reserve* in a *capacity reserve* auction and the maximum *settlement amount* for *capacity reserve* during the *obligation period* associated with that *capacity reserve* auction. The *IESO Board* may increase the *maximum capacity reserve price* for any *capacity reserve* auction relative to the *maximum capacity reserve price* applicable to the preceding *capacity reserve* auction, but it may not decrease such *maximum capacity reserve price* except by *amending* this section 10.1.5.2 in accordance with section 4 of Chapter 3.~~ [Intentionally left blank – section deleted]

10.1.5.3 [Intentionally left blank – section deleted]

10.2 ~~Eligibility~~ [Intentionally left blank – section deleted]

10.2.1 ~~A *registered market participant* may submit, and the *IESO* shall accept, *offers* to provide *capacity reserve* in a *capacity reserve* auction only with respect to *facilities* which are *generation facilities* that are *registered facilities* for the provision of *capacity reserve*.~~ [Intentionally left blank – section deleted]

10.2.2 ~~The *IESO* shall approve an application for *facility* registration of a *facility* as a *registered facility* for the provision of *capacity reserve* if the applying *market participant* submits the registration information required by this section 10.2 and the *IESO* is satisfied on reasonable grounds that the *facility* is capable of operating as described in the registration information.~~ [Intentionally left blank – section deleted]

10.2.3 ~~The *market participant* designated in the registration information as the *market participant* authorised to submit *dispatch data* with respect to a *registered facility* for the provision of *capacity reserve* must already be the *registered market participant* for that same *registered facility* for purposes of participation in the *real-time market* for *energy* or *operating reserve*.~~ [Intentionally left blank – section deleted]

10.2.4 ~~The *IESO* shall define and *publish* in the applicable *market manual* the form and content of information required for registration as a *registered facility* for the provision of *capacity reserve*.~~ [Intentionally left blank – section deleted]

10.2.4A ~~A *market participant* may apply to the *IESO* to aggregate several *generation facilities* into a single *registered facility* for the purpose of participating in a *capacity reserve* auction provided that:~~ [Intentionally left blank – section deleted]

10.2.4A.1 ~~the *generation facilities* proposed to be aggregated are identified in the application for registration as a *registered facility* for the provision of *capacity reserve*;~~ [Intentionally left blank – section deleted]

10.2.4A.2 ~~none of the *generation facilities* proposed to be aggregated as a single *registered facility* are or become *registered facilities* for the provision of *capacity reserve*:~~ [Intentionally left blank – section deleted]

a. ~~on an individual basis; or~~ [Intentionally left blank – section deleted]

b. ~~as part of any other aggregated *registered facility*; and~~ [Intentionally left blank – section deleted]

10.2.4A.3 ~~each of the *generation facilities* proposed to be aggregated has been registered:~~ [Intentionally left blank – section deleted]

a. ~~on an individual basis as a *registered facility*; or~~ [Intentionally left blank – section deleted]

b. ~~as part of an aggregated *registered facility* pursuant to section 2.3,~~ [Intentionally left blank – section deleted]

~~for the purpose of participating in the *real-time energy market*.~~

~~Upon *IESO* approval, the aggregated *generation facility* shall be treated as a single *registered facility* for the provision of *capacity reserve*:~~

10.2.4A.4 ~~by the *registered market participant* for purposes of the submission of *offers* to provide *capacity reserve* in a *capacity reserve* auction; and~~ [Intentionally left blank – section deleted]

10.2.4A.5 ~~by the *IESO* for purposes of conducting a *capacity reserve* auction.~~ [Intentionally left blank – section deleted]

10.2.4B ~~No *generation facility* shall be registered, individually or on an aggregated basis pursuant to section 10.2.4A, as a *registered facility* for the provision of *capacity reserve* unless the *market participant* applying to register the *generation facility* demonstrates that *energy offers* can be submitted in respect of:~~ [Intentionally left blank – section deleted]

10.2.4B.1 ~~the *generation facility*, where registered on an individual basis for the provision of *capacity reserve*; or~~ [Intentionally left blank – section deleted]

102.4B.2 ~~each *generation facility* comprised in an aggregated *registered facility*, where registered as part of an aggregated *registered facility* pursuant to section 10.2.4A.~~ [Intentionally left blank – section deleted]

10.2.5 [Intentionally left blank – section deleted]

10.2.6 [Intentionally left blank – section deleted]

10.2.7 [Intentionally left blank – section deleted]

10.2.7.1 [Intentionally left blank – section deleted]

10.2.7.2 [Intentionally left blank – section deleted]

10.2A ~~Timing of the Capacity Reserve Auction~~

10.2A.1 ~~The *IESO* shall conduct the first *capacity reserve* auction at 14:00 EST on the date specified for such purpose in the notice referred to in section 10.1.3.~~ [Intentionally left blank – section deleted]

10.2A.2 ~~The second and each subsequent *capacity reserve* auction shall be conducted by the *IESO* at 14:00 EST on the first *business day* of the sixth calendar month following the end of the calendar month in which the previous *capacity reserve* auction was conducted.~~ [Intentionally left blank – section deleted]

10.2B ~~Obligations from Capacity Reserve Auction~~ [Intentionally left blank – section deleted]

10.2B.1 ~~A *registered market participant* whose *offer* to provide *capacity reserve* is accepted during a *capacity reserve* auction shall, during the *obligation period* associated with that *capacity reserve* auction, submit *energy offers* and, where applicable, *offers* to provide *operating reserve* when called upon to do so by the *IESO* in accordance with this section 10. The amounts called upon by the *IESO* shall not exceed the quantity contained in the accepted *offer* to provide *capacity reserve*.~~ [Intentionally left blank – section deleted]

10.2B.2 ~~Where:~~ [Intentionally left blank – section deleted]

10.2B.2.1 ~~*generation facilities* have been aggregated as a single *registered facility* pursuant to section 10.4.2A; and~~ [Intentionally left blank – section deleted]

10.2B.2.2 ~~the individual *generation facilities* comprising such aggregated *registered facility* have not all been aggregated into a single *registered facility* pursuant to section 2.3 for the purpose of participation in the *real-time energy market*,~~ [Intentionally left blank – section deleted]

~~the *registered market participant* shall comply with the obligation referred to in section 10.2B.1 by submitting individual *energy offers* and, where applicable, *offers* to provide *operating reserve* in respect of one or more, as may be required to satisfy such obligation, of the individual *generation facilities* comprising such aggregated *registered facility*.~~

10.3 ~~Capacity Reserve Offers~~ [Intentionally left blank – section deleted]

10.3.1 ~~An *offer* to provide *capacity reserve* submitted with respect to a given *capacity reserve* auction:~~ [Intentionally left blank – section deleted]

10.3.1.1 [Intentionally left blank – section deleted]

10.3.1.2 ~~may be submitted or revised only between 06:00 EST and 11:00 EST on the day of the *capacity reserve* auction; and~~ [Intentionally left blank – section deleted]

10.3.1.3 ~~shall be time-stamped by the *IESO* when received.~~ [Intentionally left blank – section deleted]

