ONTARIOPOWER GENERATION

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August 8, 2007

VIA COURIER

Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, Suite 2700
Toronto, ON
M4P 1E4

Dear Ms. Walli:

Re: Lennox Generating Station Reliability Must-Run Agreement

Attached please find a request from Ontario Power Generation Inc. (OPG) to the Board for approval of a Lennox Generating Station Reliability Must-Run Agreement. This agreement was recently signed between OPG and the Independent Electricity System Operator (IESO).

I am providing ten (10) hardcopies of OPG's request along with one electronic copy.

Please direct any comments or questions in this matter to the undersigned.

Yours truly,

Andrew Barrett

Attach
cc: Regulatory Affairs Records, OPG
Enzo D'Alimonte, OPG
Michael Penny, Torys
John Rattray, IESO
Doug Thomas, IESO

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Re: Request for Approval of a Reliability Must-Run Agreement for Lennox G.S.

Dear Ms. Walli:

Ontario Power Generation Inc. ("OPG") has negotiated a Reliability Must-Run ("RMR") agreement with the Independent Electricity System Operator ("IESO") for the Lennox Generating Station ("Lennox") pursuant to Chapter 5, section 4.8, and Chapter 7, sections 2.4, 9.6 and 9.7 of the market rules for the Ontario electricity market. This agreement is the third RMR agreement for Lennox negotiated between the parties and covers the period October 1, 2007 to September 30, 2008.

OPG's Generation Licence (EG-2003-0104), Part 1, Paragraph 5.2, provides that any such agreement "shall be subject to approval by the Board prior to its implementation." Pursuant to this licence condition, OPG hereby requests Board approval of the attached RMR agreement for Lennox (Appendix 1).

The agreement for which approval is being sought is in exactly the same form as the existing Lennox RMR agreement which was approved by the OEB in January 2007 (EB-2006-0205). In its Decision on that agreement, the Board found: "...that the RMR Contract is in accordance with OPG's license ... that these contract terms do not provide incentives for OPG to alter the way it offers the output of Lennox into the IESO-administered market"(Decision EB-2006-0205, p. 5), and "that the financial provisions of the RMR contract are reasonable." (Decision EB-2006-0205, p. 8)

As there are no changes to the form of the last agreement, which was subject to a full written hearing and was approved by the Board, OPG submits that the Board should approve this new Lennox RMR and that no hearing is necessary.

1. Background

The Lennox facility is a 2,140 MW dual-fuelled (oil and natural gas-fired) generating station located near Kingston, Ontario. Due to its relatively high operating cost, Lennox is a peaking plant that generates mainly during times of peak electricity demand when lower cost resources are unable to satisfy demand. As a result, it operates for relatively few hours each year. Since the formation of OPG in 1999, Lennox has been unable to consistently earn sufficient revenues in the wholesale electricity market to cover the station's fixed and variable operating costs, essentially recovering only its marginal fuel costs.

Until 2004, OPG expected that the introduction of a capacity market and/or higher market prices would enable Lennox to cover its costs and provide a return on investment. However, as a result of the significant increase in the amount of electricity capacity procured by contract by the Ontario Power Authority ("OPA"), OPG expects future revenues from the wholesale electricity market to be lower than previously anticipated. Many new entrants are expected to recover fixed costs through their contractual arrangements with the OPA, thereby reducing anticipated prices in the wholesale electricity market as these new entrants will need to recover only fuel and other variable costs from the market.

Accounting standards require that an impairment loss be recognized when the undiscounted future cash flows expected to be generated over the estimated useful life of an asset are less than the net book value of the asset. The expected continuing losses at Lennox led OPG to advise its Shareholder, the Province, that an impairment loss would be required unless Lennox could generate additional revenue.

In early 2005, OPG was informed by its Shareholder that it would support OPG seeking an arrangement with the IESO that would allow OPG to recover Lennox's fixed operating costs, but would not support the recovery of costs related to the carrying value of Lennox. As a result of this and the structural changes in the market already outlined, OPG recorded on March 31, 2005 an impairment loss of $202 M before taxes representing the carrying value (i.e. the remaining book value) of Lennox. For clarity, the RMR agreement does not recover any of this impairment loss.

