



# **ONTARIO ENERGY BOARD**

## **BOARD STAFF SUBMISSION**

### **ONTARIO POWER GENERATION**

#### **PAYMENT AMOUNTS FOR PRESCRIBED FACILITIES**

**EB-2007-0905**

**JULY 15, 2008**

## **PART 1: LEGAL ADVICE TO PANEL REGARDING THE INTERPRETATION OF O.REG. 53/05**

### Summary of Submissions on Legislative Framework:

The Board's mandate is to determine just and reasonable payment amounts under section 78.1 of the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Sched. B (the "Act"). The Board is to make an order setting payment amounts in accordance with the rules prescribed by regulation. The relevant regulation is Ontario Regulation 53/05, *Payments under Section 78.1 of the Act* (the "Regulation" or "Regulation 53/05").<sup>1</sup>

It is Board staff's submission that the legislative framework requires the Board to do the following:

- The Board must accept the amounts set out in the audited financial statements approved by the board of directors of Ontario Power Generation Inc. ("OPG") as they relate to the matters referred to in sections 6(2)5 and 6(2)6, including the revenue requirement impact of accounting and tax policy decisions. The audited financial statements before the Board are those for the period ending December 31, 2007, and the obligation to accept amounts therefore relates to that period. For the period after December 31, 2007, the Board has discretion to determine the relevant costs, revenues and other financial amounts in accordance with such principles as it considers appropriate.
- The Board must ensure that OPG recovers the balances in the variance and deferral accounts identified in the Regulation, on the terms set out for each in the Regulation.
- The Board must ensure that OPG recovers and continues to recover:
  - the costs incurred and firm financial commitments made to increase the output of, refurbish or add operating capacity to a prescribed facility, provided in some cases that the Board determines those costs or commitments to have been prudently made or incurred;
  - the costs incurred and firm financial commitments made in the course of planning and preparation for the development of proposed new nuclear generation facilities, provided that the Board determines those costs or commitments to have been prudently made or incurred;
  - the revenue requirement impact of OPG's nuclear decommissioning liability arising from the current approved reference plan; and
  - all the costs OPG incurs with respect to the Bruce Nuclear Generating Stations.

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<sup>1</sup> Section 78.1 of the Act and Regulation 53/05 are reproduced in their entirety in Appendix A and B, respectively. Unless otherwise noted, references in these submissions to sections are to sections of Regulation 53/05.

## Principles of Statutory Interpretation

The modern principle of statutory interpretation, which the Supreme Court of Canada has declared to be the preferred approach, is described as follows:

Today there is only one principle or approach, namely, the words of an Act are to be read in their entire context, in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act and the intention of Parliament.

....

At the end of the day, after taking into account all relevant and admissible considerations, the court must adopt an interpretation that is appropriate. An appropriate interpretation is one that can be justified in terms of (a) its plausibility, that is, its compliance with the legislative text; (b) its efficacy, that is, its promotion of legislative intent; and (c) its acceptability, that is, the outcome complies with legal norms; it is reasonable and just.<sup>2</sup>

Although Professor Sullivan specifically refers to “courts” in her discussion of statutory interpretation, the principle applies equally to administrative tribunals and thus the Board.

The modern principle emphasizes the importance of purposive analysis in statutory interpretation. A purposive analysis is based on the following propositions:

1. All legislation is presumed to have a purpose.
2. Legislative purpose should be taken into account in every case and at every stage of interpretation, including the determination of a text's meaning.
3. Insofar as the language of the text permits, interpretations that are consistent with or promote legislative purpose should be adopted, while interpretations that defeat or undermine legislative purpose should be avoided.<sup>3</sup>

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<sup>2</sup> Ruth Sullivan, *Sullivan and Driedger on the Construction of Statutes* (4th ed.), Butterworths (Toronto), 2002, pp.1, 3. The modern principle was most recently applied in respect of the Act in *Low Income Energy Network v. Ontario Energy Board* [2008] O.J. 1970 (Div. Ct.)

<sup>3</sup> *Ibid.*, p. 195.

The *Legislation Act, 2006* applies to all Ontario statutes. Section 64 of the *Legislation Act, 2006* reads:

- (1) An Act shall be interpreted as being remedial and shall be given such fair, large and liberal interpretation as best ensures the attainment of its objects.
- (2) Subsection (1) also applies to a regulation, in the context of the Act under which it is made and to the extent that the regulation is consistent with that Act.<sup>4</sup>

Where the provision to be interpreted appears in a regulation, it is to be read in the context of both the regulation and the enabling statute as a whole.<sup>5</sup>

Legislation is enacted to achieve one or more purposes, and each provision in a statute or regulation contributes to realizing the purpose(s) in a specific way. An interpretation that would tend to frustrate the purpose(s) of legislation or the realization of the legislative scheme is likely to be labeled absurd.<sup>6</sup>

If the ordinary meaning of legislation is ambiguous, the interpretation that best accords with the purpose of the legislation should be adopted. If the ordinary meaning is clear, but an alternative interpretation is plausible and more in keeping with the purpose, the interpretation that best accords with the purpose of the legislation should be adopted.<sup>7</sup>

Board staff also notes that the courts have consistently found that the Board has very broad discretion in exercising its mandate to set just and reasonable rates.<sup>8</sup> In Board staff's submission, the same broad discretion applies to the Board's mandate to determine just and reasonable payment amounts under section 78.1 of the Act, subject only to statutory provisions that constrain the exercise of that discretion.

### Statutory Framework

Section 78.1 of the Act directs the Board to set just and reasonable payment amounts for generation facilities prescribed by regulation (the "prescribed facilities").<sup>9</sup> As previously stated, the relevant regulation is Regulation 53/05".

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<sup>4</sup> *Legislation Act, 2006*, S.O. 2006, chapter 21, Schedule F, section 64(1). The same concept was formerly captured in section 10 of the *Interpretation Act*, R.S.O. 1990, chapter I.11.

<sup>5</sup> Driedger, p. 282.

<sup>6</sup> *Ibid.*, pp. 243-44.

<sup>7</sup> *Ibid.*, p. 219.

<sup>8</sup> See, for example, *Natural Resource Gas v. Ontario Energy Board*, [2005] O.J. No. 1520 (Ont. Div. Ct.); *Union Gas Ltd. v. Ontario (Energy Board)*, (1983), 43 O.R. (2<sup>nd</sup>) 489 (Ont. Sup. Ct.); and *Garland v. Consumers' Gas Company*, [2000] O.J. No. 1354 (Sup. Ct. Jus.) (overturned on different grounds).

<sup>9</sup> The prescribed facilities are identified in section 2 of the Regulation as the following generation facilities owned by OPG: Sir Adam Beck I, Sir Adam Beck II, Sir Adam Beck Pump Generating Station, De Cew Falls I, De Cew Falls II (all of the foregoing being hydroelectric generating stations located in the Regional Municipality of Niagara), R.H. Saunders hydroelectric generating station on the St. Lawrence River,

The contextual background to the statutory framework includes the objectives set out in section 1(1) of the Act; namely:

1. To protect the interests of consumers with respect to prices and the adequacy, reliability and quality of electricity service.
2. To promote economic efficiency and cost effectiveness in the generation, transmission, distribution, sale and demand management of electricity and to facilitate the maintenance of a financially viable electricity industry.

### **Requirements of Regulation 53/05**

Regulation 53/05 affects the setting of payment amounts for the prescribed facilities in three principal ways:

- by requiring that OPG establish certain variance and deferral accounts and that the Board ensure recovery of the balance in those accounts subject to certain conditions being met;
- by requiring that the Board ensure that certain costs, financial commitments or revenue requirement impacts be recovered by OPG; and
- by setting certain financial values that must be accepted by the Board when making its first order under section 78.1 of the Act ("first order").

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Pickering A nuclear generating station, Pickering B nuclear generating station and Darlington nuclear generating station.

**Issue 3.1**

**Are the costs and financial commitments OPG is seeking to recover under section 6(2)4 incurred to increase the output of, refurbish or add operating capacity to a prescribed facility?**

**Issue 3.2**

**If so, are the costs and financial commitments within project budgets approved for that purpose by the board of directors of OPG?**

**Applicable Sections of Regulation 53/05**

6(2)4. The Board shall ensure that Ontario Power Generation Inc. recovers capital and non-capital costs, and firm financial commitments incurred to increase the output of, refurbish or add operating capacity to a generation facility referred to in section 2, including, but not limited to, assessment costs and pre-engineering costs and commitments,

- i. if the costs and financial commitments were within the project budgets approved for that purpose by the board of directors of Ontario Power Generation Inc. before the making of the Board's first order under section 78.1 of the Act in respect of Ontario Power Generation Inc., or
  - ii. if the costs and financial commitments were not approved by the board of directors of Ontario Power Generation Inc. before the making of the Board's first order under section 78.1 of the Act in respect of Ontario Power Generation Inc., if the Board is satisfied that the costs were prudently incurred and that the financial commitments were prudently made.
5. In making its first order under section 78.1 of the Act in respect of Ontario Power Generation Inc., the Board shall accept the amounts for the following matters as set out in Ontario Power Generation Inc.'s most recently audited financial statements that were approved by the board of directors of Ontario Power Generation Inc. before the effective date of that order:
- i. Ontario Power Generation Inc.'s assets and liabilities, other than the variance account referred to in subsection 5 (1), which shall be determined in accordance with paragraph 1.

....

6. Without limiting the generality of paragraph 5, that paragraph applies to values relating to,
  - i. capital cost allowances,
  - ii. the revenue requirement impact of accounting and tax policy decisions, and
  - iii. capital and non-capital costs and firm financial commitments to increase the output of, refurbish or add operating capacity to a generation facility referred to in section 2.

## Discussion

OPG is seeking recovery of costs only under section 6(2)4(i), and is not seeking the recovery of any firm financial commitments.

Based on the provisions of Regulation 53/05, the following rules apply in relation to the costs referred to in section 6(2)4 of that Regulation ("Section 6(2)4 Costs"):

- if the Section 6(2)4 Costs were within the project budgets approved for that purpose by OPG's board of directors before the making of the Board's first order, the Board must ensure that OPG recovers the Section 6(2)4 Costs;
- if the Section 6(2)4 Costs were not approved by OPG's board of directors before the making of the Board's first order, recovery of the Section 6(2)4 Costs is subject to a prudence review; and
- in making its first order, the Board must accept the values relating to the Section 6(2)4 Costs set out in OPG's most recently audited financial statements that were approved by OPG's board of directors before the effective date of the first order (as noted above, these being the 2007 audited financial statements).

Regulation 53/05 does not constrain the Board's discretion in relation to when and how the Section 6(2)4 Costs will be recovered. This remains wholly within the Board's discretion.

Under section 6(2)4, recovery is limited to Section 6(2)4 Costs "incurred" to increase the output of, refurbish or add operating capacity to a prescribed facility. Board staff submits that use of the past tense suggests that only those Section 6(2)4 Costs that have been expended, and not those that will be expended, fall within section 6(2)4. This interpretation accords with the plain meaning of the words used in the opening paragraph of section 6(2)4.

