

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

AND IN THE MATTER OF an application filed by Ontario Power Generation Inc. pursuant to section 78.1 of the *Ontario Energy Board Act, 1998* for an order or orders determining payment amounts for the output of certain of its generating facilities.

**CANADIAN MANUFACTURERS & EXPORTERS (“CME”)
COMPENDIUM FOR
ONTARIO POWER GENERATION INC. (“OPG”)
WITNESS PANEL 1**

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Memorandum of Agreement

BETWEEN

Her Majesty the Crown In Right of Ontario (the
"Shareholder")

And

Ontario Power Generation ("OPG")

Purpose

This document serves as the basis of agreement between Ontario Power Generation Inc. ("OPG") and its sole Shareholder, Her Majesty the Queen in Right of the Province of Ontario as represented by the Minister of Energy (the "Shareholder") on mandate, governance, performance, and communications. This agreement is intended to promote a positive and co-operative working relationship between OPG and the Shareholder.

OPG will operate as a commercial enterprise with an independent Board of Directors, which will at all times exercise its fiduciary responsibility and a duty of care to act in the best interests of OPG.

A. Mandate

1. OPG's core mandate is electricity generation. It will operate its existing nuclear, hydroelectric, and fossil generating assets as efficiently and cost-effectively as possible, within the legislative and regulatory framework of the Province of Ontario and the Government of Canada, in particular, the Canadian Nuclear Safety Commission. OPG will operate these assets in a manner that mitigates the Province's financial and operational risk.
2. OPG's key nuclear objective will be the reduction of the risk exposure to the Province arising from its investment in nuclear generating stations in general and, in particular, the refurbishment of older units. OPG will continue to operate with a high degree of vigilance with respect to nuclear safety.
3. 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.
4. With respect to investment in new generation capacity, OPG's priority will be hydro- electric generation capacity. OPG will seek to expand, develop and/or improve its hydro- electric generation capacity. This will include expansion and redevelopment on its existing sites as well as the pursuit of new projects where feasible. These investments will be taken by OPG through partnerships or on its own, as appropriate.

5. OPG will not pursue investment in non-hydro-electric renewable generation projects unless specifically directed to do so by the Shareholder.
6. OPG will continue to operate its fossil fleet, including coal plants, according to normal commercial principles taking into account the Government's coal replacement policy and recognizing the role that fossil plants play in the Ontario electricity market, until government regulation and/or unanimous shareholder declarations require the closure of coal stations.
7. OPG will operate in Ontario in accordance with the highest corporate standards, including but not limited to the areas of corporate governance, social responsibility and corporate citizenship.
8. OPG will operate in Ontario in accordance with the highest corporate standards for environmental stewardship taking into account the Government's coal replacement policy.

B Governance Framework

The governance relationship between OPG and the Shareholder is anchored on the following:

1. OPG will maintain a high level of accountability and transparency:
 - OPG is an *Ontario Business Corporations Act* ("OBCA") company and is subject to all of the governance requirements associated with the OBCA.
 - OPG is also subject to the *Freedom of Information and Protection of Privacy Act*, the *Public Sector Salary Disclosure Act* and the *Auditor General Act*.
 - OPG's regulated assets will be subject to public review and assessment by the Ontario Energy Board.
 - OPG will annually appear before a committee of the Legislature which will review OPG's financial and operational performance.
2. The Shareholder may at times direct OPG to undertake special initiatives. Such directives will be communicated as written declarations by way of a Unanimous Shareholder Agreement or Declaration in accordance with Section 108 of the OBCA, and be made public within a reasonable timeframe.

C. Generation Performance and Investment Plans

1. OPG will annually establish 3 –5 year performance targets based on operating and financial results as well as major project execution. Key measures are to be agreed upon with the Shareholder and the Minister of Finance. These performance targets will be benchmarked against the

performance of the top quartile of electricity generating companies in North America.

2. Benchmarking will need to take account of key specific operational and technology factors including the operation of CANDU reactors worldwide, the role that OPG's coal plants play in the Ontario electricity market with respect to load following, and the Government of Ontario's coal replacement policy.
3. OPG will annually prepare a 3 – 5 year investment plan for new projects.
4. Once approved by OPG's Board of Directors, OPG's annual performance targets and investment plan will be submitted to the Shareholder and the Minister of Finance for concurrence.

D. Financial Framework

1. As an OBCA corporation with a commercial mandate, OPG will operate on a financially sustainable basis and maintain the value of its assets for its shareholder, the Province of Ontario.
2. As a transition to a sustainable financial model, any significant new generation project approved by the OPG Board of Directors and agreed to by the Shareholder may receive financial support from the Province of Ontario, if and as appropriate.

E. Communication and Reporting

1. OPG and the Shareholder will ensure timely reports and information on major developments and issues that may materially impact the business of OPG or the interests of the Shareholder. Such reporting from OPG should be on an immediate or, at minimum, an expedited basis where an urgent material human safety or system reliability matter arises.
2. OPG will ensure the Minister of Finance receives timely reports and information on multi-year and annual plans and major developments that may have a material impact on the financial performance of OPG or the Shareholder.
3. The OPG Board of Directors and the Minister of Energy will meet on a quarterly basis to enhance mutual understanding of interrelated strategic matters.
4. OPG's Chair, President and Chief Executive Officer and the Minister of Energy will meet on a regular basis, approximately nine times per year.

5. OPG's Chair, President and Chief Executive Officer and the Minister of Finance will meet on an as needed basis.
6. OPG's senior management and senior officials of the Ministry of Energy and the Ministry of Finance will meet on a regular and as needed basis to discuss ongoing issues and clarify expectations or to address emergent issues.
7. OPG will provide officials in the Ministry of Energy and the Ministry of Finance with multi-year and annual business planning information, quarterly and monthly financial reports and briefings on OPG's operational and financial performance against plan.
8. In all other respects, OPG will communicate with government ministries and agencies in a manner typical for an Ontario corporation of its size and scope.

F. Review of this Agreement

This agreement will be reviewed and updated as required.

Dated: the 17th day of August, 2005

On Behalf of OPG:

On Behalf of the Shareholder:

Original signed by:

Original signed by:

Jake Epp
Chairman
Board of Directors

Her Majesty the Queen in Right of
the Province of Ontario as
represented by the Minister of Energy,
Dwight Duncan

Ontario Energy Board Act, 1998
Loi de 1998 sur la Commission de l'énergie de l'Ontario

ONTARIO REGULATION 53/05
PAYMENTS UNDER SECTION 78.1 OF THE ACT

Consolidation Period: From February 19, 2008 to the e-Laws currency date.

Last amendment: O. Reg. 27/08.

This Regulation is made in English only.

Definition

0.1 In this Regulation,

“approved reference plan” means a reference plan, as defined in the Ontario Nuclear Funds Agreement, that has been approved by Her Majesty the Queen in right of Ontario in accordance with that agreement;

“nuclear decommissioning liability” means the liability of Ontario Power Generation Inc. for decommissioning its nuclear generation facilities and the management of its nuclear waste and used fuel;

“Ontario Nuclear Funds Agreement” means the agreement entered into as of April 1, 1999 by Her Majesty the Queen in right of Ontario, Ontario Power Generation Inc. and certain subsidiaries of Ontario Power Generation Inc., including any amendments to the agreement. O. Reg. 23/07, s. 1.

Prescribed generator

1. Ontario Power Generation Inc. is prescribed as a generator for the purposes of section 78.1 of the Act. O. Reg. 53/05, s. 1.

Prescribed generation facilities

2. The following generation facilities of Ontario Power Generation Inc. are prescribed for the purposes of section 78.1 of the Act:

1. The following hydroelectric generating stations located in The Regional Municipality of Niagara:

- i. Sir Adam Beck I.
- ii. Sir Adam Beck II.
- iii. Sir Adam Beck Pump Generating Station.
- iv. De Cew Falls I.
- v. De Cew Falls II.

2. The R. H. Saunders hydroelectric generating station on the St. Lawrence River.

3. Pickering A Nuclear Generating Station.

4. Pickering B Nuclear Generating Station.

5. Darlington Nuclear Generating Station. O. Reg. 53/05, s. 2; O. Reg. 23/07, s. 2.

Prescribed date for s. 78.1 (2) of the Act

3. April 1, 2008 is prescribed for the purposes of subsection 78.1 (2) of the Act. O. Reg. 53/05, s. 3.

Payment amounts under s. 78.1 (2) (a) of the Act

4. (1) For the purpose of clause 78.1 (2) (a) of the Act, the amount of a payment that the IESO is required to make with respect to a unit at a generation facility prescribed under section 2 is,

(a) for the hydroelectric generation facilities prescribed in paragraphs 1 and 2 of section 2, \$33.00 per megawatt hour with respect to output that is generated during the period from April 1, 2005 to the later of,

(i) March 31, 2008, and

(ii) the day before the effective date of the Board's first order in respect of Ontario Power Generation Inc.; and

- (b) for the nuclear generation facilities prescribed in paragraphs 3, 4 and 5 of section 2, \$49.50 per megawatt hour with respect to output that is generated during the period from April 1, 2005 to the later of,
 - (i) March 31, 2008, and
 - (ii) the day before the effective date of the Board's first order in respect of Ontario Power Generation Inc. O. Reg. 53/05, s. 4 (1).
- (2) Despite subsection (1), for the purpose of clause 78.1 (2) (a) of the Act, if the total combined output of the hydroelectric generation facilities prescribed under paragraphs 1 and 2 of section 2 exceeds 1,900 megawatt hours in any hour, the total amount of the payment that the IESO is required to make with respect to the units at those generation facilities is, for that hour, the sum of the following amounts:
 - 1. The total amount determined for those facilities under clause (1) (a), for the first 1,900 megawatt hours of output.
 - 2. The product obtained by multiplying the market price determined under the market rules by the number of megawatt hours of output in excess of 1,900 megawatt hours. O. Reg. 53/05, s. 4 (2).
- (2.1) The total amount of the payment under subsection (2) shall be allocated to the hydroelectric generation facilities prescribed under paragraphs 1 and 2 of section 2 on a proportionate basis equal to each facility's percentage share of the total combined output in that hour for those facilities. O. Reg. 269/05, s. 1.
- (2.2) Subsection (2.1) applies in respect of amounts payable on and after April 1, 2005. O. Reg. 269/05, s. 1.
- (3) For the purpose of this section, the output of a generation facility shall be measured at the facility's delivery points, as determined in accordance with the market rules. O. Reg. 53/05, s. 4 (3).

Deferral and variance accounts

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. O. Reg. 23/07, s. 3.
- (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. O. Reg. 23/07, s. 3.
- (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. O. Reg. 23/07, s. 3.
- (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. O. Reg. 23/07, s. 3.

Nuclear liability deferral account, transition

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. O. Reg. 23/07, s. 3.

(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. O. Reg. 23/07, s. 3.

Nuclear liability deferral account

5.2 (1) Ontario Power Generation Inc. shall establish a deferral account in connection with section 78.1 of the Act that records, on and after the effective date of the Board's first order under 78.1 of the Act, the revenue requirement impact of changes in its total nuclear decommissioning liability between,

- (a) the liability arising from the approved reference plan incorporated into the Board's most recent order under section 78.1 of the Act; and
- (b) the liability arising from the current approved reference plan. O. Reg. 23/07, s. 3.

(2) Ontario Power Generation Inc. shall record interest on the balance of the account as the Board may direct. O. Reg. 23/07, s. 3.

Nuclear development deferral account, transition

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. O. Reg. 27/08, s. 1.

Nuclear development variance account

5.4 (1) Ontario Power Generation Inc. shall establish a variance account in connection with section 78.1 of the Act that records, on and after the effective date of the Board's first order under section 78.1 of the Act, differences between actual non-capital costs incurred and firm financial commitments made and the amount included in payments made under that section for planning and preparation for the development of proposed new nuclear generation facilities. O. Reg. 27/08, s. 1.

(2) Ontario Power Generation Inc. shall record interest on the balance of the account as the Board may direct. O. Reg. 27/08, s. 1.

Rules governing determination of payment amounts by Board

6. (1) 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. O. Reg. 53/05, s. 6 (1).

(2) The following rules apply to the making of an order by the Board that determines payment amounts for the purpose of section 78.1 of the Act:

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.
2. In setting payment amounts for the assets prescribed under section 2, the Board shall not adopt any methodologies, assumptions or calculations that are based upon the contracting for all or any portion of the output of those assets.
3. The Board shall ensure that Ontario Power Generation Inc. recovers the balance 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.
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

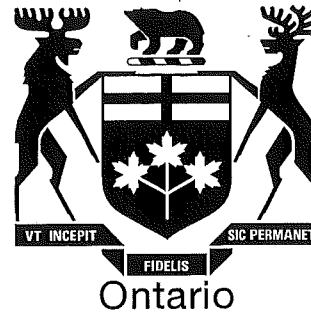
Generation Inc., if the Board is satisfied that the costs were prudently incurred and that the financial commitments were prudently made.

- 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.
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. 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,
 - 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.
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.
- 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.
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.
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. O. Reg. 23/07, s. 4; O. Reg. 27/08, s. 2.
7. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 53/05, s. 7.

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**Ontario Energy
Board**

**Commission de l'énergie
de l'Ontario**



EB-2007-0905

**IN THE MATTER OF AN APPLICATION BY
ONTARIO POWER GENERATION INC.**

PAYMENT AMOUNTS FOR PRESCRIBED FACILITIES

DECISION WITH REASONS

November 3, 2008

EB-2007-0905

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

AND IN THE MATTER OF an application by Ontario Power Generation
Inc. pursuant to section 78.1 of the *Ontario Energy Board Act, 1998* for an
Order or Orders determining payment amounts for the output of certain of
its generating facilities.

BEFORE: Gordon Kaiser
Presiding Member & Vice Chair

Cynthia Chaplin
Member

Bill Rupert
Member

DECISION WITH REASONS

NOVEMBER 3, 2008

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- B- Approvals Sought by OPG in EB-2007-0905
- C- Decision on Interim Payments in EB-2007-0905
- D- Section 78.1 of the *Ontario Energy Board Act, 1998*, S.O.1998, c.5 (Schedule B)
- E- Ontario Regulation 53/05
- F- Memorandum of Agreement between OPG and the Province of Ontario

needed as a consequence of any other findings in this decision, OPG should detail those adjustments in its draft order.

