

#### SENT BY ELECTRONIC MAIL AND BY COURIER

March 1, 2013

Ms. Kirsten Walli Board Secretary Ontario Energy Board 2300 Yonge Street, 27<sup>th</sup> Floor Toronto, ON M4P 1E4

Dear Ms. Walli:

Independent Electricity System Operator Station A, Box 4474 Toronto, Ontario M5W 4E5 t 905 855 6100

www.ieso.ca

# Re: Application by the Independent Electricity System Operator for Licence Renewal El-2008-0096

The Independent Electricity System Operator (the "IESO") is currently licensed by the Ontario Energy Board (the "Board") under Licence El-2008-0096. The Licence is due to expire on July 30, 2013. Accordingly, the IESO hereby applies under section 60 of the *Ontario Energy Board Act*, *1998* (the "Act") for a renewal of its current licence authorizing the IESO to continue to direct the operation of transmission systems in Ontario and to operate the market established by the Market Rules as specified in sub-sections 57(g) and (h) of the Act.

#### A. The Applicant

. . . . . . .

The IESO was established on April 1999 and has been continued as a corporation without share capital pursuant to Part II and section 4 of the *Electricity Act*, 1998. The objects of the IESO are set out in section 5 of the *Electricity Act*, 1998 and include,

- "s. 5(1)(c) to direct the operation and maintain the reliability of the IESO-controlled grid to promote the purposes of [the Electricity Act];
  - (d) to participate in the development by any standards authority of standards and criteria relating to the reliability of transmission systems;
  - (g) to operate the IESO-administered markets to promote the purposes of [the Electricity Act]

Under section 32(1) of the *Electricity Act*, 1998, the IESO may make rules governing the IESOcontrolled grid and establishing and governing markets related to electricity and ancillary services.

#### B. The Application

The IESO is applying for a renewal of its current Licence, El-2008-0096, under section 60 of the Act to exercise the powers and perform the duties of the IESO under the *Electricity Act*, 1998.

After more than ten years of operation, the Ontario electricity market has proven to be sustainable as it continues to evolve and attract new entrants. The continuation of the Ontario electricity market requires the IESO to operate the market and maintain reliability of the electricity grid (pursuant to sections 5 (b) and (g) of the *Electricity Act*, 1998). Further, the IESO's role in developing reliability standards (pursuant to section 5(d) of the *Electricity Act*, 1998) is increasingly important with the renewed focus on consistent and mandatory reliability standards across North America.

#### **Licence** Term

The IESO requests that the Board renew the IESO's license for a twenty- year period in the form attached as Appendix "A", effective July 31, 2013.

Historically, the IESO's license has been renewed for five-year terms. Given that the IESO's mandate and core responsibilities have not changed over the past ten years, a longer term is appropriate and would reduce administrative costs associated with licence processing. Twenty-year terms are standard for many transmitters and generators who are licenced by the OEB to participate in Ontario's electricity market. Further, the OEB has the authority to amend the IESO's licence at any time if conditions change.

#### **Removing Condition related to Interim Licences**

Section 5.2 of the current licence includes a condition that originated from a Ministerial Directive issued to the Board on March 24, 1999 (O.C. No. 600/99). This licence condition was applicable to interim and transitional licences only. The IESO's first licence issued in 1999 was a transitional licence and, as such, the condition applied. However, the interim licence condition ceased to apply once the IESO received a permanent licence in 2003. Therefore, the IESO requests that section 5.2 be removed from its licence.

Further, this interim licence condition in section 3 of the O.C. applies to a licence under section 129 of the *Ontario Energy Board Act*, 1998. However, section 129 was repealed in 2003.

#### **Additional Editorial Changes**

The IESO is proposing changes to definitions such that they conform to the definitions in the *Electricity Act*, 1998, along with other minor editorial changes. The proposed changes and rationale are set out in Appendix "A" to this letter.

#### **Other Considerations**

There are several other licence conditions (sections 14, 16 and 17) that were included through a Ministerial Directive issued to the Board on March 24, 1999 (O.C. No. 600/99). The IESO understands that any changes to, or removal of these sections would require another Ministerial Directive. In the event a Ministerial Directive enabled changes to sections 14, 16, 17, the IESO would seek corresponding licence amendments. These sections are described below.

- (i) Section 14 and Schedules A and B of the Licence describes the terms and conditions of the settlement agreement relating to the Ontario Power Generation, Inc. (OPGI) rebate that expired in 2009. In addition, Section 17 of the License refers to maintaining the confidentiality of data related to the settlement of the (expired) OPGI rebate.
- (ii) Section 16 in the current Licence refers to the MSP as a panel of the IESO. Under the Electricity Restructuring Act, 2004, the Market Surveillance Panel was continued as a panel of the Board pursuant to subsection 4.3.1(1) of the Act.

#### C. Information about Each Key Individual at the IESO

Information about each officer and director of the IESO is set out in Appendices "B" and "C" to this application.

Earlier this year, Paul Murphy, the IESO's President and Chief Executive Officer, announced that he will retire on April 30, 2013. As the IESO Board of Directors has yet to appoint his successor, Appendices "B" and "C" still reflect Mr. Murphy in these roles. Once his successor is announced, the IESO will advise the Board accordingly.

#### D. Procedural Matters

The number of parties potentially affected by this application is large, including all market participants authorized under the IESO's Market Rules, all transmitters, distributors, retailers, wholesalers and generators in Ontario, as well as any parties in other jurisdictions. To affect individual service of this application on each such person would be very costly. Therefore, the IESO proposes that notice of this application be given by the following means:

- (i) Posting this letter application, including Appendices "A", "B", and "C" on the IESO's website at the "IESO News and Notices" and "Regulatory Affairs" pages;
- (ii) Distributing by electronic mail to all market participants and interested parties who are registered to receive IESO news and other communiques that the letter of application has been posted.

#### E. Contact Information for this Proceeding

The IESO requests that a copy of all documents filed with the Board by each party to this proceeding be served on the IESO's counsel in this proceeding as follows:

(a) The IESO:

Ms. Tam Wagner Senior Analyst, Regulatory Affairs Independent Electricity System Operator

General Counsel and Secretary for the Independent Electricity System Operator

Address for Service:

655 Bay Street, Suite 410 P.O. Box 1 Toronto, ON M5G 2K4

(905) 855-4291

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tam.wagner@ieso.ca

R.D. Roy Stewart

Telephone: Fax: Email address:

(b) The IESO's counsel:

Address for Service:

655 Bay Street, Suite 410 P.O. Box 1 Toronto, ON M5G 4K2

Telephone: Fax: (416) 506-2855(416) 506-2838

Email address:

roy.stewart@ieso.ca

#### F. Freedom of Information Consent

Please find enclosed an executed consent to the collection of information for the purpose of determining the IESO's licence renewal application. A cheque in the amount of \$200 covering the licence application fee will be forwarded shortly.

Please call the undersigned should the Board have any questions about this application.