## **Issue 5.1**

**Are the Operation, Maintenance and Administration budgets for the prescribed hydroelectric and nuclear business appropriate?**

### **Applicable Sections of Regulation 53/05**

- 6(2) 4.1 The Board shall ensure that Ontario Power Generation Inc. recovers the costs incurred and firm financial commitments made in the course of planning and preparation for the development of proposed new nuclear generation facilities, to the extent the Board is satisfied that,
- i. the costs were prudently incurred, and
  - ii. the financial commitments were prudently made.

### **Discussion**

Recovery of costs and firm financial commitments under section 6(2)4.1 (the “Section 6(2)4.1 Amounts”) is limited to costs “incurred” or commitments “made” in the course of planning and preparation for the development of proposed new nuclear generation facilities. Board staff submits that use of the past tense suggests that only those Section 6(2)4 Amounts that have been expended or made, and not those that will be expended or made, fall within section 6(2)4.1. This interpretation accords with the plain meaning of the words used in the opening paragraph of section 6(2)4.1.

In addition, the Board must be satisfied that the Section 6(2)4.1 Amounts were prudently incurred or prudently made. In its argument in chief, OPG has set out the prudence standard to be followed by the Board.<sup>10</sup> Board staff agrees that the prudence standard is correctly stated.

Regulation 53/05 does not constrain the Board's discretion in relation to when and how the Section 6(2)4.1 Amounts will be recovered. This remains within the Board's discretion.<sup>11</sup>

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<sup>10</sup> OPG Argument in Chief, pp. 2-3.

<sup>11</sup> Some of the costs referred to here are captured in the deferral account in section 5(3).



## Issue 6.5

**Are OPG's forecasts of costs related to the Bruce Nuclear Generating Station, and costs and revenues related to the Bruce lease, accurate?**

### **Applicable Sections of Regulation 53/05**

6(2)5. In making its first order under section 78.1 of the Act in respect of Ontario Power Generation Inc., the Board shall accept the amounts for the following matters as set out in Ontario Power Generation Inc.'s most recently audited financial statements that were approved by the board of directors of Ontario Power Generation Inc. before the effective date of that order:

...

- ii.. Ontario Power Generation Inc.'s revenues earned with respect to any lease of the Bruce Nuclear Generating Stations.
- iii. Ontario Power Generation Inc.'s costs with respect to the Bruce Nuclear Generating Stations.

6. Without limiting the generality of paragraph 5, that paragraph applies to values relating to,

...

- ii. the revenue requirement impact of accounting and tax policy decisions, and

...

9. The Board shall ensure that Ontario Power Generation Inc. recovers all the costs it incurs with respect to the Bruce Nuclear Generating Stations.

10. If Ontario Power Generation Inc.'s revenues earned with respect to any lease of the Bruce Nuclear Generating Stations exceed the costs Ontario Power Generation Inc. incurs with respect to those Stations, the excess shall be applied to reduce the amount of the payments required under subsection 78.1 (1) of the Act with respect to output from the nuclear generation facilities referred to in paragraphs 3, 4 and 5 of section 2.

## Discussion

When making its first order, the Board must accept the amounts as set out in OPG's most recently audited financial statements, approved by its board of directors before the effective date of the first order, for the revenues earned by OPG with respect to any lease of the Bruce Nuclear Generating Stations ("the Bruce Facilities"), and for OPG's costs with respect to the Bruce Facilities.

In Board staff's submission, the application of the statutory framework regarding the costs and revenues associated with the Bruce Facilities would result in the following:

- For the period to the end of 2007, the costs set out in the audited financial statements are those that OPG is entitled to recover under section 6(2)9 and the revenues set out in the audited financial statements are those that are to be used to offset costs as required by section 6(2)10. As part of the costs associated with respect to the Bruce Facilities, OPG is seeking a return on equity of \$27.7M for 2007, and a forecast return on equity of \$70.1M and \$66.M in the test years, calculated at 10.5%.<sup>12</sup> The return on equity for the Bruce Facilities is not included as a "cost" in OPG's most recently audited financial statements.<sup>13</sup> As such, Board staff submits that it is not an amount that the Board is required to accept under section 6(2)5(iii).
- For the period after December 31, 2007, it is appropriate for the Board to determine the costs incurred and revenues earned by giving those terms ("costs" and "revenues") the meaning they would ordinarily have in the context of rate-setting applications (including those based on a cost-of-service application). In other words, the Board should use generally accepted accounting principles applicable in a rate setting environment to determine what constitutes a cost with respect to Bruce Facilities. Section 6(2)9 requires the Board to ensure that OPG recovers all the costs it incurs with respect to the Bruce facilities. It is Board staff's submission that the use of "it incurs" rather than "incurred" signifies an intention that the costs with respect to the Bruce Facilities receive different treatment than those relating to the prescribed facilities. Unlike sections 6(2)4 and 6(2)4.1, where in Board staff's submission the costs must be incurred in order to be subject to recovery, the costs in section 6(2)9 are ongoing costs. Board staff therefore submits that once the Board has determined an expenditure to be a cost with respect to the Bruce Facilities, and is satisfied that it is a cost that OPG will incur in 2008 and 2009, OPG must be allowed to recover it.

When making its first order, the Board must also accept values relating to the revenue requirement impact of accounting and tax policy decisions as set out in OPG's most recently audited financial statements. Board staff submits that this section of Regulation

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<sup>12</sup>Ex. G2, Tab 2, Sch. 1, Table 3, line 5.

<sup>13</sup> Volume 7, pp. 29-31.

53/05 does not permit the Board to question the accounting and tax policy decisions made by OPG, even if the accounting and tax policies are out of keeping with generally accepted principles that would be applicable in a rate-setting context. This, in Board staff's submission, applies to the extent that the revenue requirement impact of the policy decisions is reflected in OPG's audited financial statements.

However, Board staff further submits that, for the period after December 31, 2007, the Board may go behind the accounting and tax policy decisions made by OPG in determining OPG's revenue requirement.

Regulation 53/05 does not constrain the Board's discretion in relation to when and how the Bruce Facilities costs will be recovered. This remains wholly within the Board's discretion.

## **NUCLEAR WASTE MANAGEMENT AND DECOMMISSIONING (Exhibit H)**

**Issue 7.1 The proposed rate base includes the estimated net book value of OPG's nuclear fixed assets, which in turn includes amounts related to OPG's obligations to decommission the nuclear plants and manage nuclear waste. Do the amounts fall within the parameters of O. Reg. 53/05? The proposed revenue requirement includes depreciation of those nuclear fixed asset costs and a return on rate base. Is this method of recovering nuclear fixed asset removal and nuclear waste management costs appropriate? Or should alternative recovery mechanisms be considered?**

### **Applicable Sections of Regulation 53/05**

6(2)5. In making its first order under section 78.1 of the Act in respect of Ontario Power Generation Inc., the Board shall accept the amounts for the following matters as set out in Ontario Power Generation Inc.'s most recently audited financial statements that were approved by the board of directors of Ontario Power Generation Inc. before the effective date of that order:

- i. Ontario Power Generation Inc.'s assets and liabilities, other than the variance account referred to in subsection 5 (1), which shall be determined in accordance with paragraph 1.

....

- iii. Ontario Power Generation Inc.'s costs with respect to the Bruce Nuclear Generating Stations.

- 6. Without limiting the generality of paragraph 5, that paragraph applies to values relating to,
  - i. capital cost allowances,
  - ii. the revenue requirement impact of accounting and tax policy decisions, and
  - iii. capital and non-capital costs and firm financial commitments to increase the output of, refurbish or add operating capacity to a generation facility referred to in section 2.
- 8. The Board shall ensure that Ontario Power Generation Inc. recovers the revenue requirement impact of its nuclear decommissioning liability arising from the current approved reference plan.

## Discussion

### General

OPG's 2007 audited financial statements include as part of OPG's nuclear fixed assets the asset retirement costs associated with the decommissioning of its nuclear generating stations and the management of used fuel and low and intermediate waste ("nuclear waste management costs"). It is OPG's position that treating the nuclear waste management costs as a fixed asset is required by CICA; as fixed assets typically form part of the rate base, the nuclear waste management costs should form part of OPG's rate base; such treatment accords with the intent of the legislature as reflected in both the interim payments (which were set with such costs in rate base) and Regulation 53/05 (specifically, the inclusion of 'return on rate base' in section 6(2)7(i) in relation to nuclear decommissioning deferral accounts); and is the best and most appropriate methodology by which to recover nuclear waste management costs.

In making its first order, the Board must accept the assets and liabilities as set out in the approved audited financial statements. The prescriptive language used in section 6(2)5(i) does not appear to permit the Board to question the characterization of an item as an asset or a liability in the approved audited financial statements for the period to the end of 2007. To the extent that the nuclear waste management costs are characterized as fixed assets in the audited financial statements, they must be accepted and treated as such by the Board, and included in rate base.

Board staff further submits that, in determining what constitutes an asset and a liability after December 31, 2007, it is appropriate for the Board to give those terms the meaning they would ordinarily have in the context of rate-setting applications (including those based on a cost-of-service application), using generally accepted accounting principles applicable in a rate setting environment. The practice of the Board is to include all fixed assets in rate base. If the Board is satisfied that treating nuclear waste management costs as fixed assets is an appropriate application of generally accepted accounting principles, it would be in keeping with the Board's practice for those costs to be included in rate base.

A related issue is whether a different cost of capital could be applied to an element of rate base, such as the nuclear waste management costs. After stating that the Board must accept OPG's prescribed asset values, as any other interpretation of sections 6(2)5 and 6(2)6 would render them "meaningless and totally ineffective", OPG made the following statement: "Accepting the asset retirement cost into rate base, but attaching a different cost of capital to this element of rate base would similarly contravene the clear intent of the section." (p. 83)

Board staff submits that sections 6(2)5 and 6(2)6 must be read in conjunction with sections 78.1 of the Act and section 6(1) of the Regulation.

Section 78.1(4) of the Act states:

The Board shall make an order under this section in accordance with the rules prescribed by the regulations and may include in the order conditions, classifications or practices, including rules respecting the calculation of the amount of the payment.

Section 6(1) of the Regulation states:

Subject to subsection (2), the Board may establish the form, methodology, assumptions and calculations used in making an order that determines payment amounts for the purpose of section 78.1 of the Act.

Board staff submits that while the Board must accept the amounts and certain values set out in the audited financial statements when making its first order, the Board's discretion in dealing with matters which are placed in rate base, either through the operation of the Regulation or as a result of its own determination of the composition of rate base, remains. Board staff submits that it is open to the Board to determine whether a different cost of capital should be applied to an element of rate base.

#### Nuclear waste obligations associated with the Bruce Facilities

OPG believes that its nuclear waste management costs, which include decommissioning costs, are costs associated with the Bruce Facilities that the Board must permit OPG to recover, and that those costs should be included in rate base. OPG relies upon sections 6(2)8 and 6(2)9 in support of that position.