8.2 Capital Structure and Cost of Capital – Introduction

OPG's interim rates are based on a debt/equity ratio of 55/45 and a return on equity (ROE) of 5%. The following table sets out OPG's proposed capital structure and cost of capital for 2008 and 2009.

Table 8-2: Proposed Capital Structure and Cost of Capital

	2008		2009	
	% of Capital Structure	Rate	% of Capital Structure	Rate
Short-Term Debt	2.6%	5.83%	2.6%	5.98%
Existing/Planned Long-Term Debt	29.7%	5.79%	32.1%	5.79%
Other Long-Term Debt Provision	10.3%	5.65%	7.8%	6.47%
Total Debt	42.5%	5.76%	42.5%	5.92%
Common Equity	57.5%	10.50%	57.5%	10.50%
Total Rate Base	100%	8.48%	100%	8.56%

Source: Ex. C1-2-1, Tables 2 and 3.

OPG also proposed that the Board adopt a formula to be used for future adjustments to the ROE.

Ms. McShane provided evidence for OPG. Intervenors also presented expert evidence as follows:

- Board staff sponsored evidence by Mr. Goulding.
- The Pollution Probe Foundation (Pollution Probe) sponsored evidence by Drs. Kryzanowski and Roberts.
- VECC and CCC sponsored evidence by Dr. Booth.
- Energy Probe sponsored evidence by Dr. Schwartz.
- Green Energy Coalition (GEC) sponsored evidence by Mr. Chernick.
- AMPCO sponsored evidence by Dr. Murphy and Mr. Adams.

The following table summarizes the quantitative evidence of the witnesses.

Table 8-3: Summary of Expert Recommendations

Expert	Return on Equity	Capital Structure	
		Debt	Equity
Ms. McShane			
Equity Risk Premium test	9.5-10.25%	42.5%	57.5%
Discounted Cash Flow test	9.5-10.0%		
Comparable Earnings test	12.5%		
Recommendation	10.50%		
Dr. Kryzanowski / Dr. Roberts	7.35% (2008) 7.40% (2009)	53%	47%
Dr. Booth	7.75%	60%	40%
Dr. Schwartz	7.64%	55%	45%

This chapter will address the following issues:

- Capital structure
- Return on equity
- Cost of debt

8.3 Capital Structure

8.3.1 Approach to setting capital structure

CME submitted that the Board should begin with the premise that the debt/equity structure determined by the Province for purposes of setting the payments in the interim period was appropriate and that the structure should only change if there has been a material change in OPG's risks. CME pointed to OPG's testimony that its risks had not changed.

OPG responded that this position would have some merit if the prior capital structure had been set by the Board. OPG submitted that the Province adopted the interim equity ratio "as a transition to full cost of service rates established after an independent review

by the OEB.”⁹⁸ OPG pointed out that the level was set without a thorough cost of capital study and O. Reg. 53/05 clearly makes the Board the authority to set the payments. OPG also argued that if the Province thought the capital structure was appropriate, it could have indicated as such in O. Reg. 53/05. In OPG’s view, the fact that the O. Reg. 53/05 does not stipulate the equity ratio supports the conclusion that the Province expected the Board to make its determination of the cost of capital on a commercial basis.

Board Findings

The Board finds that the approach to setting the capital structure should be based on a thorough assessment of the risks OPG faces, the changes in OPG’s risk over time and the level of OPG’s risk in comparison to other utilities.

The equity ratio underlying the interim rates is informative, but not determinative for purposes of the Board’s decision; rather it is an expression of the Province’s expectations at that time and its assessment of what would be reasonable in the circumstances. The Board agrees that an important distinction is that the equity ratio was not set under the auspices of a Board proceeding with evidence, testimony and argument.

The following factors were raised in the context of the risk assessment, each of which will be addressed in turn:

- The stand-alone principle
- Regulatory risk
- Operating risk

8.3.2 The stand-alone principle

Many regulated utilities are part of a broader entity that includes affiliates or non-regulated operations. Under the stand-alone principle, the regulated operations of the utility are treated for regulatory purposes as if they were operating separately from the other activities of the entity. The intent is that the cost of capital borne by customers, in respect of the regulated operations, should not reflect subsidies to or from other activities of the firm and should only reflect the business risks associated with the regulated operations.

⁹⁸ OPG Reply Argument, p. 9.

OPG has several characteristics which differentiate it from other utilities regulated by the Board. Both the regulated and unregulated operations are in the business of generating power for sale into the Ontario market; both the regulated and unregulated operations are owned by the Province. It is also the Province that has determined, in certain respects, the Board's current and future approach to setting payment amounts. That is the context in which the Board considers the application of the stand-alone principle to the regulated operations of OPG.

At issue in the hearing was whether in the course of setting an appropriate capital structure, the application of the stand-alone principle excluded a consideration of the significance of the Province's ownership of OPG as part of the assessment of business risks associated with the regulated operations.

OPG's position is that the matter of ownership should not be taken into account, and the cost of capital for the regulated operations should reflect what the cost would be if OPG were raising capital in the public markets on the strength of their own business and financial parameters. OPG noted that Mr. Goulding and Drs. Kryzanowski and Roberts agree that the stand-alone principle is a fundamental principle in determining the cost of capital.

OPG also noted that Mr. Goulding recognized the political risk which OPG faces due to changing power sector policies and that the bond rating agencies have highlighted political risk. Mr. Goulding's evidence was that the prescribed assets face greater political risk than transmission, distribution or merchant generators because these other entities are less likely to be used directly by government for policy purposes. Ms. McShane assessed that "the risk of future political intervention in the market is higher than in other Canadian jurisdictions."⁹⁹

CCC, VECC, AMPCO, and CME all took the position that provincial ownership of OPG should be a factor in assessing OPG's risk and in determining the appropriate capital structure.

CCC took the position that the real shareholders are the residents of Ontario, and that the government is acting as their agent or proxy and is responsible for ensuring there is an adequate supply of electricity at reasonable prices:

⁹⁹ Ex. C2-1-1, p.64

The Council submits that the facts require the Board to consider the capital structure and return on equity, not on the basis of what amounts to an artificial concept of a stand-alone entity, but on the basis of the reality that the government, because of its obligations to the residents of the province, has a stake in limiting the risks which OPG faces, and ensuring that OPG does not fail.¹⁰⁰

CCC noted that the government had directed the OPA to include up to 14,000MW of baseload nuclear generation in its planning, directed OPG to refurbish existing and develop new nuclear capacity, and established a deferral account to recover the costs related to refurbished and new nuclear capacity. In CCC's view, "the government has exercised a power no private sector shareholder has, namely to direct the regulator to ensure risks which are taken in the public interest are protected."¹⁰¹

VECC made similar submissions:

While the identity of any private group of shareholders or owners is not of relevance, ownership of a utility by the same entity that can simultaneously direct utility operations and direct regulatory treatment is of the utmost relevance in this case especially with respect to risk and return.¹⁰²

VECC submitted that three factors reduce OPG's risk in relation to other utilities, especially unregulated generators:

- The requirements imposed on OPG through the MOA to mitigate the Province's financial and operational risk in operating the assets and reducing the Province's risk exposure to its nuclear assets
- The requirements in O. Reg. 53/05 that the Board accept certain amounts from OPG's audited financial statements and provide for recovery of various costs
- The various deferral and variance accounts which increase the probability of recovering unforecast costs

AMPCO submitted that the ownership of OPG affects the risks it bears and should be taken into account by the Board. AMPCO noted that both Standard & Poors' and Dominion Bond Rating Service recognize this in citing ownership of OPG as an important factor in determining OPG's debt rating. AMPCO pointed to the evidence it filed from Mr. Adams and Dr. Murphy, which concluded that the impact of past political

¹⁰⁰ CCC Argument, p. 8

¹⁰¹ Ibid.

¹⁰² VECC Argument, p. 14.

changes on OPG have been passed on to consumers. AMPCO questioned why, if political uncertainty creates risk for OPG, the shareholder should be compensated for a risk of its own creation. AMPCO concluded that regardless of the Board's findings, if the shareholder is dissatisfied with the risk borne by OPG, it can issue a further Directive to shift the impact to consumers.

CME submitted that Ms. McShane "misapplies the stand-alone principle by ascribing little weight to the risk mitigation effects of the government's ownership of OPG."¹⁰³

CME also disagreed with Ms. McShane's assessment of political risk:

We submit that it is unreasonable to suggest that electricity consumers should pay a higher return because OPG's owner, the Government, might take some action which could harm the shareholder interest the Government holds in OPG. Ratepayers should not be burdened with higher Costs of Capital because the Government might decide to act in a way which causes harm to taxpayers as the ultimate owners of OPG.¹⁰⁴

In response to CCC, OPG submitted that customers' interests must be kept separate from taxpayers' interest, and that this principle has been recognized by the Board in the past. OPG further submitted that the Province's objective of limiting its risk is no different than any other shareholder's, and that the proposed regulatory framework, including deferral and variance accounts, is a reasonable sharing of those risks and consistent with the approach of other utilities.

OPG argued that Hydro One is as important to the province as OPG and it is permitted to earn a commercial rate of return on a stand-alone basis.

OPG also argued that it was incorrect to claim that the government's legislative power has always been used to benefit or protect OPG. OPG pointed to the price caps of the early 2000s and the original requirement to decontrol a substantial portion of OPG's assets: "It is the very fact that the government can act both in ways to advantage and disadvantage OPG that creates uncertainty – and therefore political risk – in the future."¹⁰⁵

¹⁰³ CME Argument, p. 50.

¹⁰⁴ CME Argument, p. 51.

¹⁰⁵ OPG Reply Argument, p. 14.

OPG also noted Ms. McShane's testimony that the circumstances suggest that the Province is trying to establish an arm's-length company and concluded as follows:

To proceed on the assumption that the shareholder will intervene to protect OPG as an argument for ignoring the stand-alone principle directly contradicts the province's decision to place OPG's prescribed assets under the independent jurisdiction of the OEB.¹⁰⁶

Board Findings

The stand alone principle is a long-established regulatory principle and the Board has considered its application in a variety of circumstances. The unique circumstances of OPG, however, are in many ways without precedent. As noted above:

- Both the regulated and non-regulated operations perform the same function (i.e., generate power).
- The owner is the Province.
- The Board's approach to setting the payments now and in the future have in some respects been determined by the Province (through O. Reg. 53/05).

OPG is also different from the other entities the Board regulates in that it is not a natural monopoly.

Risk, in the regulatory context, can be considered to be the magnitude of the range of potential outcomes, with the focus generally being on the potential for an adverse outcome. In other words, the greater the range of potential outcomes, the greater is the risk. The Board is faced with two questions when considering the appropriate application of the stand-alone principle in the assessment of risk for OPG:

- Should OPG's risk be considered lower than other regulated Ontario energy utilities because the Province as owner has substantial control over OPG's risks – either in creating them or in protecting OPG from them (shifting the risk to consumers)? This is the issue of the shareholder impact on a regulated entity's risk.
- Is the political risk higher for OPG's regulated assets than for other regulated Ontario energy utilities? This is the issue of the impact of electricity policy changes on risk.

¹⁰⁶ OPG Reply Argument, p. 16

The witnesses and the parties generally agreed that deferral and variance accounts affect the level of risk and reduce it from what it would otherwise be. Similarly, where O. Reg. 53/05 mandates the recovery of certain costs, it is agreed that this reduces risk. O. Reg. 53/05, and in particular the establishment of various deferral and variance accounts and the requirement that certain types of cost be recovered, operates to transfer risk from OPG to customers. The Board must consider the precise nature of the accounts and determine the impact on risk; this is discussed in more detail later in this chapter.

In summary, some of these protections relate to expenditures before the period of Board regulation (the PARTS account) or to activities beyond the operation of the prescribed facilities (recovery of Bruce costs and new nuclear costs). These do not affect the level of risk for the prescribed facilities in the test period. Some of the accounts are comparable to the accounts of other regulated entities; they have not been stipulated through O. Reg. 53/05 for the test period, but rather have been approved by the Board (the accounts related to tax changes, water conditions, nuclear fuel expense, and ancillary service revenues). OPG also applied for other accounts, which the Board has decided not to approve (OPEB changes and SMO and WT revenues).

Two significant protections related to the prescribed assets have been established by O. Reg. 53/05 and will be ongoing: changes in nuclear liabilities and refurbishment costs. These are significant additional protections which have been established by the government and exceed the level of protection typically granted to a regulated utility.

The Board's conclusion is that these accounts do reduce risk. The Board notes, however, that under O. Reg. 53/05, amounts placed in the deferral and variance accounts after the Board's first order will be subject to a prudence review. These accounts will operate the same way for OPG as they do for other regulated entities, although the breadth of protection is greater.

While OPG's risk is lower due to these accounts, should OPG be considered of even lower risk because the shareholder can control whether OPG's financial risks are borne by the customers or the shareholder? The Board concludes that it should not. To conclude that OPG is of lower risk would be comparable to assuming that, after the Board's first order, the Province will direct the regulation of the prescribed assets, and regulate the distribution of risks between OPG and its customers, beyond the protections already established and assessed for purposes of setting the capital

structure. O. Reg. 53/05 is viewed by the Board as setting the baseline for OPG as it enters into a formal regulatory framework; essentially limiting any review of activities in the period prior to the Board's payment setting mandate and requiring protection against forecast error (subject to a prudence review) for certain significant costs going forward. The Board concludes that if OPG is operated at arm's length, then it should be examined in the same way as Hydro One, another energy utility owned by the Province. In other words, Provincial ownership will not be a factor to be considered by the Board in establishing capital structure.