Yours truly,

R

R.D. Roy Stewart General Counsel and Secretary for the Independent Electricity System Operator

cc: Lynne Anderson, Ontario Energy Board George Dimitropoulos, Ontario Energy Board Tam Wagner, Independent Electricity System Operator





Appendix A: IESO Proposed Changes for Licence Renewal Filed: March 1, 2013

# Independent Electricity System Operator Licence

# EI-2008-0096

Valid Until

July 30, 20<u>33</u>13

Original signed by

Jennifer Lea Counsel, Special Projects Ontario Energy Board Date of Issuance: June 26, 2008 (Corrected October 23, 2008) Effective Date: July 31, 2008

Ontario Energy Board P.O. Box 2319 2300 Yonge Street 27th. Floor Toronto, ON M4P 1E4 Commission de l'énergie de l'Ontario C.P. 2319 2300, rue Yonge 27e étage Toronto ON M4P 1E4

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#### 1. Definitions

In this Licence:

"Act' means the Ontario Energy Board Act, 1998, S.O. 1998, c. 15, Schedule B;

"Ancillary Services" means services necessary to maintain the reliability of the IESOcontrolled grid, including, but not limited to, frequency control, black start capability, voltage control, reactive power, operating reserve and any other such services established by the Market Rules;

"Board" means the Ontario Energy Board;

"Electricity Act' means the Electricity Act, 1998, S.O. 1998, c. 15, Schedule A;

"**IESO-controlled grid**" means the transmission systems with respect to which, pursuant to agreements, the IESO has authority to direct operations

"Licensee" means Independent Electricity System Operator established under the *Electricity Act*, and IESO has the same meaning;

"Market Rules" means the rules made under section 32 of the Electricity Act;

"Market Surveillance Panel" means the panel established by the board of directors of the Licensee pursuant to subsection 13(1) of the *Electricity Act*, Board's management committee pursuant to section 4.3.1 of the *Ontario Energy Board Act*, 1998;

Rationale for the Proposed Change:

<u>Under the Electricity Restructuring Act, 2004, the Market Surveillance Panel was transferred to</u> the OEB from the IESO effective January 1, 2005 pursuant to subsection 4.3.1 of the Ontario Energy Board Act, 1998. This update brings this definition in line with current legislation.

"OPGI" means Ontario Power Generation Inc.

"Regulations' means regulations made under the Act or the Electricity Act,

"Standards Authority" means the North American Electric Reliability Corporation, any successor thereof, or any other agency or body that recommends approves standards or criteria

relating to the reliability of transmission systems;

Rationale for the Proposed Change: To bring the definition in line with the definition used in the Electricity Act, 1998

**"Transmission system**" means a system for transmitting electricity, and includes any structures, equipment or other things used for that purpose;

"**Transmit**" with respect to electricity, means to convey electricity at voltages of more than 50 kilovolts;

"Transmitter" means a person who owns or operates a transmission system;

#### 2. Interpretation

2.1 In this Licence, words and phrases shall have the meaning ascribed to them in the Act or the Electricity Act. Words or phrases importing the singular shall include the plural and vice versa. Headings are for convenience only and shall not affect the interpretation of the <code>4Licence</code>. Any reference to a document or a provision of a document includes an amendment or supplement to, or a replacement of, that document or that provision of that document. In the computation of time under this <code>4Licence</code> where there is a reference to a number of days between two events, they shall be counted by excluding the day on which the first event happens and including the day on which the second event happens.<u>-and w\_Where</u> the time for doing an act expires on a <u>statutory</u> holiday, the act may be done on the next day that is not a statutory holiday.

Rationale for the Proposed Change: To clarify the intended timing

#### 3. Authorization

- 3.1 The Board, in the exercise of the powers conferred by Part V of the Act, licenses the Licensee to\_ direct the operation of the transmission system(s) in accordance with Agreements and the Market Rules, subject to the conditions set out in this Licence.
- 3.2 The Board, in the exercise of the powers conferred by Part V of the Act, also licenses the Licensee to operate the IESO administered markets and to do such things as may be permitted by the Market Rules or required to be done by the Licensee in furtherance of the establishment and operation of the market(s) to be administered by the Licensee, subject to the conditions set out in this Licence.

#### 4. Fees and Assessment

- 4.1 The Licensee shall pay any fees charged by the Board or amounts assessed by the Board.
- 4.2 The Licensee shall comply with all applicable Market Rules.

Rationale for the Proposed Change: This is already addressed under section 7.Obligation to comply with Legislation and Market Rules of the Licence.

#### 5. Term of Licence

5.1 This Licence shall take effect on July 31, 20<u>1308</u> and terminate on July 30, 20<u>33</u>43. The Board may extend the term of this Licence.

Rationale for the Proposed Change: Refer to explanation in covering memo

5.2 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.

Rationale for the Proposed Change:

Refer to explanation in covering memo

#### 6. Provision of Information to the Board

- 6.1 The Licensee shall provide, in the manner and form determined by the Board, such information as the Board may require from time to time.
- 6.2 Without limiting the generality of paragraph 6.1, the Licensee shall, unless a Market Rule or other condition of this Licence otherwise requires:
  - a) provide such information as the Board may require from time to time to enable the Board to monitor the Licensee's compliance with the conditions of this Licence and any other legislative or regulatory requirements set out in this Licence;
  - b) notify the Board of any material change in circumstances that adversely affects or is likely to adversely affect the Licensee's ability to comply with this Licence, its financial integrity, or its ability to carry out its responsibilities under the Electricity Act, as soon as \_practicable after the occurrence of any such change, but in any event within fifteen days of the date upon which such change becomes known to the Licensee;
  - c) provide the Board with any information that is required by the Market Rules to beprovided to the Board by the Licensee;

#### Rationale for the Proposed Change:

These reporting requirements under the Market Rules are covered off under section. 7.Obligation to comply with Legislation and Market Rules of the Licence.

- <u>ce</u>) provide the Board with a copy of the annual report of the Licensee as submitted to the Minister pursuant to subsection 21(1) of the Electricity Act;
- <u>de</u>) post the annual report of the Licensee as submitted to the Minister pursuant to subsection 21(1) of the Electricity Act and the Licensee's quarterly financial statements on its public Website; and,
- <u>e</u>f) provide the Board, on or before the end of each calendar year, with a summary of any significant activities related to the development of reliability standards undertaken by the Licensee pursuant to subsections 5(1)(d) or 5(1)(e) of the *Electricity Act*.

#### 7. Obligation to Comply with <u>Legislation and</u> Market Rules

- 7.1 The Licensee shall comply with all applicable provisions of the Act, the Electricity Act and the Regulations.
- 7.2 7.1 The Licensee shall comply with all applicable provisions of the Market Rules.

Rationale for the Proposed Change: To include the IESO`s responsibility to adhere to legislation. This allows other areas of the Licence to be simplified.

#### 8. Transmission System Agreement

- 8.1 The Licensee may enter into an agreement ("Agreement") with any transmitter providing for the direction by the Licensee of the operation of the transmitter's transmission system. Following a request by the Licensee to enter into an Agreement, the Licensee and the transmitter shall enter into an Agreement within a period of 90 days, unless extended with leave of the Board. The Agreement shall be filed with the Board within 20 days of its completion.
- 8.2 The agreements referred to in paragraph 8.1 shall cover all such transmission assets and facilities as may, in the opinion of the Licensee, be necessary to enable the Licensee to meet its obligations under the Electricity Act and the Market Rules.
- 8.3 Where necessary for the purpose of the agreements referred to in paragraph 8.1, and upon request by the Licensee, the Board may in the exercise of the powers conferred by section 84 of the Act determine that a system, or part of a system, that is or forms part of a distribution system is a transmission system or part of a transmission system.
- 8.4 Where the Licensee and any party referred to in paragraph 8.1 are unable to reach agreement upon the terms and conditions of a proposed Agreement, or an amendment to an Agreement, the matter shall be determined by the Board.

#### 9. Transmission System Access

- 9.1 The Licensee shall take all reasonable steps to ensure non-discriminatory access is provided to the IESO\_-controlled grid for all generators, retailers, and consumers, in accordance with the Licensee's responsibility for directing the operation of the transmission systems, the Market Rules, applicable reliability standards and the conditions of this Licence.
- 9.2 In directing the operation of the IESO<u>-</u>controlled grid, the Licensee may give direction to market participants and other persons in accordance with Agreements and the Market Rules.