Those sections read as follows:

- 6(2) 8. The Board shall ensure that Ontario Power Generation Inc. recovers the revenue requirement impact of its nuclear decommissioning liability arising from the current approved reference plan.

9. The Board shall ensure that Ontario Power Generation Inc. recovers all the costs it incurs with respect to the Bruce Nuclear Generating Stations.

Under section 6(2)8, the Board must ensure that OPG recovers the revenue requirement impact of its nuclear decommissioning liability arising from the current approved reference plan. Board staff submits that this section applies to the prescribed facilities only. The Bruce Facilities are not part of the prescribed facilities. Regulation 53/05 refers to the Bruce Facilities in sections 6(2)5(ii), 6(2)5(iii), 6(2)9 and 6(2)10. Board staff submits that the Bruce Facilities are only subject to, or captured by, the sections of Regulation 53/05 that expressly refer to those Facilities. If the legislature had intended for other sections of Regulation 53/05 to apply to the Bruce Facilities, the legislature would have referred to those Facilities in the same manner as it has in sections 6(2)5(ii), 6(2)5(iii), 6(2)9 and 6(2)10. This interpretation is, in Board staff's submission, the one that best accords with the legislative framework and context, which is that Regulation 53/05 is intended to address the determination of payment amounts for the prescribed facilities.

In addition, Board staff notes that section 6(2)5 specifically identifies the costs and revenues associated with the Bruce Facilities in paragraphs (ii) and (iii). Board staff submits that an interpretation to the effect that costs associated with the Bruce Facilities constitute an "asset" or "liability" within the meaning of section 6(2)5(i) would, in essence, render sections 6(2)5(ii) superfluous and without independent meaning or purpose. In Board staff's submission, it follows that the nuclear waste management costs associated with the Bruce Facilities are not required to be accepted by the Board as forming part of the rate base for the prescribed facilities, nor should they be.

Board staff's submissions in relation to the application of section 6(2)9 and what constitutes a cost associated with the Bruce Facilities are set out in section 6.5. Briefly, if the nuclear waste management costs for the Bruce Facilities appear as costs in the audited financial statements, OPG will be entitled to recover them under section 6(2)9; after December 31, 2007, OPG can recover the those costs with respect to the Bruce Facilities if the Board determines they fit within the term 'costs', as that term is ordinarily used in a rate setting environment.

- Issue 9.1** Are the costs and the revenues recorded in the variance account established under section 5(1) (the “forecast variance account”) due to deviations from the forecasts set out in “Forecast Information for Facilities Prescribed under Ontario Regulation 53/05”? Were the costs incurred and the revenues earned or foregone on or after April 1, 2005?
- 9.2** Do the costs and revenues recorded in the forecast variance account conform to the requirements of section 5(1)?
- 9.3** Were the revenues recorded in the forecast variance account earned or foregone; were the costs prudently incurred; and were the revenues and costs accurately recorded as required by section 6(2)1?

### **Applicable Sections of Regulation 53/05**

5. (1) Ontario Power Generation Inc. shall establish a variance account in connection with section 78.1 of the Act that records capital and non-capital costs incurred and revenues earned or foregone on or after April 1, 2005 due to deviations from the forecasts as set out in the document titled “Forecast Information (as of Q3/2004) for Facilities Prescribed under Ontario Regulation 53/05” posted and available on the Ontario Energy Board website, that are associated with,
- (a) differences in hydroelectric electricity production due to differences between forecast and actual water conditions;
  - (b) unforeseen changes to nuclear regulatory requirements or unforeseen technological changes which directly affect the nuclear generation facilities, excluding revenue requirement impacts described in subsections 5.1 (1) and 5.2 (1);
  - (c) changes to revenues for ancillary services from the generation facilities prescribed under section 2;
  - (d) acts of God, including severe weather events; and
  - (e) transmission outages and transmission restrictions that are not otherwise compensated for through congestion management settlement credits under the market rules.
- (2) 2) The calculation of revenues earned or foregone due to changes in electricity production associated with clauses (1) (a), (b), (d) and (e) shall be based on the following prices:
- 1. \$33.00 per megawatt hour from hydroelectric generation facilities prescribed in paragraphs 1 and 2 of section 2.



2. \$49.50 per megawatt hour from nuclear generation facilities prescribed in paragraphs 3, 4 and 5 of section 2. O. Reg. 23/07, s. 3.
  - (3) Ontario Power Generation Inc. shall record simple interest on the monthly opening balance of the account at an annual rate of 6 per cent applied to the monthly opening balance in the account, compounded annually.
- 6(2)1. The Board shall ensure that Ontario Power Generation Inc. recovers the balance recorded in the variance account established under subsection 5 (1) over a period not to exceed three years, to the extent that the Board is satisfied that,
- i. the revenues recorded in the account were earned or foregone and the costs were prudently incurred, and
  - ii. the revenues and costs are accurately recorded in the account.

## Discussion

Based on the provisions of Regulation 53/05, the following rules apply in relation to the recovery of the balance recorded in the forecast variance account:

- the Board must be satisfied that the costs were incurred on or after April 1, 2005 and were prudently incurred;
- the Board must be satisfied that the revenues were earned or foregone after April 1, 2005 and were calculated in accordance with section 5(2); and
- the Board must be satisfied that the costs and revenues were accurately recorded in the forecast variance account.

In its argument in chief, OPG has set out the prudence standard to be followed by the Board<sup>14</sup>. Board staff agrees that the prudence standard is correctly stated.

The balance in the forecast variance account must be recovered over a period not to exceed three years, with interest payable at an annual rate of six percent, compounded annually, until the balance in the account has been cleared.

Board staff submits the ordinary meaning of “accurately recorded” requires a consideration of whether the deviations from the forecast were accurately calculated.

Regulation 53/05 does not constrain the Board’s discretion in relation to how the balance in the forecast variance account is to be recovered. This remains wholly within the Board’s discretion.

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<sup>14</sup> OPG Argument in Chief, pp. 2-3.

Amounts recorded in the forecast variance account cover the period from April 1, 2005. Regulation 53/05 does not specify the last date on which amounts may be so recorded. In the *Filing Guidelines for Ontario Power Generation* (the "Filing Guidelines"), the Board stated that it expected that this variance account would not be used to record amounts subsequent to the effective date of the Board's first order.<sup>15</sup>

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<sup>15</sup> *Filing Guidelines for Ontario Power Generation*, EB-2006-0064, p. 4.

**Issue 9.4      Are all of the non-capital costs recorded in deferral account established under section 5(4) incurred after January 1, 2005, and associated with either the planned return to service of all of the units at the Pickering A Nuclear Generating Station or units the board of directors of OPG determined should be placed in safe storage?**

**Applicable Sections of Regulation 53/05**

5(4) Ontario Power Generation Inc. shall establish a deferral account in connection with section 78.1 of the Act that records non-capital costs incurred on or after January 1, 2005 that are associated with the planned return to service of all units at the Pickering A Nuclear Generating Station, including those units which the board of directors of Ontario Power Generation Inc. has determined should be placed in safe storage.

(5) For the purposes of subsection (4), the non-capital costs include, but are not restricted to,

- (a) construction costs, assessment costs, pre-engineering costs, project completion costs and demobilization costs; and
- (b) interest costs, recorded as simple interest on the monthly opening balance of the account at an annual rate of 6 per cent applied to the monthly opening balance in the account, compounded annually.

6(2)3. The Board shall ensure that Ontario Power Generation Inc. recovers the balance recorded recorded in the deferral account established under subsection 5 (4). The Board shall authorize recovery of the balance on a straight line basis over a period not to exceed 15 years.

5. In making its first order under section 78.1 of the Act in respect of Ontario Power Generation Inc., the Board shall accept the amounts for the following matters as set out in Ontario Power Generation Inc.'s most recently audited financial statements that were approved by the board of directors of Ontario Power Generation Inc. before the effective date of that order:

- i. Ontario Power Generation Inc.'s assets and liabilities, other than the variance account referred to in subsection 5 (1), which shall be determined in accordance with paragraph 1.

....

**Discussion**

Under section 5(4), OPG must establish a deferral account to record non-capital costs incurred on or after January 1, 2005 that are associated with the planned return to service of all units at the Pickering A nuclear generating station ("Pickering A"),

including units that the board of directors of OPG has determined should be placed in safe storage.

For this purpose, non-capital costs include construction costs, assessment costs, pre-engineering costs, project completion costs, demobilization costs and interest costs, recorded as simple interest on the monthly opening balance of the account at an annual rate of 6 percent, compounded annually, until the balance in the account has been cleared.

In accordance with section 6(2)5(i), the Board in making its first order must accept the amounts recorded in this deferral account as set out in OPG's most recently audited financial statements that were approved by the board of directors of OPG before the effective date of that order.

With regard to the amounts recorded in the deferral account after December 31, 2007, the Regulation requires the Board ensure that OPG recovers the balance recorded in the deferral account. Board staff submits this requires the Board to accept balances as recorded after December 31, 2007, provided they are satisfied that those balances consist of non-capital costs, as defined in section 5(5), incurred on or after January 1, 2005 associated with the planned return to service of all units at Pickering A including those units which the board of directors of OPG has determined should be placed in safe storage.

In accordance with section 6(2)3, the Board must ensure that OPG recovers the balance in this deferral account on a straight line basis over a period not to exceed 15 years.

Amounts recorded in this deferral account cover the period from January 1, 2005. Regulation 53/05 does not specify the last date on which amounts may be so recorded. In the Filing Guidelines, the Board stated that it expected that this deferral account would not be used to record amounts subsequent to the effective date of the Board's first order.<sup>16</sup>

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<sup>16</sup> Filing Guidelines, p. 4.

**Issue 9.5 Are the revenue requirement impacts of any change in OPG's nuclear decommissioning liability, arising from an approved reference plan approved after April 1, 2005, accurately recorded in the nuclear liability deferral account established under subsection 5.1(1), as required by section 6(2)?**

Deferral Account for Nuclear Decommissioning Liability—Transition Period

**Applicable Sections of Regulation 53/05**

- 5.1 (1) Ontario Power Generation Inc. shall establish a deferral account in connection with section 78.1 of the Act that records for the period up to the effective date of the Board's first order under section 78.1 of the Act the revenue requirement impact of any change in its nuclear decommissioning liability arising from an approved reference plan, approved after April 1, 2005, as reflected in the audited financial statements approved by the board of directors of Ontario Power Generation Inc.
- (2) Ontario Power Generation Inc. shall record simple interest on the monthly opening balance of the account at an annual rate of 6 per cent applied to the monthly opening balance in the account, compounded annually.
- 6(2)5. In making its first order under section 78.1 of the Act in respect of Ontario Power Generation Inc., the Board shall accept the amounts for the following matters as set out in Ontario Power Generation Inc.'s most recently audited financial statements that were approved by the board of directors of Ontario Power Generation Inc. before the effective date of that order:
- i. Ontario Power Generation Inc.'s assets and liabilities, other than the variance account referred to in subsection 5 (1), which shall be determined in accordance with paragraph 1.
  - ii. [omitted].
  - iii. [omitted].
7. The Board shall ensure that the balances recorded in the deferral accounts established under subsections 5.1 (1) and 5.2 (1) are recovered on a straight line basis over a period not to exceed three years, to the extent that the Board is satisfied that revenue requirement impacts are accurately recorded in the accounts, based on the following items, as reflected in the audited financial statements approved by the board of directors of Ontario Power Generation Inc.,
- i. return on rate base,
  - ii. depreciation expense,
  - iii. income and capital taxes, and
  - iv. fuel expense.

