



Ontario  
Executive Council  
Conseil des ministres

# Order in Council Décret

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and concurrence of the Executive Council, orders that:

Sur la recommandation du soussigné, le lieutenant-gouverneur, sur l'avis et avec le consentement du Conseil des ministres, décrète ce qui suit :

**WHEREAS** it is intended that the generating assets of Ontario Hydro are to be transferred to Ontario Power Generation Inc. and its subsidiaries under the authority of transfer orders made by the Lieutenant Governor in Council under subsection 116(1) of the *Electricity Act, 1998*;

**AND WHEREAS** Ontario is developing a competitive market for the sale of electricity;

**AND WHEREAS** participants in the electricity industry will require a licence from the Ontario Energy Board;

**AND WHEREAS** Ontario Power Generation Inc. will have control over the large majority of electricity generated in Ontario at the commencement of the competitive market for electricity;

**AND WHEREAS** the Market Design Committee established by the Government to advise it on the development of a competitive market in electricity has provided detailed recommendations on the provisions which should be contained in the licence of Ontario Power Generation Inc. and others to address the issues which arise from the market share of Ontario Power Generation Inc. in the Ontario electricity industry;

**AND WHEREAS** the Minister may, with the approval of the Lieutenant Governor in Council, issue directives under section 28 of the *Ontario Energy Board Act, 1998* with respect to proposed licence conditions;

**NOW THEREFORE** the Directive, attached hereto, is approved.

Recommended

Minister of Energy, Science & Technology

Concurred

Chair of Cabinet

Approved & Ordered

MAR 24 1999

Date

Lieutenant Governor

## MINISTER'S DIRECTIVE AND REFERRAL

### TO: THE ONTARIO ENERGY BOARD

#### PART A Directive

I, Jim Wilson, Minister of Energy, Science & Technology, hereby direct the Ontario Energy Board (the Board) under section 28 of the *Ontario Energy Board Act, 1998* as follows:

#### 1. Various Licence Conditions

To implement and maintain as licence conditions:

- (a) the provisions contained in Appendix A to this document with respect to the licences of Ontario Power Generation Inc. (OPGI) and its successors;
- (b) the provisions contained in Appendix B to this document with respect to the licences of the Independent Electricity Market Operator (IMO) and its successors;
- (c) the provisions contained in Appendix C to this document with respect to the licences of Ontario Hydro Services Company Inc. (OHSCI) and its successors;
- (d) the provisions contained in Appendix D to this document with respect to the licences of any person licensed to undertake an activity described in clause 57(a), 57(d) or clause 57(f) of the *Ontario Energy Board Act, 1998*.

#### 2. Licence Conditions Not to be Amended

The licence conditions referred to in paragraph 1 are not to be subsequently amended, varied, removed, not renewed or stayed, except as expressly contemplated in said licence conditions or in this document. The foregoing shall not prevent the Board from taking or omitting to take any action arising in connection with any review, determination, request, advice or recommendation referred to in said licence conditions or in this document.

### 3. Interim and Transitional Licences

In addition to the licence conditions referred to in paragraph 1, a licence issued under section 129 of the *Ontario Energy Board Act, 1998* to a person referred to in paragraph 1 shall include the following additional condition:

Any provision of this licence that by its terms would only apply after the date on which this licence is set to expire, shall apply only to the extent that the duration of this licence is extended to include such stated time.

### PART B Referral

I, Jim Wilson, Minister of Energy, Science & Technology, hereby require the Board, under section 35 of the *Ontario Energy Board Act, 1998*, to do the following:

#### 1. 42-month OPGI Review

- (a) Examine and determine the matters contemplated in paragraph 1 of Part 4 of the licence conditions of OPGI as set out in Appendix A to this document;
- (b) report to the Minister on its determination of whether or not the targets referred to in the said paragraph 1 have been met and whether or not OPGI has developed a plan in accordance with clause (a)(iii) of the said paragraph 1;
- (c) where any of the said targets have not been met, advise the Minister on a range of mechanisms which may be used to achieve a stable structural solution to market power through to the end of the tenth anniversary of the competitive market opening (such recommendations may include the additional decontrol of OPGI assets);
- (d) where all of the said targets have been met, advise the Minister regarding the appropriateness and form of ongoing price controls over OPGI's Tier 1 generation for the fifth through tenth years following the competitive market opening, while not altering the 10 year decontrol target;
- (e) in advising the Minister in accordance with clauses (c) and (d), take into account whether OPGI has failed to develop a plan in accordance with clause (a)(iii) of the said paragraph 1.

## 2. 7-Year OPGI Review

- (a) Examine the matters contemplated in paragraph 2 of Part 4 of the licence conditions of OPGI as set out in Appendix A to this document;
- (b) report to the Minister on OPGI's progress towards meeting the targets referred to in the said paragraph 2.

## 3. 10-Year OPGI Review

- (a) Examine and determine the matters contemplated in paragraph 3 of Part 4 of the licence conditions of OPGI as set out in Appendix A to this document;
- (b) report to the Minister on its determination of whether OPGI has met the target referred to in the said paragraph 3.

## 4. 36-Month OHSCI Review

- (a) Examine and determine the matters contemplated in paragraph 2 of Part 3 of the licence conditions of OHSCI as set out in Appendix C to this document;
- (b) report to the Minister on its determination of whether OHSCI has used its best efforts to expand inter-tie capacity to neighbouring jurisdictions by approximately 2000 MW.

### Best Efforts

The Board shall use its best efforts to report to and advise the Minister on any of the matters set out above within 3 months of commencing to examine these matters.

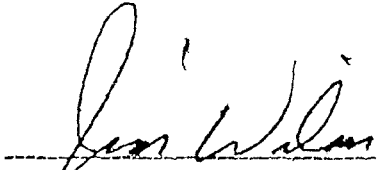
### Progress Reports

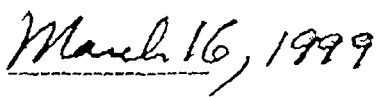
Nothing in this Directive and Referral in any way limits or prevents the Minister from requesting progress reports from the Board from time to time on OPGI's progress towards meeting the targets referred to in Part 4 of the licence conditions of OPGI as set out in Appendix A to this document.

### Confidentiality

Subject to the Board's rules of practice and procedure and all applicable law, the Board shall use its reasonable efforts to ensure that it maintains all data contained in

the Model Output Data that represents  $q_h^i$  data or  $FMRC_h$  data in confidence (with all such terms having the meanings ascribed thereto in paragraph 1 of the licence conditions of OPGI as set out in Appendix A to this document).