#### 10. Must Run Contracts

10.1 The Licensee shall, as needed, identify in accordance with the Market Rules facilities that it may require to operate in specific ways for reasons of system reliability, other than for reasons of a

- \_lack of overall adequacy of the IESO-controlled grid, regardless of whether dispatch data has been submitted with respect to such facilities.
- 10.2 The Licensee shall, as needed, negotiate and conclude agreements ("reliability must-run contracts") with the persons licensed by the Board in respect of the facilities identified pursuant to paragraph 10.1.
- 10.3 Where the Licensee and any party referred to in paragraph 10.2 are unable to reach agreement upon the terms and conditions of a proposed Agreement, or an amendment to an Agreement, the matter shall be determined by the Board.

#### 11. Ancillary Services Contract

- 11.1 The Licensee shall, as needed, identify in accordance with the Market Rules the facilities that it may require to provide contracted ancillary services.
- 11.2 The Licensee shall, as needed, negotiate and conclude agreements ("ancillary services contracts") with the persons licensed by the Board in respect of the facilities identified pursuant to paragraph 11.1.
- 11.3 Where the Licensee and any party referred to in paragraph 11.2 are unable to reach agreement upon the terms and conditions of a proposed Agreement, or an amendment to an Agreement, the matter shall be determined by the Board.

#### 12. Procuring Ancillary Services Through Markets

- 12.1 The Licensee may, as needed, procure any category of ancillary services in accordance with the Market <u>R</u>rules when it determines that, based on any number of independently controlled and competing alternatives and other circumstances at its discretion, such services may be provided more efficiently and cost-effectively through a market-based process for that category of ancillary services.
- 12.2 (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 IESO 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) subject to (a.1), the price to be offered 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 IESO, which cap will be designed, taking into account the relevant IESO <u>Mmarket Rrules</u>, 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 offer 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;

- (a.1) notwithstanding (a) above, save and except where the IESO has advised OPGI that specific units are required to offer in for reliability, OPGI may offer less than the maximum available amount of any category of operating reserve where this is necessary in order for OPGI to satisfy its obligations under, or to give effect to, any shareholder declaration or resolution of the Minister of Energy in effect at the relevant time relating to, or any Regulation made under the Environmental Protection Act (Ontario) relating to, carbon dioxide (CO2) emissions arising from the use of coal at OPGI's coal-fired generation stations;
- b) subject to (a.1), 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) subject to (a.1), in the event that either OPGI or the IESO 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 IESO 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) subject to (a.1), 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) subject to (a.1), pending reaching an agreement, or pending the resolution of any dispute, the IESO may at any time set the price 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) subject to (a.1), if the IESO's <u>Mmarket Rrules at any time are such that the market clearing price for a category of operating reserve services does not include both the offer 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.</u>

12.3 Notwithstanding paragraph 12.1, the Licensee shall honour all existing agreements entered into prior to the issuance of this <u>Licence</u>, with respect to the provision of an ancillary service, until such time that the agreement expires or is terminated by the mutual consent of the parties thereto.

#### 13. Expansion and Budgetary Review

- 13.1 The Licensee shall maintain proper books of account and adhere to generally accepted accounting practices. The Licensee shall notify the Board of any material change to its accounting procedures.
- 13.2 Unless otherwise stated by law, the Licensee shall, no less than 60 days before the beginning of the Licensee's fiscal year submit the Licensee's proposed expenditure and revenue requirements for the following fiscal year and the fees it proposes to charge during that year to the Board for review and approval.

#### 14. Administration Rates

14.1 The IESO shall enter into and comply with a settlement agreement with OPGI consistent with the provisions in Schedules A and B to this Licence.

#### 15. Access to Other Markets

15.1 The IESO shall use all reasonable efforts consistent with the purposes of the Electricity Act, including by seeking to make appropriate amendments to the Market Rules related to transmission service and connection and access to the IESO-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.

#### 16. Market Power Mitigation Monitoring

16.1 The Market Surveillance Panel of the <u>IESO OEB</u> shall, in carrying out its duties under the <u>Electricity Ontario Energy Board</u> Act, and the Market Rules, have due regard to the conditions of <u>L</u>icence of OPGI and, in particular, Paragraph 3 of Part <u>2</u>3 of the <u>L</u>icence of OPGI.

Rationale for the Proposed Change: Updated the wording here to comply with current legislation and to harmonize with OPG`s current Licence.

#### 17. Maintaining Confidentiality

17.1 Subject to the Market Rules and applicable law, the IESO shall use its reasonable efforts to ensure that it maintains all data contained in the Model Output Data that represents q<sup>i</sup><sub>h</sub> data or FMRC<sub>h</sub> data in confidence (with all such terms having the meanings ascribed thereto in paragraph 1 of Part <u>32</u> of OPGI's licence).

Rationale for the Proposed Change: To harmonize with OPG`s current Licence.

Note for sections 14, 16 and 17: Refer to covering memo

18. Communication

#### Independent Electricity System Operator El-2008-0096

<u>18.1</u> All communication related to this Licence must be in writing.

48.118.2 All communication is to be regarded as having been given by the sender and received by the addressee:

- a) when delivered in person to the addressee by hand or by courier;
- b) 10 business days after the date of posting by registered mail; and,
- c) when received by facsimile or electronic transmission by the addressee, according to the sender's transmission report.

Rationale for the Proposed Change: To clarify the intent such that it conforms to the language in other OEB Licences.

#### 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.

Following payment of the Rebate by OPGI to the IMO, the IMO shall pay or apply the Rebate as follows:

- a) representing interest or GST, the IMO shall pay the Rebate, including GST and interest, to all persons who were Market Participants in Ontario during the Settlement Period and who pursuant to the Market Rules had attributed to them during the Settlement Period an allocated quantity of energy withdrawn at a Delivery Point (the "Ontario Payees"). The IMO shall pay the Rebate to Ontario Payees by the next IMO Payment Date for the realtime market following the end of the month in which the payment from OPGI is received and the IMO shall distribute payment of the Rebate to Ontario Payees in proportion to the allocated quantities of energy withdrawn at a Delivery Point which were attributed to each Ontario Payee during the Settlement Period. The IMO may, to the extent practicable, pay the Rebate to all or some Ontario Payees by applying a Rebate settlement credit to the Ontario Payees' applicable Settlement Statements; and
- b) Where the Rebate is less that \$10 million, exclusive of any amounts representing interest or GST, the IMO shall retain and apply the Rebate, inclusive of any amounts representing interest or GST, to offset the IMO Administration Charge imposed on Market Participants in accordance with section 4.5, Chapter 9 of the Market Rules, during the period in which the first order of the OEB approving the IMO Administration Charge made:
  - (i) pursuant to subsection 19(2) of the Electricity Act, 1998, and
  - (ii) subsequent to the date on which payment of the Rebate is received by the IMO, is in effect.

Where paragraph (a) applies, if by the date upon which the IMO is required to pay the Rebate to Ontario Payees, the IMO cannot locate an Ontario Payee, or a successor or other representative of the said Ontario Payee to whom the IMO is permitted or required by law to pay the said Ontario Payee's share of the Rebate, the IMO shall retain the said Ontario Payee's share of the Rebate for a period of 90 days from the date upon which the Rebate is otherwise payable to all other Ontario Payees, and during this period the IMO will make commercially reasonable efforts to locate and payout the applicable share of the Rebate to the said Ontario Payee or his successor or other legal representative. If the IMO is unable to locate the said Ontario Payee or his successor or other legal representative within this 90 day period, the IMO shall retain the said Ontario Payee's share of the Rebate and apply it to the IMO Administration Charge in accordance with paragraph (b), as set out herein.

