EB-2008-0298

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, C. 15, Schedule B;

AND IN THE MATTER OF an application by Ontario Power Generation Inc. for approval, pursuant to Part 1, Paragraph 5.2 of Ontario Power Generation Inc.'s Generation Licence EG-2003-0104, of a Reliability Must-Run Agreement for the Lennox Generation Station facilities between Ontario Power Generation Inc. and the Independent Electricity System Operator.

PWU Interrogatories for OPG

PWU Interrogatory 1

Reference: OPG September 15, 2008 Request for Approval of a Lennox Power Generating Station Reliability Must-Run Agreement, Page 3, Paragraph 4:

> **While OPG was interested in extending the term of the RMR agreement beyond 12 months, the IESO's technical assessment indicated that under the expected resource availability and demand forecast assumptions, there is insufficient justification to extend the Lennox RMR Agreement beyond September 30, 2009.**

a) Please confirm that the IESO's technical assessment referred to is the IESO Report 0516 entitled "Lennox GS Deregistration Analysis" available on the IESO website at http://www.ieso.ca/imoweb/pubs/corp2/IESO-Lennox-RMR-2009.pdf

PWU Interrogatory 2 (see PWU Interrogatory 4 to OPG)

Reference: OPG's November 10, 2008 Additional Evidence EB-2009-0298 Reliability Must-Run Agreement for Lennox G.S., Page 3, Paragraph 4:

> **In the EB-2007-0715 decision, the Board noted that if OPG were to file a multiyear RMR agreement for Board approval, it expected that**

OPG would demonstrate that the contractual model used for the RMR contracts is appropriate for an agreement having a term of more than one year. (EB-2007-0715, page 12) While OPG has not filed a multi-year RMR agreement, OPG submits that the RMR contractual structure could be used over a longer term as it provides the counterparty with access to all information necessary to verify OPG's costs and revenues, allows the counterparty to audit this information as and when necessary, and also allows for termination of the agreement at any time should it be determined that Lennox is no longer required.

The Lennox RMR agreement has been in place in essentially the same form since October 1, 2005. The IESO has conducted two audits of the agreements (in 2006 and 2007), both of which concluded that the auditor was satisfied with the Lennox plant operation strategy, costs and practices. The successful operation of the agreement since October 2005 provides comfort that the agreement in its current form is suitable for a multi-year term.

a) Please provide an illustrative multi-year (i.e. two-year) RMR agreement for Lennox Generation Station with a similar contractual model as the one-year IESO-OPG Reliability Must-Run Agreement for Procurement Physical Services from Lennox Generating Station, inclusive of all schedules, filed by OPG with the Board on September 15, 2008. In doing so please indicate in "track-mode" the changes made to the 1-year RMR in deriving the multi-year RMR.

Reference: Board Decision EB-2007-0715, Page 11, Paragraph 3, Lines1-2:

The Board sees promise in a multi-year RMR arrangement in terms of cost-effectiveness.

Reference: OPG's November 10, 2008 Additional Evidence EB-2009-0298 Reliability Must- Run Agreement for Lennox G.S., Page 4, Paragraph 2:

OPG has identified three main benefits of a longer term contract for Lennox:

1. **Allows for more effective and efficient planning and execution of operational programs**
2. **Results in consideration of value enhancing projects which would benefit all stakeholders**
3. **Reduces administrative work associated with the re-negotiation, approval and reporting processes for contracts**

b) Please estimate any cost differences for the October 30, 2008 to September 30, 2009 in a 1-year RMR contract and the costs for that same period associated with a multi-year contract such as that requested in (a) above that reflect the benefits of a longer term contract identified by OPG.

PWU Interrogatories for the IESO

PWU Interrogatory 1

Reference: IESO Report 0516, Lennox GS Deregistration Analysis, Page 3, Paragraph 5:

It is recommended to contract all four Lennox units from October 2008 to September 2009. During the first seven months Lennox is expected to play the same role as before. The last five months cover summer 2009 with potential high demand periods in Toronto and Ottawa and September with its possible lower demands but traditionally a higher number of planned outages scheduled. Allowing for this RMR to overlap the planned in-service date of the new facilities will insure against potential delays and to confirm their reliable operation which is consistent with the IESO principle of ensuring new facilities are operationally robust before existing facilities are potentially replaced. Under the current firm resource scenarios and demand forecast, insufficient justification was found for extending the Lennox RMR contract beyond September 2009. If there is a material change in the load forecast or the expected resource availability, this decision will be reviewed.

