Ontario Energy Board | Commission de l'Énergie de l'Ontario

Ontario

EB-2006-0205

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 Generating Station facilities between Ontario Power Generation Inc. and the Independent Electricity System Operator.

BEFORE: Bill Rupert
Presiding Member

Pamela Nowina
Member and Vice Chair

DECISION WITH REASONS

January 22, 2007

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BACKGROUND

On August 23, 2006, Ontario Power Generation Inc. ("OPG") filed an application (the "Application") with the Ontario Energy Board seeking approval of a second reliability must-run agreement (the "RMR Contract") with respect to the Lennox generating station ("Lennox").

Lennox is a four-unit 2,140 Megawatt ("MW") fossil generating station located near Kingston, Ontario. It started operation in 1976 as an oil-fired station and was converted to dual oil/natural gas fueling in 1998-2000. Due to its relatively high operating cost, Lennox has been operated as a peaking plant. OPG has stated that Lennox was not able to earn sufficient revenues in the wholesale electricity market to cover its fixed and variable costs, and recovered essentially only its fuel costs. In March 2005, OPG wrote off the remaining net book value of the plant. In July 2005, OPG filed a request with the Independent Electricity System Operator ("IESO") to de-register (i.e., shut down) Lennox. The IESO rejected that request and, instead, negotiated a reliability must-run agreement with OPG for the 12 months from October 1, 2005 to September 30, 2006 ("the initial RMR agreement").[1]

On March 29, 2006, OPG wrote to the IESO to indicate it was prepared to negotiate a second reliability must-run agreement unless the IESO determined that Lennox could be de-registered. On May 19, 2006, the IESO informed OPG that de-registration of Lennox would put the IESO-controlled grid at undue risk. The IESO's Lennox GS Deregistration Analysis stated that:

> … all 4 units at Lennox are required to operate the system reliably during the period Oct[ober] 2006 to Sep[tember] 2007. The new generation capacity at Goreway [in the western GTA], scheduled to go in service in mid Jun[e] 2007 may reduce the number of units required at Lennox to three. However, the total generation at Goreway expected to go on line by the summer 2007 represents only 485 MW, less than one Lennox unit. It should also be recognized that any project delay would push the

[1] The Board approved that agreement in its March 13, 2006 Decision in EB-2005-0490.

> in service date of this new capacity beyond the first potential period of hot weather in summer 2007. In this regard, it is prudent to contract the fourth unit at Lennox at least until the end of summer 2007 for insurance purposes (e.g., to provide support for any single element contingency during the summer peak).[2]

The IESO and OPG negotiated a new RMR Contract that, subject to Board approval, is effective October 1, 2006.

Salient provisions of the new RMR Contract include:

- One-year term, from October 1, 2006 to September 30, 2007, without renewal or extension (although it may be terminated by either party upon written notice);
- Estimated payments to OPG of $62 million over the contract term (comprised of OPG's fixed and variable costs for Lennox, a "margin amount" of $1.404 million, and additional revenues equivalent to 5% of the gross revenues earned by or attributed to Lennox in the IESO-administered markets);
- An obligation on OPG to offer into the IESO-administered markets the maximum amount of energy and operating reserve from Lennox in a commercially reasonable manner and in accordance with stated performance standards; and
- Rewards or penalties (neither to exceed $2 million) based on OPG exceeding or failing to meet agreed performance standards.

In accordance with the Market Rules, the total net cost of the RMR Contract would be recovered by the IESO from wholesale market participants as part of the monthly non-hourly uplift.

THE PROCEEDING

The Application was made under section 5 of OPG's generation licence (EG-2003-0104), which requires that any reliability must-run agreement be approved by the

[2] Independent Electricity System Operator, *Lennox GS Deregistration Analysis*, May 25, 2006 (internal draft), November 29, 2006 (public release), at page 1.

Board prior to its implementation. The Board assigned file number EB-2006-0205 to the Application.

OPG requested that the Application be disposed of without a hearing on the grounds that the Board had recently reviewed and approved a must-run agreement for the year ended September 30, 2006 and that the RMR Contract is essentially the same as the first agreement except for updated cost and revenue information.

The Board issued a Notice of Application on September 22, 2006 inviting submissions on whether the Board should hold a hearing in relation to OPG's application. The only response received was a letter filed by the Electricity Market Investment Group ("EMIG")[3], which submitted, in part, that:

> The Board should clearly articulate at this time that future RMR approval applications will not be considered absent publication of a needs and alternatives analysis supporting the application, and evidence of public consultation sufficient to demonstrate the prudence of the option before the Board relative to alternatives.