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

Independent Electricity System Operator El-2008-0096

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- Counterparts clause Further assurances clause •

## SCHEDULE B: ADDITIONAL TERMS AND CONDITIONS OF SETTLEMENT AGREEMENT BETWEEN IMO & OPG

The following sets out the procedure for calculating, allocating and passing through the Market Power Mitigation Agreement (MPMA) Rebate. Where there is a conflict between Schedule A in the Minister's Directive dated March 24, 1999, as amended or replaced by a subsequent Ministerial Directive dated February 25, 2003 which relates to Order-in-Council 654/2003 (dated March 19, 2003), and subsequent Orders-in-Council including Order-in-Council No. 843/2003 (dated April 2, 2003), Order-In-Council No. 207/2005 (dated February 16, 2005), Order-in-Council No. 1909/2005 (dated December 7, 2005), Order-in-Council No. 141/2006 (dated February 3<sup>rd</sup>, 2006), Order-in-Council No. 1062/2006 (dated May 17, 2006) and this Schedule B, then this Schedule B prevails.

#### For the First Settlement Period (May 1, 2002 to April 30, 2003)

- 1) The first MPMA Rebate is to be paid out for the 9-month period ending January 31, 2003. This is the amount, as calculated by the IMO and agreed to by OPG, that OPG is required to rebate for the nine month period, based on OPG's MPMA license conditions, less the interim payment already made by OPG of approximately \$335 million and amounts relating to decontrol applications pending before the Ontario Energy Board. OPG is to pay this net amount to the IMO by May 9, 2003.
- 2) The second MPMA Rebate will cover the three-month period February 1, 2003 to April 30, 2003 inclusive. This is the amount, as calculated by the IMO and agreed to by OPG, that OPG is required to rebate for the three month period, based on OPG's license conditions, adjusted for any true-up required to ensure that the sum of the two rebates for the first settlement period, including the interim payment, is equal to OPG's full rebate requirements for the first Settlement Period under the OPG's MPMA license conditions. OPG is to pay this amount to the IMO by August 12, 2003.
- 3) The IMO will pay the pro rata share of the first MPMA Rebate and the second MPMA Rebate based on the allocated quantity of energy withdrawn during the applicable period by market participants who are receiving the fixed price under sections 79.4 and 79.5 of the Ontario Energy Board Act, 1998 to the Ontario Electricity Financial Corporation.
- 4) The IMO will pay the pro rata share of the first MPMA Rebate and the second MPMA Rebate based on the allocated quantity of energy withdrawn during the applicable period by market participants who are not distributors and are not receiving the fixed price under sections 79.4 and 79.5 of the Ontario Energy Board Act, 1998 directly to those market participants or their assignees that are market participants where the market participants have assigned their MPMA rebate.
- 5) The IMO will pay to distributors who are market participants, including host distributors on behalf of their embedded distributors, the pro rata share of the first MPMA Rebate and the second MPMA Rebate based on the share of energy withdrawn during the applicable period by consumers in the distributor's or embedded distributor's respective service areas who are not receiving the fixed price under sections 79.4 and 79.5 of the *Ontario Energy Board Act, 1998* and by customers of retailers who have assigned all or a portion of their entitlement to an MPMA Rebate to that retailer. In making these calculations and payments the IMO will rely on the information reported by the distributors to the IMO as required under Appendix D. Once the IMO has received the information from the distributors and disbursed the first MPMA Rebate or the second MPMA Rebate in accordance with this Schedule B, there shall be no opportunity to

correct any such information or provide any additional information and all amounts paid shall be final and binding and not subject to any adjustment.

6) After making the payments set out in 3), 4), and 5), the IMO is to pay any remaining Rebate to the Ontario Electricity Financial Corporation to offset in whole or in part the cost of providing the fixed price of 4.3 cents per kilowatt hour to consumers who are eligible to receive, are receiving or have received the fixed price under sections 79.4 and 79.5 of the Ontario Energy Board Act, 1998. Any amounts returned to the IMO by distributors in accordance with their license conditions shall be paid over to the Ontario Electricity Financial Corporation.

#### For the Settlement Periods (May 1, 2003 to January 31, 2005)

- 7) For each Settlement Period or partial Settlement Period from May 1, 2003 to January 31, 2005, OPG is to make quarterly MPMA Rebate payments to the IMO, consistent with OPG's MPMA license conditions, as calculated by the IMO and agreed to by OPG. The IMO and OPG may agree to appropriate true-up and carry forward mechanisms provided that these are consistent with forwarding the Rebate as soon as practicable.
- For each Settlement Period or partial Settlement Period from May 1, 2003 to January 31, 2005 the MPMA rebate payments to market participants will be calculated and determined by the IMO as follows:

$$BPPR = [(WAP - CAP) \times 0.5 \times TAQEW]$$

Where:

"Business Protection Plan Rebate" or "BPPR" is the MPMA Rebate paid out to consumers who are not receiving the fixed price under sections 79.4 and 79.5 of the *Ontario Energy Board Act, 1998.* The BPPR is to rebate half of the amount by which the weighted average commodity price of electricity exceeds 3.8 cents per kilowatt- hour.

"Weighted Average Price" or "WAP" is the average Hourly Ontario Electricity Price weighted by load over the Settlement Period as determined by the IMO.

**"Total Allocated Quantity of Energy Withdrawn**" or **"TAQEW**" is the total electricity withdrawn from the IMO-controlled grid for use in Ontario during the Settlement Period.

- 9) The IMO will make quarterly MPMA payments to market participants based on the applicable Settlement Period to the end of the previous quarter, and taking into account all prior quarterly MPMA payments made with respect to the applicable Settlement Period. The IMO will adjust the payment for the final quarter of each Settlement Period to ensure that the sum of the quarterly MPMA payments for the applicable Settlement Period does not exceed the BPPR entitlement for the Settlement Period. If there is an overpayment of quarterly payments over a Settlement Period based on the BPPR entitlement for that Settlement Period, any such overpayment can be carried over to successive Settlement Periods to be offset against future payments.
- 10) The IMO will pay the pro rata share of the BPPR based on the allocated quantity of energy withdrawn for the applicable period by market participants who are receiving the fixed price under sections 79.4 and 79.5 of the *Ontario Energy Board Act*, *1998* to the Ontario Electricity Financial Corporation.
- 11) The IMO will pay the pro rata share of the BPPR based on the allocated quantity of energy withdrawn for the applicable period by market participants who are not distributors and are not

receiving the fixed price under sections 79.4 and 79.5 of the *Ontario Energy Board Act*, 1998 directly to those market participants or their assignees that are market participants where the market participants have assigned their MPMA Rebate.