10.3.1A ~~An *offer* to provide *capacity reserve* shall only be accepted by the *IESO* in respect of a given *capacity reserve* auction if:~~ [Intentionally left blank – section deleted]

10.3.1A.1 ~~the *registered facility* to which the *offer* to provide *capacity reserve* relates, is not scheduled to undergo *planned outages* that in the aggregate exceed 90 days during the *obligation period* associated with that *capacity reserve* auction, determined in the case of an aggregated *registered facility* by reference to the aggregate number of days of *planned outages* scheduled in respect of all of the aggregated *facilities*; and~~ [Intentionally left blank – section deleted]

10.3.1A.2 ~~the *registered facility* or, in the case of an aggregated *registered facility*, each of the aggregated *facilities*, has not been disqualified from participation in the *capacity reserve market* pursuant to section 10.6.3.~~ [Intentionally left blank – section deleted]

10.3.2 ~~*Offers* to provide *capacity reserve* in a given *capacity reserve* auction may include up to four *price-quantity pairs* and shall comply with the following:~~ [Intentionally left blank – section deleted]

10.3.2.1 ~~the *offer* shall be for and applicable over the entire *obligation period* associated with that *capacity reserve* auction;~~ [Intentionally left blank – section deleted]

10.3.2.2 ~~the *offer* price in any *price-quantity pair* shall be expressed in dollars and whole cents per MW of *capacity reserve* to be provided in each hour of the *obligation period* associated with that *capacity reserve* auction, must not be less than 0.0 $/MW and must not exceed the~~

applicable *maximum capacity reserve price*; [Intentionally left blank – section deleted]

10.3.2.3 the *offer* quantity in any *price-quantity pair* shall be expressed in MW to not more than two decimal places and must not be less than 1 MW and must not exceed the installed capacity of the *registered facility*, determined in the case of an aggregated *registered facility* by reference to the installed capacity of each of the aggregated *facilities* in respect of which the *offer* is being submitted; and [Intentionally left blank – section deleted]

10.3.2.4 the *offer* price in each *price-quantity pair* must not decrease as the associated *offer* quantity increases. [Intentionally left blank – section deleted]

10.4 The Capacity Reserve Target and Capacity Reserve Price [Intentionally left blank – section deleted]

10.4.1 The *IESO* shall, in each *capacity reserve* auction, determine for each hour in the *obligation period* associated with such *capacity reserve* auction: [Intentionally left blank – section deleted]

10.4.1.1 the *capacity reserve price*; and [Intentionally left blank – section deleted]

10.4.1.2 the *capacity reserve quantities* for each *registered facility* [Intentionally left blank – section deleted]

using the process described in this section 10.4.

10.4.2 The *IESO* shall determine a single *capacity reserve* supply curve by ranking the valid *offers* to provide *capacity reserve* in order of increasing *offer* price. [Intentionally left blank – section deleted]

10.4.3 The *capacity reserve* target used in a given *capacity reserve* auction shall be the product of the *capacity reserve ratio* established for that *capacity reserve* auction and the maximum forecast *demand* over the *obligation period* associated with that *capacity reserve* auction, such maximum forecast *demand* being determined on the basis of the *demand* forecasts *published* pursuant to section 7.1.1.4 of Chapter 5. [Intentionally left blank – section deleted]

10.4.4 The *IESO* shall, in each *capacity reserve* auction, determine the *capacity reserve* price by determining a price that equates the amount of *capacity reserve offered* in that *capacity reserve* auction and the *capacity reserve* target for that *capacity reserve* auction determined in accordance with section 10.4.3 and: [Intentionally left blank – section deleted]

10.4.4.1 ~~if it is not possible to equate the *offers* to provide *capacity reserve* with the *capacity reserve* target, the *capacity reserve price* shall be *MCRP*;~~ [Intentionally left blank – section deleted]

10.4.4.2 ~~where there is a unique price less than *MCRP* at which *offers* to provide *capacity reserve* equal the *capacity reserve* target, that unique price shall be the *capacity reserve price*; or~~ [Intentionally left blank – section deleted]

10.4.4.3 ~~where there is a range of prices less than *MCRP* at which *offers* to provide *capacity reserve* equal the *capacity reserve* target (i.e., if the supply curve is vertical precisely at the *capacity reserve* target), the *capacity reserve* price shall be at the mid-point of the range of such prices.~~ [Intentionally left blank – section deleted]

10.4.5 ~~The *IESO* shall, in each *capacity reserve* auction, determine the *capacity reserve quantity*, in MW, to be provided by each *registered facility* in each hour of the *obligation period* associated with such *capacity reserve* auction in accordance with the following process:~~ [Intentionally left blank – section deleted]

10.4.5.1 ~~if there is a unique quantity of *capacity reserve offered* by each *registered market participant* at the market-clearing price (i.e., the supply curve is vertical at this price) all quantities of *capacity reserve offered* at this price shall be accepted, and the corresponding quantities of *capacity reserve* shall be provided by the corresponding *registered facility*; or~~ [Intentionally left blank – section deleted]

10.4.5.2 ~~where there is a range of *capacity reserve quantities* at the market-clearing price (i.e., the supply curve is horizontal at this price), the quantity *offered* at this price by each *registered market participant* shall be reduced in the same proportion so that the total quantity *offered* equals the *capacity reserve* target determined for that *capacity reserve* auction in accordance with section 10.4.3. This reduced quantity shall be provided by each *registered facility*.~~ [Intentionally left blank – section deleted]

10.4.6 ~~The *IESO* shall submit the market-clearing quantities of *capacity reserve* for each *registered facility*, as determined in accordance with section 10.4.5, to the *settlement process* defined in Chapter 9.~~ [Intentionally left blank – section deleted]

10.4.6.1 [Intentionally left blank – section deleted]

10.4.6.2 [Intentionally left blank – section deleted]

10.4.7 ~~The *IESO* shall, within one hour after each *capacity reserve* auction, publish the *capacity reserve* target, the *capacity reserve* price and any shortfalls in *capacity reserve* associated with such *capacity reserve* auction and notify each *registered*~~

~~*market participant* of the *capacity reserve quantity* to be provided by the *registered market participant's registered facilities* in each hour of the *obligation period* associated with such *capacity reserve* auction.~~ [Intentionally left blank – section deleted]

10.5 ~~Calling Capacity Reserve~~ [Intentionally left blank – section deleted]

10.5.1 [Intentionally left blank – section deleted]

10.5.2 ~~The *IESO* may call *capacity reserve* if it projects a shortage of *energy* or *operating reserve* during an *obligation period*. By 16:00 EST on day "N", the *IESO* shall, subject to section 10.5.2A, call upon any *registered market participants* whose *offers* to provide *capacity reserve* were accepted for that *obligation period* to submit *offers* to provide *energy*, *offers* to provide *operating reserve*, or both, for *pre-dispatch day* "N+1" and for *dispatch day* "N+2" if the *IESO* determines that there would otherwise be a shortfall of *energy* or *operating reserve* on *dispatch day* "N+2", in which case the *IESO* shall call enough *capacity reserve* to eliminate the projected *energy* or *operating reserve* shortfall on *dispatch day* "N+2".~~ [Intentionally left blank – section deleted]