EMIG did not comment on the terms of the RMR Contract nor did it take a position on whether the Board should hold a hearing. The Board indicated as part of its Procedural Order No. 1 that the issues raised by EMIG concerned future reliability must-run agreements and, therefore, were outside the scope of issues that would be considered in this proceeding. The Board believes, however, that EMIG has raised some important issues concerning future RMR arrangements and the Board comments on those issues in the last section of this Decision.

The Board determined it would proceed by way of a written hearing. On November 13, 2006, the Board issued a Notice of Hearing and Procedural Order No. 1 to OPG and directed OPG to serve those documents on potential interested parties. Interested parties were instructed to register their intervention or to file comments.

[3] The EMIG member firms are: Constellation New Energy Canada Inc., Coral Energy Canada Inc., Direct Energy Marketing Limited, EPCOR Utilities Inc., Invenergy LLTC, Ontario Energy Savings LP, Sithe Global Power LLC, and Universal Energy Corporation.

Board staff interrogatories to OPG were attached to Procedural Order No. 1. OPG filed responses to Board staff's interrogatories on November 27, 2006.

Union Gas Limited, Direct Energy Marketing Inc. and the Power Workers' Union (the "PWU") were granted intervenor status as requested. The IESO applied for, and was granted, intervenor status after the deadline provided in the Notice.

In Procedural Order No. 1, intervenors were invited to file evidence by November 29, 2006. Only the IESO filed evidence. All parties and Board staff were invited to file written interrogatories directed to any other party to the proceeding by December 6, 2006. Board staff submitted an interrogatory to the IESO on that date. There were no interrogatories submitted by any intervenors. The IESO filed its interrogatory response on December 12, 2006.

OPG filed final argument on December 15, 2006. PWU filed final argument on December 20, 2006 and recommended that the Board approve the RMR Contract. PWU also made some suggestions about Board processes in respect of any future reliability must-run agreements. Those suggestions are discussed in the last section of this Decision. None of the other intervenors filed argument. The Board received a reply argument from OPG on December 22, 2006.

ISSUES

The Board's review mandate with respect to this matter is contained in section 5.2 of OPG's licence, which reads as follows:

> Where an agreement is entered into in accordance with paragraph 5.1 [that is, an agreement with the IESO for the supply of energy or other services for the purpose of maintaining the reliability of the IESO-controlled grid], it shall comply with the applicable provisions of the Market Rules or such other conditions as the Board may consider reasonable. The agreement shall be subject to approval by the Board prior to its implementation. Unresolved disputes relating to the terms of the Agreement, the interpretation of the Agreement, or amendment of the Agreement, may be determined by the Board.

When it considered the initial RMR agreement for Lennox in EB-2005-0490, the Board determined there were three key issues that needed to be addressed before it could approve the subject contract. Those issues were:

1. Does the RMR contract comply with OPG’s licence?
2. Are the financial provisions of the RMR contract reasonable?
3. What are the incentive effects, if any, of the RMR contract?

The Board finds that there is no evidence that should cause it to reconsider the issues that are relevant to a decision to approve a new agreement.

OPG’s generation license requires that an RMR Contract must comply with the applicable provisions of the Market Rules. The terms and conditions of the RMR Contract are essentially the same as those in the initial RMR agreement and there have been no changes to the relevant Market Rules. The Board finds that the RMR Contract is in accordance with OPG’s license (Issue 1). Like the initial RMR agreement, the RMR Contract allows OPG to retain 5% of the gross revenues from Lennox and also provides the same rewards (penalties) for exceeding (failing to meet) agreed performance standards. The Board finds 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 (Issue 3).

Given the findings set out in the preceding paragraph, the Board restricted the scope of the hearing to Issue 2, as noted in Procedural Order No.1:

> The Board notes that the structure of the proposed RMR Contract is similar to the structure of the reliability must-run contract for the 12 months ended September 30, 2006 that was filed by OPG for the Board’s approval under Board File No. EB-2005-0490. Accordingly, this hearing will be restricted to consideration of the issue of reasonableness of the estimated operating costs and gross revenues in the proposed RMR Contract as compared to the amounts included in the reliability must-run contract filed under Board File No. EB-2005-0490.