- 12) The IMO will pay to distributors who are market participants, including host distributors on behalf of their embedded distributors, the pro rata share of the BPPR based on the share of energy withdrawn for the applicable period by consumers in the distributor's or embedded distributor's respective service areas who are not receiving the fixed price under sections 79.4 and 79.5 of the *Ontario Energy Board Act, 1998* for the MPMA Rebate and by customers of retailers who have assigned all or a portion of their entitlement to an MPMA Rebate to that retailer. In making these calculations and payments the IMO will rely on the information reported by the distributors to the IMO as required under Appendix D. Once the IMO has received the information from the distributors and disbursed the BPPR for that quarter in accordance with this Schedule B, there shall be no opportunity to correct any such information or provide any additional information and all amounts paid shall be final and binding and not subject to any adjustment.
- 13) For the quarterly periods from May 1, 2003 to January 31, 2005, after making the payments set out in 10), 11), and 12), the IMO is to pay any remaining Rebate to the Ontario Electricity Financial Corporation to offset in whole or in part the cost of providing the prices established under sections 79.4 and 79.5 of the *Ontario Energy Board Act, 1998* to consumers who are eligible to receive the prices established under sections 79.4 and 79.5 of the *Ontario Energy Board Act, 1998*. Any amounts returned to the IESO by distributors in accordance with their license conditions shall be paid over to the Ontario Electricity Financial Corporation.

#### For the Payment for the Period (February 1, 2005 to March 31, 2005)

- 14) For the Payment for the Period from February 1, 2005 to March 31, 2005, OPG is to make an MPMA Rebate payment to the IESO, consistent with OPG's MPMA license conditions, as calculated by the IESO and agreed to by OPG. The IESO and OPG may agree to appropriate true-up and carry forward mechanisms provided that these are consistent with forwarding the Rebate as soon as practicable.
- 15) For the Payment for the Period from February 1, 2005 to March 31, 2005 the MPMA rebate payments to market participants will be calculated and determined by the IESO as follows:

$$BPPR = [(WAP - CAP) \times 0.5 \times TAQEW]$$

Where:

"Business Protection Plan Rebate" or "BPPR" is the MPMA Rebate paid out to consumers who are not receiving the fixed price under sections 79.4, 79.5, and 79.16 of the *Ontario Energy Board Act, 1998.* The BPPR is to rebate half of the amount by which the weighted average commodity price of electricity exceeds 3.8 cents per kilowatt hour.

"Weighted Average Price" or "WAP" is the average Hourly Ontario Electricity Price weighted by load over the Settlement Period as determined by the IESO.

**"Total Allocated Quantity of Energy Withdrawn**" or **"TAQEW**" is the total electricity withdrawn from the IESO-controlled grid for use in Ontario during the Settlement Period.

16) The IESO will make the MPMA payment to market participants for the two month period ending March 31, 2005 taking into account all prior MPMA payments made in that Settlement Period.

- 17) The IESO will pay the pro rata share of the BPPR based on the allocated quantity of energy withdrawn for the applicable period by market participants who are receiving the prices established under sections 79.4, 79.5 and 79.16 of the *Ontario Energy Board Act, 1998* to the Ontario Electricity Financial Corporation.
- 18) The IESO will pay the pro rata share of the BPPR based on the allocated quantity of energy withdrawn for the applicable period by market participants who are not distributors and are not receiving the prices established under sections 79.4, 79.5, and 79.16 of the Ontario Energy Board Act, 1998 directly to those market participants or their assignees that are market participants where the market participants have assigned their MPMA Rebate.
- 19) The IESO will pay to distributors who are market participants, including host distributors on behalf of their embedded distributors, the pro rata share of the BPPR based on the share of energy withdrawn for the applicable period by consumers in the distributor's or embedded distributor's respective service areas who are not receiving the prices established under sections 79.4, 79.5, and 79.16 of the *Ontario Energy Board, Act 1998* for the MPMA Rebate and by customers of retailers who have assigned all or a portion of their entitlement to an MPMA Rebate to that retailer. In making these calculations and payments the IESO will rely on the information reported by the distributors to the IESO as required under Appendix D. Once the IESO has received the information from the distributors and disbursed the BPPR for that quarter in accordance with this Schedule B, there shall be no opportunity to correct any such information or provide any additional information and all amounts paid shall be final and binding and not subject to any adjustment.
- 20) After making the payments set out in 17), 18), and 19), the IESO is to pay any remaining Rebate to the Ontario Electricity Financial Corporation to offset in whole or in part the cost of providing the prices established under sections 79.4, 79.5, and 79.16 of the Ontario Energy Board Act, 1998 to consumers who are eligible to receive the prices established under sections 79.4, 79.5, and 79.16 of the Ontario Energy Board Act, 1998. Any amounts returned to the IESO by distributors in accordance with their license conditions shall be paid over to the Ontario Electricity Financial Corporation.

## Replacement of the MPMA Rebate With A New Payment for the Period (April 1, 2005 to December 31, 2005)

21) For the Payment for the Period from April 1, 2005 to December 31, 2005, OPG is to make a single payment to the IESO, calculated as follows:

Payment = Sum over all hours [(HOEP - \$47) x (ONPA (output) x 0.85)]

Where:

**ONPA or OPG's Non-Prescribed Assets** are those generation assets operated and controlled by Ontario Power Generation, excluding Lennox Generating Station, that are not prescribed assets under section 78.1 of the *Ontario Energy Board Act, 1998* as amended by the *Electricity Restructuring Act, 2004*.

**HOEP** is the Hourly Ontario Energy Price as determined by the IESO.

**ONPA (output)** is the generation output from OPG's Non-Prescribed Assets generation assets over each hour of the period adjusted to take account of volumes sold through Transitional Rate Option contracts and forward contracts in effect as of January 1, 2005.

- 22) For the Payment for the Period from April 1, 2005 to December 31, 2005 the single payment to market participants will be equal to the payment calculated in 21) above.
- 23) The IESO will pay the pro rata share of the Payment based on the allocated quantity of energy withdrawn for the applicable period by market participants who are receiving the prices established under sections 79.4, 79.5 and 79.16 of the Ontario Energy Board Act, 1998 to the Ontario Power Authority to be applied to the variance account established under section 25.33 (5) of the Electricity Act, 1998 as amended by the Electricity Restructuring Act, 2004.
- 24) The IESO will pay the pro rata share of the Payment based on the allocated quantity of energy withdrawn for the applicable period by market participants who are not distributors and are not receiving the prices established under sections 79.4, 79.5, and 79.16 of the *Ontario Energy Board Act, 1998* directly to those market participants or their assignees that are market participants where the market participants have assigned their Payment.
- 25) The IESO will pay to distributors who are market participants, including host distributors on behalf of their embedded distributors, the pro rata share of the Payment based on the share of energy withdrawn for the applicable period by consumers in the distributor's or embedded distributor's respective service areas who are not receiving the prices established under sections 79.4, 79.5, and 79.16 of the Ontario Energy Board Act, 1998 for the Payment and by customers of retailers who have assigned all or a portion of their entitlement to a Payment to that retailer. In making these calculations and payments the IESO will rely on the information reported by the distributors to the IESO as required under Appendix D. Once the IESO has received the information from the distributors and disbursed the Payment for the period in accordance with this Schedule B, there shall be no opportunity to correct any such information or provide any additional information and all amounts paid shall be final and binding and not subject to any adjustment.
- 26) After making the payments set out in 23), 24), and 25), the IESO is to pay any remaining amount of the Payment to the Ontario Power Authority to be applied to the variance account established under section 25.33 (5) of the *Electricity Act*, *1998* as amended by the *Electricity Restructuring Act*, *2004*.
- 27) With respect to its non-prescribed generating facilities, OPG shall maximize their value to the people of Ontario by operating those facilities in response to the price signals of the IESO-administered markets. OPG's conduct in the IESO-administered markets under this direction is subject to review by the Market Surveillance Panel of the Ontario Energy Board.