The Board must also consider how it will address the shareholder's ability to control future risk. If the Province transfers risks from OPG to consumers in future, then the Board would need to assess the resulting level of risk and adjust the risk ranking (and possibly the capital structure) accordingly. | ✓

OPG suggests that its regulated assets are subject to greater political risk than other energy utilities in the province. The Board does not agree that this is a risk that should be reflected in OPG's cost of capital. All of Ontario's energy utilities are subject to risks arising from changing energy policy. The Province has established cost recovery requirements for utilities in which it has no ownership (for example, the regulations related to smart meter implementation). For example, the Province also required the LDCs to spend the third tranche of their market rates of return on conservation and demand management expenditures. The Board concludes that OPG's exposure to the risks and benefits of Provincial direction regarding expenditures and cost recovery are comparable to that of other regulated utilities.

The Board finds no evidence that OPG's regulated hydroelectric and nuclear facilities will be uniquely exposed. Mr. Goulding's evidence suggests that the risk of political interference is higher for OPG, but precisely because the Province is the owner and may choose to use OPG in a way which would be adverse to OPG's financial interests. It would not be appropriate for the Board to assume that the Province will interfere in the distribution of OPG's risks now that the Board has regulatory authority over OPG; it is consistent therefore to regulate OPG on the basis that the Province will not control OPG's currently regulated facilities in a manner which is adverse to OPG's commercial interests. The stand alone principle leads us to conclude that OPG's financial risks are not lower as a result of Provincial ownership; therefore it is consistent to conclude that political risk is not higher as a result of Provincial ownership.

8.3.3 Regulatory Risk

OPG noted that this is OPG's first application under the Board's regulatory authority. In OPG's view there is no track record of stable or consistent regulation and, therefore, there is regulatory uncertainty about the regulatory end state and OPG's ability to recover its costs. As a result, OPG argued, there is a risk of unintended consequences from specific decisions until there is a track record of consistent, stable regulation.

AMPCO pointed to Ms. McShane's evidence wherein she assumes the Board will regulate OPG the way it regulates other utilities and that the Board will provide OPG with a reasonable opportunity to recover its costs and earn a risk related return. AMPCO concluded that this was inconsistent with the claim that OPG's regulatory risks are higher than for other utilities. AMPCO noted that Dr. Booth and Drs. Kryzanowski and Roberts agreed that OPG did not face higher regulatory risk. Pollution Probe pointed, in particular, to Drs. Kryzanowski and Roberts's testimony that regulatory risk is low in reality because the Board has extensive experience with regulating gas and electric utilities, even if it has not regulated OPG previously. CCC and CME also disagreed that OPG's regulatory risks are higher than for other utilities.

OPG noted that both Ms. McShane and Mr. Goulding recognized the regulatory risk associated with the newness of OPG's regulatory regime. In OPG's view, it is not an issue of the Board's competence or integrity; it is an issue that there is not yet an established track record.

OPG also submitted that it faces operating risk from the fact that it is regulated by the Canadian Nuclear Safety Commission (CNSC) which has powers to make orders, including without a hearing in the event of an emergency, the consequences of which have the potential to impose significant costs on OPG. OPG argued that these powers are a significant factor in the regulatory risk assessment.

Board Findings

The Board finds that there is little evidence to support the conclusion that OPG's regulatory risk is higher than that of other regulated energy utilities because of its new regulatory framework. Hydro One and the electric LDCs were also new to Board determined cost of service regulation, but no evidence was presented that those entities were exposed to higher regulatory risk. It is also important to note that the Board's regulatory process provides ample opportunities to address issues of cost recovery

through applications, deferral accounts, and motions to review. These are standard and well established regulatory tools; cost of service is a long established regulatory framework; even incentive regulation is well established.

The Board does accept that there could be some risk associated with the uncertainty of applying cost of service regulation, which is typically applied to natural monopolies, to generation assets in Ontario's hybrid market. However, the Board notes that throughout North America there continues to be rate regulation of generation facilities, and that the traditional models of cost of service or incentive regulation are applied in these circumstances. The Board concludes that the risk is therefore minimal.

The risk with respect to the CNSC is whether OPG would be able to recover the costs arising from CNSC action. The Board does agree that it is a category of costs not faced by other regulated Ontario utilities. However, the Board expects that were such costs to arise, OPG would apply for recovery through an application, as would any other regulated entity faced with a significant cost which it claimed was beyond its control and imposed by a body with the authority to do so. The Board would consider the application in the normal way, including a test of prudence.

The Board concludes that regulatory risk is not a significant factor for OPG and is not materially higher for it than for the other utilities the Board regulates.

8.3.4 Operating Risk

For OPG, operating risk entails outage risk, dispatch risk, non-payment risk and the risk associated with environmental obligations. There was general agreement that electricity generators have greater operational risks than non-generation entities regulated by the Board. It was also generally agreed that OPG's risks were lower than those of merchant generators. Given the proposed continuation of the deferral account covering fluctuations in water availability during the test period for the hydroelectric operations, the focus was largely on OPG's nuclear operations and primarily on the risk related to forced outages and dispatch.

OPG took the position that although much has been made of deferral and variance account protection in this case, most of the accounts are simply reflections of the prohibition against retroactive rate making; i.e., they are designed to ensure the recovery of costs associated with initiatives that were directed, authorized or approved

by the government before the introduction of rate regulation by the Board. OPG also noted that operating and production risk is the largest risk it faces as nuclear technology is more complex than other types of generation and is subject to a higher risk of unanticipated costs of repair, and loss of production and revenues.

One of the risks that OPG and Ms. McShane identified is dispatch risk. This is the risk that baseload generation from OPG's regulated assets will not be dispatched because of economic conditions and/or the presence of generators with lower marginal costs. AMPCO submitted that this risk is insignificant and pointed to Ms. McShane's analysis of the Ontario market over the last three years. In AMPCO's view, her analysis shows that even at low levels of demand there is the opportunity for additional baseload capacity to be added without a risk that OPG's regulated assets will not be dispatched. AMPCO also noted the evidence of Dr. Booth and Drs. Kryzanowski and Roberts, both of which concluded that dispatch risk is low. CME supported AMPCO's submissions. In the end, there was limited dispute that dispatch risk for OPG is low.

AMPCO submitted that there appears to be a consensus that the major risk facing OPG is related to the operation of the nuclear units. AMPCO submitted that these risks are largely mitigated: ONFA limits OPG's potential liabilities, as changes in the nuclear liability resulting from changes to the decommissioning reference plan are recovered through a variance and deferral account; other deferral and variance accounts cover unexpected costs related to nuclear regulatory costs and technological changes, and the non-capital costs associated with the Pickering A return to service; and new accounts are proposed to cover variances in nuclear fuel costs, pension costs, and taxes.

AMPCO pointed to the evidence of Dr. Booth as supporting the conclusion that the variance and deferral accounts effectively transfer operational risks to consumers. AMPCO submitted that the remaining operational risks are within the control of management and are not risks for which OPG should be compensated.

CCC submitted that while the nuclear assets are undoubtedly riskier than the hydroelectric assets, many of the risks have been covered off with deferral accounts and the only substantive remaining risks are production and operating risks. In CCC's view, "It is inconceivable that the government would allow OPG to be materially

adversely affected by production or operating risks.”¹⁰⁷ CCC submitted that these risks can be mitigated by increasing the fixed portion for nuclear payments to 50%.

CME submitted that if the proposed additional variance and deferral accounts and the fixed nuclear payment are approved, then the equity ratio should be reduced to 40% in recognition of the reduction in risk from these mechanisms.

OPG replied:

It was Mr. Goulding’s opinion, shared by Drs. Kryzanowski and Roberts, that OPG’s nuclear assets are far more exposed to potential loss of revenues due to operational risk than a transmission or distribution network. The operational risk associated with OPG’s prescribed assets is, in fact, the principal risk that faces OPG.¹⁰⁸

OPG submitted that none of OPG’s nuclear production risk is mitigated by a deferral or variance account. OPG argued that Dr. Booth’s contention that all of OPG’s risks are covered by deferral and variance accounts does not recognize that deferral and variance accounts are a common feature of regulated utilities or that OPG does not have an account to cover nuclear production risk. Further, OPG argued that Dr. Booth had not reviewed the ONFA or analyzed the actual extent of the nuclear liabilities and OPG’s risk related to residual unfunded liabilities and the limits on the provincial guarantee cap. In OPG’s view it still faces significant exposure to this item, even with the related deferral and variance account.

With respect to the deferral and variance accounts generally, OPG characterized them as being designed to prevent “hindsight re-examinations of historical decisions and commitments made long before the OEB acquired jurisdiction to determine payment amounts.”¹⁰⁹ In OPG’s view, the most recently established accounts reflect the reality that the Board was not the regulator at the time.

All of the experts acknowledged that the use of deferral and variance accounts reduced risk. Ms. McShane testified that her recommendations were based on the assumption that the proposed variance and deferral accounts are implemented. She estimated that if the new proposed accounts (related to nuclear fuel, OPEBs/Pension costs, and tax

¹⁰⁷ CCC Argument, p. 18.

¹⁰⁸ OPG Reply Argument, p. 17.

¹⁰⁹ OPG Reply Argument, p. 22.

changes/assessments) were not implemented, the increased risk would warrant an upward adjustment to either the equity ratio or the ROE.

OPG argued that the evidence is clear that Ms. McShane's recommendations are premised on the approval of the proposed deferral and variance accounts, and that if they are not approved, the equity ratio and/or ROE would need to be adjusted accordingly. OPG submitted that if the scope of the accounts, including, for example, the Nuclear Liabilities Deferral Account, is reduced, then OPG's risk will increase which would need to be reflected in the cost of capital.

Mr. Goulding testified that the fixed payment component would reduce OPG's business risk and pointed out that this payment structure would not be available to merchant generators nor to the generators under contract with the OPA. Ms. McShane estimated that without the fixed payment component, the ROE would need to increase by about half the increase in the variability, approximately 25 basis points, or the equity component should be increased to 60%.

Board Findings

The Board finds that while the dispatch risk for the regulated facilities is low, the operational and production risks, particularly for the nuclear assets, are significant. Some of these risks are mitigated by the existing and ongoing deferral and variance accounts, but the accounts do not cover all of the risk, particularly not the risk of forced outages and the corresponding impact on costs and production. The accounts fall into four categories: those not related to the prescribed assets; one which provides for recovery of costs which pre-date the Board's regulation of OPG; those that have been specifically approved by the Board in this decision and are typical of utility variance and deferral accounts; and those which provide extended protection against forecast variance. We will review each in turn.

Some of the accounts and cost recovery protection mechanisms contained in O. Reg. 53/05 do not relate to the prescribed assets. The Board is required to ensure that OPG recovers the costs associated with Bruce and the costs associated with new nuclear build. Although these represent significant shifts of costs and risks to customers, they are not related to the regulation of the prescribed facilities. The Board finds that although these requirements may lower OPG's risk as a corporation, they have no impact on the risks of the prescribed facilities.

One of the accounts relates to circumstances and decisions taken before the period in which the Board has regulatory authority. The PARTS account is related to non-capital expenditures related to Pickering A which pre-date the period of the Board's regulatory authority. No new amounts will be added to this account; it is being maintained as the amounts are recovered over the next four years. The Board concludes that this account has no significant impact on OPG's risk in the test period, as the expenditures pre-date the Board's regulatory authority.

Some of the approved accounts going forward are related to protection against forecast error, namely tax changes, nuclear fuel cost, water conditions and ancillary services. The Board concludes that while these accounts each reduce risk, they are not dissimilar to the accounts of other regulated utilities. The electric LDCs have accounts related to tax changes; the ancillary services account ensures customers receive the full benefit of these revenues; and the nuclear fuel and water accounts, while providing protection against inputs over which OPG has little control, are not large relative to the size of OPG's revenue requirement.

The Board is also required to ensure that OPG recovers the revenue requirement implications of changes in the nuclear liabilities Reference Plan and the costs of the refurbishment of the prescribed nuclear facilities. These represent a more extensive risk protection than might typically apply to a regulated utility. Although the nuclear liabilities are unique to OPG, the deferral account ensures that OPG is kept whole and the impact of any change in the Reference Plan is borne by customers. This protects OPG against a significant risk. The refurbishment account provides protection against forecast variance in non-capital costs; this could be significant given the high levels of project OM&A. While the account also provides protection related to capital costs, these costs will not be included in rate base until the assets are in-service in any event and therefore the account does not provide significant additional risk protection. The requirement for a prudence review continues to provide a measure of protection to customers and ensures that OPG retains some risk.

The Board notes that future accounts may be established which further reduce risk; however, that factor is not determinative of the Board's assessment of the current level of risk. The proposed payment structure would also mitigate some of the risk, but as set out in Chapter 9, the Board has determined that it is not appropriate to include a fixed component in the payment structure.

The Board concludes that OPG's regulated nuclear business is riskier than regulated distribution and transmission utilities in terms of operational and production risk, but is less risky than merchant generation (for example, given the risk reduction afforded by some of the deferral and variance accounts). The Board also concludes that it is not appropriate for the shareholder to be compensated for all of the operational risks associated with the regulated nuclear facilities. Under cost of service regulation OPG has the opportunity to forecast production and operating costs and to seek recovery of the associated revenue requirement. The Board concludes that it would not be appropriate for shareholders to be fully compensated for the risk that those forecasts are incorrect given that management controls the development of the forecasts and has some considerable control over the achievement of those forecasts.

8.3.5 Capital Structure Conclusion

CCC concluded that OPG was no riskier than any other utility and that Dr. Booth's recommended equity ratio of 40% was appropriate. Similarly, AMPCO took the position that OPG and Ms. McShane have exaggerated the risks facing OPG and concluded that the equity ratio should remain unchanged. SEC submitted that the equity component should be 47%, representing 40% for hydroelectric and 50% for nuclear. OPG replied that those who have recommended lower equity ratios than Ms. McShane have underestimated OPG's business risk.

Board Findings

Union Gas Limited and Enbridge Gas Distribution Inc. both have equity ratios of 36%, and the risk differential between Union and Enbridge is reflected in Union's ROE which is 15 basis points higher. The electric LDCs and Hydro One have equity ratios of 40%, and Great Lakes (transmission) has an equity ratio of 45%. The Board has concluded that OPG is of higher risk than electricity LDCs, gas utilities and electricity transmission utilities and of lower risk than merchant generation. And while the deferral and variance accounts mitigate some aspects of OPG's risk, they do not protect against outage risk.