FINANCIAL PROVISIONS OF THE RMR CONTRACT

Table 1 is a summary of the forecast and actual costs, revenues, and margin amounts for each of the initial Lennox GS RMR contract (2005-2006) and the new contract (2006-2007).

Table 1: Forecast and Actual Costs and Revenues for Lennox GS

$ millions *12 months ended September 30*		2005-2006		2006-2007
		Forecast	**Actual**	**Forecast**
Costs				
Fuel		$ 29.6	$ 52.1	$ 43.2
OM&A		51.8	50.3	51.3
IESO market costs		-	6.4	1.8
Working capital financing		3.0	4.7	4.0
		84.4	113.5	100.3
Margin amount		1.3	1.3	1.4
	[A]	85.7	114.8	101.7
Revenue				
Total		24.8	59.6	42.2
Retained by OPG (5%)		- 1.2	- 3.0	- 2.1
	[B]	23.6	56.6	40.1
Net cost	[A]-[B]	$ 62.1	$ 58.2	$ 61.6

Source: Summarized from information provided by OPG in its response to Staff interrogatory #1.

The Board accepts that there are no alternatives to a Lennox RMR contract in the short term; the IESO has determined that shutting down Lennox would put the IESO-controlled grid at undue risk. Thus, the Board's review of the financial aspects of the RMR Contract could not be aimed at determining whether the contract is the most cost-effective way to resolve the identified reliability issues in the short-term. Rather, the Board's review focussed on whether the financial terms and conditions of the contract are reasonable in the circumstances. Specifically, and consistent with the

Board's review of the initial Lennox reliability must-run agreement, the Board considered whether the RMR Contract should:

a. Provide for recovery of 100% of the fixed and variable operating costs (both fuel and non-fuel) of Lennox;,
b. Provide for the payment of a fixed "margin amount" in addition to the recovery of the fixed and variable operating costs;
c. Include a revenue sharing mechanism and, if so, whether 5% of gross revenue was appropriate; and
d. Include performance-based incentives.

The Board finds that these four financial elements of the RMR Contract are appropriate for the same reasons as outlined in its Decision on the 2005-2006 contract.[4] In summary:

- Recovery of fixed and variable operating costs is appropriate for reliability must-run resources and is consistent with practice in other jurisdictions. The RMR Contract does not provide for the recovery of any capital costs, which in any event were written off by OPG in 2005.
- The "margin amount" this year is set at $1.404 million compared to $1.283 million last year. In both cases, the margin amount is fixed at five per cent of the forecast cost of labour and corporate services directly related to plant operation. The Board finds this amount is reasonable compensation to OPG for costs and risks not included in its fixed and variable costs.
- The revenue sharing mechanism incents OPG to ensure Lennox is able to operate as much as required, particularly in hours when market prices are high.
- Performance-based incentives/penalties are a common feature of reliability must-run arrangements in other jurisdictions and align OPG's interests with those of the IESO.

[4] The Board's reasons for accepting these four elements of the initial contract are set out on pages 10 and 11 of its March 13, 2006 Decision in EB-2005-0490.

The Board asked OPG for additional information on how Lennox actually performed during the term of the first RMR agreement, relative to the forecast built into the initial RMR agreement, the reasons for significant variances, and how this information was taken into account in negotiating the terms of the RMR Contract under consideration in this Application. OPG noted that energy production at Lennox was considerably higher than forecast in the initial period (440,962 MWh actual production compared to a forecast of 286,426 MWh), resulting in significantly higher fuel cost and revenue from the IESO-administered market.

The Board also asked the IESO if it had carried out an audit of the actual costs and revenues for 2005-2006 as permitted by the RMR contract. The IESO did engage an external consultant to carry out an audit and filed with the Board the Executive Summary from the consultant's November 2006 report. The audit covered six objectives – compliance with the RMR contract, verification of billing costs, compliance with RMR contract schedules, reasonableness of maintained resources, reasonableness of plant costs, and confirmation of good utility practice. The Executive Summary of the audit report noted that the consultant was satisfied with the Lennox plant operation strategy, costs, and practices.

Based on the evidence and submissions in this proceeding, the Board finds that the financial provisions of the RMR Contract are reasonable. The Board is also satisfied that the RMR Contract complies with OPG's licence conditions and the Market Rules, and that the RMR Contract does not contain incentives for OPG to alter its offer behaviour. The Board therefore approves the RMR Contract as submitted.

FUTURE RMR CONTRACTS

EMIG and the PWU made recommendations about the Board's process for dealing with future RMR contract applications and about the possibility of alternatives to further RMR arrangements for Lennox.

