



EB-2013-0061

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

Before: Paula Conboy
Presiding Member

Peter Noonan
Member

DECISION AND ORDER

July 25, 2013

The Application

Ontario Power Generation Inc. ("OPG") filed an application on March 1, 2013 with the Ontario Energy Board (the "Board") seeking approval of a reliability must-run agreement (the "Thunder Bay RMR Agreement") entered into with the Independent Electricity System Operator (the "IESO") in relation to one of the two 153 MW coal-fired units at OPG's Thunder Bay generating station (the "TB GS Unit"). The application was made under section 5 of OPG's generation licence, which requires that any reliability must-run

("RMR") agreement be approved by the Board prior to its implementation. The Board has assigned file number EB-2013-0061 to OPG's application.

The process for the negotiation of an RMR agreement as set out in the Market Rules can be triggered by a request to de-register a generation facility. Upon receipt of such a request, the IESO may conduct a technical assessment to determine whether the removal from service of the facility will or is likely to have an unacceptable impact on the reliability of the IESO-controlled grid. OPG gave notice of its intention to de-register the Thunder Bay generating station on November 15, 2012, citing OPG's expectation that revenue earned by the generating station from the wholesale electricity market would continue to be insufficient to cover the station's costs. By letter to OPG dated January 7, 2013, the IESO advised that its technical assessment had concluded that the removal from service of the entire generation facility would likely have an unacceptable impact on the reliability of the IESO-controlled grid. At the same time, the IESO indicated that it would therefore be prepared to enter into discussions with a view to concluding an RMR agreement for at least one unit at the Thunder Bay generating station for a period of up to one year.

Subject to Board approval, the Thunder Bay RMR Agreement comes into effect as of January 1, 2013, and has a term of one year without renewal or extension. The Agreement itself contemplates that it will not be approved by the Board prior to the date of its coming into effect, and includes (in Schedule A) provisions to address any payments accrued and payable before the date of Board approval. Essentially, such payments will be made in equal monthly amounts spread over the remainder of the term of the Agreement.

Interventions and Cost Awards

On April 3, 2013, the Board issued its Notice of Application and Written Hearing (the "Notice"). In response to the Notice, the Board received intervention requests from the following: the Building Owners and Managers Association - Greater Toronto ("BOMA"); Canadian Manufacturers & Exporters ("CME"); Energy Probe Research Foundation ("Energy Probe"); the IESO; the Power Workers' Union ("PWU"), the Society of Energy Professionals; the Vulnerable Energy Consumers Coalition ("VECC"); and a coalition comprised of the City of Thunder Bay, Common Voice Northwest, the Northwestern

Ontario Municipal Association and the Northwestern Ontario Associated Chambers of Commerce (the “NOACC Coalition”).

The Board also received cost eligibility requests from BOMA, CME, Energy Probe, VECC and the individual members of the NOACC Coalition.

In its April 19, 2013 Decision on Intervenor Status and Cost Eligibility, the Board granted intervenor status to all parties that requested it, and determined that BOMA, CME, Energy Probe, VECC and the Northwestern Ontario Associated Chambers of Commerce are eligible for cost awards.

The Issues List

In Procedural Order No. 1, issued together with the Notice on April 3, 2013, the Board confirmed the following as the three key issues in this proceeding:

1. Does the reliability must-run agreement comply with OPG's licence?
2. Are the financial provisions of the reliability must-run agreement reasonable?
3. What are the incentive effects, if any, of the reliability must-run agreement?

However, the Board also made provision for the filing of submissions on whether any further issue(s) should be added to the issues list for this proceeding, and for the filing of responding submissions.

The Board's May 21, 2013 Decision on Issues List and Procedural Order No. 2 contains a summary of the submissions filed in response to Procedural Order No. 1, and sets out the Board's finding that no additional issues are required to be added to the issues list beyond the three noted above.