## Replacement of the MPMA Rebate With A New Payment for the Period (January 1, 2006 to April 30, 2006)

28) For the Payment for the Period from January 1, 2006 to April 30, 2006, OPG is to make a single payment to the IESO, calculated as follows:

Payment = Sum over all hours [[(HOEP - \$47) x (ONPA (output) x 0.85)] + [(PA (price) - \$52) x (PA (amount))]]

#### Where:

**ONPA or OPG's Non-Prescribed Assets** are those generation assets operated and controlled by Ontario Power Generation, excluding Lennox Generating Station, that are not prescribed assets under section 78.1 of the *Ontario Energy Board Act, 1998* as amended by the *Electricity Restructuring Act, 2004*.

**HOEP** is the Hourly Ontario Energy Price as determined by the IESO.

**ONPA (output)** is the generation output from OPG's Non-Prescribed Assets generation assets over each hour of the period adjusted to take account of volumes sold through Transitional Rate Option contracts and forward contracts in effect as of January 1, 2005 and volumes sold through the Pilot Auction administered by the Ontario Power Authority in the first half of 2006 with sales volumes commencing on April 1, 2006.

**PA** is the Pilot Auction administered by the Ontario Power Authority in the first half of 2006, which includes a limited amount of output from OPG's non-prescribed assets, with sales to commence on April 1, 2006.

**PA (amount)** is the hourly volume in MWh of OPG non-prescribed assets output sold through the Pilot Auction administered by the Ontario Power Authority in the first half of 2006 with sales commencing on April 1, 2006.

**PA (price)** is the weighted average auction price in \$/ MWh realized in each hour of the Period for the output of the limited amount of OPG non-prescribed assets output volume sold through the Pilot Auction administered by the Ontario Power Authority in the first half of 2006 with sales volumes commencing on April 1, 2006.

- 29) For the Payment for the Period from January 1, 2006 to April 30, 2006 the single Payment to market participants will be equal to the Payment calculated in 28) above.
- 30) The IESO will pay the pro rata share of the Payment based on the allocated quantity of energy withdrawn for the applicable period by market participants who are receiving the prices established under sections 79.4, 79.5 and 79.16 of the Ontario Energy Board Act, 1998 to the Ontario Power Authority to be applied to the variance account established under section 25.33 (5) of the Electricity Act, 1998 as amended by the Electricity Restructuring Act, 2004.
- 31) The IESO will pay the pro rata share of the Payment based on the allocated quantity of energy withdrawn for the applicable period by market participants who are not distributors and are not receiving the prices established under sections 79.4, 79.5, and 79.16 of the Ontario Energy Board Act, 1998 directly to those market participants or their assignees that are market participants where the market participants have assigned their Payment.
- 32) The IESO will pay to distributors who are market participants, including host distributors on behalf of their embedded distributors, the pro rata share of the Payment based on the share of energy withdrawn for the applicable period by consumers in the distributor's or embedded distributor's respective service areas who are not receiving the prices established under sections 79.4, 79.5, and 79.16 of the Ontario Energy Board Act, 1998 for the Payment and by customers of retailers who have assigned all or a portion of their entitlement to a Payment to that retailer. In making these calculations and payments the IESO will rely on the information reported by the distributors to the IESO as required under Appendix D. Once the IESO has received the information from the distributors and disbursed the Payment for the period in accordance with this Schedule B, there shall be no opportunity to correct any such information or provide any additional information and all amounts paid shall be final and binding and not subject to any adjustment.
- 33) After making the payments set out in 30), 31), and 32), the IESO is to pay any remaining amount of the Payment to the Ontario Power Authority to be applied to the variance account established

under section 25.33 (5) of the *Electricity Act, 1998* as amended by the *Electricity Restructuring Act, 2004*.

34) With respect to its non-prescribed generating facilities, OPG shall maximize their value to the people of Ontario by operating those facilities in response to the price signals of the IESO-administered markets. OPG's conduct in the IESO-administered markets under this direction is subject to review by the Market Surveillance Panel of the Ontario Energy Board.

#### OPG Rebate for the Period (May 1, 2006 to April 30, 2009)

35) For the Period from May 1, 2006 to April 30, 2009, OPG is to make quarterly Payments to the IESO, as calculated by the IESO and agreed to by OPG as follows:

Payment = Sum over all hours [(HOEP – ORL) x (ONPAO x 0.85 – PAA) + (PAP – PAORL) x PAA)]

Ontario Power Generation's quarterly payments will be based on a cumulative calculation commencing May 1, 2006 to the end of each quarter less the same cumulative calculation to the end of the previous quarter. This will continue until the final quarter ending April 30, 2009. For greater certainty, where the payment formula results in an amount owing to OPG for any quarter, no such payment will be made to OPG by the IESO and any such amount will be carried forward into subsequent quarters.

#### Where:

**ONPA or OPG's Non-Prescribed Assets** are those generation assets operated and controlled by Ontario Power Generation assets in service as of January 1, 2006, excluding Lennox Generating Station and excluding stations whose generation output is subject to a contract with the Ontario Power Authority (OPA) in the form of a hydroelectric energy supply agreement [entered into by the OPA and OPG pursuant to a ministerial direction made under section 25.32 of the *Electricity Act, 1998*], that are not prescribed assets under section 78.1 of the *Ontario Energy Board Act, 1998* as amended by the *Electricity Restructuring Act, 2004*.

**HOEP** is the Hourly Ontario Energy Price as determined by the IESO.

**ONPAO** is the generation output from OPG's Non-Prescribed Assets, over each hour of the quarter adjusted to take account of volumes sold through forward contracts in effect as of January 1, 2005. For greater certainty, any output from ONPA resulting from fuel conversion by Ontario Power Generation in ONPA, or incremental output from ONPA resulting from refurbishment or expansion, or is subject to a contract with the OPA in the form of a hydroelectric energy supply agreement, [entered into by the OPA and OPG pursuant to a ministerial direction made under section 25.32 of the *Electricity Act, 1998*] is to be excluded from ONPAO.

#### Incremental Output is defined as:

generation output x (new total installed capacity – installed capacity as of January 1, 2006) / new total installed capacity.

#### ORL is the Ontario Power Generation Revenue limit.

For the period May 1, 2006 to April 30, 2007 ORL is equal to \$46/ MWh. For the period May 1, 2007 to April 30, 2008 ORL is equal to \$47/ MWh. For the period May 1, 2008 to April 30, 2009 ORL is equal to \$48/ MWh.

**PA** is the Pilot Auction administered by the Ontario Power Authority in the first half of 2006.

**PAA** is the volume in MWh over each hour in the quarter that is sold by Ontario Power Generation through the PA.

**PAORL is the Pilot Auction Ontario Power Generation Revenue limit.** For the period May 1, 2006 to April 30, 2007 PAORL is equal to \$51/ MWh. For the period May 1, 2007 to April 30, 2008 PAORL is equal to \$52/ MWh. For the period May 1, 2008 to April 30, 2009 PAORL is equal to \$53/ MWh.

**PAP** is the weighted average auction price in \$/ MWh over each hour of the quarter realized for the PAA by Ontario Power Generation.