Reference: OPG's November 10, 2008 Additional Evidence EB-2009-0298 Reliability Must- Run Agreement for Lennox G.S., Page 2, Paragraphs 3-4:

**The OPA's pre-filed evidence for the IPSP filed with the OEB on August 29,
2007 proposes that the OPA will contract for Lennox following expiry of the RMR contract with the IESO. The OPA states:**

"… the OPA will enter into a procurement contract with OPG to replace the OEB approved Reliability-Must-Run contract that is currently in place with respect to the Lennox GS through the OEB-approved procurement process." (EB-2007-0707, Exhibit B-1-1, page 28)

The OPA further states:

"While Lennox is assumed to remain in service, its category changes from an existing resource to a planned resource in 2011. This is a result of Lennox, and therefore its RMR contract, not being needed for local reliability purposes after 2010." (EB-2007-0707, Exhibit D-8-1, page 9)

a) Based on the IESO's understanding, what are the differences, if any, between the scope and purpose of an IESO RMR technical assessment and the scope and purpose of an OPA IPSP process?

b) Given the differences identified in response to (a), if any, what in the IESO's view are the possible differences in the determination by the IESO and OPA on the need for Lennox GS to remain operational in the short-term, the mid-term and the long-term?

PWU Interrogatory 2

Reference: IESO Report 0516, Lennox GS Deregistration Analysis, Page 2, Paragraph 3, Lines 6-11:

> **Under the current limit structure, the transfer capability to the Ottawa area is dependent on the number of Lennox units in service. More than two units are required to realize additional benefits by arming local load rejection. Extreme weather conditions in the Ottawa area can result in an FIO (Flow Into Ottawa) as high as 1950MW and under certain outage conditions may require all four Lennox units and at least 150 MW of load rejection armed in Ottawa to reliably supply the zone. The operating documents currently in force only allow load rejection in Ottawa to be armed if Lennox units are synchronized to the grid. A review of these operating limits to recognize the new connection to Quebec and its associated facilities is expected to result in an improvement in the transfer limit and the effectiveness of allow arming of load rejection in Ottawa when all Lennox units are disconnected from the grid. As a result, Lennox support may no longer be required beyond September 2009 to reliably supply the Ottawa zone if sufficient load rejection can be armed.**

a) Do the criteria set out in the Ontario Resource and Transmission Assessment Criteria (ORTAC) (https://ieso.ca/imoweb/pubs/marketAdmin/IMO_REQ_0041_TransmissionAssessmentCriteria.pdf) apply in the above review?

b) If so, please explain how the operating limits that recognize the new connection to Quebec and its associated facilities that are "expected to result in an improvement in transfer limit and the effectiveness of allow arming of load rejection in Ottawa when all Lennox units are disconnected from the grid", meet the relevant criteria of the ORTAC.

PWU Interrogatory 3

Reference: IESO Report 0516, Lennox GS Deregistration Analysis, Page 2, Paragraph 2, Lines 9-12:

> **… It should be noted that under reliability must run contract Lennox generation capacity is available when needed to control eastern**

Ontario voltages and support high flows into Ottawa, while presently the planned resource scenario does not rely on imports to satisfy internal reliability requirements.

a) Please provide a detailed explanation of the above sentence.

Reference: IESO Report 0516, Lennox GS Deregistration Analysis, Page 3, Paragraph 4:

The transmission enhancements associated with new tie and HVDC connection with Transenergie expected to go in service in spring 2009 is expected to reduce reliance on Lennox for Ottawa supply.

b) How does the above statement relate to the sentence cited in part (a) of this interrogatory with regard to relying on imports to satisfy internal reliability requirement?

PWU Interrogatory 4 (see PWU Interrogatory 2 to OPG)

Reference: OPG's November 10, 2008 Additional Evidence EB-2009-0298 Reliability Must- Run Agreement for Lennox G.S., Page 3, Paragraph 4:

In the EB-2007-0715 decision, the Board noted that if OPG were to file a multiyear RMR agreement for Board approval, it expected that OPG would demonstrate that the contractual model used for the RMR contracts is appropriate for an agreement having a term of more than one year. (EB-2007-0715, page 12) While OPG has not filed a multi-year RMR agreement, OPG submits that the RMR contractual structure could be used over a longer term as it provides the counterparty with access to all information necessary to verify OPG's costs and revenues, allows the counterparty to audit this information as and when necessary, and also allows for termination of the agreement at any time should it be determined that Lennox is no longer required.

The Lennox RMR agreement has been in place in essentially the same form since October 1, 2005. The IESO has conducted two audits of the agreements (in 2006 and 2007), both of which concluded that the auditor was satisfied with the Lennox plant operation strategy, costs and practices. The successful operation of the agreement since October 2005 provides comfort that the agreement in its current form is suitable for a multi-year term.

a) Please provide an illustrative multi-year (e.g. two-year) RMR agreement for Lennox Generation Station with a similar contractual model as the October 1, 2008 IESO-OPG Reliability Must-Run Agreement for Procurement Physical Services from Lennox Generating Station, inclusive of all schedules, filed by

OPG in its September 15, 2008 request for Board approval of the RMR Agreement. In doing so please indicate in "track-mode" the changes made to the 1-year RMR in deriving the multi-year RMR.