The Board finds that the proposed equity ratio of 57.5% is excessive. The incremental level of risk does not warrant the additional 12.5% equity over that of the next highest regulated utility. It is also well in excess of the equity levels of merchant generators, who have higher risk than OPG, as pointed out by Mr. Goulding. The Board concludes that the recommendation of Drs. Kryzanowski and Roberts, namely an equity ratio of 47%, is appropriate in the circumstances. This ratio is higher than the equity ratio of

any other regulated Ontario energy utility, thereby recognizing the higher risk of OPG. The Board notes that this deemed capital structure will be applied to the rate base which is net of the specific treatment to be applied to the nuclear liabilities related to Pickering and Darlington (which is discussed in Chapter 5).

8.4 Return on Equity

8.4.1 Introduction

Ms. McShane used three tests: the Equity Risk Premium ("ERP") test, the Discounted Cashflow ("DCF") model test and the Comparable Earnings ("CE") test. For the ERP test, she used three approaches:

- Capital Asset Pricing Model ("CAPM")
- Historical utility risk premium test
- Discounted Cash Flow ("DCF") risk premium test

Although Ms. McShane updated her estimates of the various tests in April 2008, the result was no change in the aggregate ROE recommendation: in her view, the lower government interest rate is partially offset by a higher risk premium which is reflected in a higher spread between government bonds and long-term A-rated utility bonds.

Pollution Probe submitted that the Board should prefer and accept the recommendations of Drs. Kryzanowski and Roberts. They used four methods to estimate the market equity risk premium: the Equity Risk Premium (including CAPM) methodology and three other methods to support the "directional conservatism" of the estimate derived from the ERP method. Pollution Probe noted that OPG acknowledged that this was now the dominant methodology used for regulated energy utilities in Canada.

CCC submitted that the Board should prefer the testimony of Dr. Booth to that of Ms. McShane. Dr. Booth estimated that OPG will have sufficient financial flexibility to access capital markets on reasonable terms with an ROE of 7.75% and an equity ratio of 40%. Dr. Booth relied on a CAPM risk premium model and a two-factor model, with the CAPM estimate based on an historic average market risk premium adjusted for the

5 NUCLEAR WASTE MANAGEMENT AND DECOMMISSIONING

OPG's balance sheet includes substantial liabilities for nuclear used fuel management, nuclear decommissioning, and low- and intermediate-level waste management. At December 31, 2007, those liabilities totalled almost \$10.8 billion. They are projected to grow to \$11.7 billion by the end of 2009.

The regulatory treatment of these liabilities was a major issue in this proceeding. The nuclear liabilities are relevant to the determination of: the amount of costs with respect to the Bruce nuclear generating stations (Chapter 6); the balance in the nuclear liability transitional deferral account (this chapter and Chapter 7); and, rate base and cost of capital (Chapter 8).

This chapter first provides some factual information and background on OPG's obligations for waste management and decommissioning at each of its nuclear facilities, the arrangements in place to fund those liabilities, and how the company presents them in its consolidated financial statements. It then summarizes OPG's proposed treatment of nuclear liabilities in the calculation of the revenue requirement, the balance in the Section 5.1 deferral account, and the calculation of Bruce costs. The balance of the chapter deals with OPG's rationale for its proposal, the submissions of the other parties, and the Board's findings.

5.1 Background

5.1.1 Nuclear liabilities

OPG is legally responsible for the ongoing, long-term management of radioactive waste from each of its nuclear facilities – Pickering A, Pickering B, Darlington, Bruce A, and Bruce B. OPG is also responsible for decommissioning the nuclear plants after the plants are shut down permanently. The Bruce A and Bruce B stations are not prescribed facilities. They are owned by OPG but have been leased to, and are operated by, Bruce Power L.P.

The amounts of OPG's nuclear waste management and decommissioning liabilities (collectively the "nuclear liabilities") are based on the costs OPG expects to incur up to and beyond the termination of operations and the closure of nuclear facilities. Costs will be incurred to dismantle, demolish and dispose of facilities and equipment, to remediate and restore the plant sites, and to manage nuclear used fuel and low- and intermediate-level waste material.

OPG estimated that the undiscounted amount of future cash outflows for waste management and station decommissioning at the end of 2007 was \$24 billion (measured in 2007 dollars). The amounts and timing of future cash outflows are based on significant assumptions and are necessarily subject to considerable uncertainty. OPG's current nuclear waste management and decommissioning plan includes cash flow estimates for decommissioning nuclear stations for approximately 40 years after station shutdown, and to 2065 for placement of used fuel into a long-term depository followed by extended monitoring.

OPG measures the nuclear liabilities by discounting the estimated cash flows for the time value of money. When OPG acquired the generation business of Ontario Hydro on April 1, 1999 and commenced operations, the nuclear liabilities were less than \$6.5 billion, which equalled the expected future cash outflows discounted at 5.75%.³⁶ By the end of 2007, the liabilities had grown to \$10.8 billion. The principal reasons for the increase since 1999 are accretion expense (as time passes, the present value of estimated cash outflows increases) and a material upward revision to estimated future cash flows that was recognized at the end of 2006.

Table 5-1 is a continuity schedule of nuclear liabilities from the beginning of 2005 to the end of 2009. For liabilities established before the end of 2006, the discount rate is 5.75%. For liabilities recorded on December 31, 2006, the discount rate is 4.6%, which was based on bond market conditions at that time.

³⁶ OPG 1999 consolidated financial statements, Note 7.

Table 5-1: OPG's Actual and Forecast Nuclear Liabilities

<i>\$ millions</i>	2005	2006	2007	2008 Forecast	2009 Forecast
Opening balance	\$ 8,150	\$ 8,567	\$ 10,328	\$ 10,781	\$ 11,207
Accretion	467	490	575	603	626
Accrue variable expense	34	38	76	48	39
Liabilities settled	(84)	(153)	(198)	(225)	(193)
Change in cost estimates	-	1,386	-	-	-
Ending balance	\$ 8,567	\$ 10,328	\$ 10,781	\$ 11,207	\$ 11,679
<i>By facility:</i>					
Pickering/Darlington	\$ 5,009	\$ 5,714	\$ 5,921	\$ 6,182	\$ 6,466
Bruce	3,558	4,614	4,860	5,025	5,213

Source: Exhibit J1.5.

At December 31, 2007, total nuclear liabilities of \$10,781 million were comprised of a liability for used fuel management of \$5,938 million and a liability for nuclear decommissioning and low- and intermediate level waste management of \$4,843 million. OPG advised that its nuclear liabilities are substantially higher than the liabilities of nuclear operators in the United States, which do not directly bear the risk of managing nuclear fuel waste. In the U.S., the federal government bears the liability for managing used fuel and collects a per kWh charge from operators.

5.1.2 Funding

At the end of 1999, the year that OPG assumed the nuclear waste management and decommissioning obligations from Ontario Hydro, the nuclear liabilities were largely unfunded. There was only \$367 million segregated to satisfy the liabilities compared to total nuclear liabilities of \$6,591 million.³⁷

In 2002, OPG and the Province of Ontario finalized the Ontario Nuclear Funds Agreement (ONFA). That agreement established two segregated funds – a used fuel fund and a decommissioning fund – to be held by an independent custodian. The used fuel fund will be used to fund future costs of long-term nuclear used fuel waste management. The decommissioning fund will be used to pay for the cost of

³⁷ OPG 1999 consolidated financial statements, Note 7.

decommissioning the plants and the cost of managing low- and intermediate-level waste.

The ONFA requires OPG to make quarterly payments to the funds. OPG's payments are determined by a Provincially-approved reference plan (Approved Reference Plan) that sets out the estimated costs to meet OPG's nuclear waste management and decommissioning obligations. The ONFA requires OPG to prepare reference plans when required by law or regulatory bodies, or every five years, whichever is earlier. The current Approved Reference Plan was approved by the Province in December 2006. The ONFA also requires OPG to prepare a new or amended reference plan in the event of a material change, which includes reductions in the remaining operating period for a nuclear station and any change in circumstances or assumptions that would cause a change in estimated costs by more than an agreed amount.

Under the ONFA, the Province limits OPG's financial exposure for used fuel management with respect to the first 2.23 million used fuel bundles, a threshold that OPG expects will be reached in 2011. OPG is fully responsible for costs of managing used fuel bundles in excess of that amount. The Province also guarantees an annual rate of return of 3.25% above the Ontario Consumer Price Index on the portion of the used fuel fund related to the first 2.23 million used fuel bundles. Actual returns in excess of the guaranteed return accrue to the Province, not OPG.

OPG contributed approximately \$4.2 billion to the segregated funds during the five years ended December 31, 2007.³⁸ The Province made a substantial one-time contribution to the decommissioning fund in 2003. The decommissioning fund had a fair value of approximately \$5.1 billion at December 31, 2007 and is considered to be overfunded under the provisions of the ONFA.

At the end of 2007, the fair value of the investments held in the used fuel fund was approximately \$4.2 billion, after deducting \$511 million relating to excess earnings that accrue to the Province. A revised schedule for OPG's contributions to the used fuel fund was approved by the Province in March 2008. That schedule shows OPG making contributions of approximately \$2.1 billion to the used fuel fund over the ten-year period 2008 to 2017, with smaller amounts being contributed thereafter.

³⁸ Exhibit J15.11, page 4.

5.1.3 Financial reporting

For external financial reporting purposes, OPG accounts for its nuclear liabilities in accordance with the requirements of Section 3110 of the Handbook of the Canadian Institute of Chartered Accountants (CICA).

Section 3110 defines an asset retirement obligation (ARO) as:

[A] legal obligation associated with the retirement of a tangible long-lived asset that an entity is required to settle as a result of an existing or enacted law, statute, ordinance or written or oral contract, or by legal construction of a contract under the doctrine of promissory estoppel.³⁹

OPG's nuclear liabilities meet the definition of an ARO.

Section 3110 requires that an entity recognize the fair value of an ARO as a liability on its balance sheet in the period in which it is incurred, provided a reasonable estimate of fair value can be made. The fair value of an ARO is generally calculated by discounting expected future cash flows, the approach used by OPG.

When an ARO is recognized as a liability, Section 3110 requires that an equal amount be recorded as an increase in the net book value of the related long-lived assets. The addition to net book value is referred to as an asset retirement cost (ARC). An ARC is amortized over the useful life of the assets in the same manner as any other capital cost related to the asset.

Section 3110 is essentially the same as the United States accounting standard on asset retirement obligations issued by the Financial Accounting Standards Board (FASB) in 2001.

The net book values of OPG's nuclear stations include material amounts of unamortized ARC, as shown in Table 5-2.

³⁹ CICA Handbook Section 3110, "Asset Retirement Obligations," paragraph .03 (a), issued March 2003. OPG adopted Section 3110 in 2003 and retroactively applied the new standard to financial statements for earlier periods.

Table 5-2: Nuclear ARO and ARC Amounts on OPG's Balance Sheet

<i>\$ millions at December 31</i>	2005	2006	2007	2008 Forecast	2009 Forecast
Pickering and Darlington					
Fixed asset net book value	\$ 2,493	\$ 2,924	\$ 2,826	\$ 2,762	\$ 2,630
Unamortized ARC in net book value	\$ 1,013	\$ 1,435	\$ 1,301	\$ 1,181	\$ 1,061
Unamortized ARC as % of NBV	41%	49%	46%	43%	40%
Nuclear liabilities (ARO)	\$ 5,009	\$ 5,714	\$ 5,921	\$ 6,182	\$ 6,466
Bruce					
Fixed asset net book value	\$ 492	\$ 1,271	\$ 1,195	\$ 1,128	\$ 1,063
Unamortized ARC in net book value	\$ 388	\$ 1,188	\$ 1,128	\$ 1,080	\$ 1,032
Unamortized ARC as % of NBV	79%	93%	94%	96%	97%
Nuclear liabilities (ARO)	\$ 3,558	\$ 4,614	\$ 4,860	\$ 5,025	\$ 5,213

Sources: Ex. B3-3-1, Tables 1 and 2; Ex. B3-5-1, Tables 1 and 2; Ex. G2-2-1, Table 2; Ex. J1.5; and Ex. J15.1, Addendum #2.

An entity must recognize period-to-period changes in the ARO liability due to the passage of time (accretion expense) and due to revisions to the timing or amounts of the expected future cash flows required to carry out the asset retirement activities. Accretion expense is a charge against earnings. Increases or decreases in AROs due to changes in cost estimates are accounted for the same as the initial recognition of an ARO – they give rise to an equivalent amount of ARC, which is an adjustment to the net book value of the related long-lived assets.

At the end of 2006, OPG revised its cost estimate for nuclear waste management and recorded a \$1,386 million increase in the nuclear liabilities and a corresponding increase in the net book values of the nuclear plants (\$509 million related to Pickering and Darlington and \$878 million related to the Bruce stations).

In its GAAP income statement, OPG books expenses for accretion, depreciation of ARC, and variable waste management expenses (this last expense arises because the nuclear liabilities increase as more nuclear fuel is used each period). OPG also books the earnings on, and change in fair value of, assets held in the segregated funds. Table 5-3 shows the forecast pre-tax charge in OPG's income statement due to the nuclear liabilities and the segregated funds.

Table 5-3: Forecast GAAP Expense – Nuclear ARO, ARC, Segregated Funds

<i>\$ millions, periods ending December 31</i>	2008 nine months	2009	Total
Pickering and Darlington			
Depreciation of ARC	\$ 90	\$ 120	\$ 210
Nuclear waste variable expense	16	23	39
Accretion expense	251	344	595
Segregated fund earnings	(186)	(264)	(450)
Total - Pickering, Darlington	\$ 171	\$ 223	\$ 394
Bruce			
Depreciation of ARC	\$ 36	\$ 48	\$ 84
Nuclear waste variable expense	19	17	36
Accretion expense	201	282	483
Segregated fund earnings	(176)	(262)	(438)
Total - Bruce	\$ 80	\$ 85	\$ 165

Sources: Ex. H1-1-3, page 2; Ex. J1.5; Ex. J7.2; Ex. 8.1; Ex. J15.1, Addendum #2.