OPG filed its first Notice of Request to Deregister Lennox with the IESO on July 15, 2005, and following confirmation by the IESO that Lennox was required to avoid an unacceptable impact on the reliability of the IESO-controlled grid, a RMR agreement for a one-year period beginning October 1, 2005 was finalized and subsequently approved by the OEB. OPG filed a second Notice of Request to Deregister with the IESO on March 29, 2006, and was advised by the IESO that Lennox was still required to avoid an unacceptable impact on the reliability of the IESO-controlled grid. Consequently, a RMR agreement for a one-year period beginning October 1, 2006 was finalized and subsequently approved by the OEB.

2. Requirement for a Third Lennox RMR Agreement

The market rules provide that the term of any RMR contract is limited to one year.

OPG does not envision any change in market conditions that would allow Lennox to recover its fixed and variable operating costs from the wholesale electricity market once the current RMR contract terminates on September 30, 2007. As a result, on February 6, 2007, OPG filed a Notice of Request to Deregister Lennox with the IESO[1]. On April 5, 2007, the IESO responded to OPG indicating that deregistration of the Lennox facility would put the IESO-controlled grid at undue risk, and that it was their intention to enter into negotiations for a third RMR contract that would ensure the continued operation of Lennox for up to one year. A copy of this correspondence is attached as Appendix 2.

Subsequently, a new RMR agreement for the period between October 1, 2007 and September 30, 2008 was negotiated. This new RMR was executed by the IESO on July 23, 2007 and by OPG on August 2, 2007.

3. RMR Agreements– Relevant Market Rule Provisions

Chapter 5, section 4.8 of the market rules generally explains the need for reliability must-run resources and introduces the concept of reliability must-

[1] The market rules require a generator to provide the IESO not less than six months notice of the planned retirement of any of its generation facilities that are registered facilities (chapter 7, section 2.4.8). This advance notice allows the IESO to assess the impact that the removal of the registered facility would have on the reliability of the IESO-controlled grid.

run agreements. Chapter 7, section 2.4.5 provides that if a party requests deregistration of a facility and the IESO concludes that the facility is necessary for reliability of the IESO controlled grid, then the IESO and that party should commence negotiations of a reliability must-run contract under Chapter 7 sections 9.6 and 9.7. Chapter 7, section 9.6 describes the process for negotiating a reliability must-run contract while section 9.7 specifies the terms and conditions that must be addressed in a RMR contract.

4. Comparison to the Previous Lennox RMR Agreement

The form and structure of the RMR agreement that is the subject of the current application is the same as the existing, approved agreement. A detailed description of the operation of the Lennox RMR agreement is provided in Appendix 3.

5. Performance of the 2006-07 Lennox RMR Agreement

For the period from October 1, 2006 to June 30, 2007, the actual net costs (costs minus revenues) of the agreement were higher than the originally estimated net costs for this period ($52.68 M actual compared to $43.62 M estimated). The variances in costs and revenues are explained below.

For the period from October 1, 2006 to June 30, 2007, the existing RMR agreement had actual total costs of $93.49 M compared to the estimate of $75.24 M. This variance is due primarily to increased fuel costs ($47.16 M actual versus $32.39 M estimated) and an increase in project costs ($8.19 M actual versus $6.77 M estimated). The variance is partially offset by a decrease in Financing on Working Capital ($2.72 M actual versus $3.03 M estimated). The actual costs also include the Net Energy Settlement for Non-Dispatchable Load (station service load drawn by Lennox from the IESO-controlled grid) ($2.98 M) which is netted out of the revenue forecast in OPG's business planning model and must therefore be added back to obtain total costs when the monthly true-up is done.

For the same period, the existing RMR agreement has actual total revenues of $40.81M compared to an estimate of $31.62 M. This variance is due mainly to increased net energy revenue ($32.67 M actual versus $29.03 M estimated) and other revenues such as CMSC for energy ($3.46 M) and Generation Cost Guarantee ($2.37 M) that are netted out of the revenue forecast in OPG's business planning model and must therefore be added back to obtain total revenues when the monthly true-up is done.

The performance reward and penalty mechanism which has been included in the agreement since the first RMR agreement (October 1, 2005 – September 30, 2006) was reviewed during the contract negotiations between OPG and the IESO. It was agreed that based on experience to date the mechanism is working as intended and does not require modification. In addition, performance data reflecting the full term of the second RMR agreement (October 1, 2006 – September 30, 2007) was not available prior to the completion of negotiations in July 2007, and there is therefore no further basis on which to pursue different performance criteria. Information available for the completed shoulder period (October 1, 2006 – November 30, 2006 and April 1, 2007 – May 31, 2007) shows a reward to OPG of $686 K. The peak period, which included the period December 1, 2006 to March 31, 2007, and which began again on June 1, 2007, will continue to run until Sept 30/07.