  
 Minister of Energy, Science & Technology

  
 Date

## APPENDIX A LICENCE CONDITIONS FOR OPGI

### PART 3. PRICE CAP AND REBATE

#### 1. Definitions and Interpretation

In Parts 3 through 6 inclusive of these Licence Conditions:

"Average Price" or "AP" is the price against which the Price Cap is compared to determine whether a Rebate is required in respect of a Settlement Period. The Average Price is determined by summing the product of the Hourly Price multiplied by the Contract Weight for all hours of that Settlement Period;

"Changes in Law" means changes in law (including without limitation environmental laws, laws affecting OPGI's generation facilities, tax laws and the general laws affecting the regulation of electricity in Ontario), but excluding provincial tax laws and, for greater certainty, excluding changes in licence conditions and market rules;

"Contract Required Quantity" or "CRQ" means the quantity of energy upon which any Rebate is determined, in respect of a Settlement Period, as set forth in the Model Output Data and as may be modified pursuant hereto. Subject to such adjustments, the CRQ will equal the sum of all Hourly Quantities for all hours in a Settlement Period;

"Contract Weight" or " $CW_h$ " means the weighting for each hour in a Settlement Period,  $h$ , that is used to calculate the Average Price. For any particular hour, the Contract Weight equals the Hourly Quantity for that hour divided by the CRQ for that Settlement Period;

"Effective Control" in respect of output means control over the timing, quantity and bidding into the Ontario market of such output;

"Force Majeure Adjustment" or "FMA" means a reduction in the Rebate as a result of a Force Majeure Event;

"Force Majeure Event" means an event defined in clause 2(c)(ii) of Part 3 below;

"Force Majeure Replacement Cost" or " $FMRC_h$ " means, for any particular hour in a Settlement Period,  $h$ , the predetermined net incremental replacement cost for each OPGI generation unit, as set forth in the Model Output Data that is used in determining the Force Majeure Adjustment, and as

may be modified pursuant hereto.  $FMRC_h$  may be constant in the Model Output Data over the hours in a month or other period;

"Hourly Quantity" or " $Q_h$ " means, for any particular hour in a Settlement Period,  $h$ , the quantity of energy upon which the Contract Weight is established, as set forth in the Model Output Data. The sum of the Hourly Quantities for all hours in a Settlement Period equals the CRQ for that Settlement Period;

"Hourly Price" or " $P_h$ " means, for any particular hour in a Settlement Period,  $h$ , the unconstrained spot price for energy for that hour expressed in a price in \$ per MWh, as determined by the IMO pursuant to its market rules;

"Hourly Reserve Capacity Price" is the hourly market clearing price of reserve capacity;

"Hourly Unit Quantity," or " $q_h^i$ " means, for any particular hour in a Settlement Period,  $h$ , the hourly quantity of energy associated with a particular OPGI generation unit,  $i$ , upon which the Hourly Quantity is established, as set forth in the Model Output Data. The sum of all Hourly Unit Quantities for all OPGI generation units in respect of an hour equals the Hourly Quantity for that hour;

"Locational Spot Price" means, for any particular hour in a Settlement Period,  $h$ , and any particular OPGI generation unit, the spot price for energy at such generation unit's interconnection, which will only apply if location-based marginal pricing is developed in Ontario;

"Model Output Data" means the data filed with the Board. The Model Output Data contains data, some of which is confidential, derived from a production cost model of the electricity market in Ontario and neighbouring regions under the assumption that OPGI is assumed to bid its generation units in a manner that achieves an average sales price of \$ 38/MWh. The resulting CRQ,  $Q_h$ , and  $q_h^i$  data reflects 90 per cent of OPGI's predicted sales to Ontario customers;

"Potential Force Majeure Event" means an event defined in clause 2(c)(i) of Part 3 below;

"Price Cap" or "CAP" means \$38/MWh, which is the threshold used in calculating the Rebate;

"Price Spike Adjustment" or "PSA" means the reduction in the Rebate as a result of qualifying price spikes, as calculated pursuant hereto;

"**Prime Rate**" means the variable annual rate of interest, calculated on the basis of a calendar year, announced from time to time by the IMO's then principal Canadian banker as the reference rate of interest (commonly known as its prime rate) then in effect and used by such bank for determining interest rates on Canadian dollar denominated commercial loans made by it in Canada to customers of varying degrees of credit-worthiness;

"**Rebate**" or "**R**" means the amount OPGI must pay the IMO as a consequence of the Average Price in any Settlement Period exceeding the Price Cap, less any applicable adjustments;

"**Rebate Carryforward Adjustment**" or "**RCA**" means the adjustment in which negative Rebates from a Settlement Period are used to offset Rebates in subsequent Settlement Periods;

"**Reserve Capacity Ratio**" is a number greater than 1, such as 1.2, that is set by the IMO for the purposes of multiplying by the hourly demand to determine the reserve capacity target in such hour;

"**Settlement Period**" means each time period over which OPGI's compliance with the Price Cap shall be measured, which shall be over a 12 month period, except that (1) the first Settlement Period shall commence on the opening of the competitive electricity market and shall consist of the first full 12 calendar months plus the days, if any, in the first partial month; and (2) the last Settlement Period shall end on the termination of the provisions of Part 3, and therefore could be less than 12 full calendar months; and

"**Tier 1**" capacity means all nuclear and hydroelectric generation in Ontario and "**Tier 2**" capacity means that portion of Ontario's generation capacity, including inter-tie capacity and demand-side bidding, that is not part of Tier 1 capacity. For such purposes, generation capacity shall be based upon the maximum continuous rating of a unit, inter-tie capacity shall be based on the average of summer and winter season Ontario transfer capacity, and demand-side bidding shall be based on the sum of the dispatchable and interruptible loads, all expressed in MW.

All dollar amounts referred to are expressed in Canadian dollars.

## 2. Determination of Rebate

OPGI shall pay a Rebate to the IMO in respect of each Settlement Period in which the Average Price (AP) exceeds the Price Cap (CAP). The amount of the Rebate shall be determined in accordance with the following formula:



$$R = [(AP - CAP) * CRQ] - (RCA + PSA + FMA)$$

If the calculated Rebate in respect of any Settlement Period is a negative number, then there shall be no Rebate, and the Rebate Carryforward Adjustment shall be changed as described herein.