5.2 OPG's Proposed Treatment of Nuclear Liabilities

Section 6(2)8 of O. Reg. 53/05 requires the Board to ensure that OPG recovers the "revenue requirement impact of its nuclear decommissioning liabilities arising from the current approved reference plan". OPG proposed the following ratemaking approach for nuclear liabilities related to the prescribed facilities, and the related segregated funds, for the test period:

- Depreciation of the ARC component of the net book value of the prescribed nuclear plants is included in the test period revenue requirement.
- Nuclear waste variable costs for Pickering and Darlington are included in the revenue requirement as either fuel costs or depreciation.
- The rate base for 2008 and 2009 would include the average net book values of OPG's Pickering and Darlington nuclear stations. Those net book values include significant amounts of ARC as shown in Table 5-2 above. OPG proposed

applying its debt rate and return on equity to the entire rate base, including unamortized ARC, to determine the revenue requirement.

- Accretion expense and the earnings on segregated funds, both of which affect OPG's reported income under GAAP, are excluded from the revenue requirement under OPG's proposal.

OPG referred to this approach as the "rate base method."

Section 6(2)9 of O. Reg. 53/05 requires that the Board ensure OPG recovers all of the costs it incurs with respect to the Bruce Nuclear Generating Stations ("Bruce stations"). Section 6(2)10 requires that if OPG's revenues from the lease of the Bruce stations exceed its costs, the excess shall be applied to reduce the payment amounts for the Pickering and Darlington facilities. OPG proposed to use the rate base method for nuclear liabilities to calculate its test period costs of the Bruce stations.

Table 5-4 sets out the amounts OPG proposed to recover during the test period in respect of nuclear liabilities. The amounts for depreciation of ARC and nuclear waste variable expenses are the same as the amounts OPG forecasts it will charge to expense in its financial statements (as shown in Table 5-3). For ratemaking purposes, OPG proposed to ignore accretion expense and earnings on segregated funds. Instead, OPG proposed to recover \$175 million as a return on the average unamortized ARC of the Pickering and Darlington facilities (\$51 million of deemed interest and a return on equity of \$124 million). OPG also proposed to include a \$161 million return on unamortized ARC in its forecast costs related to the Bruce stations (deemed interest of \$47 million and a return on equity of \$114 million).

Table 5-4: OPG's Proposed Recoveries Related to Nuclear Liabilities

<i>\$ millions, periods ending December 31</i>	2008 nine months	2009	Total
Pickering and Darlington			
Depreciation of ARC	\$ 90	\$ 120	\$ 210
Nuclear waste variable expense	16	23	39
Cost of capital:			
Interest	23	28	51
ROE	56	68	124
Total - Pickering, Darlington	\$ 185	\$ 239	\$ 424
Bruce			
Depreciation of ARC	\$ 36	\$ 48	\$ 84
Nuclear waste variable expense	19	17	36
Cost of capital:			
Interest	20	27	47
ROE	50	64	114
Total - Bruce	\$ 125	\$ 156	\$ 281

Source: Ex. H1-1-3, page 2.

The increase in the nuclear liabilities that OPG recorded at the end of 2006 occurred before the Board assumed responsibility for setting the payment amounts. That increase is nonetheless relevant to this application because the deferral account mandated by Section 5.1 of O. Reg. 53/05 requires OPG to record the "revenue requirement impact" of that increase in the nuclear liabilities for the period up to the date of the Board's first order.

OPG proposed to adopt the same rate base method to calculate the balance in the Section 5.1 deferral account that it proposes to adopt for the test period revenue requirement for Pickering and Darlington. That treatment, which OPG proposed should apply to both the increase in 2006 in the Pickering/Darlington nuclear liabilities and the increase in nuclear liabilities related to the Bruce stations, resulted in OPG recording \$75.4 million as a "return on rate base" in the Section 5.1 deferral account.

5.3 The Issues and Board Findings

The ratemaking treatment for nuclear liabilities is complex, and it is made more complex in this case because the issues involve two types of facilities (Pickering and Darlington, which are prescribed facilities under O. Reg. 53/05, and the Bruce stations, which are not prescribed facilities) and two time periods (the test period, and the period prior to the date of the Board's first order.) Some of the relevant issues and considerations are common to both time periods and types of facilities while other issues are unique to a particular time period or type of facility. The Board has chosen to deal with OPG's rationale for its proposal, the positions of the parties, and the Board's findings under four headings:

- Interpretation of O. Reg. 53/05. OPG submitted that the regulation requires the Board to allow OPG to recover costs related to nuclear liabilities using the rate base method. Several intervenors disputed that claim and submitted that the Board has the discretion under the regulation to adopt other methods. Section 5.3.1 below deals with this issue. The Board finds that O. Reg. 53/05 does not obligate the Board to accept OPG's use of the rate base method and that the Board has the discretion to set the revenue requirement using other methods.
- Method of recovering the costs of nuclear liabilities of the prescribed facilities. Section 5.3.2 below reviews the arguments made in favour of and against the rate base method, and the alternatives suggested by intervenors. This section is restricted to the test period revenue requirement of the nuclear liabilities of the prescribed nuclear facilities, Pickering and Darlington. The Board has determined that OPG's revenue requirement related to the cost of nuclear liabilities for the prescribed facilities should not be calculated using the rate base method. Instead, the Board finds that OPG shall use a method that provides separate rate base treatment for the amount of unfunded liabilities.
- Section 5.1 and 5.2 deferral accounts. Section 5.3.3 below deals with the question of how the revenue requirement impact of the 2006 change in nuclear liabilities should be calculated for purposes of the deferral account mandated by Section 5.1 of the regulation. It also addresses how OPG should calculate entries into the deferral account mandated by Section 5.2 of O. Reg. 53/05, in the event OPG records a change in its nuclear liabilities after the date of the Board's first order. The Board finds that for each account the revenue requirement impact will

be calculated using the method that was used to set the revenue requirement during the period of time which the account covers.

- Bruce nuclear liabilities. The issue is whether the costs of nuclear liabilities related to the Bruce stations, which are not prescribed facilities, should be calculated in the same manner as the costs related to the prescribed facilities, or whether a different methodology should be used. This issue is addressed in Chapter 6 of this decision.

5.3.1 O. Reg. 53/05 and nuclear liabilities

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." Nuclear liabilities are referred to in Section 6(2)8, which requires that: "The Board shall ensure Ontario Power Generation Inc. recovers the revenue requirement impact of its nuclear decommissioning liability arising from the current approved reference plan." The regulation does not contain definitions of "revenue requirement" or "revenue requirement impact."

OPG took the position that the regulation requires the Board to allow OPG to recover nuclear liability costs using the rate base method. OPG submitted that both:

- (i) Section 6(2)5(i) of O. Reg. 53/05, which requires the Board to accept the amounts of assets and liabilities as set out in OPG's 2007 audited financial statements, and
- (ii) Section 6(2)6(ii), which states that Section 6(2)5 applies to values relating to the revenue requirement impact of accounting and tax policy decisions,

make it clear that asset values resulting from accounting policy decisions approved by OPG's auditors and OPG's Board of Directors must be accepted by the Board in making its first order.

The net book value of nuclear fixed assets set out in OPG's 2007 audited financial statements includes material amounts of unamortized ARC (as shown in Table 5-2 above). OPG submitted that those fixed asset amounts must be accepted into rate base because those amounts appear in the financial statements. OPG claimed that any other interpretation of Sections 6(2)5 and 6(2)6 would "render them meaningless and totally

ineffective.” OPG asserted that accepting ARC into rate base but attaching a different cost of capital to that element of rate base would contravene the clear intention of those two sections of the regulation.

OPG also submitted that O. Reg. 53/05’s provisions for the deferral accounts authorized by Sections 5.1 and 5.2 support its view that the test period revenue requirement must be set using the rate base method. Those deferral accounts capture the “revenue requirement impact” of certain changes in nuclear liabilities before (Section 5.1) or after (Section 5.2) the date of the Board’s first order. Section 6(2)7 requires those revenue requirement impacts to be based on four items as “reflected in” OPG’s financial statements, including a “return on rate base.”⁴⁰ OPG argued that there would be no meaning to this provision if the regulation did not require the Board to use the rate base method. OPG argued that it would be capricious and arbitrary to employ one method to calculate deferral account balances related to *changes* to nuclear liabilities as a result of new reference plans (Sections 5.1 and 5.2) and a different method to set the revenue requirement impact of those changes for the test period (Section 6(2)8).

CCC, CME (supported by AMPCO), SEC, VECC and Board staff disagreed with OPG’s interpretation of O. Reg. 53/05.

CCC submitted that the regulation does not directly, or by necessary implication, require the Board to accept the rate base method for the costs of nuclear liabilities. CCC also submitted that although the Board is required by Section 6(2)5 to accept amounts set out in OPG’s financial statements, the Board is not required to adopt all of the accounting and ratemaking assumptions therein.

CME acknowledged that Sections 6(2)5 and 6(2)6 require the Board to accept amounts set out in OPG’s financial statements. CME submitted, however, that the “revenue requirement impact” of nuclear liability costs is an item of regulatory policy, not an item of tax or accounting policy. CME argued that the regulation does not empower OPG and its auditors to make a regulatory policy determination with respect to the recovery of costs associated with nuclear liabilities. CME also submitted that if the recovery of the costs of nuclear liabilities is a matter of accounting policy, and not regulatory policy, then GAAP provisions relating to expensing of nuclear liability costs should apply. Yet,

⁴⁰ The four items are: return on rate base; depreciation expense; income and capital taxes; and fuel expense.

CME noted, OPG's rate base method disregards and does not apply GAAP to calculate the amount of expense related to nuclear liabilities.

SEC urged the Board to reject OPG's proposition that the inclusion of nuclear liability costs in the revenue requirement has been predetermined by the regulation. SEC observed that OPG does not cite any specific provision of O. Reg. 53/05 that directs the Board to accept the rate base method and noted that "revenue requirement impact" is not defined in the regulation. SEC submitted that the regulation leaves it to the Board to determine the revenue requirement related to the cost of nuclear liabilities.

SEC disagreed with OPG's submission that the reference to "return on rate base" in Section 6(2)7, which deals with the deferral accounts for changes in nuclear liabilities, supports a conclusion that the regulation requires OPG's rate base method. SEC pointed out that while Section 6(2)7 requires revenue requirement impacts to be based on four items as reflected in OPG's audited financial statements, one of which is a "return on rate base," OPG's audited financial statements do not contain any items called "return" or "rate base." SEC argued that on a plain reading of Section 6(2)7, no return on rate base could be permitted as there is no item called "return on rate base" in the financial statements; a plain reading of the other parts of Section 6(2)7 would lead to similarly absurd results.⁴¹ For these reasons, SEC submitted that the government, in enacting the regulation, did not intend Section 6(2)7 to be read literally, and did not intend that the entire decision-making responsibility for recovering the costs of nuclear liabilities be granted to OPG's Board of Directors.

SEC submitted that:

... this Board should not fetter its discretion to determine payment amounts under s. 78.1 on the basis of an implied direction in s. 6(2)7. The Board should only decline jurisdiction when its mandate is clearly and expressly circumscribed, which is not the case here. The alternative is for the Board to implement rate recovery for nuclear negative salvage on a basis that the Board knows (or at least suspects) is not just and reasonable, on the theory that the government

⁴¹ Of the three remaining items, SEC pointed out that depreciation expense is included in the financial statements but not normally disaggregated into line items; income and capital taxes are accounted for differently for regulatory and accounting purposes, and a literal reading of section 6(2)7 would require the application of conventional deferred tax accounting to the regulatory sphere, a significant and major change in regulatory process that is unlikely to have been implemented by the government without express direction; and fuel expense, another of the four items, is not separately set out in the financial statements. (SEC Argument, paragraph 194.)

may have indirectly limited the Board's jurisdiction to do what is right.⁴²
(emphasis in original)

VECC submitted that whether and how a particular accounting item is included in the regulatory construct of "rate base" is entirely at the discretion of the Board, and is not something imposed on the Board by a non-regulatory accounting policy. VECC acknowledged that although the accounting treatment for an item can provide guidance in a regulatory context, the method of accounting is not determinative of the appropriate regulatory treatment.

Board staff submitted that Sections 6(2)5 and 6(2)6, on which OPG relies in its argument, must be read in conjunction with Section 78.1(4) of the *OEB Act*⁴³ and Section 6(1) of O. Reg. 53/05. Board staff concluded 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.⁴⁴

In its reply argument, OPG submitted that O. Reg. 53/05 does not confer any jurisdiction on the Board with respect of the recovery of the cost of nuclear liabilities. OPG asserted that the regulation merely confirms the continuation of what OPG describes as the status quo – the use of the rate base method.

OPG argued that the phrase "revenue requirement impact" used in Section 6(2)7 does not convey total discretion to the Board, as CME and the other intervenors suggest. In OPG's view, the role of the Board is quite limited. OPG submitted that the phrase "to the extent the Board is satisfied that revenue requirement impacts are accurately recorded in the accounts" in Section 6(2)7:

⁴² SEC Argument, paragraph 201. "Nuclear negative salvage" is the term that SEC used to describe nuclear decommissioning liabilities.

⁴³ Section 78.1(4) of the *OEB 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."

⁴⁴ Board Staff Argument, page 14.

... obligates the OEB to ensure that OPG has accurately calculated the "revenue requirement impacts" and recorded the correct figures in the deferral account; it has nothing to do with the methodology that the OEB must follow for determining the "revenue requirement impacts."⁴⁵

OPG claimed that a conclusion that the Board retains discretion over the composition of rate base and the return on ARC would make a complete mockery of Sections 6(2)5 and 6(2)6 of the regulation. OPG asked: "If the OEB must accept the ARC as a fixed asset but is free to assign it a zero cost [a position advocated by some intervenors], how has the Board "accepted" anything?"⁴⁶

OPG claimed that the Province of Ontario knew, when it approved O. Reg. 53/05 in 2005, that the initial payment amounts were set using the rate base method for the costs of nuclear liabilities. OPG submitted this is an important factor to be considered when interpreting Sections 6(2)5 to 8 of the regulation. OPG also claimed that the Province is aware that OPG used the rate base method in preparing this application and the interpretation of the regulation that it was putting forward, namely, that the regulation required the Board to ensure OPG recovers nuclear liability costs calculated using the rate base method. OPG stated: "As the sole shareholder, if OPG's request was out of line with the intent of O. Reg. 53/05, it would be reasonable to expect that the Province would have so advised the company."⁴⁷

Board Findings

The Board does not accept OPG's position that O. Reg. 53/05 requires the Board to ensure OPG recovers nuclear liability costs calculated using the rate base method. The Board finds it has discretion to determine the method that OPG should use to calculate and so recover the revenue requirement impact of the nuclear liabilities.