The Proceeding

In its Procedural Order No. 1, the Board made provision for the filing of interrogatories to OPG and the IESO on the three issues noted above. Interrogatories were filed by a

number of parties and by Board staff, and responses were filed by OPG and the IESO, as applicable.

In its Decision on Issues List and Procedural Order No. 2, the Board made provision for the filing of submissions on the three issues noted above, and for the filing of reply submissions by OPG. Submissions were received from BOMA, CME, Energy Probe, the NOACC Coalition, PWU, VECC and Board staff, and reply submissions were filed by OPG.

The complete record of this proceeding is available for review at the Board's offices and on the Board's website. While the Board has considered the full record, the Board has summarized and referred only to those portions of the record that it considers helpful to provide context to its findings.

Issue 1: Does the Thunder Bay RMR Agreement Comply with OPG's Licence?

In its application, OPG noted that in the first proceeding to approve an RMR agreement for the Lennox generating station ("Lennox") (EB-2005-0490), the Board specifically referred to the following sections of the Market Rules in relation to the issue of compliance with OPG's licence: section 4.8 of Chapter 5 and sections 2.4, 9.6 and 9.7 of Chapter 7.

OPG further stated that it followed the same process for the Thunder Bay RMR Agreement as it had for the RMR agreement for the Lennox facility, a process that the Board had been satisfied complied with both OPG's licence conditions and the Market Rules. OPG further stated that the terms and conditions set out in section 9.7 of Chapter 7 of the Market Rules have been satisfied in respect of the Thunder Bay RMR Agreement.

Submissions

BOMA, CME, PWU, VECC and Board staff all submitted that there is no evidence to suggest that there has been a failure by OPG to comply with provisions of the Market Rules that govern the process or terms and conditions applicable to RMR agreements. This was noted in OPG's reply submission.

Board Findings

There being no evidence to the contrary, the Board has determined that the Thunder Bay RMR Agreement complies with OPG's licence.

Issue 2: Are the financial provisions of the Thunder Bay RMR Agreement reasonable?

The financial provisions of the Thunder Bay RMR Agreement can be summarized as follows:

- i. Variable costs (including the cost of fuel and variable maintenance costs): in accordance with Schedule D of the Thunder Bay RMR Agreement, compensation for the variable costs of operating the TB GS Unit is not covered by the Agreement; rather, those costs are recovered through revenues earned in the IESO-administered markets;
- ii. Fixed costs (being the OM&A and other costs listed in Schedule D of the Thunder Bay RMR Agreement): in accordance with Schedule D of the Agreement, the fixed costs of operating the TB GS Unit that would be avoided by OPG if the Unit was de-registered are recovered under the Agreement by means of monthly fixed payments of \$3,164,000 each, for a total of \$37,968,000 over the one-year term of the Agreement;
- iii. Auxiliary boiler and regulatory testing costs: in accordance Schedule D of the Thunder Bay RMR Agreement, these costs are reimbursed under the Agreement quarterly based on after-the-fact actual fuel cost submissions;
- iv. Market costs (defined in section 1.2 of the Thunder Bay RMR Agreement as including all uplift and transmission charges as well as the Global Adjustment): in accordance with Schedule D of the Agreement, these costs are reimbursed under the Agreement;
- v. Net Revenue Sharing Adjustment ("NRSA"): in accordance with Schedule D of the Thunder Bay RMR Agreement, OPG is permitted to retain 5% of any operating profit (described as revenues (market and non-market) less the actual cost of fuel) when the TB GS Unit is dispatched to run, determined quarterly. In accordance with Schedule E of the Agreement, there is no NRSA when OPG is operating as an energy-limited resource under the fuel management provisions set out in Schedule E of the Agreement; and

- vi. Performance standards: in accordance with Schedule C of the Thunder Bay RMR Agreement, OPG receives a “reward” or pays a “penalty” if its performance exceeds or falls below certain performance standards, to a cap of \$500,000 over the term of the Agreement. The metric used for this purpose is called EFOR-OP, which is a measure of a generating unit’s reliability when it is called on to operate. The net penalty/reward is calculated and settled once at the end of the term of the Agreement.