## Discussion

Under section 5.1(1), OPG must establish a deferral account to record (for the period up to the date of the Board's first order) the revenue requirement impact of any change in its nuclear decommissioning liability arising from an "approved reference plan", approved after April 1, 2005, as reflected in the audited financial statements approved by the board of directors of OPG. Simple interest is to be recorded on the monthly opening balance of the deferral account at an annual rate of 6 percent until the balance in the account has been cleared.

In making its first order, the Board must accept the amounts recorded in this deferral account as set out in OPG's most recently audited financial statements that were approved by the board of directors of OPG before the effective date of that order.

In accordance with section 6(2)7, the Board must ensure that OPG recovers the balance in this deferral account on a straight line basis over a period not to exceed 3 years to the extent that the Board is satisfied that the revenue requirement impacts are accurately recorded in the account, based on the following items, as reflected in the audited financial statements approved by the board of directors of OPG:

- (i) return on rate base;
- (ii) depreciation expense;
- (iii) income and capital taxes; and
- (iv) fuel expense.

Board staff submits the ordinary meaning of "accurately recorded" requires the Board to ensure that amounts recorded in the deferral account record the revenue requirement impact of any change in its nuclear decommissioning liability arising from an "approved reference plan" approved after April 1, 2005, and are the values set out in the approved audited financial statements.

This deferral account records the revenue requirement impact up to the date of the Board's first order, which is April 1, 2008. The amounts set out in the audited financial statements, which must be accepted, reflect amounts recorded in the account up to and including December 31, 2007.

With regard to amounts recorded after December 31, 2007 and before April 1, 2008, the Regulation requires the Board ensure OPG recover the balances recorded in the deferral account. Board staff submits this requires the Board to accept balances as recorded after December 31, 2007 and before April 1, 2008, if the Board is satisfied that the balances recorded reflect the revenue requirement impact of any change in its nuclear decommissioning liability arising from an "approved reference plan", approved after April 1, 2005.

While Section 5.1(1) requires the recording in a deferral account of the revenue requirement impact change up to the effective date of the Board's first order, section 6(2)7 requires the Board ensure the balances be recovered to the extent the Board is satisfied that the impacts are accurately recorded in the accounts as reflected in the audited financial statements approved by the board of directors of OPG. Given that the audited financial statements cover the period up to December 31, 2007 only, the Board will not be able to satisfy itself that the impacts are accurately recorded for those amounts recorded beginning January 1, 2008. Board staff submits that the Board may only order the recovery of the amounts recorded that are reflected in the audited financial statements for December 31, 2007, and that those amounts recorded beginning January 1, 2008 shall be the subject of recovery in the next cost of service application.

OPG has included the nuclear decommissioning costs associated with the Bruce Facilities in the nuclear liability deferral account created under section 5.1(1). It is OPG's position that these are costs associated with the Bruce Facilities in respect of which the Board must ensure OPG recovers. OPG cites sections 6(2)8 and 6(2)9 in support of its position.

It is Board staff's opinion that, for the same reasons as those expressed in section 7.1], section 6(2)8 and section 5.1 of Regulation 53/05 should be interpreted as applying to the prescribed facilities only, and should therefore not include decommissioning costs related to the Bruce Facilities.

#### Deferral Account for the Development of Proposed New Nuclear Generation Facilities

#### **Applicable Sections of Regulation 53/05**

5.3 (1) Ontario Power Generation Inc. shall establish a deferral account in connection with section 78.1 of the Act that records, for the period up to the effective date of the Board's first order under section 78.1 of the Act, the costs incurred and firm financial commitments made on or after June 13, 2006, in the course of planning and preparation for the development of proposed new nuclear generation facilities that are associated with any one or more of the following activities:

1. Activities for carrying out an environmental assessment under the *Canadian Environmental Assessment Act*.
2. Activities for obtaining any governmental licence, authorization, permit or other approval.
3. Activities for carrying out a technology assessment or for defining all commercial and technical requirements to, or with, any third parties. O. Reg. 27/08, s. 1.

- (2) Ontario Power Generation Inc. shall record simple interest on the monthly opening balance of the account at an annual rate of 6 per cent applied to the monthly opening balance in the account, compounded annually.
- 6(2) 4.1 The Board shall ensure that Ontario Power Generation Inc. recovers the costs incurred and firm financial commitments made in the course of planning and preparation for the development of proposed new nuclear generation facilities, to the extent the Board is satisfied that,
- i. the costs were prudently incurred, and
  - ii. the financial commitments were prudently made.
- 7.1 The Board shall ensure the balances recorded in the deferral account established under subsection 5.3 (1) and the variance account established under subsection 5.4 (1) are recovered on a straight line basis over a period not to exceed three years, to the extent the Board is satisfied that,
- i. the costs were prudently incurred, and
  - ii. the financial commitments were prudently made.

## Discussion

Under section 5.3(1), OPG must establish a deferral account that records, for the period up to the effective date of the Board's first order, the costs incurred and firm financial commitments made on or after June 13, 2006, in the course of planning and preparation for the development of proposed new nuclear generation facilities that are associated with: carrying out an environmental assessment under the *Canadian Environmental Assessment Act*; obtaining any governmental licence, authorization, permit or other approval; and carrying out a technology assessment or for defining all commercial and technical requirements to or with any third parties. Costs incurred in the course of planning and preparation that are not captured by section 5.3(1) are recoverable under section 6(2)4.1.

Simple interest is to be recorded on the monthly opening balance of this deferral account at an annual rate of 6 per cent, compounded annually.

In making its first order, the Board must accept the amounts recorded in this deferral account as set out in OPG's most recently audited financial statements that were approved by the board of directors of OPG before the effective date of that order.

Under section 6(2)7.1, the Board must ensure that OPG recovers the balance recorded in the deferral account on a straight line basis over a period not to exceed three years, to the extent the Board is satisfied that i) the costs were prudently incurred; or ii) the financial commitments were prudently made. In its argument in chief, OPG has set out



the prudence standard to be followed by the Board<sup>17</sup>. Board staff agrees that the prudence standard is correctly stated.

The requirement that the Board engage in a prudence review is at odds with the requirement that the Board accept the values for this deferral account, as set out in the approved audited financial statements. The fact that the legislature has *generally* directed in section 6(2)5(i) that the amounts set out for every deferral account in the audited financial statements should be accepted, and has *specifically* directed a prudence review of certain deferral accounts supports, in Board staff's opinion, an interpretation which gives prominence to the prudence review. That interpretation is further supported by the wording of section 6(2)4.1, which also requires a prudence review.

Alternatively, Board staff submits that for the period to December 31, 2007, the Board must accept the amounts in the financial statements and for all amounts recorded in the account thereafter, must perform a prudence review.

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<sup>17</sup> OPG Argument in Chief, pp. 2-3.

## PART II : STAFF SUBMISSION ON WRITTEN AND ORAL EVIDENCE

### Introduction:

Ontario Power Generation Inc. ("OPG") is a corporation, incorporated under the *Ontario Business Corporations Act*, with its head office in the City of Toronto. The principal business of OPG is the generation and sale of electricity in Ontario.

OPG filed its Application, dated November 30, 2007, with the Ontario Energy Board (the "Board") pursuant to section 78.1 of the *Ontario Energy Board Act, 1998* (the "Act"), for an order or orders approving the payment amounts for generating facilities prescribed under Ontario Regulation 53/05 as amended (the "Regulation" or "Regulation 53/05"), of the Act for the period from April 1, 2008 through December 31, 2009 ("test period"), or for such other period determined to be appropriate by the Board.

For the purposes of section 6 (1) of Regulation 53/05<sup>18</sup>, OPG requests that the Board use a forecast cost of service methodology to approve payment amounts for the test period as set out in "A Regulatory Methodology for Setting Payment Amounts for the Prescribed Generation Assets of Ontario Power Generation Inc." and "Filing Guidelines for Ontario Power Generation" (EB-2006-0064).

OPG seeks an order establishing payment amounts that allow full recovery of the test period revenue requirement over the test period.

The Applicant's interrogatory responses were filed by April 18, 2008. Intervenor responses to interrogatories on intervenor evidence were filed by May 12, 2008. The oral hearing lasted from May 22 to June 20, 2008.

The following submissions by Board staff are based upon a review of the oral and written evidence and pose questions on certain issues that all parties may wish to address in their written argument.

### Summary of the Application:

OPG is requesting Board approval of the following costs and forecasts<sup>19</sup> to be recovered in the payment amounts for the Hydroelectric and Nuclear generation facilities prescribed by the Regulation (the "prescribed facilities")<sup>20</sup>.

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<sup>18</sup> Section references are references to sections in the Regulation, unless otherwise indicated.

<sup>19</sup> Sources: Exhibits A1-T3-S1 tables 1,2,3; Exhibits K1-T1-S1 tables 1,2,3; Exhibits K1-T2-S1 table 1; Exhibit K1-T3- S1 table1

<sup>20</sup> The generation facilities are defined in section 2 of the Regulation. They are: Sir Adam Beck I, Sir Adam Beck II, Sir Adam Beck Pump Generating Station, De Cew Falls I, De Cew Falls II (all of the foregoing being hydroelectric generating stations located in the Regional Municipality of Niagara), the R.H. Saunders hydroelectric generating station on the St. Lawrence River, Pickering A nuclear generating station, Pickering B nuclear generating station and Darlington nuclear generating station.

Hydro Electric						
in millions	2008	2008 adjusted	2009	test period		
Rate Base	\$3,885.5	\$3,880.2	\$3,869.9	na		
Cost of Capital ( 57.5%/42.5% equity to debt ratio @ 10.5 % ROE)	\$329.7	\$246.9	\$331.1	\$578.0		
Operating Expenses	\$417.4	\$325.4	\$433.4	\$758.7		
Other Revenue	\$32.4	\$24.3	\$33.1	\$57.4		
Taxes	\$0.0	\$0.0	\$0.0	\$0.0		
Revenue Requirement	\$714.7	\$548.0	\$731.3	\$1,279.3		
Revenue Requirement (less tax loss mitigation)	na	na	na	\$1,189.2		
Current Payment Design/\$ per MWh	\$33.00	\$33.00	\$33.00	\$33.00		
Forecast Production (TWh)	na	12.9	18.5	31.5		
Revenue Deficiency	na	\$120.9	\$120.3	\$241.2		
Proposed Payment Design / \$per MW	na	na	na	\$37.80		

Nuclear						
in millions	2008	2008 adjusted	2009	test period		
Rate Base	\$3,515.4	\$3,509.1	\$3,483.8	na		
Cost of Capital ( 57.5%/42.5% equity to debt ratio @ 10.5 % ROE)	\$298.3	\$223.3	\$298.1	\$521.4		
Operating Expenses	\$2,718.8	\$2,082.0	\$2,783.8	\$4,855.7		
Other Revenue	\$134.6	\$101.2	\$133.4	\$234.6		
Taxes	\$0.0	\$0.0	\$0.0	\$0.0		
Revenue Requirement	\$2,882.5	\$2,204.1	\$2,948.4	\$5,152.5		
Revenue Requirement (less tax loss mitigation [\$137.9] and D&A Amtz amount [\$128.1])				\$4,886.5		
Current Payment Design/\$ per MWh	\$49.50	\$49.50	\$49.50	\$49.50		
Forecast Production (TWh)		38.3	49.9	88.2		
Revenue Deficiency		\$306.4	\$478.2	\$784.6		
Proposed Payment Design						
fixed Monthly Payment (M)				\$ 58.2		
\$ per MWh				\$41.50		
Payment rider \$/MWh				\$ 1.45		

This submission contains staff comments, including legal interpretations where appropriate, on the following issues.