In its letter, EMIG stated that the Lennox RMR Contract appears to pose relatively high costs to consumers (although it noted it is hard to assess the prudence of extending the RMR arrangements in the absence of an analysis of alternatives). Assuming that is true, EMIG considers the arrangement to be an undesirable, temporary solution that should be supplanted by a more sustainable and efficient strategy. As an alternative to future Lennox RMR arrangements, EMIG would support a public procurement for new supply, as well as conservation and demand management activities, to meet the reliability needs identified by the IESO.

The PWU recommended a streamlined process to deal with any future RMR applications.[5] It suggested that a streamlined process could be developed as part of a generic RMR hearing or as part of the Board's hearing on the Ontario Power Authority's Integrated Power System Plan (IPSP). The PWU called for timely notice to market participants of the potential impact of RMR arrangements, which would allow sufficient time for market responses. The PWU also noted that the OPA has included Lennox as a supply resource for the 20-year term of its preliminary IPSP.

The Board agrees with EMIG and PWU about the need to identify and evaluate alternatives to Lennox RMR contracts should the reliability issues identified by the IESO persist. At a net cost of roughly $60 million per year, the Lennox RMR Contract is a significant cost borne by electricity consumers. The OPA's Preliminary IPSP shows that all four units at Lennox are assumed to remain in service until 2027 although the Preliminary Plan assumes no output from the plant (zero capacity factor) over that period.[6] The Board is concerned about the possibility of being asked in the future to routinely approve one-year RMR arrangements for Lennox without any evidence of whether there are any cost-effective alternatives that should be pursued.

[5] PWU suggests that a streamlined RMR process could also include a review of non-RMR generation contracts that are approaching maturity. The Board does not have the authority to review and approve generation contracts except pursuant to a license condition and any pre-IPSP OPA contracts that have not been entered into under Ministerial direction.

[6] Ontario Power Authority, *Ontario's Integrated Power System Plan, Discussion Paper 7: Integrating the Elements – A Preliminary Plan*, November 15, 2006, pages 18 and 81.

The Board does not reasonably expect either OPG or the IESO to develop and analyze longer-term alternatives to Lennox in the normal course of performing their respective responsibilities. OPG is not responsible for reliability of the Ontario power system. It has made it very clear that, absent an RMR arrangement, it would retire Lennox. Under the *Electricity Act, 1998*, the IESO has a mandate to collect and provide to the OPA and the public information relating to the current and short-term electricity needs of Ontario and the adequacy and reliability of the integrated power system to meet those needs. When it identifies a near-term reliability issue, the Market Rules require that the IESO take action to address that issue. The Market Rules call for the IESO, where practical, to employ a competitive tendering or negotiation process to identify multiple potential suppliers and to determine competitive prices and other terms for the reliability must-run contract.[7] If the IESO determines that an RMR arrangement with a single supplier is the only feasible way to solve the reliability issue, it cannot delay entering into a contract until someone analyzes and develops longer-term alternatives.[8]

The OPA clearly has, as its legislated mandate, forecasting of the adequacy and reliability of electricity resources for Ontario for the medium and long term and engaging in activities in support of the goal of ensuring adequate, reliable and secure electricity supply and resources in Ontario. The Board anticipates that, in its IPSP filing in 2007, the OPA will provide an analysis of reliability issues in Eastern Ontario for the next 20 years as well as an economic analysis that shows the most cost-effective way to deal with the identified reliability issues.

With respect to the PWU's submission that a streamlined and generic RMR process is required, the Board believes it is unnecessary to develop such a process. Lennox is the only generation plant that has been subject to an RMR arrangement to date and

[7] Market Rules for the Ontario Electricity Market,Chapter 9, subsection 9.6.7, Baseline 16.1, December 6, 2006.
[8] The Board notes that the public release by the IESO of the reliability study that supports the Lennox RMR Contract and the IESO's commitment to continue to release such studies in the future would be helpful to market participants and others that are considering new investments, and might spur development of longer-term alternatives to a Lennox RMR.

only two contracts have been reviewed by the Board. At this point, the Board is not aware of RMR contracts for other generating plants that the IESO is anticipating and will need to be submitted to the Board for review.

DATED At Toronto, January 22, 2007

ONTARIO ENERGY BOARD

Original signed by

Bill Rupert
Presiding Member

Original signed by

Pamela Nowina
Member and Vice Chair