10.5.2A ~~The *IESO* may only call upon a *registered market participant* to submit an *offer* to provide *operating reserve* pursuant to section 10.5.2 to the extent that the applicable *registered facility* is registered in the *real-time market* for *energy* or *operating reserve* as being capable of providing sufficient *operating reserve* to meet the *IESO's* call.~~ [Intentionally left blank – section deleted]

10.5.3 [Intentionally left blank – section deleted]

10.5.4 [Intentionally left blank – section deleted]

10.6 ~~Failure to Submit Offers for Energy or Operating Reserve~~

10.6.1 ~~A *registered market participant* that:~~ [Intentionally left blank – section deleted]

10.6.1.1 ~~fails to submit adequate *offers* to provide *energy*, *operating reserve*, or both, when called upon to do so pursuant to section 10.5.2 in the amount required; or~~ [Intentionally left blank – section deleted]

10.6.1.2 ~~submits an *offer* for *energy*, *operating reserve* or both, as the case may be, but fails to provide *energy*, *operating reserve* or both in respect of some or the whole of the amount required,~~ [Intentionally left blank – section deleted]

~~shall, in addition to any sanctions that may be imposed on the *registered market participant* pursuant to section 6 of Chapter 3, be subject to the withholding of *settlement amounts* associated with *capacity reserve* as provided in section 10.6.2.~~ [Intentionally left blank – section deleted]

10.6.2 ~~The *IESO* may, in the circumstances referred to in section 10.6.1, withhold from a *registered market participant* any *settlement amount* that it would otherwise be required to credit to the *registered market participant* in respect of *capacity reserve* for those hours in which it is called upon to submit *energy offers*, *offers* to provide *operating reserve*, or both. The duration of any period for which such *settlement amount* shall be withheld shall be determined in accordance with the applicable *market manual* and shall depend on:~~ [Intentionally left blank – section deleted]

10.6.2.1 ~~the degree of deviation from the applicable obligation or requirement; and~~ [Intentionally left blank – section deleted]

10.6.2.2 ~~the performance history of the *registered market participant* or the *registered facility* in the *capacity reserve market*.~~ [Intentionally left blank – section deleted]

10.6.3 ~~The *IESO* may disqualify from future participation in the *capacity reserve market* any *registered facility* or a *generation facility* aggregated as part of a *registered facility* pursuant to section 10.2.4, that repeatedly fails to honour the obligations of the *capacity reserve market* to submit an *offer* to supply *energy*, *operating reserve* or both when called upon to do so in accordance with this section 10.~~ [Intentionally left blank – section deleted]

……..

12.1.2 Each system status report shall contain information on the following variables, as projected for future *dispatch hours* and as estimated for the current *dispatch hour* where appropriate:

……..

12.1.2.6 ~~*facilities* instructed to bid under *capacity reserve market* obligations if the *capacity reserve market* is activated in accordance with section 10.1;~~ [Intentionally left blank – section deleted]

……..

Chapter 9

1.1.2 This chapter sets out the respective rights and obligations of the *IESO* and of *market participants* in determining, billing for and effecting payment in respect of financial obligations arising from the *IESO-administered markets*, other provisions of the *market rules*, the *Electricity Act, 1998* and the *Ontario Energy Board Act, 1998*, including the following:

……..

1.1.2.6 ~~the *capacity reserve market* (if activated by the *IESO*);~~ [Intentionally left blank – section deleted]

……..

2.8 ~~Collection of Capacity Reserve Market Data~~[Intentionally left blank – section deleted]

2.8.1 ~~If the *capacity reserve market* is active, the *IESO* shall operate such *capacity reserve market* to determine the *capacity reserve quantity* (in MW) provided by each *registered market participant* and the *capacity reserve price* for each hour of the applicable *obligation period*.~~ [Intentionally left blank – section deleted]

2.8.2 [Intentionally left blank – section deleted]

2.8.3 ~~The price and quantity data from the *capacity reserve market* with respect to each *dispatch day* shall be provided by the *IESO* directly to the *settlement process*.~~ [Intentionally left blank – section deleted]

……..

3.1.5 ~~If the daily *capacity reserve market* is active, the *IESO* shall determine *capacity reserve prices* and *capacity reserve quantities* in the *capacity reserve market* and shall provide the following variables and data directly to the *settlement process*:~~ [Intentionally left blank – section deleted]

~~$QCAPR_{k,h}^{m}$ = *capacity reserve quantity* (in MW) sold by *market participant* 'k' at *RWM* m for *settlement hour* 'h'~~

~~$PCAPR_{h}^{m}$ = *capacity reserve price* (in $/MW/hr) at *RWM* m in *settlement hour* 'h'~~

……..

3.1.9 The *IESO* shall determine the following allocated physical quantities for each *market participant* for each *primary RWM* and each *intertie metering point* using *metering data*, *operating results* and *interchange schedule data*. If physical quantities are provided only for each *settlement hour* (as they may be for *interchange schedules*, *non-dispatchable loads*, *self-scheduled generation facilities*, *transitional scheduling generators* and *intermittent generators*), the *IESO* shall, if necessary for *settlement* purposes, determine the interval amounts defined below by dividing the hourly amounts into twelve equal interval amounts:

$AQEI_{k,h}^{m,t}$ = allocated quantity (in MWh) of *energy* injected by *market participant* 'k' at *primary* or *intertie metering point* 'm' in *metering interval* 't' of *settlement hour* 'h'

$AQEW_{k,h}^{m,t}$ = allocated quantity (in MWh) of *energy* withdrawn by *market participant* 'k' at *primary* or *intertie metering point* 'm' in *metering interval* 't' of *settlement hour* 'h'

$AQOR_{r,k,h}^{m,t}$ = allocated quantity (in MW) of *class r reserve* for *market participant* 'k' at *primary* or *intertie metering point* 'm' in *metering interval* 't' of *settlement hour* 'h'

~~$AQCR_{k,h}^{m,t}$ = allocated *capacity reserve quantity* (in MW) for *market participant* 'k' at *primary* or *intertie metering point* 'm' in *metering interval* 't' of *settlement hour* 'h'~~

……..

3.7 ~~Hourly Settlement Amounts in the Capacity Reserve Market~~[Intentionally left blank – section deleted]

3.7.1 ~~This section 3.7 is applicable only if the *capacity reserve market* has been activated by the *IESO Board* and has not been deactivated.~~ [Intentionally left blank – section deleted]

3.7.2 ~~The hourly *capacity reserve settlement* credit to *market participant* 'k' for providing *capacity reserve* in *settlement hour* 'h' is $CAPRSC_{k,h}$ defined by the following equation:~~ [Intentionally left blank – section deleted]

~~$CAPRSC_{k,h}$ = Σ_m $QCAPR_{k,h}^m \times PCAPR_h^m$;~~

~~where:~~

~~m = all *primary RWM's* and *intertie metering points*~~

……..