Section:

1. Capital Structure and Cost of Capital
2. Production Forecast

3. Operating, Maintenance and Administration
4. Corporate Cost Allocation
5. Nuclear Fuel Risk Management
6. Segregated Mode of Operations
7. Nuclear Waste/ Decommissioning liability
8. Deferral Accounts
9. Design of Payments

## **1. Capital Structure and Cost of Capital**

### **Introduction:**

1. Should OPG's return on equity be established to provide for an A credit rating?
2. Does OPG's risk profile warrant a 10.5% ROE and a 57.5% capital structure equity component?
3. Should the deferral and variance accounts have an affect on the allowed return on equity?
4. What effect should the requested fixed monthly nuclear payment have on OPG's ROE and/or Capital Structure?

### **Discussion - Should OPG's return on equity be established to provide for an A credit rating?**

In her analysis Ms. McShane, the cost of capital expert for OPG, placed a significant emphasis on the need for OPG to move to an "A" credit rating as part of the rationale underlying the recommended increase in the cost of capital.

On the other hand, CIBC World Markets (L-2-10, p.22) concluded

*"For purposes of the analysis, we considered a target credit rating of BBB+ (Standard and Poor's) to be a strong investment grade rating that would allow OPG to access the capital markets on a consistent basis."*

Further to addressing the need for a specific credit rating Ms. McShane's response to L-12-4 appears to only identify one utility – Pacific Northern Gas (PNG) – of the six companies that are rated below "A" in Canada (EPCOR, Newfoundland Power, Nova Scotia Power, Union Gas and Westcoast Energy) that has had trouble accessing the capital markets. PNG does not seem to be the norm. For example, Mr. Penny OPG's

counsel referred to PNG as the “orphan child” and Mr. Goulding referred to PNG as an “outlier”. (Tr., v.12, p.157)

There does not appear to be extensive evidence that the need for an ‘A’ credit rating should be a consideration when determining the appropriate return on equity. Further, there is evidence to suggest that lower credit ratings do not impair the ability of a company such as OPG to access capital.

When making submissions on this issue, parties may wish to address the following:

Should OPG's return on equity be established to provide for an A credit rating?

What evidence should the Board rely upon in setting OPG's return on equity if it determines that OPG does not require an A credit rating?

**Discussion - Does OPG's risk profile warrant a 10.5% ROE and a 57.5% capital structure equity component?**

Ms. McShane stated that an appropriate capital structure and an appropriate ROE are fundamentally linked and cannot be determined in isolation of each other. OPG has requested an increase in ROE from 5% to 10.5% and an increase in the common equity ratio from 45% to 57.5% based on Ms. McShane's recommendations. (C1-T1-S1)

The total impact of the requested cost of capital changes is about 38% of the overall Revenue Deficiency or \$391 million (L-3-49):

- Impact of increasing the ROE (from 5% to 10.5%) is \$319 million
- Impact of changing the capital structure to 57.5:42.5 (taking into account the reduction in interest of \$97 million from \$169 million) is \$72 million

Ms. McShane used a benchmark to support the claims of OPG for a specific return and capital structure. The peer identified was TransAlta Corporation (C2-T1-S1, p.88).

Other cost of capital experts retained by other parties recommended the following:

Other Parties	Expert	Recommended ROE	Capital Structure	
			Debt	Equity
CCC/VECC	Dr. Booth	7.75%	60%	40%
Energy Probe	Dr. L. Schwartz	7.64%	55%	45%
Pollution Probe	Dr. Kryzanowski / Dr. Roberts	7.35% (2008) 7.4% (2009)	53%	47%

OPG's comparison to TransAlta is problematic for two reasons. One, Exhibit L-1-8 indicates that TransAlta's generation mix is much different than OPG's. TransAlta has 9% hydro, 0% nuclear, 58% coal-fired, 29% gas and 4% wind. Two, TransAlta operates as a merchant generator. Mr. A.J. Goulding, Board staff expert, indicated that a merchant generator is the highest risk of the various types of utilities in the relative risk continuum that he developed. (M-T1-S1, p.30)

Staff observe that the generation mix differences may mean OPG and TransAlta will be affected differently based on government policies such as climate change and nuclear waste disposal. In addition, OPG comparing itself to this one company may create additional uncertainty due to the uniqueness of the comparator.

Ms. McShane also relied upon U.S. vertically integrated utilities that had a high proportion of generation listed in Schedule 28 of her testimony (C2-T1-S1, p.256) to arrive at the incremental equity returns of 1.5% to apply to OPG relative to the average benchmark utility. In contrast, the other experts appear to take a common position that the Board should focus on utilities in Canada and, given the arrangements (i.e., deferral and variance accounts), OPG is slightly or marginally riskier than the electric and/or natural gas utilities in Ontario.

When making submissions on this issue, parties may wish to address the following:

Does OPG's risk profile warrant a 10.5% ROE and a 57.5% capital structure equity component?

If the Board finds that the use of TransAlta as a comparator is not appropriate, what evidence should the Board rely upon to make an adjustment to OPG's ROE and capital structure proposal?

**Discussion - Should the deferral and variance accounts have an affect on the allowed return on equity?**

OPG has proposed the request of deferral and variance accounts should have no impact on its return on equity proposal or capital structure.

In their report prepared for OPG's shareholder CIBC World Markets (Exhibit L2-2-10) stated:

- "we advised that appropriate but perhaps limited variance accounts should be established for the initial period as well as under OEB regulation" (p.12)
- "Typically, the more variance accounts, the lower the residual risk left with the utility" (p.12)

Board staff note that parties have identified a concern with risk in light of the number of deferral and variance accounts requested. Ms. McShane estimated a 25-50 basis points risk reduction in relation to the additional variance accounts – nuclear fuel, OPEBs/Pension, tax changes/assessments.(KT1.6).

The estimated range does not include the impact of the following accounts:

- PARTS Deferral Account
- Nuclear Liability Deferral Account
- Capacity Refurbishment Variance Account
- Nuclear Development Variance Account

In J12.2, Ms McShane did not provide an estimated impact concluding "it is not possible to isolate and explicitly quantify the impact of these accounts on the cost of capital".However, she also stated "The absence of the nuclear liability, capacity refurbishment and nuclear development accounts is likely to have a significant impact on the cost of capital".

Board staff note that all intervenors and OPG's expert recognized that employing the requested deferral and variance accounts would decrease the risk to OPG. It appears the only quantification of a portion of this impact was made by Ms. McShane.

When making submissions on this issue, parties may wish to address the following:

Should the deferral and variance accounts have an affect on the allowed return on equity?

Given the testimony of OPG's expert, what evidence should the Board rely upon to substantiate OPG's proposal?

If the Board were to accept Ms. McShane's estimated impact range on return on equity, what evidence should the Board rely upon to determine a specific value in that range?



## **Discussion - What effect should the requested fixed monthly nuclear payment have on OPG's ROE?**

OPG is proposing to introduce a "fixed" component to its payment amounts.

Mr. Goulding's testimony indicates that "Current arrangements for the OPG prescribed assets are entirely volumetric... Use of a fixed monthly payment is another means to reduce business risk for OPG ... payment of capacity payments may be linked to the plant achieving certain availability or reliability standards. OPG does not propose such a linkage.... this is an arrangement which would not be available to merchant generators in a competitive wholesale market, and is not available to generators with OPA contracts. Indeed, it would also not be available to a regulated wires company facing a shutdown of an industrial customer". (Exhibit M1-T1-S1, p.25).

As to the impact that the fixed monthly payment would have on costs of capital, Ms McShane in Exhibit L-12-1 indicated that the increase in the potential variability of returns would in principle increase the cost of capital, but there is no documented empirical relationship between the variability in earned returns on book value and the cost of capital. In Ms. McShane's judgment, the increase in the required ROE could be approximately half the increase in the variability, i.e., approximately 25 basis points.

When making submissions on this issue, parties may wish to address the following:

What effect should the requested fixed monthly nuclear payment have on OPG's ROE?

If the Board approves the fixed monthly payment, should the Board use Ms. McShane's estimated impact on return on equity?

In the absence of using Ms. McShane's estimated impact, what evidence can the Board rely upon to make an adjustment to ROE due to the impact on risk of a fixed monthly payment?

## **2. Production Forecast**

### **Introduction:**

1. Considering the increasing inaccuracy in OPG's forecasting between 2005 and 2009 is the forecast presented a reasonable basis for setting the payments?

### **Discussion:**

OPG's methodology for forecasting nuclear production includes a recognition of times when the nuclear units are not generating electricity. Starting from an assumed 100 per cent capability factor, total potential production is reduced by planned outages or

deratings of an expected duration plus an uncertainty adjustment. Deviations of actual production levels from forecast production levels arise from unplanned outages or the extension of scheduled outages beyond their planned duration. OPG labels this outage factor as a fleet level uncertainty adjustment.

“The adjustment for uncertainty is intended to address generic planned outage issues of the fleet.” (E2/T1/S1/, page 11 of 28, line 19-20). The fleet level uncertainty adjustment is “....based on past experience, and recognizes the potential for unexpected additional inspections or maintenance that could impact the duration of a planned outage or the potential for forced outages within the fleet.” (E2/T1/S1/, page 11 of 28, lines 27-29).

Each terra-watt hour deviation from forecasted production equates to a change in net income of \$47 million based on current payment levels of \$49.50 per mega-watt hour.

Exhibit L1-32 shows that over the 2005 to 2007 period, nuclear outage days deviated from forecasted by -12.6% in 2005, 26.9% in 2006 and 30.8% in 2007. Further, two significant non-recurring events at the Pickering plant were excluded from the 2007 actual data. Including these two events would increase the 2007 deviation to 86%.

OPG states that it has not changed the fleet level uncertainty adjustment even though actual lost production from unexpected events has exceeded the adjustment level over the past several years (E2/T1/S1/, page 12 of 28, lines 6-9). OPG cites expectations that the initiatives to improve outage performance will effectively address the factors that have compromised its forecast in the past (E2/T1/S1/, page 12 of 28, lines 10-12).