- 36) For the Payment for the Period from May 1, 2006 to April 30, 2009 quarterly payments made by the IESO to market participants will be equal to the quarterly Payment calculated in 35) above. In the event of any quarterly Payment calculated in 35) above being negative, no quarterly payment will be made by the IESO to market participants.
- 37) The IESO will pay the pro rata share of the Payment based on the allocated quantity of energy withdrawn for the applicable quarter by market participants who are receiving the prices established under sections 79.4, 79.5 and 79.16 of the Ontario Energy Board Act, 1998 to the Ontario Power Authority to be applied to the variance account established under section 25.33 (5) of the Electricity Act, 1998 as amended by the Electricity Restructuring Act, 2004.
- 38) The IESO will pay the pro rata share of the Payment based on the allocated quantity of energy withdrawn for the applicable quarter by market participants who are not distributors and are not receiving the prices established under sections 79.4, 79.5, and 79.16 of the Ontario Energy Board Act, 1998 directly to those market participants.
- 39) The IESO will pay to distributors who are market participants, including host distributors on behalf of their embedded distributors, the pro rata share of the Payment based on the share of energy withdrawn for the applicable quarter by consumers in the distributor's or embedded distributor's respective service areas who are not receiving the prices established under sections 79.4, 79.5, and 79.16 of the Ontario Energy Board Act, 1998 for the Payment. In making these calculations and payments the IESO will rely on the information reported by the distributors to the IESO as required under Appendix D. Once the IESO has received the information from the distributors and disbursed the Payment for the quarter in accordance with this Schedule B, there shall be no opportunity to correct any such information or provide any additional information and all amounts paid shall be final and binding and not subject to any adjustment.
- 40) After making the payments set out in 37), 38), and 39), the IESO is to pay any remaining amount of the Payment to the Ontario Power Authority to be applied to the variance account established under section 25.33 (5) of the *Electricity Act, 1998* as amended by the *Electricity Restructuring Act, 2004.*

41) With respect to its non-prescribed generating facilities, OPG shall maximize their value to the people of Ontario by operating those facilities in response to the price signals of the IESO-administered markets. OPG's conduct in the IESO-administered markets under this direction is subject to review by the Market Surveillance Panel of the Ontario Energy Board.



## Appendix B: Board of Directors of the IESO

The IESO Board of Directors oversees the management of the organization's business and affairs. All members of the IESO Board must be independent from market participants and are prohibited from having a material interest in any market participant in Ontario's electricity sector. As part of its responsibilities, the IESO Board approves the market rules that govern the operation of the IESO-administered markets and the direction by the IESO of the operation of the IESO-controlled grid.

Members of the IESO Board are appointed by the Minister of Energy for a two-year term and may be reappointed for successive terms not exceeding five years. There is currently one vacancy on the IESO Board.

**Tim O'Neill** is Chair of the IESO Board of Directors. He is the President of O'Neill Strategic Economics and a Visiting Professor at Duke University; he is a member of the Canadian Employment Insurance Financing Board and a Director of the United Church of Canada Foundation. After retiring from BMO Financial Group where he served as Executive Vice President and Chief Economist, he was the first H. Ian MacDonald Visiting Economist with the Ontario government. He served as President of the Atlantic Provinces Economic Council after teaching in the Department of Economics at St. Mary's University in Halifax for 12 years. He has served as a consultant to several provincial governments, as well as the federal government. Dr. O'Neill is the first Canadian economist to be elected to the Board of Governors of the Washington-based National Association for Business Economics (NABE) where he served as president from October 2002 until September 2003.

**Rudy G. Riedl** is Vice Chair of the IESO Board of Directors and Chair of the IESO Human Resources and Governance Committee. Mr. Riedl has been involved in the Canadian and North American energy business for more than 33 years. Since his retirement from Enbridge, where he last served as president of Enbridge Consumers Gas from 1997 to 2001, he has served as president of R.G.Riedl Consulting Inc. Mr. Riedl has extensive experience in the management and restructuring of regulated utilities, energy policy development and organizational effectiveness.

**William J. Museler** is Chair of the IESO Audit Committee. Mr. Museler was most recently President and CEO of the New York Independent System Operator (NYISO). Prior to his service at NYISO, Mr. Museler held senior positions at the Tennessee Valley Authority (TVA), Long Island Lighting Company (LILCO), and Brookhaven National Laboratory. He has served as a federal representative for the North American Electric Reliability Council (NERC) and as chairman of the Southeastern Electric Reliability Council (SERC). He is

currently a member of the Secretary of Energy's Energy Advisory Board (EAB). A graduate of the Pratt Institute with a Bachelor of Science in Engineering Science, Mr. Museler also holds a Master of Science degree in Mechanical Engineering from Worcester Polytechnic Institute.

**David Cassivi** is a career educator having taught in the Windsor Board of Education for 33 years. Mr. Cassivi has also served the people of Windsor in municipal politics for over three decades, first as a Separate School Trustee and then as a city councillor from 1982 to 2006. He also has experience in the energy sector having served first as a member and then Chair of ENWIN Utilities, Windsor's local distribution company. Mr. Cassivi has been a member of numerous community boards, including Chair of the Windsor Separate School Board and Windsor's International Relations Committee, Vice-Chair of the Windsor Detroit Tunnel Commission and the Windsor Police Services Board and Member of the Windsor Canada Utilities Board, the Essex Region Conservation Authority and the Windsor Essex County Health Unit. Mr. Cassivi holds a Bachelor of Arts from St. Mary's University, a Bachelor of Education from the University of Toronto and a Master of Education from the University of Virginia.

**Angela Ferrante** is an experienced Board Director and has held several senior executive positions, most recently as Chief Operating Officer of the Ontario Energy Board. Prior to that, she was Senior Vice President, Corporate Communications at BMO Financial Group, Vice President, Public Affairs at Ontario Power Generation, and Executive Vice President and Chief Operating Officer of the C.D. Howe Institute. Formerly a journalist, she has worked for a number of publications including Maclean's, where she served as Assistant Managing Editor. Ms. Ferrante plays an active role in the community, and has served on a number of not for profit Boards. She was most recently appointed Chair of the Toronto Central Local Health Integration Network and is also a member of the Board with VIA Rail Canada and Ombudsman for Banking Services and Investments. Ms. Ferrante holds the Institute of Corporate Directors' ICD.D (Certified Director) designation.

**Paul Murphy** was appointed President and Chief Executive Officer of the Independent Electricity System Operator in October 2006. Under Mr. Murphy, the IESO is responsible for overseeing the safe and reliable operation of Ontario's bulk electrical system - one of the most diversified and efficient in the world. The organization also oversees the IESO-administered wholesale electricity markets.

Previously, as Chief Operating Officer, Mr. Murphy led the IESO through the opening of the market and the recovery from the 2003 blackout. He has worked in the operation and planning of Ontario's electrical system for over 30 years and in the development of competitive markets for the last ten.

**Tricia O'Malley** twice served as the Chair of the Canadian Accounting Standards Board (AcSB) from July 2009 to October 2010 and from 1999 to 2001. She was also a member of the AcSB's Emerging Issues Committee from its inception in 1988 until 1997 followed by a term as AcSB's Vice Chair where she represented Canada on international groups that

developed accounting standards. She continues to act as a senior advisor to the AcSB. In 2001 Ms. O'Malley became a founding member of the International Accounting Standards Board (IASB) in London, UK and later served as the Director of Implementation Activities. She also worked as a partner in the National Assurance and Professional Practice Group of KPMG Canada, with particular emphasis on financial instruments and structured finance transactions. While at KPMG she was Chair of the Ontario Securities Commission's Financial Disclosure Advisory Board and a member of the Independent Advisory Committee on Accounting and Auditing Matters of the Auditor General of Canada. Ms. O'Malley who started her career as an accountant after having graduated from the University of Manitoba is also a Past President of the Canadian Academic Accounting Association.