3.8.1 The *IESO* may adjust by means of a debit the *settlement statement* of any *market participant* who is compensated in the market for providing *operating reserve* from a specific *registered facility* that operates in a way that does not provide the service for which it has been paid. Such debits in any *settlement hour* may represent either the decreased value of services provided in that same *settlement hour*, or the value of *operating reserve* services deemed not to have been provided in earlier *dispatch hours* as a result of failure to perform when called in the later *dispatch hour* associated with that *settlement hour*. The hourly *settlement* debits for failure to provide *energy* from *operating reserve* ~~and *capacity reserve*~~ when it is called are set forth in this section 3.8.

……..

3.9 Hourly Uplift Settlement Amounts

3.9.1 The hourly *settlement amounts* defined by the preceding provisions of this section 3 will result in an hourly *settlement* deficit that shall be recovered from *market participants* as a whole through the *hourly uplift*. The total *hourly uplift settlement amount* for *settlement hour* 'h' ("$HUSA_h$") shall be determined according to the following equation:

$HUSA_h$ = Σ_K ($NEMSC_{k,h}$ +$ORSC_{k,h}$+ ~~$CAPRSC_{k,h}$ +~~$CMSC_{k,h}$ +$TRSC_{k,h}$ + $IOG_{k,h}$) + $TCRF_h$ – Σ_K (~~$CRSSD_{k,h}$ +~~ Σ_R $ORSSD_{k,r,h}$ +$DA_IFC_{k,h}$ +$RT_IFC_{k,h}$ + $DA_EFC_{k,h}$ +$RT_EFC_{k,h}$+ $DA_LWFC_{k,h}$)

over all 'k' *market participants*

$NEMSC_{k,h}$ = net *energy market settlement* credit for *market participant* 'k' in *settlement hour* 'h'

$ORSC_{k,h}$ = *operating reserve market settlement* credit for *market participant* 'k' in *settlement hour* 'h'

~~$CAPRSC_{k,h}$ = *capacity reserve market settlement* credit for *market participant* 'k' in *settlement hour* 'h'~~

$CMSC_{k,h}$ = congestion management *settlement* credit for *market participant* 'k' in *settlement hour* 'h'

$TRSC_{k,h}$ = *transmission rights settlement* credit for *market participant* 'k' in *settlement hour* 'h'

$IOG_{k,h}$ = intertie offer guarantee settlement credit for the *market participant* 'k' in *settlement hour* 'h'

$DA_IFC_{k,h}$= day-ahead import failure charge for the *market participant* 'k' in *settlement hour* 'h'

$RT_IFC_{k,h}$ = real-time import failure charge for the *market participant* 'k' in *settlement hour* 'h'

$DA_EFC_{k,h}$= day-ahead export failure charge for the *market participant* 'k' in *settlement hour* 'h'

$RT_EFC_{k,h}$= real-time export failure charge for the *market participant* 'k' in *settlement hour* 'h'

$DA_LWFC_{k,h}$= day-ahead linked wheel failure charge for the *market participant* 'k' in *settlement hour* 'h'

$TCRF_h$ = transmission charge reduction fund contribution in *settlement hour* 'h'

~~$CRSSD_{k,h}$ = *capacity reserve settlement* debit for *operating deviations* for *market participant* 'k' in *settlement hour* 'h'~~

$ORSSD_{k,r,h}$ = *operating reserve settlement* debit for *operating deviations* for *class r reserve* for *market participant* 'k' in *settlement hour* 'h'

Where:

'K' is the set of all *market participants* 'k'

'R' is the set of each class r of *operating reserve*

……..

6.5.3 The *preliminary settlement statements* referred to in section 6.5.2A shall be in electronic format and shall set forth, for the *market participant* to whom the *preliminary settlement statement* is issued and referenced by applicable *charge type*:

……..

~~6.5.3.4 the aggregate capacity reserve quantity provided by each of that market participant's registered facilities;~~ [Intentionally left blank – section deleted]

……..

Chapter 11

~~*capacity reserve* means *generation capacity* that can be available to provide *energy* or *operating reserve* within the time required by section 10 of Chapter 7;~~

~~*capacity reserve market* means the market established pursuant to section 10 of Chapter 7 and activated by the *IESO Board* for the purpose of reducing concerns respecting low reserve margins, the *security* of the *electricity system* or the *adequacy* of the *electricity system* to meet demand for electricity;~~

~~*capacity reserve price* means, in respect of a given *obligation period*, the price for *capacity reserve* determined for every hour of such *obligation period* in accordance with section 10.4 of Chapter 7;~~

~~*capacity reserve quantity* means, in respect of a given *obligation period*, the quantity of *capacity reserve* required to be provided in every hour of such *obligation period* by a given *registered facility* and determined in accordance with section 10.4 of Chapter 7;~~

~~*capacity reserve ratio* means, in respect of a given *obligation period*, the target ratio by which *capacity reserve* secured in the *capacity reserve* auction associated with such *obligation period* should exceed the maximum forecast *demand* for such *obligation period*;~~

……..

dispatch data means the *offers*, *bids*, *self-schedules* and estimates of *intermittent generation* required to be submitted to the *IESO* in accordance with Chapter 7 and used by the *IESO* to determine physical operations and *physical market prices* ~~and the *capacity reserve prices* and *capacity reserve quantities* for the *capacity reserve market* if activated by the *IESO Board* pursuant to section 10 of Chapter 7~~;

……..

~~*maximum capacity reserve price* or *MCRP* means the maximum price that can be determined or paid to a *market participant* for *capacity reserve*;~~

……..

~~*obligation period* means, in respect of a given *capacity reserve* auction, the period commencing at the beginning of the *trading day* immediately following the day on which such *capacity reserve* auction is conducted and ending at the end of the *trading day* immediately preceding the day that is the first *business day* of the sixth calendar month following the end of the calendar month on which such *capacity reserve* auction was conducted;~~

……..

operating deviation means the deviation described in section 3.8 of Chapter 9 between the performance of a *registered facility* and the performance required of that *registered facility* for the provision of *operating reserve* ~~or *capacity reserve*~~;

……..

real-time market means any one of the markets operated by the *IESO* for *energy*, *operating reserve* ~~or *capacity reserve*~~ pursuant to Chapter 7;

……..

registered facility means, in respect of a *facility*, a *facility* which is capable of supplying or withdrawing *physical services*, ~~of providing *capacity reserve*, or both~~ and which is registered with the *IESO* and means, in respect of a *boundary entity*, a *boundary entity* which is comprised of resources capable of supplying or withdrawing *physical services*, ~~of providing *capacity reserve*, or both~~ and is registered with the *IESO*;

……..

References to the Energy Forward Market

Chapter 2

Minimum Trading Limit

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

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

……..

Establishing Market Participant Default Protection Amount

5.3.8 The IESO shall, for each energy market billing period, establish a default protection amount for each market participant as follows:

5.3.8.1 for a metered market participant, 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 the energy forward market and~~ estimated settlement amounts associated with a transmission right, assuming 21 days of participation in the real-time market and assuming all energy injected or withdrawn is transacted through the real-time market; and

……..

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* ~~and the *energy forward 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.

……..

8.2.3 A first *notice of default* levy shall be issued to each *non-defaulting market participant* that participated in the *real-time market* ~~or the *energy forward 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:

……..

8.6 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:

……..