(a) *Rebate Carryforward Adjustment*

Initially, the Rebate Carryforward Adjustment ("RCA") shall be zero. In any Settlement Period in respect of which the calculated Rebate is negative, the absolute value of that amount shall be the Rebate Carryforward Adjustment for the purposes of the next Settlement Period.

(b) *Price Spike Adjustment*

A Price Spike Adjustment (PSA) shall be calculated for all hours in a Settlement Period in which both (1) the Hourly Price ( $P_h$ ) exceeds \$125/MWh, and (2) OPGI's Generation for that hour is less than the Hourly Quantity ( $Q_h$ ). The PSA for a Settlement Period shall equal the sum of the adjustments for each applicable hour, which shall be calculated pursuant to the following formula:

$$PSA = (P_h - \$125/\text{MWh}) * (Q_h - \text{OPGI's Generation for that hour}),$$

where OPGI's Generation for that hour = OPGI's energy generated from all sources in Ontario (metered as per IMO market rules) the output of which is Effectively Controlled by OPGI and which was included as OPGI energy generated in the Model Output Data, and includes the current power purchase agreement with Manitoba Hydro.

(c) *Force Majeure Adjustment*

(i) *Potential Force Majeure Event*

A Potential *Force Majeure* Event is any event consisting of any of the following conditions or events that results in the loss or failure of, or the inability to operate, in whole or in part, one or more generation units in Ontario the output of which is Effectively Controlled by OPGI and that, in each case, is beyond the reasonable control of OPGI and which is not a result of OPGI's failure to comply with pre-existing laws or licence conditions or market rules or to reasonably maintain or to use its best efforts to promptly repair any generation unit or units:

- (A) acts of war, revolution, riot, sabotage, occupation or vandalism;

- (B) earthquakes, tornadoes or severe storms;
- (C) other acts of God;
- (D) local, regional or national states of emergency;
- (E) strikes or other labour disputes;
- (F) other failure or damage to an OPGI generating facility, including failure or damage caused by construction defects, fire, or damage to necessary equipment and which is not a result of negligence in the maintenance or repair thereof;
- (G) interruptions in the supply of fuel or other essential supplies (excluding variations in water supplies in the case of hydroelectric generation units);
- (H) failure of transmission or distribution facilities in Ontario;
- (I) other system emergencies in Ontario; and
- (J) Changes in Law.

(ii) Definition of *Force Majeure* Event

A *Force Majeure* Event is either an Isolated *Force Majeure* Event or a Cumulative *Force Majeure* Event.

An Isolated *Force Majeure* Event is that portion of any Potential *Force Majeure* Event that occurs after the Potential *Force Majeure* Event has caused a reduction in the energy actually generated by the applicable units greater than 250,000 MWh from the sum of such units' Hourly Unit Quantities during the effectiveness of such Potential *Force Majeure* Event.

A Cumulative *Force Majeure* Event occurs in a Settlement period when the cumulative reduction in that Settlement Period of energy actually generated by affected generation units in Ontario the output of which is Effectively Controlled by OPGI caused by Potential *Force Majeure* Events exceeds 500,000 MWh when compared to the sum of such affected units' Hourly Unit Quantities during the effectiveness of such Potential *Force Majeure* Events. OPGI will, where applicable, designate with

15 days following the end of the applicable Settlement Period that portion of Potential *Force Majeure* Events that is in excess of 500,000 MWh and that qualifies as a Cumulative *Force Majeure* Event.

A Potential *Force Majeure* Event, or a portion of a Potential *Force Majeure* Event, that qualifies as both an Isolated *Force Majeure* Event or a Cumulative *Force Majeure* Event may at the discretion of OPGI within 15 days following the end of the applicable Settlement Period be designated as either type of *Force Majeure* Event, but not as both, and, for greater certainty, a Potential *Force Majeure* Event designated as one type of *Force Majeure* Event by OPGI shall not be treated for purposes of determining whether the other type of *Force Majeure* Event has occurred.

(iii) *Force Majeure* Adjustment

The *Force Majeure* Adjustment (FMA) in respect of any Settlement Period shall be equal to the sum, for all generation units the output of which is Effectively Controlled by OPGI subject to *Force Majeure* Events, of the *Force Majeure* Replacement Cost (FMRC<sub>h</sub>) in respect of each applicable unit for each hour during the effectiveness of each *Force Majeure* Event in respect of such unit during the Settlement Period, less any insurance or other recovery in respect of such loss or deemed loss. The *Force Majeure* Adjustment in respect of any Settlement Period for each generation unit the output of which is Effectively Controlled by OPGI whose generation is reduced as a consequence of a *Force Majeure* Event shall be calculated pursuant to the following formula, prior to any recovery adjustment:

$$\sum_h [q_h^i * FMRC_h * ((Capacity - Reduced Capacity_h)/Capacity)]$$

where:

Capacity = the maximum continuous rating of the unit at the time of the *Force Majeure* Event (at normal head for hydroelectric generation units); and

Reduced Capacity<sub>h</sub> = the reduced capacity in an hour of the unit as a consequence of and during the effectiveness of the *Force Majeure* Event.

(iv) Adjustment to *Force Majeure* Replacement Cost

In the event that over 2,000 MW of OPGI generating capacity the output of which is Effectively Controlled by OPGI qualifies for a particular *Force Majeure* Event, OPGI shall have the right to petition the Board to increase the amount of the *Force Majeure* Replacement Cost in respect of one or more affected unit(s) in the applicable hours, which petition shall be granted if OPGI can demonstrate to the Board's satisfaction higher incremental replacement costs (net of any variable costs avoided as a consequence of the *Force Majeure* Event) than those set forth in the Model Output Data.

(v) Notice

OPGI shall promptly notify the IMO of any *Force Majeure* Event claimed by OPGI and shall provide the IMO with all information reasonably required to verify the *Force Majeure* Event and to calculate the *Force Majeure* Adjustment.

3 Conduct of OPGI

OPGI may engage in unilateral actions to attempt to maintain Hourly prices at levels that will result in the Average Price for a Settlement Period equaling the Price Cap, plus all adjustments provided for in Part 3, Section 2 above. In the event that unilateral actions taken by OPGI cause the Average Price to exceed such a level, the sole remedy shall be for OPGI to pay the Rebate as provided for in paragraph 2 of Part 3 above.