6. Conclusion

The IESO has determined that deregistration of Lennox would put the IESO-controlled grid at undue risk and requested negotiations with OPG for another RMR agreement for this facility. The resulting RMR agreement is consistent with the market rules and OPG's Generation Licence. Its payment and true-up mechanism compensates OPG only for those operating costs that are not recovered through Lennox revenues, recognizing the need to provide appropriate incentives to support reliability, maximize available revenues, and to address the risks inherent in plant operation.

The agreement provides the IESO with access to all information necessary to verify OPG's costs and revenues. Furthermore, it allows the IESO to audit this information as and when necessary. It also allows the IESO to terminate the agreement at any time should the IESO determine that Lennox is no longer required to maintain the reliability of the IESO-controlled grid.

The agreement is in exactly the same form as the 2006-2007 RMR agreement that was approved by the Board in January 2007. The monthly payments under the proposed agreement are higher ($6.49 M vs $5.14 M) than the monthly payments under the existing agreement. This is due mainly to additional project work for the installation of a permanent oil unloading facility and the rewinding of the stator on Unit 4, and increased labour costs due to increased labour burdens and negotiated agreements with labour unions. In the Decision on the existing RMR agreement, the

Board found that the RMR Contract is in accordance with OPG's license, that the contract terms do not provide incentives for OPG to alter the way it offers the output of Lennox into the IESO-administered market, and that the financial provisions of the RMR contract are reasonable. Because the Board has so recently reviewed and approved the existing RMR agreement and because there has been no change in the form of the agreement, OPG submits that the Board should approve the RMR agreement and that no hearing is necessary.

Yours truly,

Andrew Barrett
Vice President, Regulatory Affairs and Corporate Strategy

Att. Appendix 1 – Reliability Must-Run Agreement
Appendix 2 – Formal De-registration Correspondence between OPG and IESO
Appendix 3 – Operation of the Lennox RMR Agreement

APPENDIX 3

Operation of the Lennox RMR Agreement

The RMR agreement is structured to permit OPG to recover the fixed and variable costs associated with keeping Lennox available to the system and the fixed and variable costs associated with producing electricity from Lennox.

(a) Performance Terms

The RMR agreement obligates OPG to offer into the IESO-administered market the maximum available amounts of energy and operating reserve from Lennox consistent with good utility practice. The agreement also requires that OPG make Lennox available whenever it is physically capable of responding to dispatch instructions, consistent with good utility practice. Finally, the agreement provides that if future products related to Lennox production ("Future Related Products") are developed by the IESO, OPG will offer the maximum available amount of these products from Lennox into the relevant IESO-administered markets. If markets for Future Related Products are developed by others, OPG will use Lennox to participate in these markets in a commercially reasonable manner, consistent with good utility practice (RMR Agreement Section 3.3 and Schedule A, section 1).

Schedule B of the RMR agreement contains performance standards. It also contains penalty or reward provisions that apply if reliability targets are missed or exceeded. The reliability targets use a metric called EFOR-OP (Equivalent Forced Outage Rate-Operations) which is an indication of a generating unit or station's reliability when it is required to operate. It measures the ratio of forced occurrences (outages and output derates) to "total exposure time"[2]. The reliability metric is similar to the widely used utility measure Equivalent Forced Outage Rate (EFOR) except that it accounts for Available But Not Operating (ABNO) and Available But Not Staffed (ABNS) conditions in the metric's denominator.

The EFOR-OP targets used in calculating rewards or penalties vary seasonally. In the peak season (essentially summer and winter) the target range is between four and six percent with the penalty provisions applying if the EFOR-OP is above six percent and the reward provisions applying if the EFOR-OP is below four percent. In the shoulder season (essentially spring and fall), the EFOR-OP target range is between six and eight percent with

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[2] "Total exposure time" generally relates to any time that a forced occurrence could potentially take place and is formulaically represented in Schedule B to the RMR Contract.

operation above or below this range leading to either penalties or rewards, respectively.