Section 6(2)8 of O. Reg. 53/05 obligates the Board to ensure OPG recovers the revenue requirement impact of its nuclear liabilities. Section 6(1) of O. Reg. 53/05 specifies that the Board "may establish the form, methodology, assumptions and calculations used in making an order that determines payment amounts." The only restriction in Section 6(1) is that a Board order is subject to the provisions of section 6(2). The Board has concluded that none of the provisions of section 6(2) require the

⁴⁵ OPG Reply Argument, page 127.

⁴⁶ OPG Reply Argument, page 126.

⁴⁷ OPG Reply Argument, page 126.

rate base method be used to calculate the revenue requirement impact referred to in Section 6(2)8.

The Board reached this conclusion for several reasons.

First, the regulation does not define “revenue requirement impact” and does not state anywhere that the rate base method must be used to determine the cost of nuclear liabilities. In its role as economic regulator of electric and natural gas utilities, the Board has many years of experience in setting the revenue requirements of the entities it regulates. Determining what items should be included in an entity’s revenue requirement, and how those items should be measured, is one of the most important functions of an economic regulator. Had the government intended that the Board relinquish the jurisdiction to determine how the revenue requirement should be calculated, it could have included clear and unambiguous language to that effect in the regulation. It did not do so.

The Board notes that OPG was unable to provide any examples from other North American jurisdictions of the rate base method being used to calculate the costs of nuclear liabilities. While the lack of examples does not invalidate the method, it certainly casts doubt on OPG’s contention that, notwithstanding the lack of any explicit statement, the government clearly intended that only the rate base method be used. The Board cannot accept that the government intended to require the Board to accept a method not known to be used in any other jurisdiction yet did not consider it necessary to make this requirement explicit in the regulation.

Second, the Board does not agree with OPG’s interpretation of the sections of O. Reg. 53/05 concerning acceptance of amounts in OPG’s 2007 financial statements. OPG correctly pointed out that Section 6(2)5 of the regulation requires the Board to accept the net book values of OPG’s fixed assets as set out in its 2007 audited financial statements. It also noted that those net book values include substantial amounts of unamortized ARC (as shown in Table 5-2 above). OPG then asserted: “According to O. Reg. 53/05, the OEB must accept into rate base OPG’s prescribed fixed asset values.”⁴⁸ The Board does not agree that OPG’s conclusion follows from the requirements of Sections 6(2)5 or 6(2)6.

⁴⁸ OPG Argument-in-Chief, page 83.

Section 6(2)5 requires the Board to accept the amounts of certain items as set out in OPG's financial statements. In the Board's view, the purpose of this section was to limit the extent to which the Board and intervenors could go back in history and question the impact of OPG's past accounting decisions on amounts that were determined before the Board took over the responsibility for setting payment amounts. A requirement to accept certain amounts is not an instruction as to how the Board should use those amounts in determining OPG's revenue requirement. The Board notes that when it is intended that the Board ensure OPG recover certain amounts, O. Reg. 53/05 is explicit. For example, Section 6(2)4 obligates the Board to ensure OPG recovers nuclear refurbishment costs. In contrast, Sections 6(2)5 and 6(2)6 do not require the Board to ensure recovery of any amounts or to use certain methodologies, and do not circumscribe the Board's authority as set out in Section 6(1).

Third, the Board is not persuaded by OPG's argument that the reference to "return on rate base" in Section 6(2)7 on nuclear liability deferral accounts supports a conclusion that O. Reg. 53/05 obligates the Board to accept the rate base method for the cost of OPG's nuclear liabilities.

As more fully explained in section 5.3.3 of this decision on nuclear liability deferral accounts, the Board has concluded that the term "return on rate base" in Section 6(2)7 does not restrict in any way how the Board determines the revenue requirement impacts under Section 6(2)8. The Board's interpretation of Sections 5.1, 5.2, and 6(2)7 is that those sections require that OPG be "kept whole" when its nuclear liabilities increase in response to a new reference plan. However, contrary to OPG's interpretation, the Board finds that those sections do not specify how to calculate the amounts that would keep OPG whole.

The Board finds that O. Reg. 53/05 does not require the Board to use the rate base method when determining the revenue requirement impact for purposes of Section 6(2)8.

5.3.2 Recovering the cost of nuclear liabilities related to Pickering and Darlington

Having found that the Board is not required by O. Reg. 53/05 to accept OPG's use of the rate base method for the costs of nuclear liabilities, the Board considered the merits of various methods, including the rate base method, of recovering the costs.

In addition to OPG's rate base method, four other methods of determining the revenue requirement impact of the nuclear liabilities were discussed during the hearing. Those methods and OPG's rate base method are summarized in Table 5-5, which is based on calculations filed by OPG. The table deals only with the "return on rate base" aspects of each method. It omits depreciation of unamortized ARC and the other elements of the revenue requirement proposed by OPG that were not opposed by any party. Table 5-5 includes amounts for both the prescribed assets (Pickering and Darlington) and the Bruce stations. (The Board did not have all of the information required to separate the Bruce amounts from the amounts for Pickering and Darlington.) Cost of capital in the table is based on OPG's application (a capital structure of 42.5% debt, 57.5% equity; proposed debt rates of 5.65% in 2008 and 6.47% in 2009; and a return on equity of 10.5%).

In their arguments, some intervenors proposed new approaches or variations on the methods shown in Table 5-5.

Table 5-5: Comparison of Methods to Calculate the Revenue Requirement for Nuclear Liabilities

\$ millions	OPG's Rate Base Method	CIBC Option 2	Flow-through Method	Method 3	Method 3(b)
Rate base	Average unamortized ARC (\$2,325 million for 2008 and \$2,178 million for 2009)	Rate base per OPG, <u>less</u> average unfunded nuclear liability (\$1,231 million for 2008 and \$878 million for 2009)	Zero	Same as OPG's rate base method	Same as CIBC Option 2
Revenue requirement	Cost of capital applied to rate base	Cost of capital applied to rate base. Revenue requirement also includes total forecast accretion expense and total forecast segregated fund earnings	Total forecast accretion expense, less total forecast segregated fund earnings	Cost of capital applied to rate base. Cost of debt is based on a blend of the OPG's average accretion rate of 5.6% (for the amount of the unfunded liability) and the forecast long-term debt rate (for the balance of deemed debt)	Cost of capital applied to rate base. The revenue requirement for the unfunded liability is based on OPG's average accretion rate of 5.6%
Cost of capital	\$334.3	\$180.9	-	\$326.2	\$179.3
Accretion expense	-	1,074.7	1,074.7	-	100.9
Segregated fund earnings	-	(888.1)	(888.1)	-	-
Revenue requirement	\$334.3	\$367.5	\$186.6	\$326.2	\$280.2

Sources: Ex. J12.1, Attachment 1; Ex. H1-1-3, page 2; Ex. J7.1

Note 1: Amounts in the table relate to both the prescribed nuclear facilities and the Bruce stations.

Note 2: The amounts in the table are all taken from an OPG-prepared exhibit. The Board notes that the cost of capital amounts shown for CIBC Option 2 and Method 3(b) are different. Those amounts should be identical, however, given that the rate base for each method is the same. "CIBC Option 2" is contained in a report written in December 2004 by CIBC World Markets, commissioned by the government to assist it in determining the current payment amounts.

OPG noted that its total proposed revenue requirement for nuclear waste management and decommissioning costs (as shown in Table 5-4) would be less than the company's

cash flow requirements during the test period (expected contributions to the segregated funds and nuclear costs funded through operations).

In addition to its argument that the regulation requires the Board to accept use of the rate base method (see section 5.3.1 above), OPG argued that the Board should approve the use of the method because it was used by the government when it set the current payment amounts in 2005, and it is the most appropriate methodology.

OPG referred to a December 2004 report from CIBC World Markets to support its contention that the rate base method was used to set current payment amounts. That report provided CIBC's analysis and advice on the initial regulated payment amounts for the prescribed assets. CIBC described two methods of dealing with nuclear liabilities. CIBC's preferred method, which it submitted followed traditional rate base methodology, involved recovering the unfunded liability through OPG's return on assets. CIBC acknowledged that this method "effectively requires rate payers to fund a higher cost of capital associated with the unfunded liability than the interest rate used in calculating the liability pursuant to ONFA."⁴⁹ This method is summarized in Table 5-5 under the heading "OPG's Rate Base Method".

CIBC also described an alternative method that involved removing the unfunded liability from rate base, which would lower OPG's return on capital, and collecting interest at the rate used under the ONFA to calculate the liability. This method is summarized in Table 5-5 under the heading "CIBC Option 2". According to CIBC, this method would have lowered the initial payment amounts by \$1 per MWh.

OPG acknowledged that the various payments amounts discussed in the CIBC report are not the same as the payment amounts set by the government effective April 1, 2005. Part of the reason for the difference is that the payment amounts in the CIBC report were based on a 10 per cent return on equity while the government used a five per cent rate to set the initial payments. OPG's evidence was that the CIBC report and the initial rates were "entirely consistent in every regard, except for their recommendation on return on equity."⁵⁰ OPG concluded that the government must have used CIBC's preferred method, which OPG submitted is the same as its rate base method, to set the initial payments.

⁴⁹ CIBC World Markets Inc., *Engagement Review of Financial Advisory Services on OPG's Initial Regulated Rate and Financial Soundness*, December 2004, page 19. [Exhibit L-2-10, Attachment 1]

⁵⁰ Transcript Volume 1, page 78.

OPG submitted that the rate base method is “the best and most appropriate method to recover OPG’s nuclear waste management costs.”⁵¹ The CICA Handbook requires ARC to be included in the net book value of fixed assets and depreciated like any other element of asset cost. OPG considered that to be a rational allocation of the costs over the lives of the related assets. OPG also submitted that no investor would invest in nuclear generation if no consideration were given to the capital required to finance ARC.

OPG submitted that the rate base method is consistent with traditional regulatory practice in that it does not require “streaming” of particular costs to particular assets.

OPG noted that the revenue requirement that results from using the rate base method is not tied to the level or pace of cash contributions to the segregated funds or to fund earnings. An OPG witness submitted that:

... we feel that any approach that involves nuclear fund earnings is going to result in volatility of regulatory earnings, as well as increased regulatory burden associated with scrutiny of those forecasts, and that earnings can be volatile is certainly illustrated by things that occurred in the early part of this year ...⁵²

CCC, CME (supported by AMPCO), SEC, and VECC objected to OPG’s proposed rate base method. Other intervenors were silent on the issue.

There were three arguments against OPG’s use of the rate base method that appeared in various forms in the written submissions of the intervenors. Those arguments are summarized below, followed by a description of the alternative approaches suggested by the intervenors.

First, intervenors argued that a rate base return on capital should be allowed only when capital has been supplied by debt or equity investors. Most intervenors who opposed OPG’s use of the rate base method submitted that ARC is not funded by debt and equity and, therefore, none of that amount should attract a return equal to OPG’s weighted average cost of capital (WACC). (CCC seemed to suggest that some amount

⁵¹ OPG Argument-in-Chief, page 82.

⁵² Transcript Volume 7, page 46. The event in the early part of the year referred to by the OPG witness was OPG’s recognition of a loss of \$51 million on the segregated funds in the first quarter of 2008, compared to earnings of \$91 million in the first quarter of 2007.

of ARC should attract a return equal to WACC.) SEC's comment on funding of nuclear liabilities and ARC is typical:

The use of rate base to calculate the amount of allowable debt (and therefore interest recovery), and the amount of allowed equity (and return on it), presupposes that this amount of capital is needed by the utility to operate. That is, the regulatory methodology used starts from the assumption that the utility needs to be capitalized by an amount equal to the rate base, through issuing either debt or equity. That assumption is only correct where the rate base involves real capital expenditures, actually incurred or needing to be funded.

That is not true in the case of nuclear negative salvage. No money has been spent, and no capital has been raised through debt or equity.⁵³

Second, intervenors noted there is no precedent in North America for the use of the rate base method for ARC, and this was acknowledged by OPG. Neither of the two owners of other nuclear generation facilities in Canada, Hydro-Québec and New Brunswick Power, are subject to cost-of-service regulation for nuclear output. With respect to rate regulated nuclear plants in the United States, OPG's expert on cost of capital provided her views on the impact of FASB Statement No. 143, *Accounting for Asset Retirement Obligations*, which is virtually identical to CICA Handbook Section 3110. She indicated that "FASB 143 has not resulted in material changes in regulatory practice with respect to rate base or capital structure for U.S. utilities with ARCs and AROs."⁵⁴

VECC noted that the U.S. Federal Energy Regulatory Commission (FERC) has not mandated a single method of dealing with recovery of asset retirement costs. VECC filed FERC Order No. 631, which deals with accounting and rate filing requirements for asset retirement obligations, and which states: "The Commission finds that the issue of whether, and to what extent, a particular asset retirement cost must be recovered through jurisdictional rates should be addressed on a case-by-case basis in the individual rate change filed by the public utilities, licensees, and natural gas companies."⁵⁵

Third, contrary to OPG's submission, the intervenors took the position that how the government treated ARC when it set the current payment amounts on April 1, 2005 is

⁵³ SEC Argument, paragraphs 212 and 213.

⁵⁴ Addendum to Exhibit J1.3, page 4.

⁵⁵ Federal Energy Regulatory Commission, Docket No. RM02-7-000, Order No. 631, *Accounting, Financial Reporting, and Rate Filing Requirements for Asset Retirement Obligations*, April 9, 2003, paragraph 62. [Exhibit K11.7]

not relevant in this proceeding and not binding on the Board. CCC submitted that to imply the ratemaking treatment for 2008 and 2009 must be consistent with the 2005-2007 interim rates is tantamount to stating that the interim rates established a binding precedent.