4. Reduction to CRQ and  $Q_h$  Upon Decontrol

(a) *Unadjusted Reductions*

Except as may be provided in (b) below, in the event that OPGI completes the transfer of Effective Control over the output of a generation unit, as determined by the Board under Part 4, then  $Q_h$  for each hour in respect of the current and any subsequent Settlement Period shall be reduced by 110 percent of the  $q_h^i$  of the transferred unit for each hour subsequent to the completion of the transfer. As a result, the CRQ in respect of each applicable Settlement Period shall be reduced by these reductions in  $Q_h$ .

(b) *Adjustment Necessitated by Environmental Laws*

In the event that OPGI transfers Effective Control over the output of a generation unit and the transferee, at the date of completion of the transfer, does not have and cannot reasonably obtain sufficient environmental emission permits or other environmental authorizations ("emission permits"), in respect of the applicable hours in the period commencing following the completion of the transfer of Effective Control (the "applicable hours"), to enable the unit's potential output during the applicable hours (the "transferred permitted output") to meet or exceed 110 percent times the sum for the applicable hours of the  $q_h^i$  of such unit (the "transferred output"), whether as the result of a change in environmental laws or otherwise, then:

- (i) any adjustment to  $Q_h$  and CRQ otherwise provided for in (a) above will be reduced by the proportion that the transferred permitted output is of the transferred output, subject to (ii) below;
- (ii) in circumstances where OPGI's remaining emission permits following the transfer of Effective Control are not sufficient to enable its remaining output during the applicable hours (the "remaining permitted output") to meet or exceed 110 percent times the sum for the applicable hours of the  $q_h^i$ 's of its remaining units, (the "remaining output"), then, in lieu of the adjustment provided for in (i) above, any adjustment to  $Q_h$  and CRQ otherwise provided for in (a) above will be multiplied by the result of the following formula, which if greater than 1.0 shall be deemed to be equal to 1.0:

$$\frac{(\text{transferred permitted output} / \text{transferred output})}{(\text{remaining permitted output} / \text{remaining output}); \text{ and}}$$

- (iii) where the transferee's emission permits are affected by more than one substance, then the resulting adjustment to  $Q_h$  and CRQ otherwise provided for in (i) or (ii) above will be that which operates to constrain the transferee's output.

5. *Administration of Rebate*

OPGI shall enter into and comply with a settlement agreement with the IMO consistent with the document attached as Schedule A to this licence.

## 6. Capacity Reserve Market

In the event that a capacity reserve market is developed in Ontario at any time while the provisions of Part 3 are in effect, then:

- (a) the following definition of "Average Price" or "AP" shall be used in lieu of the definition provided for in paragraph 1 of Part 3 above:

"Average Price" or "AP" is the price against which the Price Cap is compared to determine whether a Rebate is required in respect of a Settlement Period. The Average Price is determined by using the following formula:

AP =

$$\frac{\sum [CWh_h * [P_h + (\text{Hourly Reserve Capacity Price} * \text{Reserve Capacity Ratio})]]}{\text{CRQ}}$$

- (b) the Price Spike Adjustment shall be calculated according to the following formula in lieu of the formula provided for in paragraph 2(b) of Part 3 above:

$$PSA = [(P_h + \text{Hourly Reserve Capacity Price} * \text{Reserve Capacity Ratio}) - \$125/\text{MWh}] * (Q_h - \text{OPGI's Generation for that hour});$$

- (c) OPGI may apply to the Board for adjustments to (a) or (b) above if necessary or desirable depending upon the precise nature of the capacity reserve market introduced.

## 7. Location-Based Marginal Pricing

In the event that location-based marginal pricing is developed in Ontario at any time while the provisions of Part 3 are in effect, then:

- (a) the following definition of "Average Price" or "AP" shall be used in lieu of the definition provided for in paragraph 1 of Part 3 above:

"Average Price" or "AP" is the price against which the Price Cap is compared to determine whether a Rebate is required in respect of a Settlement Period. The Average Price is determined by using the following formula:

AP =

$$\frac{\sum (L_i * q_i)}{\text{CRQ}}$$

- (b) the Hourly Price, or  $P_h$ , for purposes of determining if a price spike has occurred and in order to calculate the Price Spike Adjustment in each applicable hour, shall be the average price of energy OPGI sells into the IMO spot market in that hour, which average price shall be determined by dividing OPGI's hourly spot market revenue in \$ by the quantity (calculated in MWh) of OPGI's spot market sales; and
- (c) OPGI may apply to the Board for adjustments to (a) or (b) above if necessary or desirable depending upon the precise nature of the location-based marginal pricing introduced.

#### 8. Capacity Reserve Market and Location-Based Marginal Pricing

In the event that both a capacity reserve market and location-based marginal pricing are developed in Ontario at any time while the provisions of Part 3 are in effect, then:

- (a) the following definition of "Average Price" or "AP" shall be used in lieu of the definitions provided for in paragraphs 1, 6 or 7 of Part 3 above:

"Average Price" or "AP" is the price against which the Price Cap is compared to determine whether a Rebate is required in respect of a Settlement Period. The Average Price is determined by using the following formula:

AP =

$$\sum_h [CW_h * (\text{Hourly Reserve Capacity Price} * \text{Reserve Capacity Ratio})]$$

$$+ \sum_{h,i} (\text{Locational Spot Price} * q_{h,i}^i) / CRQ$$

- (b) the Price Spike Adjustment shall be calculated according to the following formula in lieu of the formula provided for in paragraphs 2(b) or 6 of Part 3 above:

$$PSA = [(\text{Hourly Reserve Capacity Price} * \text{Reserve Capacity Ratio}) + \sum_i ((\text{Locational Spot Price} * q_{h,i}^i) / Q_h) - \$125/\text{MWh}]$$

$$* (Q_h - \text{OPGI's Generation for that hour});$$

- (c) OPGI may apply to the Board for adjustments to (a) or (b) above if necessary or desirable depending upon the precise nature of the capacity reserve market or location-based marginal pricing introduced.

#### 9. Additional Adjustment for Changes in Law

If one or more Changes in Law cause or are reasonably expected to cause a decrease in OPGI's net annual income equal to or greater than \$60,000,000, then, rather than treating such Changes in Law as a *Force Majeure* Event for purposes of paragraph 2 above, OPGI may apply to the Board for a variation in the CRQ, Rebate, and/or the Price Cap methodology in respect of the Settlement Period in which the Change in Law occurs and all subsequent Settlement Periods the Change in Law is reasonably expected to affect in order to ensure that OPGI is not materially adversely affected as a result, taking into account all Changes in Law and whether the net effect of these Changes in Law have benefited or are reasonably likely to benefit OPGI during the same time period or any prior or subsequent time period.