~~8.6.1.2 in the case of a *default levy* imposed in respect of a default in the *energy forward market*, the share allocated to each *non-defaulting market participant* shall be determined on the basis of the following formula:~~ [Intentionally left blank – section deleted]

~~[*default amount* x (absolute value of the *energy forward market* quantities cleared in respect of the *non-defaulting market participant* in the *energy forward market*, for the *energy forward market billing period* to which the default in payment by the *defaulting market participant* relates)]~~	~~divided by~~	~~net transaction MWh amount~~

~~Where the *net transaction MWh amount* is:~~

~~∑ the absolute value, in MWh, of the *energy forward market* quantities cleared in respect of *market participants* during the *energy forward market billing period* to which the default in payment by the *defaulting market participant* relates~~	~~minus~~	~~the absolute value, in MWh, of the *energy forward market* quantity cleared in respect of the *defaulting market participant* in the *energy forward market*, in such *energy forward market billing period;*~~

……..

Appendix 2.2

1.3 Dispatch Workstations

1.3.1 Each *market participant* other than a *boundary entity* shall, for the purposes of:

1.3.1.1 the provision to the *IESO* of real-time information required by the *IESO* to direct the operations of the *IESO-controlled grid*;

1.3.1.2 if the person is or will be subject to dispatch by the *IESO*, the receipt of *dispatch instructions*; and

1.3.1.3 the exchange with the *IESO* of other information required to be submitted or received pursuant to Chapter 7 or Chapter 8, other than the submission, receipt of confirmation of and validation of *dispatch data*, ~~*EFM bids* or *EFM offers* in the day-ahead *energy forward market*,~~ *TR bids* or *TR offers* in the *TR market* and *physical bilateral contract data*,

……..

Chapter 3

6.3A.4 The *IESO* may do one or more of the following to give effect to a *suspension order*:

6.3A.4.1 reject any *bid*, *offer*, ~~*EFM bid*, *EFM offer*,~~ *TR bid* or *TR offer* submitted by the *suspended market participant*;

……..

Chapter 5

12.1.5 Where a ~~market participant~~*market participant* wishes to submit ~~dispatch data~~*dispatch data*, ~~physical bilateral contract data~~*physical bilateral contract data*, ~~EFM bids or EFM offers in the day-ahead energy forward market~~ or ~~TR bids~~*TR bids* or ~~TR offers~~*TR offers* in the ~~TR market~~*TR market* using private network dedicated communication links, all costs associated with such use, including but not limited to the cost of the provision and maintenance of the required communication channel, shall be borne by the ~~market participant~~*market participant*.

……..

Chapter 8

1.1 Purpose and Application

1.1.1 This Chapter sets forth the rules governing:

1.1.1.1 the submission of physical bilateral contract data by market participants and the use of such physical bilateral contract data by the *IESO*; and

1.1.1.2 ~~the operation of and participation in the *energy forward market*; and~~[Intentionally left blank – section deleted]

1.1.1.3 the sale and administration of *transmission rights* or *TRs* by the *IESO*.

1.1.2 The rules in this Chapter apply to:

1.1.2.1 the *IESO*; and

1.1.2.2 any *market participant* submitting *physical bilateral contract data* to the *IESO*, ~~buying or selling in the day-ahead *energy forward market*,~~ or holding, buying or selling *transmission rights* or *TRs*.

……..

3. ~~The Energy Forward Market~~[Intentionally left blank – section deleted]

3.1 ~~Interpretation and Participation in the Energy Forward Market~~[Intentionally left blank – section deleted]

3.1.1 ~~Any *market participant*, provided that it is authorized to participate in the *energy forward market* pursuant to section 3 or 4 of Chapter 2 may, but is not required to, participate in the day-ahead *energy forward market*. *Market participants* choosing to participate in the day-ahead *energy forward market* shall comply with the provisions of this section 3.~~ [Intentionally left blank – section deleted]

3.1.2 ~~The *energy forward market* is a financial, non-delivery *IESO-administered market*, settled on an hourly basis, in which a *market participant* may commit to pay or receive a *settlement amount*, determined in accordance with section 3.2.1 of Chapter 9, based on the difference between the *energy forward market* price~~

and the *hourly Ontario energy price*. While *EFM offers* and *EFM bids* are expressed in terms of quantities of, and prices relating to, *energy*, no person that participates in the *energy forward market* shall provide or obtain *energy* or any other commodity, or have a right to obtain or an obligation to provide, *energy* or any other commodity, as a result of such participation. [Intentionally left blank – section deleted]

3.2 Submission of EFM Offers and EFM Bids[Intentionally left blank – section deleted]

3.2.1 *Market participants* shall submit all *EFM offers* and *EFM bids* in the day-ahead *energy forward market* to the *IESO* through the same *electronic information system* used for the submission of *dispatch data* for that *dispatch day* as described in section 3.2.1 of Chapter 7 or, if the *electronic information system* is not available, by such other means as may be specified by the *IESO* pursuant to section 3.2.2.3 of Chapter 7. [Intentionally left blank – section deleted]

3.2.2 The *IESO* shall confirm receipt and validation of *EFM bids* and *EFM offers* through the *electronic information system* or other means referred to in section 3.2.1 within 5 minutes of receipt. If an *EFM bid* or *EFM offer* does not comply with the provisions of this section 3, the *IESO* shall reject it and provide to the relevant *market participant* the reason for such rejection. If the *IESO* fails to provide confirmation of or rejects an *EFM bid* or *EFM offer* without good cause, the matter may be resolved using the dispute resolution process set forth in section 2 of Chapter 3. [Intentionally left blank – section deleted]

3.2.3 A *market participant* shall, if it does not receive timely confirmation that the *IESO* has received the *market participant's EFM bid* or *EFM offer*, telephone the *IESO* to establish confirmation and, if necessary, resubmit the *EFM bid* or *EFM offer* to the *IESO* by whatever means may be specified by the *IESO*. [Intentionally left blank – section deleted]

3.2.4 The *IESO* shall time-stamp each *EFM offer* and *EFM bid* received, indicating the time it was received. [Intentionally left blank – section deleted]

3.2.5 A *market participant* shall submit to the *IESO* its *EFM offers* and its *EFM bids* in the *energy forward market* in respect of each *real-time market dispatch hour* of the *real-time market dispatch day* at any time between 08:00 EST and 09:00 EST of the *real-time market pre-dispatch day*. [Intentionally left blank – section deleted]

3.2.6 If the *IESO* rejects an *EFM bid* or *EFM offer* as invalid, the *market participant* may not resubmit that *EFM bid* or *EFM offer* after 09:00 EST of the *pre-dispatch day*. [Intentionally left blank – section deleted]

3.2.7 The *IESO* shall not grant exceptions from the deadline described in section 3.2.6 to *market participants* that claim that the *IESO* wrongly rejected valid *EFM offers*

or *EFM bids*. Such claims may, however, be adjudicated using the dispute resolution process set forth in section 2 of Chapter 3. [Intentionally left blank – section deleted]

3.2.8 A *market participant* may revise or cancel an *EFM bid* or *EFM offer* in the *energy forward market* for a given *real-time market dispatch day* up to 09:00 EST of the *real-time market pre-dispatch day*. [Intentionally left blank – section deleted]