SEC submitted that with respect to ARC, it is not clear what the government took into account when it set the initial payment amounts. SEC submitted that:

[T]he Board is not in a position to look at how the Legislature's decision on nuclear negative salvage was made, the evidence the Legislature considered, or whether the specific circumstances of that decision are different from the current situation.⁵⁶

SEC argued that the government's earlier decision should not influence the Board's consideration of the issue in this case.

Intervenors recommended alternative approaches to setting the revenue requirement.

CCC agreed that ARC should be included in rate base and that depreciation of that amount should be an allowable cost. CCC submitted, however, that the Board should distinguish between the funded and unfunded components of ARC in awarding a return on rate base. CCC proposed that the unfunded part of rate base would equal the average unfunded nuclear liabilities during the test period. It was not clear how CCC would calculate unfunded liabilities. CCC's argument referred to an OPG exhibit that showed the forecast average unfunded nuclear liabilities are \$1,231 million for the last nine months of 2008 and \$878 million for 2009. Another part of the CCC argument, however, suggests that unfunded liabilities equal annual average ARC minus average annual fund contributions.⁵⁷

CCC submitted that the shareholder should only earn a return on capital raised to date and that customers should not pay for a return on capital that has not been raised. CCC likened unfunded nuclear liabilities to deferred income taxes and submitted that there should be a zero rate of return on the unfunded part of rate base.

CCC argued that the calculation of the unfunded portion of rate base would not represent an administrative burden and OPG has overstated the ratemaking difficulties.

⁵⁶ SEC Argument, paragraph 177.

⁵⁷ CCC Argument, paragraph 111.

CCC claimed that customers would be willing to accept the risk that the unfunded portion of rate base may fluctuate due to conditions in the investment markets in order to defer the cost of funding to future test years when the funds have been raised.

CME recommended including ARC in rate base for the limited purpose of determining depreciation, which CME would allow as a recoverable expense. It argued for excluding ARC from the capital structure for the purposes of determining OPG's cost of debt and equity capital. CME recommended that the Board adopt a method CME called "Cost of Service Supplement to ARC Depreciation." Under this approach, OPG would be permitted to recover "the estimated annual amount needed, over and above the ARC depreciation amount, to produce, at the end of the economic life of the nuclear assets, the portion of the fund needed to retire and decommission the assets which will not be funded by ARC depreciation and interest accruals thereon."⁵⁸ CME's argument contained calculations to illustrate how its proposed method might work.

CME proposed, as a surrogate for its recommended approach, that OPG be permitted to recover 4.6% per annum on the unamortized balance of ARC included in rate base during the test period.⁵⁹ CME asserted that the combination of ARC depreciation and this 4.6% return would "be more than sufficient to produce, at the end of the economic life of the nuclear assets, the unfunded portion of the total undiscounted liability which gave rise to ARC."⁶⁰ CME also urged the Board to characterize its determination on these issues as interim only. It recommended that the Board sponsor, before OPG's next application, a consultation on the regulatory treatment of nuclear decommissioning costs, a process that could consider the results of the National Energy Board's ongoing assessment of retirement costs with respect to abandonment of pipelines.⁶¹

AMPCO supported CME's recommended approach, and also advocated that the Board undertake further review of the ratemaking treatment of ARC.

⁵⁸ CME Argument, paragraph 91.

⁵⁹ CME refers to 4.6% as the "prevailing discount rate." [CME Argument, paragraph 113] The Board understands, however, that only a portion of the \$10.8 billion ARO liability at December 31, 2007 (being the \$1,386 million increase that was booked at the end of 2006) has been calculated using a 4.6% discount rate; the balance of the ARO liability has been measured using a 5.75% discount rate.

⁶⁰ CME Argument, paragraph 97.

⁶¹ See National Energy Board Discussion Paper, *Land Matters Consultation Initiative, Stream 3: Financial Issues Related to Pipeline Abandonment*, March 2008.

SEC submitted that the Board has insufficient evidence to determine whether OPG's rate base method produces a just and reasonable result. SEC urged the Board to accept an adjusted rate base method for making its first order under Section 78.1 and to order a more detailed review of the regulatory treatment of nuclear liabilities before OPG's next application. SEC recommended that the Board accept the amount of depreciation expense proposed by OPG for the test period but that it not award the return on unamortized ARC that was proposed by OPG. Instead, SEC recommended that the Board allow a return of 4.6% on average unamortized ARC in rate base.⁶²

VECC supported granting a return on unamortized ARC that is lower than the weighted average cost of capital. It advocated a sinking fund approach to recovery of nuclear liability costs, an approach that was not set out in detail in VECC's argument. VECC said one way to implement its sinking fund method would be to adopt the treatment recommended by CME. VECC did not comment on whether OPG should be allowed to recover depreciation of ARC.

By recommending that the Board isolate a portion of rate base and attribute a different return to that component, the intervenors support "streaming" of costs to the particular assets, a practice opposed by OPG. CCC, CME and VECC submitted that the Board has the discretion to determine the cost of capital to be applied to any element of rate base, a position also taken by Board staff. VECC submitted that the two Board decisions cited by OPG as precedents for not streaming financing costs are not relevant because they involved relatively small amounts of rate base and because "streaming" was not at issue in the cases.⁶³

In its reply argument, OPG stated that most of CME's assumptions, claimed facts and calculations in respect of CME's proposed method had not been put into evidence or tested in the hearing, and that many of them were wrong. OPG submitted that the Board should disregard CME's new calculations of the revenue requirement.

OPG disagreed with the intervenors that cited the normal regulatory practice of awarding no return on deferred tax balances as support for their recommendation that

⁶² SEC described its proposed 4.6% rate as "the discount rate used to discount the future liabilities to the present." [SEC Argument, paragraph 214] As noted in footnote 12, only a portion of the current ARO liability (being the \$1,386 million increase that was booked at the end of 2006) has been calculated using a 4.6% discount rate. A higher discount rate applies to the balance of the ARO liability.

⁶³ VECC Argument, paragraph 38. The two Board decisions cited by OPG, in the addendum to Exhibit J1.3, were: Toronto Hydro (EB-2007-0680) and Centra Gas (EBRO 474).

there be no return on unamortized ARC. OPG pointed out that deferred taxes are considered to be a form of no cost capital because customers have already prepaid taxes through rates. That is not the case for OPG's nuclear liabilities.

OPG opposed the interim treatment advocated by the intervenors. In OPG's view, its proposal on nuclear waste management and decommissioning costs has been clear since the start of this proceeding. Intervenors have had the opportunity to gather evidence through the Technical Conference, interrogatories and cross-examination of OPG witnesses. OPG also asserted that deferring a final decision on the method of recovering the costs would result in a significant risk for OPG, and would require further consideration of the cost of capital when the final nuclear waste methodology is determined.

Board Findings

In the Board's view, there is no doubt that the cost of nuclear liabilities should be included in the revenue requirement for the prescribed facilities. Managing nuclear waste, and decommissioning the plants at the end of their lives, is an integral part of operating the Pickering and Darlington plants. The issue is not whether such costs should be recovered by OPG but, rather, how those costs should be measured for ratemaking purposes.

As noted by OPG and intervenors, there does not appear to be any consistent and generally accepted treatment of AROs and ARCs in other North American jurisdictions. The standards governing the financial accounting for AROs are relatively new. The FASB in the United States issued Statement No. 143 in 2001, and the CICA Handbook section 3110 in 2003. Whether North American regulators will ultimately modify their ratemaking approaches to be compatible with the accounting standards is not clear.

Given the newness of the financial accounting standards for AROs, and the apparent lack of any consensus among regulators about whether to accept a rate base that includes ARC, the Board is not prepared to accept use of the rate base method in precisely the form proposed by OPG.

The Board will accept inclusion in the revenue requirement of depreciation expense for the nuclear plants computed in accordance with GAAP, as proposed by OPG. Under GAAP, ARC included in the net book value of fixed assets is depreciated like any other fixed asset cost. It appears as an expense in OPG's income statement. The Board finds

that this approach results in a rational allocation of cost. Several intervenors explicitly supported that approach and no intervenor objected to it.

The more difficult issue is whether OPG should be permitted to recover its cost of capital on a rate base that includes 100% of unamortized ARC. There was no evidence provided at this hearing that any regulator has yet permitted the inclusion of ARC in rate base. Indeed, the policies of FERC in the United States specifically require that:

... all asset retirement obligations related rate base items be removed from the rate base computation through an adjustment. If the public utility, licensee or natural gas company is seeking recovery of an asset retirement obligation in rates, it must also provide a detailed study supporting the amounts proposed to be collected in rates.⁶⁴

Under accounting standards that existed before the release of FASB Statement No. 143 and CICA Handbook Section 3110, it was reasonable to conclude that the original cost of fixed assets on a regulated entity's balance sheet had been financed by investor-supplied debt and equity funds. While that remains true for many regulated entities, it clearly is no longer true for entities that have booked AROs.

When OPG increased its nuclear liabilities by \$1,386 million at the end of 2006, and increased its fixed asset book values by the same amount, it did not have to arrange a debt or equity issue, or invest some of its retained earnings. All that happened was that OPG posted a journal entry to its general ledger – it debited fixed assets for \$1,386 million and credited nuclear liabilities for the same amount.

At some point, the unamortized ARC that is included in fixed assets in effect will be funded by debt or equity because OPG is obligated by ONFA to make cash contributions to the segregated funds; however, until those contributions occur, the ARC component of fixed assets has not been funded with capital supplied by investors.

It would be inappropriate, in the Board's view, to award OPG a rate base-type return on unamortized ARC when OPG has not had to raise the full amount of ARC as new debt or equity. In the Board's view, the rate base method over-compensates OPG when OPG's nuclear liabilities are not fully funded. As CIBC noted in its December 2004 report, the rate base method "effectively requires ratepayers to fund a higher cost of

⁶⁴ FERC Order No. 631, paragraph 62.

capital associated with the unfunded liability than the interest rate used in calculating the liability pursuant to ONFA.”⁶⁵

The Board finds that OPG should use a variation of Method 3(b) shown in Table 5-5. The Board will accept the rate base for the prescribed nuclear assets as proposed by OPG. Rate base shall be calculated using average annual fixed asset balances that are determined in accordance with GAAP. Those fixed asset balances include unamortized ARC. The return on rate base, however, will not be as proposed by OPG.

The Board will require that the return on a portion of the rate base be limited to the average accretion rate on OPG's nuclear liabilities, which is currently 5.6%. That portion of rate base that attracts that return will be equal to the lesser of: (i) the forecast amount of the average unfunded nuclear liabilities related to the Pickering and Darlington facilities, and (ii) the average unamortized ARC included in the fixed asset balances for Pickering and Darlington. When the average unfunded nuclear liabilities exceed the amount of unamortized ARC in fixed assets, then the portion of rate base that attracts the 5.6% return would be capped at the average amount of unamortized ARC; if the average unfunded liabilities are forecast to be lower than the average unamortized ARC, it is appropriate to limit the portion of rate base that attracts the 5.6% return to the unfunded amount. That approach recognizes that OPG has raised debt (or used its retained earnings) to fund part of the unamortized ARC.

For the balance of the rate base, the return on capital should be calculated using the capital structure, debt rate, and return on equity approved by the Board in Chapter 8 of this decision.

The Board has some, but not all, of the information required to calculate the portion of rate base that will attract the 5.6% return. OPG's evidence includes the forecast amounts of average unamortized ARC in the Pickering and Darlington fixed assets (\$1,227 million for 2008 and \$1,121 for 2009). Its evidence, however, did not include the forecast unfunded liability in respect of Pickering and Darlington (the evidence provided by OPG showed a combined unfunded amount that included amounts related to the Bruce stations). OPG should provide the amounts of forecast average unfunded liabilities related to Pickering and Darlington as part of the information supporting the draft payment order based on this decision.

⁶⁵ CIBC Report, page 19.

The Board notes that the method it will require OPG to use to set payment amounts yields much the same result as Option 2 proposed by CIBC in its December 2004 report (Option 2). The CIBC report described the Option 2 calculation as follows: "Remove the unfunded liability from rate base, and instead collect interest as calculated per ONFA on the unfunded liability explicitly in rates."⁶⁶

The Board agrees with those intervenors who submitted that the cost of capital impact should be based only on amounts of "funded ARC." The Board did not accept, however, the specific methods advocated by the intervenors.

The Board disagrees with CCC's submission that OPG should earn no return on unfunded amounts. Clearly, OPG incurs accretion expense (at an average rate of 5.6%) on its nuclear liabilities whether they are funded or not.

CME advocated its "Cost of Service Supplement to ARC Depreciation" concept as a model the Board should consider in the future, while VECC advanced a sinking fund method as the right approach. Neither model was fully developed in the intervenor arguments. It appeared to the Board that both models would require the Board to develop an alternative funding schedule in order to calculate the revenue requirement. The Board questions the utility and practicality of developing alternatives to the funding schedule set out in the ONFA.

The Board does not adopt the recommendation from intervenors that the Board's decision on this issue should be labelled as "interim" or that the Board should launch a consultation process on the ratemaking aspects of asset retirement obligations. The Board agrees with OPG that there was ample opportunity in this proceeding for all parties to explore the issues and alternative treatments. The Board believes the right forum for dealing with this issue is a hearing on an application from OPG. To the Board's knowledge, no other entity it regulates has recorded any material amounts of AROs. For OPG, the issue is both real and material.

⁶⁶ CIBC Report, page 19. The calculations provided by OPG at the hearing and summarized in Table 5-5 indicate a different interpretation of Option 2. The calculation of the revenue requirement in Table 5-5 includes forecast accretion expense on OPG's entire nuclear liability (which was \$10.8 billion at the end of 2007), net of forecast earnings on the segregated funds. By including amounts related to funded liabilities, that calculation appears to be in conflict with the description of the Option 2 calculation in the CIBC report, which refers to unfunded liabilities only.