(b) Payment Terms

The RMR agreement compensates OPG by covering its operating costs and providing it with additional revenues equivalent to 5% of the gross revenues earned by or attributed to Lennox. Under the agreement, Retained Gross Revenues are set equal to 95% of the gross revenues that OPG receives from the sale of energy and operating reserve and other payments attributable to Lennox operation. These revenues are used as an offset to the payments made by the IESO to OPG to cover the facility's Operating Costs.

Allowing OPG to keep 5% of the gross revenues earned by, or attributed to, Lennox provides OPG with an incentive to maximize the gross revenues from the facility, thus reducing the financial support provided under the agreement. Operating Costs include all non-capital costs necessary to maintain Lennox's availability and to operate the plant[3]. In addition, because OPG incurs certain costs and assumes certain risks with respect to the operation of Lennox, the agreement provides for a margin amount of $1.49 M to be paid to OPG over the term of the agreement. This amount was calculated as 5% of the forecast cost of plant labour and corporate services directly related to plant operation. The fixed margin amount, in combination with other conditions discussed below, removes any incentive for OPG to increase these costs.

The forecast sum of Operating Cost and Margin, minus the forecast Retained Gross Revenues, for the agreement period, was divided by 12 to yield Monthly Payments of $6.49 M (RMR Schedule D, Section 4). The fuel costs, IESO market costs and gross revenue portions of this amount are subject to true-up against actual fuel and IESO market costs and actual Retained Gross Revenues on a monthly basis. This true-up will involve a Monthly True-up Payment from the IESO or to the IESO, so that the net amount paid to OPG reflects the actual monthly fuel costs offset by the actual monthly Retained Gross Revenues (RMR Schedule A, section 3).

In addition to the Monthly True-up Payments, the RMR agreement also provides for quarterly Interim Period True-up Payments. These true-up

[3] The RMR contract only covers the fixed and variable operating costs associated with Lennox; there is no provision for recovery of historical capital costs. All future costs incurred including, but not limited to, generating, ancillary, safety equipment and common plant facilities will be expensed as incurred in accordance with Generally Accepted Accounting Principles considering the expectation for cost recovery related to the Lennox operation in the current market environment.

payments cover OPG's OM&A and other costs and operate to eliminate any differences between forecast and actual costs so that OPG recovers only the costs it actually incurred. If forecast costs are higher than actual costs, OPG pays the difference to the IESO; if actual costs are higher, the IESO pays the difference to OPG.

Monthly Accrued True-up Payments cover costs for the period prior to OEB approval, should the contract not be approved by October 1, 2007. At the end of the month in which OEB approval is received, the parties will calculate the monthly and interim true-up payments for the period from October 1, 2007 to the end of the month in which OEB approval is received. The net amount of these true-up payments will be spread over the remaining term of the agreement and paid by, or to, the IESO in equal monthly payments at the same time as the Monthly Payments are made. The total net cost of the RMR agreement (payments and true-ups) will be recovered from wholesale market participants as part of the monthly non-hourly uplift.

OPG must provide the IESO with all the information used by OPG to calculate its true-up payments along with detailed statements validated by a senior manager of OPG. The IESO must provide OPG with information to support its monthly revenue calculation for Lennox. Each party must respond to the other's reasonable information requests regarding its calculations. Moreover, the IESO has the right to conduct both financial and operational audits of OPG's information to determine its compliance with the RMR agreement, including its calculations of costs under the agreement. OPG must assist in any such audit by retaining complete and accurate records, permitting access to them by the auditor, and furnishing such other assistance as the auditor may reasonably require.

(c) Termination

The agreement runs from October 1, 2007 to September 30, 2008 and may not be extended or renewed. The IESO can terminate the agreement at any time upon written notice stating the effective date of the termination and by paying OPG its termination costs. These costs include any out-of-pocket costs incurred or committed to by OPG as a result of the agreement. Early termination of the agreement by the IESO will constitute IESO approval for OPG to deregister Lennox upon OPG's request.

OPG may terminate the agreement at any time by withdrawing its request to deregister Lennox. All payments which accrued prior to OPG withdrawing its deregistration request must be made, but OPG is not entitled to receive termination costs. If OPG terminates this Agreement prior to September 30, 2008 and if the cumulative total Operating Cost Amount paid by the IESO (including accrued amounts) exceeds the cumulative total of the Retained Gross Revenue Amount for the time period from the effective date of the agreement to the date of termination, then OPG shall pay the difference to the IESO.