In its application, OPG stated that the financial provisions of the Thunder Bay RMR Agreement represent an improvement relative to the financial provisions of the RMR agreements that were approved by the Board in respect of the Lennox station in the following three respects:

- i. under the Thunder Bay RMR Agreement, variable costs are recovered through the market while fixed costs are recovered through monthly fixed payment amounts that have been determined based on a mutually agreed forecast of fixed costs. In the case of Lennox, these costs were all recovered under the RMR agreement based on after-the-fact actual cost submissions;
- ii. the NRSA under the Thunder Bay RMR Agreement is less generous to OPG, yet maintains a sufficient incentive to offer the TB GS Unit efficiently into the IESO-administered markets; and
- iii. the provisions pertaining to fuel management under the Thunder Bay RMR Agreement require OPG to offer the TB GS Unit in such a way as to manage OPG’s limited fuel supplies in order to meet the IESO’s reliability needs and minimize its stranded fuel costs at the termination of the Agreement.

Submissions

BOMA noted that certain costs (“Labour”, “Direct Assigned” and “Central Support – Business Unit”) being recovered under the Thunder Bay RMR Agreement by means of the monthly fixed payments are higher than actual 2012 costs, and are too high absent some more compelling explanations. BOMA did not make firm recommendations on how much the monthly fixed payments should be reduced, but suggested that the Board reduce the amounts unless OPG is able to provide a more substantial justification for

the costs in question. BOMA was supportive of the reward/penalty provisions of the Thunder Bay RMR Agreement.

CME submitted that the Board should refrain from unconditionally approving the \$37.972M annualized monthly fixed payment amount because the amount is excessive. In support of its position, CME provided a comparison between OPG's actual costs for the years 2010, 2011 and 2012 and its actual expenditures in the first quarter of 2013. CME submitted that it is unreasonable to provide OPG with a cost savings incentive in an amount which the evidence suggests could be more than \$3 million. CME suggested that the Board consider conditioning its approval of the Thunder Bay RMR Agreement on terms that would require OPG to remit to ratepayers any amount of savings in the costs covered by the monthly fixed payment amounts that exceeds \$500,000. CME noted that this approach would be consistent with the \$500,000 cap that applies to the penalty/reward scheme relating to performance standards. CME also indicated that it accepts, as reasonable, the \$500,000 reward/penalty cap specified in the Agreement.

Energy Probe's submissions focussed on the issue of avoided costs, noting that it has reservations about OPG's understanding of the principles and methodology applicable to the avoidable cost test. Energy Probe noted concern regarding the following in particular:

- i. a reliance on fully-allocated costs for certain cost items;
- ii. a failure to distinguish sunk costs and institutional factors that render certain variable costs unavoidable;
- iii. the apparent acceptance of re-assigned costs as avoidable;
- iv. a failure to provide sufficient information to assess the avoidability of certain cost items;
- v. the occasional failure to distinguish between the avoidability consequences of a hypothetical shutdown and those of an actual shutdown; and
- vi. a failure to propose a non-arbitrary relevant time period.

In light of these concerns, Energy Probe urged the Board to require OPG to re-determine the monthly fixed payment amounts on the basis of a conventional avoidable cost methodology.

PWU submitted that the financial provisions of the Thunder Bay RMR Agreement are reasonable. Among other things, PWU noted that the IESO, in response to an interrogatory, stated that it had sought to gain reasonable assurance that the contract only included costs that could be avoided within a reasonable time frame if the plant were to be de-registered. PWU also noted that the monthly fixed payment amounts were reviewed and accepted by the IESO during negotiations, and further stated that this element of the Thunder Bay RMR Agreement represents an improvement over earlier RMR agreements for the Lennox facility.

The NOACC Coalition confirmed its support for the Thunder Bay RMR Agreement, noting concerns regarding the reliability and security of power supply in the Northwest region of the Province.