#### 10. Termination of Part 3

Upon the date that is 4 years after the competitive electricity market opens, the provisions of Part 3 shall terminate, subject to the following. In the event that the Board determines that the transfer of sufficient Effective Control referred to in paragraph 3 of Part 4 hereof shall have occurred prior to the fourth year after the competitive electricity market opens, then the provisions of Part 3 shall terminate commencing on the date of such determination without prejudice to the payment of Rebates, if applicable, in respect of any preceding period.

### PART 4. TRANSFER OF EFFECTIVE CONTROL

#### 1. 42-Month Decontrol Review

- (a) OPGI shall provide information to the Board as soon as practicable following the date which is 42 months after the competitive electricity market opens or, at OPGI's discretion, at an earlier date in order that the Board may determine whether or not:
- (i) OPGI has completed the transfer of Effective Control over the output of one or more in service Tier 2 generation units such that OPGI's Effective Control over total in service Tier 2 capacity will be 35 percent or less, provided that:
- (A) for purposes of this determination, OPGI may, at its discretion, substitute the transfer of Effective Control over up to 1000 MW of in service hydroelectric



generation for the transfer of Effective Control over in service Tier 2 capacity. In such event, the amount of in service Tier 2 capacity over which OPGI is deemed to have Effective Control shall be reduced by the amount of hydroelectric generation Effective Control over which was transferred by OPGI;

- (B) OPGI's firm purchase contracts for energy generated outside Ontario to be delivered into Ontario for periods of one year or more, including any automatic renewals or renewals at OPGI's option, shall be considered to be in service Tier 2 capacity over which OPGI has Effective Control for such purposes; and
  - (C) a transfer of Effective Control of output shall be considered not to have occurred if the Board determines that either of the circumstances set forth in paragraph (b) below apply;
- (ii) OPGI has completed the transfer of Effective Control over the output of one or more in service Tier 2 generation units representing at least 4000MW of in service Tier 2 capacity, provided that:
- (A) for purposes of this determination, OPGI may, at its discretion, substitute the transfer of Effective Control over up to 1000 MW of in service hydroelectric generation for the transfer of Effective Control over an equivalent amount of in service Tier 2 capacity; and
  - (B) a transfer of Effective Control over output shall be considered not to have occurred if the Board determines that either of the circumstances set forth in (b) below apply; and
- (iii) OPGI has developed a plan (including intermediate milestones) for transferring Effective Control over enough of its in service Tier 1 and Tier 2 capacity such that by the end of the tenth year after the competitive electricity market opens OPGI's Effective Control over total in service Tier 1 and Tier 2 capacity will be 35 percent or less, as outlined in paragraph 3 below.
- (b) The circumstances referred to in (a) above are:

- (i) if any transferee had or obtained, as a result of the transfer, Effective Control over approximately 25 percent or more of either:
    - A) total in service Tier 2 capacity; or
    - (B) total in service Tier 1 and Tier 2 capacity;in each case at the time of completion of any transfer; or
  - (ii) if there existed or exist any on-going arrangements which facilitate interdependent behaviour between OPGI or a subsidiary of OPGI and the transferee.
- (b) If the Board determines that Effective Control has or has not been so transferred in such circumstances, such determination shall also apply for the purposes of the same determination at a later date under this Part.

## 2. 7 Year Review

OPGI shall provide information to the Board as soon as practicable following the date which is 7 years after the competitive electricity market opens in order that the Board may review OPGI's progress towards satisfying the intermediate milestones identified in the plan, if any, referred to in clause 1(a)(iii) above, or, in the absence of such plan, OPGI's progress towards transferring Effective Control over the output of enough of its in service Tier 1 and Tier 2 capacity such that by the end of the tenth year after the competitive electricity market opens OPGI's Effective Control over total in service Tier 1 and Tier 2 capacity will be 35 percent or less, as outlined in paragraph 3 below.

## 3. Achievement of 10-Year Plan

- (a) OPGI shall provide information to the Board as soon as practicable following the date which is 10 years after the competitive electricity market opens or, at OPGI's discretion, at an earlier date in order that the Board may determine whether or not OPGI has completed the transfer of Effective Control over the output of enough of its in service Tier 1 and Tier 2 capacity such that OPGI's Effective Control over total in service Tier 1 and Tier 2 capacity is 35 percent or less, provided that a transfer of Effective Control over output shall be considered not to have occurred if the Board determines that either of the circumstances set forth in (b) below apply.
- (b) The circumstances referred to in (a) above are:

- (i) if any transferee had or obtained, as a result of the transfer, Effective Control over approximately 25 percent or more of total in service Tier 1 and Tier 2 capacity at the time of completion of any transfer; or
- (ii) if there existed or exist any on-going arrangements which facilitate interdependent behaviour between OPGI or a subsidiary of OPGI and the transferee.

#### 4. OPGI Application

(a) OPGI may apply to the Board for:

- (i) a determination of whether a specific transaction by OPGI represents the transfer of Effective Control over the output of a generation unit; and
- (ii) confirmation of:
  - (A) the appropriate adjustments, if any, to the CRQ and the  $Q_h$  in accordance with paragraph 4 of Part 3 (no adjustments shall be made in the circumstances set forth in paragraph (b) below);
  - (B) subject to paragraph (b) below, the amount of output in respect of which a transfer of Effective Control has occurred; and
  - (C) subject to paragraph (b) below, the associated Tier of such output.

(b) A transfer of Effective Control of output shall be considered not to have occurred if the Board determines that:

- (i) the transferee has or obtains, as a result of the transfer, Effective Control over approximately 25 percent or more of either:
  - (A) total in service Tier 2 capacity; or
  - (B) total in service Tier 1 and Tier 2 capacity;
 in each case at the time of completion of the transfer; or
- (ii) there exist any on-going arrangements which facilitate interdependent behaviour between OPGI or a subsidiary of OPGI and the transferee.

- (c) If the Board determines that Effective Control has or has not been so transferred in such circumstances, such determination shall also apply for the purposes of the same determination at a later date under this Part.