**Helen Polatajko** is the Senior Vice President and Chief Information Officer at CIBC Mellon and is also a member of the company's executive committee. She is responsible for the overall strategic direction and management of CIBC Mellon's information technology function. Ms. Polatajko has over 30 years of experience in the technology services field and prior to joining CIBC Mellon in 1998 as Chief Information Officer, she was CIO at Mellon Financial's subsidiary in Houston, Texas. In 1996, she was recognized as one of the Top 100 Women in Computing, acknowledging her achievements and contributions to information services and technology. Since 2004, she has served on the judging panel of the Canadian Information Productivity Awards (CIPA) and is a founding member, and currently on the Advisory Board, of the CIO Executive Council, established in 2005. Ms. Polatajko received her education from The University of Pittsburgh, in Pennsylvania, attaining a Bachelor in Science in Mathematics and Psychology degree, and graduated from The Stonier Graduate School of Banking at the University of Delaware.

John Wiersma has worked in the electricity sector for more than 37 years. He was appointed founding President & CEO of Veridian Corporation in 1999, and continued as Chair of the Board of Directors following his retirement in 2004. Mr. Wiersma stepped down as Chair upon his appointment to the IESO Board of Directors in 2005. He is an advocate for energy efficiency and electrical safety and serves on the board of directors of the Canadian Energy Efficiency Alliance, and the Electrical Safety Authority. Mr. Wiersma has also received a number of distinguished awards for his dedication to the electricity industry and to the local Ajax-Pickering community, where he lives.



## Appendix C: Officers of the IESO

## President & Chief Executive Officer

Paul Murphy, B.Sc., P.Eng.

Paul Murphy is President and Chief Executive Officer of the Independent Electricity System Operator. Under Mr. Murphy, Ontario's IESO is responsible for overseeing the safe and reliable operation of Ontario's bulk electrical system - one of the most diversified, reliable and efficient in the world. The organization also oversees the IESO-administered wholesale electricity markets.

Previously, as Chief Operating Officer, Mr. Murphy led the IESO through the opening of the market and the recovery from the 2003 blackout. He has worked in the operation and planning of Ontario's electrical system for over 30 years and in the development of competitive markets for the last ten.

Mr. Murphy frequently represents the IESO and other independent system operators on multi-jurisdictional committees providing strategic and policy advice on reliability and cyber security matters. For example, he chairs the Ontario Smart Grid Forum, an industry initiative aimed at enabling Ontario's future electricity system.

Mr. Murphy has a Bachelor of Applied Science from Queen's University in Kingston, Ontario and is a registered Professional Engineer in Ontario.

## Vice President - Corporate Relations & Market Development Bruce Campbell

Bruce Campbell has over 30 years of regulatory and executive experience in the energy sector. Recruited from a successful legal career, where he regularly appeared before the Ontario Energy Board and other tribunals, Mr. Campbell joined the IESO (the Independent Electricity System Operator) as Vice-President, Regulatory and Legal Affairs in 2000.

Mr. Campbell serves as a Vice-Chair of the Board of Directors and member of the Audit Committee of the Northeast Power Coordinating Council, Inc., responsible for establishing and enforcing reliability standards for the power industry across eastern Canada and the northeastern United States.

A member of the Law Society of Upper Canada, Mr. Campbell also holds the Institute of Corporate Directors' ICD.D (Certified Director) designation. Well known and respected in the regulatory, government and broader industry arena, Mr. Campbell represents the IESO on the company's Stakeholder Advisory Committee.

### Vice-President - Market & System Operations, Chief Operating Officer Kim Warren

Kim Warren was appointed Vice-President, Operations and Chief Operating Officer in May 2011. In this role, Mr. Warren is responsible for managing the operation of Ontario's competitive wholesale electricity market and for directing the operation of the IESO-controlled grid. With over 34 years of experience in the Ontario electricity industry, Mr. Warren recently served as Director of Planning and Assessments where he directed the development of operating policies, reliability standards, system operating limits and grid connections associated with interconnected power system operations. Mr. Warren has also served as Manager of Regulatory Affairs and Manager of System Operations, during which time he was directly responsible for real-time operations in the control room leading to the successful restoration of the province's power system following the 2003 blackout.

## Vice-President - Information Technology & Infrastructure, Chief Information Officer Bill Limbrick

Bill Limbrick is Vice-President - Organizational Development and Chief Information Officer. The Organizational Development business unit is responsible for information technology; security and infrastructure; business process engineering; and human resources.

Prior to joining the IESO, Mr. Limbrick was with PricewaterhouseCoopers (PwC) and Sun Life Assurance in the UK. As a PwC Principal Consultant, he worked with the IESO to implement the IESO-administered market and in 1998 as a PwC program manager worked on the expansion of the competitive electricity market in the UK.

Mr. Limbrick holds a degree in Mathematical Economics from the University of Essex.

# Vice-President - Corporate Services, Chief Financial Officer and Treasurer Ted Leonard

Ted Leonard is Vice-President - Finance, Chief Financial Officer and Treasurer. He is responsible for all financial management aspects of the organization including both corporate and market accounting.

Mr. Leonard has been with the IESO from its formation in 1999. Previously he held the positions of Director - Finance, Corporate Controller and Manager - Financial Systems and Support.

Prior to his current role he worked in progressively senior Finance roles within the

electricity sector since 1996. Before joining the IESO, Mr. Leonard was with Ernst & Young LLP.

Mr. Leonard is a native of Sudbury, Ontario and is Chartered Accountant and a graduate of Laurentian University (B. Com.).

## **Vice-President – Corporate Relations**

#### **Terry Young**

Terry Young is Vice-President - Corporate Relations, responsible for managing many of the IESO's external relationships. His accountabilities include government and regulatory affairs, customer relations, communications, marketplace training and stakeholder engagement.

A well-known spokesperson in the electricity industry, Mr. Young started his career as a journalist with Canadian Press-Broadcast News before joining the energy industry with Ontario Hydro. He has worked as a communications consultant in the private sector and served as Director of Public Affairs with Hydro One.

Mr. Young has been with the IESO for the past eight years.

### **General Counsel and Secretary**

#### **Roy Stewart**

Mr. Stewart joined the IMO as General Counsel and Secretary in October 2000. A graduate of Dalhousie Law School in 1984, Mr. Roy Stewart began practicing law in Ontario in 1986 with Fraser & Beatty, now Fraser Milner Casgain, LLP, and was a partner in the firm's Financial Services Group for the last eight years of his time at the firm. Prior to his legal career, Mr. Stewart was the business manager of a private corporation for five years ending in 1981. Mr. Stewart is also the IESO's Corporate Secretary and in that capacity assists the IESO Board in fulfilling its governance mandate.

## C. Notice and Consent

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AS REQUIRED BY THE FREEDOM OF INFORMATION AND PROTECTION OF INDIVIDUAL PRIVACY A	CT	
In order to complete or verify the information provided on this form, it may be necessary for the Ontario Energy Board to collect additional information from some or all of the following sources: federal, provincial/state and municipal governments; licensing bodies; banks; professional and industry associations; and		
former and current employers. Only information relevant to your application will be collected.		
The public official who can answer questions about the collection of information is:		
Board Secretary Ontario Energy Board 2300 Yonge Street, P.O. Box 2319 Toronto, Ontario M4P 1E4		
Noto: The issuance of an electricity transmitter licence does not guarantee accreditation by the IESO, or connection to a transmission or distribution system.		
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<b>NOTE:</b> This application must be signed by the proprietor or by at least one partner, officer or director of the organization.		
WARNING: It is an offence to knowingly provide false information on this application.		
I/We consent to the collection of this information as authorized under the Ontario Energy Board Act, 1998.	Yes	
I/We understand that this information will be used to determine whether I am/we are and remain qualified for the licence for which I am/we are applying.	Vec	
Print Name and Title Signature of Applicant(s)	Date Signed	
Roy STEWART GENERAL COUNSEL Long	feb. 28, 203	