VECC submitted that the costs that would be avoided by OPG if the facility were de-registered depend on the actions that OPG would take in respect of the subject facility subsequent to de-registration. In this regard, VECC expressed concern with two components of the monthly fixed payment amounts – the avoided costs associated with property taxes and allocated costs for central support – and suggested that these might be reduced.

Board staff submitted that the financial provisions of the Thunder Bay RMR Agreement that are equivalent or comparable to provisions in the Board-approved RMR agreements for Lennox are no less reasonable. Board staff also noted that, with respect to costs or payments other than the monthly fixed payment amounts, the IESO has the right to conduct audits of OPG's financial records and operations and OPG is required to assist in any such audit.

Board staff noted that OPG's fixed costs are recovered under the Thunder Bay RMR Agreement based on a forecast of fixed costs. As such, the risk of forecast deviations where actual costs are lower than forecast lies with ratepayers and not with OPG, while the opposite is true if actual costs are higher than forecast. Board staff attempted to quantify the order of magnitude of the potential forecast deviation that might be involved using historical actual cost information provided by OPG in its responses to interrogatories. Board staff noted that actual costs for the first three months of 2013 were below the monthly fixed payment amount by anywhere from \$224,000 to \$348,000 per month, a deviation of approximately 7% to 11%. Board staff noted that the IESO, in

its response to an interrogatory, confirmed that it had independently reviewed OPG's cost estimates and found them to be reasonable and allocated to the Thunder Bay RMR Agreement appropriately. Board staff submitted that this is of assistance in mitigating any forecast deviation risk to which ratepayers may be exposed.

In its reply submission, OPG acknowledged that four parties raised various issues regarding the monthly fixed payment amounts but noted that no party had submitted that the Thunder Bay RMR Agreement should not be approved in principle. In response to concerns expressed by parties in relation to the monthly fixed payment amounts, OPG:

- i. provided explanations for the year-over-year increases in the cost components of concern to BOMA, to support OPG's position that the costs are reasonable and properly recovered through the Agreement;
- ii. submitted that there is limited applicability and reliability to comparisons of historical costs with actual costs for the first quarter of 2013, noting in particular that the monthly fixed payments were determined by dividing total annual costs by 12 and do not necessarily reflect the variability of planned expenditures during the year;
- iii. submitted that the cap suggested by CME is unnecessary and inappropriate given that the costs recovered under the Agreement are the product of a negotiated agreement as to approach and quantum, and that the IESO has independently reviewed the reasonableness of OPG's cost estimates;
- iv. provided further detail regarding OPG's treatment of avoided costs, to support OPG's position that its understanding and application of the avoidable cost test were correct; and
- v. submitted that it has taken a prudent approach to determining the property tax and allocated central support services amounts included in the monthly fixed payments.

OPG therefore urged the Board to conclude that the financial provisions of the Thunder Bay RMR Agreement are reasonable, and to approve the Agreement as filed.

According to OPG, given the significant role played by the IESO the Board can be confident that the overall package, as represented by the monthly fixed payments, yields a reasonable result for ratepayers. OPG requested that, if the Board is not satisfied that the financial provisions of the Agreement are reasonable, the Board

should approve the Agreement with conditions, outlining changes to be made to make it fully compliant with those conditions. OPG noted, however, that the financial terms of the Agreement represent an integrated negotiated package, and that caution should be exercised, in the absence of a very clear reason for doing so, before making any changes to the monthly fixed payment structure and quantum accepted by the IESO.

Board Findings

The Board accepts the financial provisions of the Thunder Bay RMR Agreement as reasonable. The Board agrees that certain of the financial provisions of the Thunder Bay RMR Agreement appear to be an improvement over the RMR agreements that the Board has approved in the past.

A number of parties questioned the reasonableness of the monthly fixed payment amounts, or of some elements of the costs that are to be recovered through those payments. However, the evidence and arguments are not, in the Board's view and when considered in light of OPG's reply submissions, sufficiently compelling such as to sustain a finding that the financial terms of the Agreement are unreasonable.