PWU Interrogatory 5

Reference: EB-2008-0298 Notice of Application and Hearing Ontario Power Generation Inc. Reliability Must-Run Contract for the Lennox Generating Station, Appendix A, Procedural Order No. 1, Page 9, Paragraph 2:

> **The Board also notes that the 2009 RMR Contract will take effect October 1, 2008 but that the coming into effect of the 2009 RMR Contract is subject to Board approval. The Board wishes to understand what, if any, financial payments are intended to be made to OPG by the IESO in relation to Lennox as of the date of expiry of the 2008 RMR Contract (September 30, 2008).**

Reference: OPG September 15, 2008 Request for Approval of a Lennox Power Generating Station Reliability Must-Run Agreement, Appendix 1, IESO-OPGI Reliability Must-Run Agreement, Page 23, Paragraph 9.17:

> ***OEB* Approval: The *Parties* agree that notwithstanding the proposed *effective date,* this *Agreement* shall not be implemented and no rights or obligations shall accrue hereunder until this *Agreement* is approved by the *Ontario Energy Board.* Notwithstanding anything else in this *Agreement,* if this *Agreement* is approved by the *Ontario Energy Board* after October I, 2008, the *1ESO* shall pay to the *Physical Service Provider* any *monthly payments* accrued and payable hereunder since October I, 2008, at the same time the *1ESO* pays the next applicable *monthly payment* following such approval, and any such accrued and payable *monthly payments* shall be subsequently trued-up pursuant to Section 6 of Schedule A.**

a) Please explain the intent of Paragraph 9.17 of the RMR agreement dated September 15, 2008 in terms of the Board's desire to understand the financial payments intended to be made to OPG by the IESO as of the date of expiry of the 2008 RMR Contract.

PWU Interrogatories for the OPA

PWU Interrogatory 1

Reference: IESO Report 0516, Lennox GS Deregistration Analysis, Page 3, Paragraph 5:

It is recommended to contract all four Lennox units from October 2008 to September 2009. During the first seven months Lennox is expected to play the same role as before. The last five months cover summer 2009 with potential high demand periods in Toronto and Ottawa and September with its possible lower demands but traditionally a higher number of planned outages scheduled. Allowing for this RMR to overlap the planned in-service date of the new facilities will insure against potential delays and to confirm their reliable operation which is consistent with the IESO principle of ensuring new facilities are operationally robust before existing facilities are potentially replaced. Under the current firm resource scenarios and demand forecast, insufficient justification was found for extending the Lennox RMR contract beyond September 2009. If there is a material change in the load forecast or the expected resource availability, this decision will be reviewed.

Reference: OPG's November 10, 2008 Additional Evidence EB-2009-0298 Reliability Must- Run Agreement for Lennox G.S., Page 2, Paragraphs 3-4:

The OPA's pre-filed evidence for the IPSP filed with the OEB on August 29,

2007 proposes that the OPA will contract for Lennox following expiry of the RMR contract with the IESO. The OPA states:

"… the OPA will enter into a procurement contract with OPG to replace the OEB approved Reliability-Must-Run contract that is currently in place with respect to the Lennox GS through the OEB-approved procurement process." (EB-2007-0707, Exhibit B-1-1, page 28)

The OPA further states:

"While Lennox is assumed to remain in service, its category changes from an existing resource to a planned resource in 2011. This is a result of Lennox, and therefore its RMR contract, not being needed for local reliability purposes after 2010." (EB-2007-0707, Exhibit D-8-1, page 9)

a) Based on the OPA's understanding, what are the differences, if any, between the scope and purpose of an IESO RMR technical assessment and the scope and purpose of an OPA IPSP process.

b) Given the differences identified in response to (a), if any, what in the OPA's view are the differences in the determination by the IESO and OPA on the need for Lennox GS to remain operational in the short-term, the mid-term and the long-term?

PWU Interrogatory 2

Reference: IESO Report 0516, Lennox GS Deregistration Analysis, Page 2, Paragraph 2, Lines 9-12:

> **… It should be noted that under reliability must run contract Lennox generation capacity is available when needed to control eastern Ontario voltages and support high flows into Ottawa, while presently the planned resource scenario does not rely on imports to satisfy internal reliability requirements.**

Reference: IESO Report 0516,Lennox GS Deregistration Analysis, Page 3, Paragraph 4:

> **The transmission enhancements associated with new tie and HVDC connection with Transenergie expected to go in service in spring 2009 is expected to reduce reliance on Lennox for Ottawa supply.**

a) From the perspective of the OPA's IPSP responsibility how does the above statement relate to the sentence cited above with regard to reliance on imports to satisfy internal reliability requirement?