3.2.9 A *market participant* may submit a standing *EFM bid* or standing *EFM offer* for the day-ahead *energy forward market* for each hour in a week and may specify a time at which the standing *EFM bid* or standing *EFM offer* expires. Once the standing *EFM bid* or standing *EFM offer* has been accepted by the *IESO*, the standing *EFM bid* or standing *EFM offer* shall take effect on the *real-time market dispatch day* following the date of acceptance provided that the standing *EFM bid* or standing *EFM offer* was submitted between 08:00 EST and 09:00 EST on the day preceding such *real-time market dispatch day*. Otherwise, the standing *EFM bid* or standing *EFM offer* shall take effect on the following *real-time market dispatch day*. [Intentionally left blank – section deleted]

3.2.10 Once accepted by the *IESO*, a standing *EFM bid* or standing *EFM offer* shall, as of the time it comes into effect pursuant to section 3.2.9, supersede any previous *EFM bid*, *EFM offer*, standing *EFM bid* or standing *EFM offer*. [Intentionally left blank – section deleted]

3.2.11 The *IESO* shall treat valid standing *EFM bids* and standing *EFM offers* for a given day of the week as that *market participant*'s *EFM bid* and *EFM offer* for that day of the week until the *market participant* submits another valid *EFM bid* or *EFM offer*, or the *market participant* informs the *IESO* that it is suspending its standing *EFM bid* or standing *EFM offer*, or the standing *EFM bid* or standing *EFM offer* expires according to its own terms. [Intentionally left blank – section deleted]

3.2.12 If the *IESO's electronic information system* for submitting *EFM bids* and *EFM offers* fails, then: [Intentionally left blank – section deleted]

3.2.12.1 if other means of communication are adequate for the *IESO* to receive and acknowledge receipt of all *EFM offers* and *EFM bids* by 09:00 EST, the day-ahead *energy forward market* shall proceed on schedule; or[Intentionally left blank – section deleted]

3.2.12.2 in all other cases, the *IESO* may extend by up to two hours the time allowed for submitting valid *EFM offers* and *EFM bids* and for completing all subsequent day-ahead *energy forward market* procedures. [Intentionally left blank – section deleted]

3.2.13 If the *energy forward market* market-clearing software fails, the *IESO* may extend by up to two hours the time allowed for determining the *energy forward market* market-clearing prices and quantities and for completing all subsequent day-ahead *energy forward market* procedures. [Intentionally left blank – section deleted]

3.2.14 ~~If it is not possible to *publish* day-ahead *energy forward market* results by 11:00 EST, then the *IESO* shall cancel the day-ahead *energy forward market* for the day. The *IESO* shall inform all *market participants* of any such cancellation as soon as possible.~~ [Intentionally left blank – section deleted]

3.3 ~~Structure and Content of EFM Bids and EFM Offers~~[Intentionally left blank – section deleted]

3.3.1 ~~No *market participant* shall submit more than one *EFM offer* and one *EFM bid* for any hour of the day-ahead *energy forward market*. In the event that a *market participant* submits more than one otherwise valid *EFM offer* or *EFM bid* to the *IESO*, the *IESO* shall use the latest *EFM bid* or latest *EFM offer* submitted.~~ [Intentionally left blank – section deleted]

3.3.2 ~~An *EFM bid* or an *EFM offer* shall consist of a number of prices, each with an associated quantity. A price and the associated quantity is a *price-quantity pair* and shall comply with section 3.3.3 and the following:~~ [Intentionally left blank – section deleted]

3.3.2.1 ~~the quantity in any *price-quantity pair* shall be cumulative, meaning that it represents the maximum quantity the participant wishes to have cleared in the *energy forward market* at the price in the *price-quantity pair*;~~ [Intentionally left blank – section deleted]

3.3.2.2 ~~the price in any *price-quantity pair* shall be expressed in dollars and whole cents per MWh and may have any value less than the *maximum market clearing price* or *MMCP* but greater than negative *MMCP*; and~~[Intentionally left blank – section deleted]

3.3.2.3 ~~the quantity in any *price-quantity pair* shall be expressed in MW to not more than one decimal place and must not be less than 0.0 MW.~~ [Intentionally left blank – section deleted]

3.3.3 ~~A *EFM bid* or an *EFM offer* may contain up to 20 *price-quantity pairs* for each hour and:~~ [Intentionally left blank – section deleted]

3.3.3.1 ~~the *price-quantity pairs* in an *EFM offer* must define an increasing supply curve, such that each successive quantity in a *price-quantity pair* must be associated with a non-decreasing price; and~~[Intentionally left blank – section deleted]

3.3.3.2 ~~the *price-quantity pairs* in a *EFM bid* must indicate a declining demand curve, such that each successive quantity in a *price-quantity pair* must be associated with a non-increasing price.~~ [Intentionally left blank – section deleted]

3.3.4 ~~*Market participants* shall submit their *EFM bids* and *EFM offers* using standard forms specified by the *IESO*.~~ [Intentionally left blank – section deleted]

3.4 ~~The Energy Forward Market Auction~~[Intentionally left blank – section deleted]

3.4.1 ~~The *IESO* shall conduct an *energy forward market* auction for each *real-time market dispatch day* at 09:15 EST on the *real-time market pre-dispatch day* (or later as permitted by sections 3.2.12 or 3.2.13). To conduct this auction, the *IESO* shall, for each *real-time market dispatch hour* of the *real-time market dispatch day*:~~ [Intentionally left blank – section deleted]

3.4.1.1 ~~form the aggregate forward market demand curve defining the aggregate quantity contained in valid *EFM bids* submitted by *market participants* at each valid *EFM bid* price between negative *MMCP* and *MMCP*;~~ [Intentionally left blank – section deleted]

3.4.1.2 ~~form the aggregate forward market supply curve defining the aggregate quantity contained in valid *EFM offers* submitted by *market participants* at each valid *EFM offer* price between negative *MMCP* and *MMCP*; and~~[Intentionally left blank – section deleted]

3.4.1.3 ~~define the *energy forward market* price and the *energy forward market* quantity by the point at which the aggregate *energy forward market* supply curve crosses the aggregate *energy forward market* demand curve in accordance with section 3.4.2.~~ [Intentionally left blank – section deleted]

3.4.2 ~~If the intersection of the aggregate *energy forward market* supply curve and aggregate *energy forward market* demand curve defines:~~ [Intentionally left blank – section deleted]

3.4.2.1 ~~a unique price and a unique quantity, then these are the *energy forward market* price and *energy forward market* quantity cleared;~~ [Intentionally left blank – section deleted]

3.4.2.2 ~~a unique price but a non-unique quantity, then the unique price is the *energy forward market* price and the *energy forward market* quantity cleared shall be the maximum quantity consistent with the *energy forward market* price; or~~[Intentionally left blank – section deleted]

3.4.2.3 ~~a non-unique price but a unique quantity, then the *energy forward market* quantity cleared is that unique quantity and the *energy forward market* price is the minimum price consistent with the *energy forward market* quantity cleared.~~ [Intentionally left blank – section deleted]