This is the first time that the Board has considered an RMR agreement for the Thunder Bay generating station. If an application is eventually filed by OPG for approval of a second and similar RMR agreement for that station, the Board will be particularly attentive to the extent to which OPG's actual costs have deviated from the forecast costs that formed the basis for the monthly fixed payment amounts. At that time, the Board may revisit the need for a mechanism, such as the one proposed by CME, to protect the interests of ratepayers in that regard.

Issue 3: What are the incentive effects, if any, of the Thunder Bay RMR Agreement?

As noted in certain submissions on the issues list for this proceeding filed in response to Procedural Order No. 1, in the first proceeding to approve an RMR agreement for the Lennox station the Board described the relevant incentive effects as follows:

- a. Does the RMR Contract provide incentives that may cause OPG to alter its offering behaviour?
- b. If OPG's offering behaviour is altered, what is the potential impact on wholesale electricity prices and other market participants?

The Board has approached issue 3 on that basis.

Submissions

The submissions filed in respect of this issue referred generally to one or more of the following three elements of the Thunder Bay RMR Agreement: (i) section 3.3 of the Agreement, which requires OPG to participate in the wholesale markets in a “commercially reasonable manner” and in a manner consistent with how OPG’s coal-fired generation is being offered pursuant to OPG’s CO₂ Implementation Strategy; (ii) the NRSA, which as described in Schedule D of the Agreement allows OPG to retain 5% of its operating profits; and (iii) the provisions relating to fuel management, which are set out in Schedule E of the Agreement.

BOMA submitted that, given the structure of the Thunder Bay RMR Agreement, there would not appear to be any major incentive effects.

PWU submitted that the Thunder Bay RMR Agreement does not provide inappropriate incentives for OPG to alter its offer behavior as the Agreement introduces the proper economical signal that incents OPG to act in a commercially reasonable manner based on its cost. PWU noted that the Board had previously found that the RMR agreement for the Lennox station did not provide incentives for OPG to alter its offer behavior, and that the Thunder Bay RMR Agreement is an improvement over that earlier agreement in this regard. Among other things, PWU noted that the Lennox RMR agreement allowed OPG to retain 5% of gross revenue while the Thunder Bay RMR Agreement allows OPG to retain 5% of net revenues after deducting the actual cost of fuel when dispatched. In PWU’s view, the use of a monthly fixed payment approach provides an incentive for OPG to manage its costs, and this incentive acts as a direct safeguard against any potential for OPG to alter its offer behavior. PWU also noted that given that OPG anticipates that CO₂ emissions will be well below target, OPG’s expectation that the CO₂ Implementation Strategy will not have an impact on OPG’s offer strategy is a reasonable one. PWU also submitted that the fuel management provisions of the Agreement will also not have an impact on OPG’s offer strategy.

Board staff submitted that the Thunder Bay RMR Agreement does not create incentives for OPG to alter its offer behavior in a manner that would have adverse consequences for prices in the market or for other market participants, although the fuel management feature of the Agreement may have an effect on prices. Board staff suggested that

OPG's offer behaviour in terms of maximizing its operating profit is the same whether OPG retains 5% or all of the operating profit, and therefore submitted that the NRSA element of the Agreement does not appear to raise significant incentive effect concerns. In Board staff's view, there are also no adverse incentive implications arising from the interaction of the Thunder Bay RMR Agreement and OPG's CO₂ Implementation Strategy. Board staff submitted that this is the case regardless of whether or not a positive emission adder was to be applied. Raising offer prices above the direct costs of fuel is a normal and efficient response to emissions limits for any generator, and Board staff did not see any reason why the Agreement would affect OPG's behaviour in that regard. Board staff did note that, to the extent that energy-limited hours identified by the IESO as requiring the TB GS Unit to run for reliability reasons do not coincide with high-priced hours, the fuel management provisions set out in Schedule E of the Agreement would have effects on market prices and other participants. However, Board staff submitted that this is not an "incentive" for OPG to alter its offer behaviour; rather, it is the consequence of the IESO making decisions about the operation of the TB GS Unit for reliability reasons. Board staff suggested that those decisions are properly left to be made by the IESO.