Board staff note that OPG has continued to use an unchanging adjustment factor for outages. This factor does not appear to reflect the historic performance in evidence. This means the production forecast may be misstated.

When making submissions on this issue, parties may wish to address the following:

Considering the increasing inaccuracy in OPG's forecasting between 2005 and 2009 is the forecast presented a reasonable basis for setting the payments?

If OPG's forecast should be adjusted what evidence should the Board rely upon to make the adjustment?

### **3. Operating, Maintenance and Administration**

#### **Introduction:**

- 1. Is an average annual increase, due largely to labour costs, in Nuclear OM&A of 6.4% from 2005 to 2009 reasonable?**

## Discussion :

The total OM&A costs budgeted for Nuclear are \$2.184 billion in 2008 and \$2.168 billion in 2009. The total OM&A budget for Hydroelectric is forecast to be \$119 million in both 2008 and 2009 (Argument-in-Chief, p.57 and p.53). OPG has applied for a significant increase in OM&A. The total OM&A increase in OPG's application for the Nuclear and Hydroelectric facilities is \$624 million (excluding fuel costs) or 60% of the \$1.03 billion revenue deficiency.

Based on the table, from 2005 to the 2008 test year total Nuclear OM&A costs increase by \$458.4 million or 26.6%, and then decline by \$15.9 million in the 2009 test year. From 2005 to 2009, there is an average annual increase of 6.4% or about \$110.6 million per year. The increase from 2006 to 2007 was relatively consistent with that rate of increase at \$106.3 million. However, the increase from 2007 to the 2008 test year is much more significant at \$160.8 million or \$54.5 million higher.

OPG Nuclear OM&A Costs (\$ million)						
	2005 Actual	2006 Actual	2007 Actual	2008 Plan	2009 Plan	2009 percentage
Base OM&A	1,036.4	1,133.8	1,216.6	1,360.8	1,368.0	63.1%
Project OM&A	155.9	142.0	111.6	144.6	137.1	6.3%
Outage OM&A	163.0	187.7	215.6	192.2	207.9	9.6%
Allocation of Corporate Costs	356.2	423.2	446.8	457.0	430.2	19.8%
Asset Service Fee	14.7	30.8	33.2	29.9	25.5	1.2%
<b>Total OM&amp;A</b>	<b>1,726.2</b>	<b>1,917.5</b>	<b>2,023.8</b>	<b>2,184.6</b>	<b>2,168.7</b>	<b>100%</b>

Base OM&A and Corporate costs represent about 83% of total OM&A. As shown in the table above, Nuclear Base OM&A accounts for over 63% and consistently increases in each consecutive year.

Labour Cost Increases:

Labour has a significant impact on total OM&A for three reasons: (1) it accounts for about 80% of OPG's Base OM&A; (2) it appears to represent the most controllable cost given the significant number of deferrals in filling vacancies to 2008; and (3) it is the primary driver behind the requested increase in OM&A as identified by OPG. As OPG stated in its Argument-in-Chief (p.4) "OPG employs, either directly or indirectly, over 9,000 people in the operation of the regulated assets. As a result, a significant portion of OPG's operating costs are labour related".

Exhibit K4.2 (p.5) shows a correlation between the increase in total Nuclear operating costs and total regular staff FTEs. This correlation is supported in OPG's response in Exhibit L-16-16 which explains there has been an average annual increase in Nuclear regular labour costs from 2005 to 2009 of about 6.1% (also reflected in K4.2, p.6).

Exhibits L-1-39 and L-1-40 discuss the substantial increase in regular FTEs of 567 in 2008 and the trend of converting non-regular to regular staff. The costs associated with non-regular staff are lower than for regular staff and therefore an increase in regular staff would see an increase in overall OM&A. For example, for a regular FTE (PWU) the average cost is \$127,000 as compared to \$54,000 for a non-regular employee (Exhibit L-1-52). In its argument in chief on page 62, OPG has indicated that a contributing factor is the hiring of a large number of regular FTEs as a large number of existing staff are eligible for retirement.

OPG also plans to reduce its reliance on overtime from 5% to about 3% in 2009 (p.22, F2-T2-S1) which would also necessitate additional regular FTEs.

With respect to labour cost increases, OPG has stated it is also addressing the matter of maintenance backlogs. According to OPG, their high labour costs correspond to the high number of corrective and elective backlogs. They note that as the backlogs get addressed the number of staff required to maintain the facilities will decrease. OPG noted that they began to make a concerted effort to address this problem in 2005 with additional resources to reduce the backlogs.

OPG noted in Exhibit L-14-15 that labour costs accounted for 52% of OM&A of the EUCG (Energy Utility Cost Group) members. OPG's percentage is 73%. However, OPG added that their costs include contractors and off-site employees. When those groups are added to the EUCG percentage, that percentage in OM&A increases to 68% (K4.2, p.4).

Global Adjustment Increases:

OPG notes that one factor of the cost increase is IESO Non-Energy Charges. OPG's request is to recover its forecast Global Adjustment costs of \$13 million in 2008 and \$12.3 million in 2009 (L-1-60, p.2, line 15). This represents an increase relative to 2007 because the current Government regulation did not make provisions for OPG to recover these amounts (Tr., Tech Conf, p.7).

OPG used a regression analysis to determine the forecast of the global adjustment costs. That analysis used recent history of HOEP and not a long term historical trend. This may affect the reliability of the forecast.

OM&A Cost Determination:

The Board has used line by line determinations and envelope based determinations in its past decisions. A line by line determination is dependent upon a detailed analysis while the envelope method focuses on the reasonableness of the overall budget and year to year changes.

The Board has recently employed a envelope determination in the Toronto Hydro-Electric System Limited Decision (EB-2007-0680 pg 37-38). In that decision the Board was guided by considering the budget within historic norms and not seeking to micro-manage the company. The Board also noted in that decision that when significant OM&A increases are sought, those increases be clearly justified.

One approach to justifying OM&A increases is through the use of benchmarking. Staff note in other decisions, the Board has used proxies and utility comparisons as a basis for the determination of the OM&A to be recovered from consumers.

In this case, there was significant discussion around benchmarking of OPG's OM&A costs with other companies. Board staff note that the Memorandum of Agreement between OPG and its Shareholder (A1-T4-S1, Appendix B) states:

"OPG will seek continuous improvement in its nuclear generation business and internal services. OPG will benchmark its performance in these areas against CANDU nuclear plants worldwide as well as against the top quartile of private and publicly- owned nuclear electricity generators in North America. OPG's top operational priority will be to improve the operation of its existing nuclear fleet."

The chart in Exhibit L-1-34 compared OPG, Bruce Power and other Nuclear generators in terms of OM&A per MWh in 2006. That chart showed that, in 2006, OPG was at \$41.94 per MWh versus Bruce Power at \$25.01 per MWh. PWU's witness Mr. Stevenson, in cross examination, described Bruce Power as the "single best comparator" in terms of labour costs and staffing (Tr., v.3. p. 82-84). For example:

- Both OPG and Bruce Power have CANDU facilities
- All of the nuclear plants are located in the Ontario electricity market
- Bruce Power inherited all of its units directly from OPG
- Bruce Power inherited its staff and the associated collective agreements directly from OPG
- Similar to OPG, Bruce Power has refurbished and restarted some of its nuclear units
- Both Bruce Power and OPG are subject to CNSC requirements
- Bruce Power is facing the same demographic issues OPG is facing.

OPG has noted issues with using either the Bruce Power operations or other. Nuclear firms as a comparison given the relationship between economies of scale and size. They have also noted that capitalization policy should be a consideration.

Exhibit L-3-50 ( the Navigant Report) provides information that benchmarks OPG's staffing levels against a composite of CANDU benchmarks. On many indicators OPG is above average ( pg39- 48)

When making submissions on this issue, parties may wish to address the following:

Is an average annual increase, due largely to labour costs, in Nuclear OM&A of 6.4% from 2005 to 2009 reasonable?

Should the Board accept the use of the historic HOEP in the regression analysis to calculate an estimate of the Global Adjustment? If not, what evidence can the Board rely upon to determine what the global adjustment forecast should be?

When approving the OM&A budget, should the Board use a line by line approach or an OM&A envelope?

If the Board chooses to approve an envelope method, is the benchmarking information in this proceeding a reasonable tool for the Board to use in assessing the OM&A envelope for OPG? If so, how should the Board be guided by that information in its determination?

#### **4. Corporate Cost Allocation**

##### **Introduction:**

- 1. Should an updated corporate cost allocation methodology be filed for use in OPG's next application?**

**Board Staff Submission – Part II**  
**OPG's Payment Amounts for**  
**Prescribed Facilities - EB-2007-0905**

**Discussion:**

OPG is proposing to allocate corporate support and centrally held OM&A costs to its prescribed facilities as follows (Exhibit L-1-58):

Summary Schedule  
Corporate Support Groups & Centrally Held Costs (\$M)  
OPG

Line No.	Corporate Costs	2006 Actual				2008 Actual				2007 Actual			
		Prescribed Assets	Percent Allocated to Prescribed Assets	Non Prescribed Assets	Total	Prescribed Assets	Percent Allocated to Prescribed Assets	Non Prescribed Assets	Total	Prescribed Assets	Percent Allocated to Prescribed Assets	Non Prescribed Assets	Total
1	Finance	33.6	59.8%	22.6	56.2	36.6	64.2%	20.4	57.0	39.4	62.9%	23.2	62.6
2	Corporate Affairs	9.5	57.5%	7.0	16.5	12.2	73.1%	4.5	16.7	13.5	68.2%	6.3	19.8
3	CIO	104.5	69.9%	45.0	149.5	102.4	69.9%	44.0	146.4	118.1	70.2%	50.1	168.2
4	Corporate Centre <sup>1</sup>	13.8	67.6%	6.6	20.4	12.7	65.8%	6.6	19.3	13.9	66.2%	7.1	21.0
5	Energy Markets	4.2	18.2%	18.9	23.1	3.0	14.3%	18.0	21.0	4.1	19.9%	16.5	20.6
6	Human Resources	29.7	69.6%	13.0	42.7	32.8	71.8%	12.9	45.7	35.0	73.4%	12.7	47.7
7	Real Estate	37.4	79.2%	9.8	47.2	30.1	80.1%	7.5	37.6	34.5	81.8%	7.7	42.2
8	Sub-Total	\$ 232.7	65.4%	\$ 122.9	\$ 355.6	\$ 229.8	66.9%	\$ 113.9	\$ 343.7	\$ 258.5	67.7%	\$ 123.6	\$ 382.1
	Centrally Held Costs:												
9	Pension/OPEB Related	76.1	78.2%	21.2	97.3	155.6	79.3%	43.1	208.7	140.9	78.8%	37.9	178.8
10	Insurance	15.3	57.3%	11.4	26.7	15.0	56.4%	11.6	26.6	14.8	55.4%	11.9	26.7
11	Performance Incentives	25.8	76.8%	7.8	33.6	30.7	75.1%	10.2	40.9	31.1	76.2%	9.7	40.8
12	IE&O Non-Energy Charges	15.3	59.1%	10.6	25.9	14.5	64.7%	7.9	22.4	13.2	64.4%	7.3	20.5
13	Other	18.6	66.4%	9.4	28.0	6.2	35.9%	11.0	17.2	26.3	84.6%	4.8	31.1
14	Sub-Total	\$ 151.1	71.4%	\$ 60.4	\$ 211.5	\$ 232.0	73.5%	\$ 83.8	\$ 315.8	\$ 226.3	76.0%	\$ 71.6	\$ 297.9
15	Total	\$ 383.8	67.7%	\$ 183.3	\$ 567.1	\$ 461.8	70.0%	\$ 197.7	\$ 659.5	\$ 484.8	71.3%	\$ 195.2	\$ 680.0