3.4.3 ~~To determine the *energy forward market* quantities cleared for each *market participant*:~~ [Intentionally left blank – section deleted]

3.4.3.1 ~~all *EFM offer* quantities with prices less than the *energy forward market* price will be deemed to have cleared in the day-ahead *energy forward market*;~~ [Intentionally left blank – section deleted]

3.4.3.2 ~~all *EFM offer* quantities with prices equal to the *energy forward market* price will be cleared on a pro-rata basis such that the total of the *EFM offer* quantities cleared equals the aggregated *energy forward market* quantity;~~ [Intentionally left blank – section deleted]

3.4.3.3 ~~all *EFM bid* quantities with prices greater than the *energy forward market* price will be deemed to have cleared in the day-ahead *energy forward market*; and~~[Intentionally left blank – section deleted]

3.4.3.4 ~~all *EFM bid* quantities with prices equal to the *energy forward market* price will be cleared on a pro-rata basis such that the total of the *EFM bid* quantities cleared equals the aggregated *energy forward market* quantity.~~ [Intentionally left blank – section deleted]

3.5 ~~Settlement of the Energy Forward Market~~[Intentionally left blank – section deleted]

3.5.1 ~~The *IESO* shall, in accordance with the provisions of Chapter 9, establish *settlement amounts* for each *market participant* that has cleared quantities in the day-ahead *energy forward market* as determined pursuant to section 3.4.~~ [Intentionally left blank – section deleted]

3.6 ~~Publication of Energy Forward Market Auction Results~~[Intentionally left blank – section deleted]

3.6.1 ~~The *IESO* shall publish the results of the day-ahead energy forward market by 09:30 EST on the day of the auction, or as soon thereafter as any delay in the *energy forward market* allows.~~ [Intentionally left blank – section deleted]

3.6.2 ~~The *IESO* shall make public the *energy forward market* price and aggregate *energy forward market* quantities cleared in the *energy forward market*.~~ [Intentionally left blank – section deleted]

3.6.3 ~~The *IESO* shall inform each *market participant* of the *energy forward market* prices and its own cleared *energy forward market* quantities.~~ [Intentionally left blank – section deleted]

……..

Chapter 9

1.1.2 This chapter sets out the respective rights and obligations of the *IESO* and of *market participants* in determining, billing for and effecting payment in respect of financial obligations arising from the *IESO-administered markets*, other provisions of the *market rules*, the *Electricity Act, 1998* and the *Ontario Energy Board Act, 1998*, including the following:

1.1.2.1 ~~the energy forward market;~~ [Intentionally left blank – section deleted]

……..

3. Determination of Hourly Settlement Amounts

3.1 Hourly Settlement Variables and Data

3.1.1 The *IESO* shall determine hourly *settlement amounts* for the *hourly markets* using the hourly price and quantity variables and data described in this section 3.1.

3.1.2 ~~The *IESO* shall determine *energy forward market* prices and quantities as provided in Chapter 8, and shall provide the following data from the *energy forward market* directly to the *settlement process*:~~ [Intentionally left blank – section deleted]

~~$FMQS_{k,h}$ = *energy forward market* quantity cleared (positive if *offer* and negative if *bid*), in MWh, by *market participant* 'k' in *settlement hour* 'h'~~

~~FMP_h = *energy forward market* price, in $/MWh, in *settlement hour* 'h'~~

……..

3.2 ~~Hourly Settlement Amounts in the Energy Forward Market~~

3.2.1 ~~The hourly net *energy forward market settlement* credit (debit if negative) for *market participant* 'k' ("$NFMSC_{k,h}$") shall be determined by the following equation:~~ [Intentionally left blank – section deleted]

~~$NFMSC_{k,h} = FMQS_{k,h} \times (FMP_h - HOEP_h)$~~

……..

6.2 Settlement Schedule and Payments Calendar

6.2.1 At least 60 days prior to the *market commencement date*, and by October 15 of each year subsequent to the *market commencement date*, the *IESO* shall *publish* a draft *IESO Settlement Schedule & Payments Calendar* or *SSPC* for the following calendar year (or, in the case of the calendar year in which the *market commencement date* occurs, for the remainder of the calendar year) showing the following dates, fixed, subject to sections 6.3.20 to 6.3.29, in accordance with the relevant provisions of this section 6:

6.2.1.1 the dates by which the *IESO* shall issue to each applicable *market participant*, a *preliminary settlement statement* for each *trading day* for:

a. ~~charges or payments incurred in the day-ahead *energy forward market*; and~~[Intentionally left blank – section deleted]

b. charges or payments incurred in respect of all rounds of any *TR auction* that is concluded on such *trading day*;

……..

6.2.1.5 the dates by which the *IESO* shall issue to each applicable *market participant*, a *final settlement statement* for each *trading day* for:

a. ~~the day-ahead *energy forward market*; and~~[Intentionally left blank – section deleted]

b. all rounds of any *TR auction* that is concluded on such *trading day*;

……..

6.2.1.7 the dates by which the *IESO* shall issue to each applicable *market participant*, an *invoice* for each *billing period* of a *trading week* for:

a. ~~the day-ahead *energy forward market*; and~~[Intentionally left blank – section deleted]

b. all rounds of a *TR auction* that is concluded during such *billing period*;

6.3 Settlement Cycles

~~Energy Forward Market and~~ TR auctions

6.3.1 The *preliminary settlement statement* for each *trading day* ~~in the day-ahead *energy forward market* and~~ for all rounds of any *TR auction* that is concluded on such *trading day* shall be issued 2 *business days* after the *trading day*.

6.3.2 After the *preliminary settlement statement* referred to in section 6.3.1 is issued, each *market participant* shall have 2 *business days* in which to notify the *IESO* of errors or omissions in the *preliminary settlement statement* in accordance with section 6.6.

6.3.3 The *final settlement statement* for each *trading day* ~~in the day-ahead *energy forward market* and~~ for all rounds of any *TR auction* that is concluded on such *trading day* shall be issued 6 *business days* after the *trading day*. The *final settlement statement* shall, subject to section 6.10.1, constitute the basis for invoicing and billing in respect of that *trading day*.

6.3.4 The *IESO* shall issue one invoice to each *market participant*, covering all *trading days* within a *billing period*, on the same *business day* it issues the *final settlement statement* for the last *trading day* of that *billing period*.

6.3.5 The *market participant payment date* ~~for each day-ahead *energy forward market billing period* and~~ for all rounds of any *TR auction* that is concluded during such *billing period* shall occur on the second *business day* after the *invoice* is issued.

6.3.6 Each *market participant* shall initiate the *electronic funds transfer* process in accordance with the provisions of section 6.12 so as to ensure that the *market participant's* payments ~~for day-ahead *energy forward market* transactions and~~ in respect of all rounds of any *TR auction* that is concluded in each ~~day-ahead *energy forward market*~~ *billing period* reach the *IESO settlement clearing account* no later than the *close of banking business* (of the bank at which the *IESO settlement clearing account* is held) on the *market participant payment date*.

6.3.7 The *IESO payment date* ~~for each day-ahead *energy forward market billing period* and~~ for all rounds of any *TR auction* that is concluded during such *billing period* shall be the second *business day* after the corresponding *market participant payment date*.