## 5. Reports

OPGI shall file a report annually with the Board in confidence commencing in the fifth year and terminating in the ninth year, in each case inclusive, following the opening of the competitive electricity market, within 90 days following the end of each anniversary of the opening of the competitive electricity market, with respect to its progress towards the decontrol target set out in clause 3(a) above, indicating the specific actions taken by OPGI in the previous 12 months and its plans for the upcoming 12 months to progress towards meeting such target, provided that the provision of information referred to in paragraph 2 above shall constitute the report in the seventh year.

## PART 5. INBOUND TRANSMISSION RIGHTS AND IMPORT LIMITS

### 1. Definitions and Interpretation

In this Part 5, "season" means the winter period (the "winter season") from and including November 1 until and including April 30 of the following year or the summer period (the "summer season") from and including May 1 until and including October 31 of the same year, as applicable.

### 2. Inter-tie and Import Limits

(a) OPGI shall not import energy into Ontario in excess of the energy import limits set forth in (b) below. In no event shall a purchase from the IMO spot market in Ontario be construed as an import of energy into Ontario for such purposes.

(b) The energy import limits referred to in (a) above are:

(i) 7.24 TWh during the winter season (increased to 7.28 TWh in a leap year); and

(ii) 6.58 TWh during the summer season;

all of which figures shall be increased, at the in service date of new or upgraded inter-tie facilities, by 35 percent times the number of hours in a season multiplied by any applicable net increase in inter-tie capacity in Ontario as determined by the IMO from that in effect on the date of the opening of the competitive electricity market. For such purposes, inter-tie capacity shall be based on the Ontario transfer capacity in the applicable season.

(c) The foregoing provisions of paragraph 2 shall not be required to be complied with by OPGI with the IMO's consent in an emergency situation.

### 3. Export Limits

Unless otherwise provided herein, none of the provisions of Parts 3 through 6 shall limit OPGI's ability to export energy from Ontario.

## PART 6. MARKET BASED ANCILLARY SERVICES

(Note: Market based ancillary services are currently comprised of Operating Reserves only, but the principles outlined herein suggest a framework that could be used for other market based ancillary services.)

Unless the IMO has determined, based on the number of independently controlled competing alternatives and other circumstances in its discretion, that a competitive market for any category of operating reserves (i.e. 10-minute and 30-minute) exists, OPGI shall be required to comply with the following requirements:

- (a) the price to be bid by OPGI associated with each category of OPGI operating reserve services will not exceed a cap to be contained in an agreement to be negotiated between OPGI and the IMO, which bid cap will be designed, taking into account the relevant IMO market rules, to compensate OPGI for its actual cost of providing such operating reserve services, including additional operating and maintenance costs, additional fuel costs, additional opportunity costs associated with providing such operating reserve services from OPGI hydroelectric generation units, and a reasonable rate of return on incremental capital needed to provide such operating reserve services, and which agreement shall require OPGI to bid the maximum available amount of each category of operating reserve services, consistent with good utility practices, for each OPGI generation unit capable of providing such services;
- (b) in the event that the agreement referred to in (a) above cannot be reached, the terms of such agreement shall be determined through binding commercial arbitration by a mutually agreed independent arbitrator on agreed terms of arbitration;
- (c) in the event that either OPGI or the IMO subsequently determines that the operation of the market is such that the intent of the agreement referred to in (a) or (b) above is materially frustrated, then OPGI and the IMO shall negotiate amendments (which may be retroactive) to the terms of such agreement with a view to correcting such situation and, in the event that they cannot agree on such amendments, the amendments, if any, shall be determined through binding commercial arbitration by a mutually agreed independent arbitrator on agreed terms of arbitration;

- (d) OPGI shall comply with the terms of the agreement referred to in (a) or (b) above, as it may be amended under (c) above;
- (e) pending reaching an agreement, or pending the resolution of any dispute, the IMO may at any time set the bid cap and terms on which OPGI must provide any category of operating reserve services, subject to later adjustment upon final agreement or final resolution of the dispute with interest at the Prime Rate, calculated and accrued daily; and
- (f) if the IMO's market rules at any time are such that the market clearing price for a category of operating reserve services does not include both the bid price and the opportunity cost of the marginal unit providing the service, and the agreement referred to in (a) or (b) above has not taken such factors into account, then the agreement referred to in (a) or (b) above shall be considered to have been materially frustrated for purposes of (c) above.

## SCHEDULE A

### TERMS AND CONDITIONS OF SETTLEMENT AGREEMENT BETWEEN IMO & OPGI

For these purposes, terms with initial capitals not otherwise defined herein shall have the meanings ascribed thereto in paragraph 1 of Part 3 of the licence conditions of OPGI or the IMO's market rules, as applicable.

OPGI will be required to rebate annually to the IMO. As soon as practicable and preferably within 15 days following the final settlement of transactions which occurred during each Settlement Period, the IMO shall calculate the Rebate and notify OPGI of such calculated Rebate.

If OPGI agrees with the IMO's calculation then, within 30 days of being notified, OPGI will be required to pay such Rebate, if any, to the IMO. If OPGI does not agree with the IMO's calculation and the parties can agree within a further 30 days on a revised Rebate, then, within 30 days of so agreeing, OPGI will be required to pay the agreed revised Rebate, if any, to the IMO. If OPGI does not agree with the IMO's calculation and the parties cannot agree on a revised Rebate within such further 30 day period, then the matter shall be finally determined by arbitration by the Dispute Resolution Panel of the IMO, and, within 30 days of such final determination, OPGI will be required to pay the finally determined Rebate, if any, to the IMO. The initially calculated, agreed revised, or finally determined Rebate, as applicable, shall be the Rebate in respect of such Settlement Period for all purposes hereof. Unless the Rebate is paid within 30 days of the IMO notifying OPGI, interest at the Prime Rate, calculated and accrued daily, from such 30<sup>th</sup> day until the date of payment to the IMO will in all cases be added to (and based upon) the final Rebate owing.

The Rebate, if any, shall be paid by the IMO on the next settlement date following the receipt of payment from OPGI. The payment shall be allocated among Metered Market Participants in Ontario in respect of Registered Wholesale Meters (other than Intertie Registered Wholesale Meters) as at the end of the month in which receipt of payment from OPGI occurs (the "Ontario payees"), as follows. The Rebate shall be divided among all Ontario payees on the following basis:

- (a) in the event that the Rebate in respect of the applicable Settlement Period is less than \$10 million, then such Rebate shall be retained by the IMO and applied by it to reduce the IMO uplift in respect of the next following



billing period (or periods, if any balance remains), as reasonably determined by the IMO; and

- (b) where paragraph (a) is not applicable, the Rebate shall be allocated to all Ontario payees on the basis of their pro rata portions of the energy delivered to all Registered Wholesale Meters (other than Intertie Registered Wholesale Meters) (or replaced such meters) of such Ontario payees (or their predecessors) during the applicable Settlement Period.