1 Corporate Centre includes Executive Office, Corporate Secretary, and Law.

**Board Staff Submission – Part II**  
**OPG's Payment Amounts for**  
**Prescribed Facilities - EB-2007-0905**

Line No.	Corporate Costs	2008 Plan				2009 Plan			
		Prescribed Assets	Percent Allocated to Prescribed Assets	Non Prescribed Assets	Total	Prescribed Assets	Percent Allocated to Prescribed Assets	Non Prescribed Assets	Total
1	Finance	43.6	65.0%	23.5	67.1	44.0	64.2%	24.5	68.5
2	Corporate Affairs	24.0	77.4%	7.0	31.0	23.8	76.8%	7.2	31.0
3	CIO	133.7	69.5%	58.6	192.3	132.3	69.5%	58.0	190.3
4	Corporate Centre <sup>1</sup>	14.1	65.3%	7.5	21.6	13.9	64.4%	7.7	21.6
5	Energy Markets	7.0	26.8%	19.1	26.1	6.9	25.9%	19.7	26.6
6	Human Resources	35.0	71.6%	13.9	48.9	36.1	71.2%	14.6	50.7
7	Real Estate	34.5	79.9%	8.7	43.2	34.2	79.7%	8.7	42.9
8	Sub-Total	\$ 291.9	67.9%	\$ 138.3	\$ 430.2	\$ 291.2	67.5%	\$ 140.4	\$ 431.6
	Centrally Held Costs:								
9	Pension/OPEB Related	116.6	78.8%	31.3	147.9	92.6	78.9%	24.8	117.4
10	Insurance	14.9	56.2%	11.6	26.5	15.5	56.4%	12.0	27.5
11	Performance Incentives	31.4	75.1%	10.4	41.8	32.0	74.9%	10.7	42.7
12	IESO Non-Energy Charges	24.6	68.5%	11.3	35.9	24.6	69.9%	10.6	35.2
13	Other	25.1	58.9%	17.5	42.6	21.1	56.0%	16.6	37.7
14	Sub-Total	\$ 212.6	72.1%	\$ 82.1	\$ 294.7	\$ 185.8	71.3%	\$ 74.7	\$ 260.5
15	Total	\$ 504.5	69.6%	\$ 220.4	\$ 724.9	\$ 477.0	68.9%	\$ 215.1	\$ 692.1

OPG's cost allocation methodology, including the methodology for allocating common business unit costs between regulated and unregulated hydro electric facilities, was reviewed and endorsed by independent cost allocation experts RJ Rudden Associates ("Rudden") in a Report dated April 2006 (the "Rudden Report"). (Exhibit F4-1-1). The Rudden Report concludes ( pg. 4) that the methodology used by OPG to distribute corporate costs separates the costs between regulated and unregulated business units in a manner that meets current best practices and is consistent with cost allocation precedents established by the OEB. OPG indicated that its auditors annually review the cost allocation actuals to ensure it accords with the methodology approved by Rudden. (Tr. 9 pg 24)

While Rudden approved the methodology and reviewed OPG's 2006 planning numbers based on the methodology, Rudden did not check the actual costs for 2006 and 2007 or the costs planned for 2008 and 2009. There has been no independent external review or evaluation of the 2008 or 2009 costs OPG is seeking to recover in rates or payments. As noted by counsel for CME, the Board's decision in Enbridge Gas Distribution ( EB-2005-0001 par. 10.5.16) requires an independent review of the costs sought to be recovered in rates or payments. (TR9 pg 20-22, 24, 87, 90).

When making submissions on this issue, parties may wish to address the following:

Should an updated Rudden Report, reporting on OPG's implementation of the corporate cost allocation methodology and reflecting the most recent regulatory precedents on cost allocation, be filed for use in OPG's next application?

Should OPG be required to file a report from an independent external reviewer which reviews the costs sought to be recovered in payments, for use in its next application?



## **5. Nuclear Fuel Risk Management**

### **Introduction :**

1. How should the establishment of a nuclear fuel variance account take into consider the possibility of OPG overstated its nuclear fuel cost forecast?

### **Discussion :**

The updated evidence shows that nuclear fuel costs for 2008 and 2009 were revised to \$162.4 million and \$204.2 million respectively. This represents an increase from \$113 million in 2007 of \$49.4 million (47%) for 2008 and \$91.2 million (81%) for 2009. In the initial filing on November 30/07, nuclear fuel costs for 2008 and 2009 were \$149.9 million and \$178.9 million respectively. In addition to the price forecast for fuel to be used for establishing the payment amounts, OPG has requested the establishment of a variance account to capture the difference between the actual and forecasted fuel prices.

When OPG submitted its initial application in November 2007, the uranium prices included in the forecast were based on OPG's business plan and OPG submits their business plan for approval in August. As a result, OPG based their forecast of nuclear fuel costs on market prices in "July of 2007, for the 2008-2012 period" and OPG confirmed that in the evidence update "the numbers that were used did not reflect the corresponding drop in uranium prices" (Tr., v.4, p.138-139)

Exhibit L-1-64 shows July 2007 is when market prices peaked. Market prices have declined from over \$130 to about \$90 when OPG provided its evidence update to around \$60 during the oral hearing. In confirmation, OPG stated "As of last week, the fuel forecast for spot market price moved down to \$60 U.S. per pound". (Tr., v.4, p.139)

OPG's current uranium supply contracts include market-related contracts and base price contracts. Market related contracts vary with market prices. Base price contracts are fixed. OPG has increased the percentage of market related contracts from 46% in 2007 to 64% in 2008. OPG stated in defence of this percentage increase "I would like to say that market-based pricing in a declining market will favour us." (Tr., v.4, p.142)

With the increase in the exposure to market prices in 2008, the concern would grow that the price forecast be a reasonable reflection of the cost OPG will incur. However, if there is uncertainty in the price forecast, the use of a variance account can eliminate the risk.

When making submissions on this issue, parties may wish to address the following:

Should there be a more detailed consideration of the price forecast with no variance account?

Alternatively, should there be a variance account and no adjustment to the forecast for fuel price?

## **6. Segregated Mode of Operations (SMO)**

### **Introduction:**

#### **1. How should SMO revenues be shared between OPG and consumers?**

### **Discussion :**

Undertaking J4.5 states that gross revenues from SMO sales were \$70.4 million in 2005, \$58.3 million in 2006 and \$57.2 million in 2007. Net revenues are derived after subtracting “opportunity costs” based on HOEP, transmission costs and line losses, and fixed transaction costs. OPG proposes that revenues from these transactions be shared on an equal basis between OPG and consumer. To track these revenues for future disposition OPG proposes the establishment of a deferral account.

OPG was questioned about the possibility of building in a revenue stream related to SMO revenues into the revenue requirement calculation. OPG rejected this proposal as inappropriate because of the difficulty of forecasting these revenues, and consequently being at risk for these revenues (Tr 15 pg 39-41).

Concern was expressed by some parties that establishing a deferral account to track the revenues could result in a cost to consumers. This was supported by the fact that the net revenues are a calculation that includes the impact of HOEP; therefore if SMO sales were at prices lower than HOEP that would mean a loss for OPG

OPG stated that the proposed deferral account would not likely see a debit balance. However, the data in Undertaking J4.5 indicates a three year trend of declining gross revenues and increasing fixed costs. Testimony revealed that the volume of SMO transactions has increased over the same period but OPG expects this trend to reverse when the new Ontario-Quebec transmission line goes into service. Additional testimony also revealed that OPG sometimes undertakes SMO transactions for reasons unrelated to the economics, and profitability, of the specific transaction (Tr 15 pg 179).

Assuming OPG maintains economic transactions there are numerous ways the revenues can be reflected in the payment amounts. One example of note is the storage

transactional revenues of Union Gas. The Board had in several rate decisions directed a certain amount of revenues to be included in the revenue forecast; in essence, a proactive sharing of 100% of a certain amount of transactional revenue with customers. Further, the Board has indicated in those decisions a sharing amount with customers, sometimes 90% sometimes 75%, and sometimes another percentage.

When making submissions on this issue, parties may wish to address the following:

Is it appropriate for consumers to bear the risk of uneconomic SMO transactions, even though the risk of a debit balance in a deferral account is low?

If the deferral account is granted, should the booking of debit transactions in the account be prohibited? Or should it be a condition of the granting of the account that at the end of the fiscal year, the overall balance of the account not contain a debit balance?

Assuming OPG engages in economic transactions, and taking into consideration the variety of sharing mechanisms which have been used by this Board, what sharing mechanism is appropriate for this account?

## **7. Nuclear Waste/ Decommissioning liability**

### **Introduction :**

1. Should the payments include a recovery of asset retirement cost and return on the asset retirement cost associated with nuclear waste and decommissioning?

### **Discussion :**

As noted in the Rate Base section of the application, the treatment of the asset retirement obligation costs for nuclear waste management and decommissioning are included in the rate base.

The method of recovery of the costs associated with these requirements is not specified by regulation or elsewhere. Evidence has been presented in this proceeding regarding OPG's choice of recovery method. OPG proposes a "rate base" treatment.

Generally Accepted Accounting Principles (GAAP) as expressed in the Canadian Institute of Chartered Accountants (CICA) Handbook section 3110, Asset Retirement Obligations, at paragraph 13, states:

“Upon initial recognition of a liability for an asset retirement obligation, an entity should recognize an asset retirement cost by increasing the carrying amount of the related long-lived asset by the same amount as the liability. An entity should subsequently allocate that asset retirement cost to expense using a systematic and rational method over its useful life. [JAN. 2004]”

There have been several other approaches put forward as described in Exhibit J 12.1.

OPG states that their proposed treatment does not appear inconsistent with O Reg. 53/05, is supported by the CIBC World Markets report that informed the development of the regulation, is stated by external auditors to be consistent with GAAP.

When making submissions on this issue, parties may wish to address the following:

Should the payments include a recovery of asset retirement cost and return on the asset retirement cost associated with nuclear waste and decommissioning?

Considering the different methods for recovering the financing costs noted in Exhibit J12.1, which method should be employed by the Board, and why?