6.3.8 The *IESO* shall initiate the *electronic funds transfer* process in accordance with the provisions of section 6.12 so as to ensure that the sums owing to each *market participant* ~~for day-ahead *energy forward market* transactions and~~ in respect of all rounds of any *TR auction* that is concluded in each ~~day-ahead *energy forward market*~~ *billing period* reach each *market participant's settlement account* no later than the *close of banking business* (of the bank at which the *market participant's settlement account* is held) on the *IESO payment date.*

……..

6.5 Preliminary Statement Coverage

6.5.1 The *IESO* shall issue to each *market participant* separate preliminary *settlement statements* to cover:

6.5.1.1 transactions in ~~the day-ahead *energy forward market* and~~ all rounds of any *TR auction* that is concluded on a given *trading day*; and

6.5.1.2 transactions in the *real-time markets* and in the *TR market*, other than in respect of the element referred to in section 6.5.1.1,

in accordance with the timelines set forth in:

6.5.1.3 section 6.3.1; or

6.5.1.4 any of sections 6.3.9, 6.3.20 and 6.3.21.1, as may be applicable.

6.5.2 *Preliminary settlement statements* related to each *market participant* ~~for the day-ahead *energy forward market* and~~ for all rounds of any *TR auction* that is concluded on a given *trading day* shall include, in electronic format, for each *settlement hour* of the relevant *trading day* or for each such *TR auction*, as the case may be, referenced by applicable *charge type*:

6.5.2.1 ~~the net quantity (in MWh) of *energy* bought or sold by the *market participant* in the *energy forward market* for that *settlement hour*;~~ [Intentionally left blank – section deleted]

6.5.2.2 ~~the energy forward market price in that settlement hour;~~ [Intentionally left blank – section deleted]

6.5.2.3 the hourly Ontario energy price in that settlement hour;

6.5.2.4 the payment for the *settlement hour*, either from the *market participant* to the *IESO*, or from the *IESO* to the *market participant*;

6.5.2.4A all fees, charges, credits and payments applicable to the *market participant* in respect of the purchase or sale of a *TR* in all rounds of such *TR auction*; and

6.5.2.5 ~~all *energy forward market* fees, charges and payments applicable to that *market participant* and the basis for deriving those fees, charges or payments; and~~ [Intentionally left blank – section deleted]

6.5.2.6 for each type of charge listed, the total *trading day's* charges and a *billing period*-to-date total.

……..

6.5.3 The *preliminary settlement statements* referred to in section 6.5.2A shall be in electronic format and shall set forth, for the *market participant* to whom the *preliminary settlement statement* is issued and referenced by applicable *charge type*:

……..

6.5.3.16 all *TR market* fees, charges, credits and payments applicable to the *market participant*~~, other than in respect of the elements referred to in section 6.5.2.5~~.

……..

6.6.11 No *market participant* may submit a *notice of disagreement* in respect of the calculation of:

6.6.11.1 the 5-minute *energy market* price for any *dispatch interval* in a given *settlement hour*;

6.6.11.2 the 5-minute price for any class of *operating reserve* for any *dispatch interval* in a given *settlement hour;* or

6.6.11.3 ~~the *energy forward market* price for a given *settlement hour*; or~~[Intentionally left blank – section deleted]

6.6.11.4 the hourly Ontario energy price for a given settlement hour,

and the *IESO* shall not investigate the subject-matter of a *notice of disagreement* to the extent that it relates to any of the elements noted in sections 6.6.11.1 to 6.6.11.4.

……..

6.7 Final Settlement Statement Coverage

6.7.1 The *IESO* shall issue to each *market participant* separate *final settlement statements* to cover:

6.7.1.1 transactions in ~~the day-ahead *energy forward market* and~~ all rounds of any *TR auction* that is concluded on a given *trading day*; and

6.7.1.2 transactions in the *real-time markets* and in the *TR market*, other than in respect of the element referred to in section 6.7.1.1,

in accordance with the timelines set forth in:

6.7.1.3 section 6.3.3; and

6.7.1.4 any of sections 6.3.11, 6.3.18.2, 6.3.21.1 and 6.3.22.3, as may be applicable.

……..

6.9 Responsibility of the IESO

6.9.1 In carrying out its *settlement* responsibilities, the *IESO* shall operate in a non-discriminatory manner.

6.9.2 The *IESO* shall not be a counter-party to any trade transacted through the *real-time markets* ~~or the day-ahead *energy forward market*~~.

6.9.3 [Intentionally left blank]

……..

6.14.4 The *IESO* shall be authorised to borrow short-term funds to clear the credits in any settlement cycle only if the following conditions are met:

6.14.4.1 there are insufficient funds remitted into the *IESO settlement clearing account* or *TR clearing account* to pay all applicable *market creditors* due for payment from the funds in the *IESO settlement clearing account* or *TR clearing account*, and clear the *IESO settlement clearing account* or *TR clearing account* on a given *IESO payment date*, due to:

a. payment default by one or more *market participants* in ~~the *day-ahead energy forward market* or~~ the *real-time markets*; or

b. the circumstances referred to in section 4.19.2 or 4.19.6 of Chapter 8;

6.14.4.2[Intentionally left blank]

……..

6.16.2 Subject to the provisions of section 6.14, the *IESO* shall not be liable to make payments in excess of the amount it receives for transactions in ~~the *day-ahead energy forward market* or~~ the *real-time markets*.

Chapter 11

billing period means, in respect of the purchase or sale of *TRs* in a round of a *TR auction*, a period of a *trading week*, ~~in respect of the day-ahead *energy forward market*, a period of a *trading week* and,~~ in respect of the *real-time markets* and the *settlement* of amounts owing to *TR holders* under section 4.4.1 of Chapter 8, a period of a calendar month;

……..

~~*energy forward market* or *EFM* means the financial, non-delivery market operated by the *IESO* pursuant to section 3 of Chapter 8;~~

~~*energy forward market bid* or *EFM bid* means a statement of prices and the~~

~~associated quantities in respect of which a *market participant* would be willing to either pay a *settlement amount*, should the *energy forward market* price exceed the *hourly Ontario energy price*, or receive a *settlement amount*, should the *energy forward market* price be less than the *hourly Ontario energy price*, with such *settlement amounts* being determined in accordance with section 3.2.1 of Chapter 9;~~

~~*energy forward market offer* or *EFM offer* means a statement of prices and the associated quantities in respect of which a *market participant* would be willing to either pay a *settlement amount*, should the *energy forward market* price be less than the *hourly Ontario energy price*, or receive a *settlement amount*, should the *energy forward market* price exceed the *hourly Ontario energy price*, with such *settlement amounts* being determined in accordance with section 3.2.1 of Chapter 9;~~

……..

financial market participant means a person that participates ~~only in one or both of the day-ahead *energy forward market* or~~ the *TR market*;

……..

~~*net transaction MW amount* means an amount calculated in accordance with section 8.6.1.2 of Chapter 2;~~

PART 5 – IESO BOARD DECISION RATIONALE

This amendment simplifies the market and "cleans-up" the market rules by deleting references to two inactive market functions.