Nothing shall preclude agreements that require the purchaser to return the rebate or any portion thereof to OPGI or any other party.

The Settlement Agreement may also include the following terms:

- Definitions and Interpretation
- Notice by OPGI to IMO of Payment and Non-Payment
- Appropriate limitations of liability
- IMO shall recover its reasonable rebate administration expenses through its fees
- Appropriate indemnification provisions
- IMO to act on its own behalf and as agent for Ontario Metered Market Participants entitled to rebates to the extent of their interests, and such Metered Market Participants are entitled, provided that they give a satisfactory funded indemnity to the IMO, to enforce, by arbitration, the Settlement Agreement directly against OPGI if desired, with reasonable assistance to be provided by IMO at their expense
- IMO may assign agreement to a qualified replacement upon approval of OEB. No other assignments without consent of other party and OEB
- IMO may subcontract any duties required of it
- Fund transfer instructions, which may be changed on notice to OPGI by IMO
- Arbitration clause with Dispute Resolution Panel as arbitrator

- Recipient registrants responsible for all taxes, if any
- Any interest earned on funds by IMO shall be paid to recipient registrants similarly to other funds
- IMO not to be viewed as in conflict in any respect as a result of its participation in the Settlement Agreement
- IMO may hold funds on deposit with a Canadian financial institution or in short-term obligations of the federal or Ontario government or any Canadian financial institution
- IMO may, but shall not be obliged to, retain and refrain from distributing any funds in the event of any dispute, and may seek advice from the Dispute Resolution Panel
- Termination of agreement when OPGI Rebate obligations terminate and all funds distributed or applied. OPGI/IMO indemnification obligations and third party enforcement rights to survive termination, former indefinitely and latter for 2 years only
- IMO may rely on any document which it believes to be genuine and on the advice of counsel, if it acts in good faith
- IMO not responsible for any non-payment by OPGI
- Binding on successors and permitted assigns
- Notice clause
- Only may be amended in writing
- Governed by the laws of Ontario
- Counterparts clause
- Further assurances clause

## APPENDIX B

### LICENCE CONDITIONS FOR THE IMO

#### PART 3. OTHER

##### 1. Administration of Rebate

The IMO shall enter into and comply with a settlement agreement with OPGI consistent with the document attached as Schedule A to this licence.

##### 2. Access

The IMO shall use all reasonable efforts consistent with the purposes of the *Electricity Act, 1998*, including by seeking to make appropriate amendments to the market rules related to transmission service and connection and access to the IMO-controlled grid, to ensure that Ontario generators have access to customers in interconnected jurisdictions equivalent to the access afforded to generators in those other jurisdictions.

##### 3. Market Power Mitigation Monitoring

The Market Surveillance Panel of the IMO shall, in carrying out its duties under the *Electricity Act, 1998* and the market rules, have due regard to the conditions of licence of OPGI and, in particular, paragraph 3 of Part 3 of the licence of OPGI.

##### 4. Confidentiality

Subject to the IMO's market rules and applicable law, the IMO shall use its reasonable efforts to ensure that it maintains all data contained in the Model Output Data that represents  $q_h^i$  data or  $FMRC_h$  data in confidence (with all such terms having the meanings ascribed thereto in paragraph 1 of Part 3 of OPGI's licence).

##### 5. Market Based Ancillary Services

(Note: Market based ancillary services are currently comprised of Operating Reserves only, but the principles outlined herein suggest a framework that could be used for other market based ancillary services.)

Unless the IMO has determined, based on the number of independently controlled competing alternatives and other circumstances in its discretion, that a competitive market for any category of operating reserves (i.e. 10 minute and 30 minute) exists, the IMO shall be required to comply with the following requirements:

- (a) the price to be bid by OPGI associated with each category of OPGI operating reserve services will not exceed a cap to be contained in an agreement to be negotiated between OPGI and the IMO, which bid cap will be designed, taking into account the relevant IMO market rules, to compensate OPGI for its actual cost of providing such operating reserve services, including additional operating and maintenance costs, additional fuel costs, additional opportunity costs associated with providing such operating reserve services from OPGI hydroelectric generation units, and a reasonable rate of return on incremental capital needed to provide such operating reserve services, and which agreement shall require OPGI to bid the maximum available amount of each category of operating reserve services, consistent with good utility practices, for each OPGI generation unit capable of providing such services;
- (b) in the event that the agreement referred to in (a) above cannot be reached, the terms of such agreement shall be determined through binding commercial arbitration by a mutually agreed independent arbitrator on agreed terms of arbitration;
- (c) in the event that either OPGI or OMI subsequently determines that the operation of the market is such that the intent of the agreement referred to in (a) or (b) above is materially frustrated, then OPGI and the IMO shall negotiate amendments (which may be retroactive) to the terms of such agreement with a view to correcting such situation and, in the event that they cannot agree on such amendments, the amendments, if any, shall be determined through binding commercial arbitration by a mutually agreed independent arbitrator on agreed terms of arbitration;
- (d) the IMO shall comply with the terms of the agreement referred to in (a) or (b) above, as it may be amended under (c) above;
- (e) pending reaching an agreement, or pending the resolution of any dispute, the IMO may at any time set the bid cap and terms on which OPGI must

provide any category of operating reserve services, subject to later adjustment upon final agreement or final resolution of the dispute with interest at the Prime Rate, calculated and accrued daily; and

- (f) if the IMO's market rules at any time are such that the market clearing price for a category of operating reserve services does not include both the bid price and the opportunity cost of the marginal unit providing the service, and the agreement referred to in (a) or (b) above has not taken such factors into account, then the agreement referred to in (a) or (b) above shall be considered to have been materially frustrated for purposes of (c) above.

## SCHEDULE A

### TERMS AND CONDITIONS OF SETTLEMENT AGREEMENT BETWEEN IMO & OPGI

For these purposes, terms with initial capitals not otherwise defined herein shall have the meanings ascribed thereto in paragraph 1 of Part 3 of the licence conditions of OPGI or the IMO's market rules, as applicable.