In its reply submissions, OPG noted that that no parties have made submissions indicating that the incentive provisions of the Thunder Bay RMR Agreement with regard to OPG's offer behavior are inappropriate. OPG also reiterated the statements made in its application to the effect that the NRSA represents a smaller incentive to OPG than did the revenue sharing mechanism in the RMR agreement for the Lennox station.

Board Findings

Based on the evidence in this proceeding, the Board is satisfied that the Thunder Bay RMR Agreement does not create incentives that may cause OPG to alter its offer behaviour. The Board notes that no party raised material concerns in this regard, and that provisions of the Thunder Bay RMR Agreement that are relevant to this issue are similar to, or represent an improvement over, provisions in the RMR agreements for the Lennox station.

Approval of the Agreement and Filing of any Future Applications for Approval

Based on the application and the evidence in this proceeding, the Board is satisfied that the Thunder Bay RMR Agreement complies with OPG's licence, that the financial

provisions of the Thunder Bay RMR Agreement are reasonable, and that the Thunder Bay RMR Agreement does not create incentives that may cause OPG to alter its offer behaviour. The Board therefore approves the Thunder Bay RMR Agreement as filed with the Board.

The Board notes that the Thunder Bay RMR Agreement was filed with the Board two months after the effective date of the Agreement. Among other things, as noted by Board staff in its submissions this means that certain of OPG's costs will be recovered from ratepayers at an accelerated rate over a shorter period of time than would be the case if the Agreement had been filed for Board approval before the effective date of the Agreement.

The Board understands from OPG's response to an interrogatory that there is no technical reason why a future request to de-register the Thunder Bay station could not be filed with the IESO to enable a future RMR agreement (if one is required) to be filed with the Board as early as October 15, 2013. The Board expects that, if another RMR agreement for the Thunder Bay generating station is required for all or part of 2014, OPG will make every effort to file its application for approval of that agreement sufficiently long in advance to permit the regulatory process to unfold before the agreement takes effect.

THE BOARD ORDERS THAT:

1. The reliability must-run agreement for the Thunder Bay generating station is approved as filed with the Board.
2. Intervenors that have been determined to be eligible for cost awards in this proceeding shall file with the Board and deliver to OPG their respective cost claims no later than August 1, 2013.
3. OPG shall file with the Board and deliver to intervenors any objections to the claimed costs no later than August 12, 2013.
4. Intervenors shall file with the Board and deliver to OPG any responses to any objections to cost claims no later than August 19, 2013.

All filings to the Board must quote file number EB-2013-0061, be made through the Board's web portal at www.pes.ontarioenergyboard.ca/eservice/, and consist of two paper copies and one electronic copy in searchable / unrestricted PDF format. Filings must clearly state the sender's name, postal address and telephone number, fax number and e-mail address. Please use the document naming conventions and document submission standards outlined in the RESS Document Guideline found at www.ontarioenergyboard.ca. If the web portal is not available you may email your document to the Board at BoardSec@ontarioenergyboard.ca. Those who do not have internet access are required to submit all filings on a CD in PDF format, along with two paper copies. Those who do not have computer access are required to file seven paper copies. If you have submitted through the Board's web portal an e-mail is not required.

All communications should be directed to the attention of the Board Secretary at the address below, and be received no later than **4:45 p.m.** on the required date.

With respect to distribution lists for all electronic correspondence and materials related to this proceeding, parties must include the Case Manager, Michael Bell at Michael.Bell@ontarioenergyboard.ca and the Board's Associate General Counsel, Martine Band at Martine.Band@ontarioenergyboard.ca.

DATED at Toronto, **July 25, 2013**

ONTARIO ENERGY BOARD

Original Signed By

Kirsten Walli
Board Secretary