## **8. Deferral Accounts**

### **Introduction :**

1. Has OPG provided sufficient justification for not following Board policy on the interest rates for the carrying charges for deferral and variance accounts?
2. Has OPG provided justification for the establishment of a variance account for tax changes?
3. Has OPG provided justification for the establishment of a variance account for pension and other post employment benefit (OPEB) costs?

### **Discussion - Has OPG provided sufficient justification for not following Board policy on the interest rates for the carrying charges for deferral and variance accounts?**

OPG proposed new interest rates to calculate carrying charges for deferral and variance accounts. OPG proposes the use of 6.47% for 2009 and 5.65% for 2008 (Ex. C1/T2/S1 Tables 3 and 2). For the Pickering A Return To Service (PARTS) deferral account, OPG proposes the use of the weighted average cost of capital (WACC) approved by the OEB (J1/T3/S1 p. 2). For 2008 and 2009 these rates are 8.48% and 8.56% respectively (Ex. C1/T2/S1 Table 3 and 2).

Under the Regulation, the interest rate for all accounts was six percent (6%), applied on simple interest basis to the monthly opening balances of the accounts and compounded annually. These carrying charges are included in the account balances (as of December 31, 2007) requested for disposition. The total deferral and variance account balances as of December 31, 2007 were \$339.3M (Ex. J1/T1/S1 Table 1).

On November 28, 2006, the Board approved industry-wide generic standards for prescribing interest rates for gas and electricity utilities on a quarterly basis ("Prescribed Interest Rates Policy", Exhibit K15.1). These rates apply to all deferral, and variance accounts.

Large electricity utilities have recorded large balances accumulated over several years in their deferral and variance accounts, similar to OPG. For example, in the 2004 regulatory assets phase II proceeding for electricity distributors, Hydro One Networks and Toronto Hydro applied for the recovery of deferral and variance balances of \$156.8M and \$95.8M respectively. With the exception of the PARTS deferral account, the total balance for all other OPG deferral and variance accounts as of December 31, 2007 is about \$155.5M.

Even with these large amounts the electricity distributors have followed the Board's policy. OPG has stated that it should not have to follow the Board's policy because of the large balances it is tracking.

Based on Board policy, the average prescribed interest rate for deferral and variance accounts in 2008 (quarters 1 to 3) is 4.19 %; OPG's proposed rate of 5.65% for 2008. The implementation of OPG's proposal would result in additional cost to consumers of approximately \$1.1 million for every \$100M in account balance. In Undertaking J14.3, OPG quantified that using its proposed rate compared to the Board's prescribed rate for deferral and variance accounts is greater by \$9.1M.

A further concern related to OPG's accounting interest rate is the rate request for the PARTS account. OPG is proposing to use a rate based on the weighted average cost of capital (WACC). Part of OPG's justification is the long disposition period which they claim mimics the recovery of carrying costs of an asset.

Staff notes while the regulation specifies a maximum of 15 years as a guideline for recovery of this account, the Board has the discretion to set a shorter recovery period. In comparison to the Nuclear Liability account, which has a balance of \$130.5M proposed to be recovered over 33 months at \$3.9M per month, the PARTS deferral account balance of \$183.8M was proposed to be recovered over 141 months at \$1.3M per month.

Even though WACC is normally applied to assets in rate base the PARTS variance account is of a non-asset type; using a asset related rate (i.e. WACC) for a non-asset charge is inconsistent with regulatory treatment.

When making submissions on this issue, parties may wish to address the following:

What interest rates should be charged on OPG's variance and deferral accounts? Has OPG justified a departure from the Prescribed Interest Rates Policy?

With regard to the PARTS account, is the longevity of the account and its similarity to an asset recovery period sufficient reason to apply an asset related rate?

What interest rate should be charged on the PARTS account? Has OPG justified a departure from the carrying cost treatment for CWIP and/or Deferral/Variance Accounts?

**Discussion - Has OPG provided justification for the establishment of a variance account for tax changes?**

OPG proposes a variance account to record changes in Tax Rates, Rules, and Assessments. On the basis that these matters are beyond the control of the company, OPG has elected to is seeking approval in advance for any future tax changes.

OPG has stated that account 1592 in the Accounting Procedures Handbook (APH) permits electricity distributors to record tax related impacts. Those impacts include "any differences that result from a legislative or regulatory change to the tax rates or rules assumed" and "any differences that result from a change in, or a disclosure of, a new assessing or administrative policy" as well as "specified tax reassessments."

A comparison between account 1592 and the proposed account indicates that OPG's account is intended to capture a wider range of tax impacts affecting the revenue requirement. Specifically, OPG seeks an account to track the impacts of potential effects of re-assessment(s) in the pre-regulation period (1999-2004) that may impact the taxes in years subject to regulation (2005 and after).

When making submissions on this issue, parties may wish to address the following:

If this account is approved by the Board, should it track the recording of reassessment impacts?

If the Board approves the recording of reassessment impacts in the proposed account, should the reassessments be restricted to the years subject to regulation only?

As OPG was not regulated until 2008, and given that consumers were paying for the past taxes through the fixed payment amounts established in 2005, should the recognition of 'after the fact' changes in the tax assessment in previous years be allowed?..

If the 'after the fact changes' are allowed, should they be dealt with differently for the three distinct periods covered by possible reassessments (pre 2005, 2005 to 2007 and 2008 onward)? If so, how should they be dealt with?

**Discussion - Has OPG provided justification for the establishment of a variance account for pension and other post employment benefit (OPEB) costs?**

OPG proposes a Pension/OPEB Cost Variance Account to record the impact of changes in the discount rate used to determine pension and OPEB cost for OPG's regulated operations. A change in this discount rate will cause a variance between the pension and OPEB cost included in the revenue requirement and the actual pension and OPEB cost. The Pension/OPEB Cost Variance Account would only be cleared if it exceeds a threshold/trigger amount of \$75M (excluding interest).

OPG is required to project discount rates that would be in effect on December 31, 2007 and December 31, 2008 for 2008 and 2009 respectively. As with any other forecast in a forward test year review, the applicant assumes the risk of the assumptions.

In addition, it is not clear what the significance of the impact of the change in discount rates will be or if there will be a change at all. In such circumstances in the past, the Board has indicated to applicants that they should apply when more specific information is known.

When making submissions on this issue, parties may wish to address the following:

If a variance account was not established until the discount rate change has occurred, and its impacts are assessed and known, how would OPG be harmed?

**9. Determination of Payments**

**Introduction:**

1. Should the recovery of deferral and variance account balances be done through the base payment or by rate rider?
2. Should there be a fixed payment component in the nuclear facilities payment design?
3. What monitoring mechanism should be established to evaluate the performance of the proposed hydroelectric incentive payment system?

**Discussion - Should the recovery of deferral and variance account balances be done through the base payment or by rate rider**

OPG has proposed an increase in the revenue requirement from the clearing of balances in the variance and deferral accounts. OPG proposes to recover the

hydroelectric balances directly in the per MWh payment whereas the nuclear balance would be recovered as a separately identified rate rider.

Staff note that the clearance of deferral and variance accounts have typically been implemented through rate riders. The reason for this approach is the irregular nature of the costs and timing of those costs associated with the accounts, as compared to ongoing operations. Rate riders allow for time limited conditions to be attached, whereas if the charges are within the base rate, a further proceeding is needed to remove them.

When making submissions on this issue, parties may wish to address the following:

Is OPG's proposal to recover the hydroelectric deferral charges through their base rates an efficient and transparent recovery of the cost?

**Discussion - Should there be a fixed payment component in the nuclear facilities payment design?**

OPG proposes to institute a fixed and variable payment design whereby the fixed payment is 25% of the revenue requirement. The payments for the test period are: fixed, \$58.2 million/month and variable, \$41.6/MWh. OPG's evidence emphasizes the need for a closer correspondence between OPG's nuclear cost structure, in which fixed costs dominate, and its payment structure.

OPG's cited other generators or regulated energy organizations that receive some portion of their revenues under fixed payments; none of the examples are baseload generators. Although the fixed payment for distributors is not in relation to the commodity it is in relation to the fixed assets of those companies.

Board staff notes that OPG recognizes that a payment structure tied to a specific per unit (\$/MWh) amount provides a strong incentive to maximize output. (Exhibit I1Tab2Schedule1, page 1, lines18-19). Moving from the current 100% variable based payment method to the method proposed by OPG could diminish this incentive.

When making submissions on this issue, parties may wish to address the following:

How does a reduction in the incentive to maximize output support the public interest in a generation capacity constrained system?

How should the public interest requirement be balanced with OPG's need to align payment design with their cost structure?



**Discussion - What monitoring mechanism should be established to evaluate the performance of the proposed hydroelectric incentive payment system?**

Regulation 53/05 established an incentive payment system for OPG's prescribed hydroelectric generating units. This incentive system was based on a fixed output level of 1900 MW per hour. Output above this level received HOEP instead of the prescribed price of \$33/MWh.

The purpose of this incentive mechanism is to provide OPG a financial benefit for shifting production from off-peak hours to peak hours. OPG does this by using the Beck Pump Generating Station to store water for peak demand, and high price periods.

OPG's application includes a revised incentive mechanism that is based on actual monthly hourly production instead of the fixed output level of 1900 MW per hour. OPG states that this incentive system will have significant benefits to Ontario consumers (estimated value of \$80 M. to \$270 M. from lower market prices) as well as OPG, \$12 M. in 2009 (Ex.I1/T1/S1, page 17, lines 4 to 8).

In the filed evidence (A1/T11/S1 Appendix C), OPG provides the number of hours by quarter that the regulated payment amounts for hydroelectric prescribed assets exceeded HOEP for the years 2005 to mid-2007. Based on total annual or half-year hours, the percentage of hours that the payment level exceeded HOEP rose from 5.8% in 2005 to 29.5% in 2006 and 34.6% for half-year 2007. This trend would indicate a probable decline in revenue flows from the existing incentive mechanism over the 2005 to mid-2007 period.

In response to SEC Interrogatory #82 (L/T14/S82), OPG states that it is subject to "...the risk that the differential between off-peak and on-peak prices is lower than expected and thus that the net-value of the production that is time-shifted is insufficient to cover the energy losses and variable costs."

Cross-examination of OPG by Energy Probe focused on OPG's ability to manipulate its production to derive maximum benefit from its proposed incentive system. In response (Undertaking J15.6), OPG produced a set of hypothetical calculations based on Energy Probe's proposed scenario. These calculations show an incremental net revenue increase of \$18,730 (0.036% of total monthly revenue) to \$37,460 (0.072%), depending on assumptions for how the PGS units are operated in the last days of the month.

The incentive mechanism's objective is to maximize the hydroelectric output during peak hours. It is unclear to Board staff whether the proposed mechanism will achieve this objective more effectively than the current mechanism.

When making submissions on this issue, parties may wish to address the following:

Does the evidence demonstrate that increased benefits to the system and consumers are likely to result if the incentive mechanism is approved?

If approved, should the Board require a written independent evaluation of the effectiveness of the mechanism (in maximizing hydroelectric output during peak hours) to be filed in OPG's next payment application?

In the alternative, should there be regular reporting of the impact and results of the incentive mechanism during 2008 and 2009?