OPGI will be required to rebate annually to the IMO. As soon as practicable and preferably within 15 days following the final settlement of transactions which occurred during each Settlement Period, the IMO shall calculate the Rebate and notify OPGI of such calculated Rebate.

If OPGI agrees with the IMO's calculation then, within 30 days of being notified, OPGI will be required to pay such Rebate, if any, to the IMO. If OPGI does not agree with the IMO's calculation and the parties can agree within a further 30 days on a revised Rebate, then, within 30 days of so agreeing, OPGI will be required to pay the agreed revised Rebate, if any, to the IMO. If OPGI does not agree with the IMO's calculation and the parties cannot agree on a revised Rebate within such further 30 day period, then the matter shall be finally determined by arbitration by the Dispute Resolution Panel of the IMO, and, within 30 days of such final determination, OPGI will be required to pay the finally determined Rebate, if any, to the IMO. The initially calculated, agreed revised, or finally determined Rebate, as applicable, shall be the Rebate in respect of such Settlement Period for all purposes hereof. Unless the Rebate is paid within 30 days of the IMO notifying OPGI, interest at the Prime Rate, calculated and accrued daily, from such 30<sup>th</sup> day until the date of payment to the IMO will in all cases be added to (and based upon) the final Rebate owing.

The Rebate, if any, shall be paid by the IMO on the next settlement date following the receipt of payment from OPGI. The payment shall be allocated among Metered Market Participants in Ontario in respect of Registered Wholesale Meters (other than Intertie Registered Wholesale Meters) as at the end of the month in which receipt of payment from OPGI occurs (the "Ontario payees"), as follows. The Rebate shall be divided among all Ontario payees on the following basis:

- (a) in the event that the Rebate in respect of the applicable Settlement Period is less than \$10 million, then such Rebate shall be retained by the IMO and applied by it to reduce the IMO uplift in respect of the next following

billing period (or periods, if any balance remains), as reasonably determined by the IMO; and

- (b) where paragraph (a) is not applicable, the Rebate shall be allocated to all Ontario payees on the basis of their pro rata portions of the energy delivered to all Registered Wholesale Meters (other than Intertie Registered Wholesale Meters) (or replaced such meters) of such Ontario payees (or their predecessors) during the applicable Settlement Period.

Nothing shall preclude agreements that require the purchaser to return the rebate or any portion thereof to OPGI or any other party.

The Settlement Agreement may also include the following terms:

- Definitions and Interpretation
- Notice by OPGI to IMO of Payment and Non-Payment
- Appropriate limitations of liability
- IMO shall recover its reasonable rebate administration expenses through its fees
- Appropriate indemnification provisions
- IMO to act on its own behalf and as agent for Ontario Metered Market Participants entitled to rebates to the extent of their interests, and such Metered Market Participants are entitled, provided that they give a satisfactory funded indemnity to the IMO, to enforce, by arbitration, the Settlement Agreement directly against OPGI if desired, with reasonable assistance to be provided by IMO at their expense
- IMO may assign agreement to a qualified replacement upon approval of OEB. No other assignments without consent of other party and OEB
- IMO may subcontract any duties required of it
- Fund transfer instructions, which may be changed on notice to OPGI by IMO
- Arbitration clause with Dispute Resolution Panel as arbitrator

- Recipient registrants responsible for all taxes, if any
- Any interest earned on funds by IMO shall be paid to recipient registrants similarly to other funds
- IMO not to be viewed as in conflict in any respect as a result of its participation in the Settlement Agreement
- IMO may hold funds on deposit with a Canadian financial institution or in short-term obligations of the federal or Ontario government or any Canadian financial institution
- IMO may, but shall not be obliged to, retain and refrain from distributing any funds in the event of any dispute, and may seek advice from the Dispute Resolution Panel
- Termination of agreement when OPGI Rebate obligations terminate and all funds distributed or applied. OPGI/IMO indemnification obligations and third party enforcement rights to survive termination, former indefinitely and latter for 2 years only
- IMO may rely on any document which it believes to be genuine and on the advice of counsel, if it acts in good faith
- IMO not responsible for any non-payment by OPGI
- Binding on successors and permitted assigns
- Notice clause
- Only may be amended in writing
- Governed by the laws of Ontario
- Counterparts clause
- Further assurances clause



## APPENDIX C

### LICENCE CONDITIONS FOR OHSCI

#### PART 3. INTER-TIE EXPANSION

##### 1. Inter-tie Expansion

OHSCI shall use its best efforts to expand inter-tie capacity to neighbouring jurisdictions by approximately 2000 MW within 36 months of the date the competitive electricity market opens. This licence condition in no way limits the obligation on OHSCI to obtain all necessary approvals including leave of the Board under section 92 of the Act, where such leave is required.

##### 2. Inter-tie Expansion Review

OHSCI shall provide information to the Board as soon as practicable following the date which is 36 months after the competitive electricity market opens or at an earlier date in order that the Board may determine whether or not, as of the end of such 36 month period, OHSCI has used its best efforts to expand inter-tie capacity to neighbouring jurisdictions by approximately 2000 MW.

## APPENDIX D

LICENCE CONDITIONS FOR PERSONS LICENSED TO UNDERTAKE AN  
ACTIVITY DESCRIBED IN CLAUSE 57(A), CLAUSE 57(D) OR CLAUSE 57(F) OF  
THE ONTARIO ENERGY BOARD ACT, 1998

## 1. Pass-Through of Rebate

Prompt pass-throughs, with the normal bill delivered in respect of the month in which the rebate amount was received, of any rebate received from the IMO, together with interest at the Prime Rate, calculated and accrued daily, on such amount from the date of receipt, will be required by the licensee so that its ultimate customers in Ontario benefit *pro rata* on the basis of energy consumed.

If requested in writing by OPGI, such licensee shall ensure that all rebates are identified as coming from OPGI in the following form on or with each applicable bill:

"ONTARIO POWER GENERATION INC. rebate"

Any rebate amount which cannot be distributed as provided above shall be promptly returned to the IMO, together with interest at the Prime Rate, calculated and accrued daily, on such amount from the date of receipt, for use to offset the IMO uplift.

Nothing shall preclude agreements that require the purchaser to return the rebate or any portion thereof to the seller or any other party.

Pending pass-through or return to the IMO of any rebate received, the licensee shall hold the funds received in trust for the beneficiaries thereof in a segregated account.