Before the hearing on OPG's next payment amounts application is completed, the National Energy Board, Provincial regulatory bodies, FERC, or other bodies may issue position or policy papers or release decisions dealing with AROs. If such external developments occur, OPG, intervenors, and Board staff will have the opportunity in that hearing to submit evidence and argue for a different approach to AROs.

5.3.3 Section 5.1 and 5.2 deferral accounts

O. Reg. 53/05 was amended in 2007 to require OPG to establish a deferral account to capture certain amounts related to changes in nuclear liabilities that occurred after April 1, 2005 and before the effective date of the Board's first order (Section 5.1), and after the date of the Board's first order (Section 5.2). O. Reg. 53/05 states:

Nuclear liability deferral account, transition

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.

Nuclear liability deferral account

5.2 (1) Ontario Power Generation Inc. shall establish a deferral account in connection with section 78.1 of the Act that records, on and after the effective date of the Board's first order under 78.1 of the Act, the revenue requirement impact of changes in its total nuclear decommissioning liability between,

(a) the liability arising from the approved reference plan incorporated into the Board's most recent order under section 78.1 of the Act; and

(b) the liability arising from the current approved reference plan.

(2) Ontario Power Generation Inc. shall record interest on the balance of the account as the Board may direct.

On December 31, 2006 OPG recorded an increase of \$1,386 million in its nuclear decommissioning and nuclear waste management liabilities. In accordance with Canadian GAAP, the increase in the nuclear liabilities was added to the net book value of the relevant nuclear stations. The net book value of the Bruce stations was increased

**Ontario Energy
Board**

**Commission de l'énergie
de l'Ontario**



EB-2010-0008

IN THE MATTER OF AN APPLICATION BY

ONTARIO POWER GENERATION INC.

**PAYMENT AMOUNTS FOR PRESCRIBED FACILITIES
FOR 2011 AND 2012**

DECISION WITH REASONS

March 10, 2011

EB-2010-0008

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

AND IN THE MATTER OF an application by Ontario
Power Generation Inc. pursuant to section 78.1 of the
Ontario Energy Board Act, 1998 for an Order or Orders
determining payment amounts for the output of certain of
its generating facilities.

BEFORE: Cynthia Chaplin
Presiding Member & Chair

Marika Hare
Member

Cathy Spoel
Member

DECISION WITH REASONS

MARCH 10, 2011

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6 CORPORATE COSTS

6.1 Compensation

The following table summarizes historic and test period compensation levels.

Table 17: Compensation (\$ million)

Organization	2007	2008	2009	2010	2011	2012
Nuclear	\$1,187.90	\$1,206.13	\$1,265.01	\$1,243.41	\$1,196.23	\$1,210.84
Regulated Hydro	42.29	45.14	45.47	47.87	50.36	52.73
Allocated Corporate Support	122.19	125.95	128.85	131.41	135.15	138.59
TOTAL REGULATED COSTS	\$1,352.38	\$1,377.22	\$1,439.33	\$1,422.69	\$1,381.74	\$1,402.16

Note1: Includes total wages, benefits, current service cost component of the Pension/OPEB costs and annual incentives.

Note 2: Does not reflect OPG's impact statement

Source: Issue 6.8, Exh. L-1-74

OPG employs approximately 10,000 staff in the regulated business, 95% of which support or are employed in the nuclear business. Of the staff in the regulated business, 90% are unionized: two thirds represented by the PWU and one third by the Society.

OPG stated that, as a result of collective bargaining, the general wage increase for the PWU and Society has been between 2% and 3% for the past number of years. As noted in the application, the forecast wage increase for each test year is 3% for management and 3% for both unions. OPG has forecast an additional 1% increase to account for step progressions and promotions for staff within the unions. OPG's labour agreement with the Society expired on December 31, 2010 and its agreement with the PWU expires on March 31, 2012.

OPG maintained that its staff must be highly skilled and noted that 73% of the positions require post secondary education. OPG indicated that these employees are in demand across the country. The OPG workforce is mature and OPG estimated that 20% to 25% will need to be replaced between 2010 and 2014.

Towers Perrin conducts a survey which compares compensation data among a variety of employers across Canada where job matches are sufficiently strong. Although OPG participates in the Towers Perrin study, the survey is not prepared specifically for OPG.

OPG used the data from the survey to prepare a chart comparing OPG's salary levels with those of other organizations in the survey. Specifically, the chart shows the variance between OPG's salary levels and the 75th percentile of the comparators for 30 positions. OPG selected the positions that were included in the chart based on its judgment of which ones were the best matches.³² Together, these positions account for approximately 30% of OPG staff who work in the regulated businesses. The chart showed that OPG was above the 75th percentile for some positions, and below it for others, and was slightly above the 75th percentile on an overall basis.³³ OPG selected the 75th percentile as the most appropriate point of comparison (Towers Perrin provided data for the 10th, 25th, 50th, 75th, and 90th percentiles). Towers Perrin did not participate in the preparation of the chart, and did not provide OPG with advice concerning the best comparable positions, or the use of the 75th percentile as a comparator. Although the Towers Perrin survey included data on both base salaries and total cash compensation, the chart prepared by OPG used the base salary data only.

OPG maintained that the compensation for unionized employees is appropriately benchmarked at the 75th percentile of the market for companies surveyed by Towers Perrin due to the nature and complexity of work performed by OPG staff. OPG advised that the 30 positions in the survey accounted for 2,804 OPG employees. In order to bring this set of positions to the 75th percentile, \$16 million would have to be removed from payroll, and in order to bring the positions to the 50th percentile, \$37.7 million would have to be removed from payroll.

In response to recommendations of the Agency Review Panel,³⁴ management compensation has declined by 12.6% in the period 2007-2009. OPG benchmarks management compensation against the 50th percentile of market. In the impact statement filed on September 30, 2010, OPG stated that it is removing management wage escalation for the period to April 1, 2012 in response to the *Public Sector Compensation Restraint Act*. OPG proposed to offset the \$12 million reduction related to management wages against the \$13 million increase in Canadian Nuclear Safety Commission fees. The latter is discussed at section 4.3.1.

The Society and the PWU supported OPG's application. The Society submitted that if the Board believes that a 3% economic increase is unlikely to be granted by an

³² Tr. Vol. 8, pp. 166-168.

³³ Exh. F4-3-1, pp. 30-31.

³⁴ The Agency Review Panel's June 27, 2007 report recommended changes to the way executive compensation would be determined at Ontario's five electricity sector institutions, which included OPG.

arbitrator, then it may consider the use of a variance account to capture any amount less than 3%. In the PWU's view, the Board needs to consider whether the current compensation rates for PWU represented staff was reasonable and prudent when the present collective agreement was entered into in April 2009. Regarding comparisons, the PWU submitted that simply comparing OPG compensation with other non-nuclear employers is not evidence of a lack of prudence on the part of OPG. The PWU also submitted that an assessment of compensation requires an assessment of productivity and skill level.

Board staff questioned OPG's choice to benchmark at the 75th percentile, noting that a number of positions OPG selected from the Towers Perrin survey are generic positions (i.e., labourer, warehouse supervisor). In addition, staff noted that OPG was not able to identify any positions that were exclusively related to specialized skills required of an employee working in a nuclear plant environment, because Towers Perrin did not categorize the positions in this way. Staff submitted that the rationale provided by OPG for use of the 75th percentile was not substantiated, and that the 50th percentile is more consistent with the use of the median by the Board in relation to Hydro One.³⁵ Staff submitted that it was appropriate to remove \$37.7 million from annual revenue requirement based on moving the 30 positions to the 50th percentile. Staff also submitted that it was appropriate to reduce the revenue requirement associated with the Society wage increase from 4% to 2.5%, as this was more consistent with recent arbitration decisions entered into evidence by PWU. These arbitration decisions resulted in increases of 2%, 2.25% and 3%.

CME submitted that the Board can assume that the Towers Perrin report is likely representative of all OPG incumbents, and urged the Board to consider higher disallowances than those suggested by Board staff. CME extrapolated the Towers Perrin results to all employees and estimated reductions of \$134.48 million assuming reductions to the 50th percentile. CCC supported CME's position.

SEC submitted it would be unfair to require OPG to move to the 50th percentile immediately and proposed a 25% reduction in 2011 (of the total amount required to match the 50th percentile) and 50% in 2012, amounting to reductions of \$33.7 million for 2011 and \$67.3 million for 2012. SEC observed that where the Board has set limits previously, regulated entities have responded favourably. SEC further proposed the elimination of the licence retention bonus. With respect to the licence retention bonus,

³⁵ Decision with Reasons, EB-2008-0272, May 28, 2009, pp. 28-31.

OPG maintained that it is appropriate due to the effort and resources required to retain licences and the comparable practice at Bruce Power.

OPG replied that it is bound by its collective agreements and that there is no basis for selecting the 50th percentile as the appropriate benchmark. OPG argued that skills and training requirements are extensive, even for positions viewed as generic by parties. OPG noted that intervenors relied on no evidence to support their view that the 50th percentile was the appropriate target.

With respect to the Ontario Hydro successor companies, OPG provided a wage comparison of OPG to Hydro One for comparable Society positions. Staff entered into evidence a similar comparison for certain PWU positions from the EB-2010-0002 Hydro One application. Board staff submitted that there is no justification for OPG to consistently pay its staff more than Hydro One for generic positions such as mechanical maintainer, regional field mechanic or labourer.

OPG maintained that its compensation compares favourably with the other successor companies, and that on a weighted average basis, OPG's wages are 10% lower than Bruce Power – the only other large nuclear operator in the province.

OPG noted that one Ontario Hydro successor company has undergone arbitration and received a 3% increase excluding progression and promotion. OPG argued that the Board staff position of 2.5% has no basis and that the reduction should be at most 0.5%.

As noted in the section on benchmarking, there was difficulty reviewing compensation data and trends due to OPG's use of headcount for the historical period and FTEs for the future period. Parties were generally of the view that FTEs should be used for all periods. SEC further submitted that OPG should be required to file compensation information in the format of Appendix 2K used for electricity distributors.³⁶ OPG responded that it would file the equivalent of Appendix 2K which is based on FTEs, to provide historical and forecast data on a comparable basis.

Board staff and SEC also submitted that OPG should be directed to file an independent full compensation study with its next application similar to the study that the Board

³⁶ Ontario Energy Board, Filing Requirements for Transmission and Distribution Applications, June 28, 2010.

required of Hydro One.³⁷ Board staff noted that, given total compensation costs of almost \$2.8 billion over the test period, the cost of such a study would be reasonable.

OPG argued that an external study of compensation was not required because the study would be expensive, at a cost of about \$0.5 million to \$1 million, there are a limited number of nuclear operators in Canada, and OPG is bound by its collective agreements. OPG stated that if it was directed to complete a study, it would do so provided funding was allocated.

Board Findings

Compensation makes up a very significant component of OPG's total operating costs. The Board is concerned with both the number of staff and the level of compensation paid in light of the overall performance of the nuclear business. Each of these issues will be addressed separately.

The lack of comparable data (use of headcount for the historical period and FTEs for the future) make comparison and trending of staffing levels difficult. The Board must be able to see proposed staffing levels and compare those to previous period actuals. The Board therefore will direct OPG to file on a FTE basis in its next application and to restate historical years on that basis.

One of the reasons for the discontinuity between headcount and FTEs may be the extensive use of overtime, particularly in the nuclear division. The Board expects to examine the issue of overtime more closely in the next proceeding. The Board expects OPG to demonstrate that it has optimized the mix of potential staffing resources.

Despite this difficulty in comparing proposed staffing levels with past periods, the Board is of the view that OPG has opportunities to reduce the overall number of employees further as a means of controlling total costs and enhancing productivity. This was demonstrated by OPG's own evidence, as explained by OPG's witness and by Mr. Sequeira from ScottMadden, with respect to the Radiation Protection Function.³⁸

The ScottMadden Phase 2 report observed that OPG's staffing levels per unit exceed both the industry median and Bruce Power, and that OPG staff levels are generally higher than the comparison panels (while noting that this may be influenced by OPG's

³⁷ Decision with Reasons, EB-2006-0501, August 16, 2007, p. 33.

³⁸ Tr. Vol. 3, p. 24.

practice of contracting out relatively few project based outage functions).³⁹ For this reason, the Board has also directed OPG to conduct a staff level analysis as part of its benchmarking studies for the next proceeding. (This issue is discussed more fully in Section 4.2, Benchmarking.) ScottMadden also conducted a pilot top-down staffing analysis for a single OPG function: the Radiation Protection Function. ScottMadden concluded that there was room for a potential reduction of 48 FTEs (28%) in the Radiation Protection Function, of which 13 FTEs could be eliminated altogether. Despite these findings, OPG failed to act on an opportunity to eliminate 13 FTEs, and instead eliminated only one.⁴⁰ This is only a single example concerning relatively few positions, but the Board is concerned that OPG has not acted more aggressively in a case where it has clear information that a particular function is overstaffed. Although collective agreements may make it difficult to eliminate positions quickly, it is not reasonable for ratepayers to bear these additional costs in the face of strong evidence that the positions are in excess of reasonable requirements. With 20 to 25% of staff expected to retire between 2010 and 2014, the Board concludes that OPG has a timely opportunity to review its organizational structure, taking actions to reassign functions and eliminate positions. The Board is not suggesting that a specific percentage of the retiring staff will not need to be replaced, but this may provide an opportunity for reducing the overall staffing complement without disrupting negotiated commitments with the unions.

As to the compensation, the Board finds that the compensation benchmark should generally be set at the 50th percentile. OPG suggests there is no evidence to support this conclusion, but the Board disagrees. This target level is consistent with the recommendations of the Agency Review Panel for executive employees, and indeed for management employees, OPG uses the 50th percentile as the benchmark. In the Board's view, there would need to be strong evidence to conclude that a higher percentile is warranted for non-management staff. OPG provided no such compelling evidence, but merely asserted that positions in the nuclear business required greater skills overall than the comparators. There was no documentation or analysis to support these assertions.

The evidence provided does not substantiate the assertion that the positions selected by OPG are sufficiently different to warrant the use of the 75th percentile. Although OPG stressed that its work requirements (particularly on the nuclear side) are highly

³⁹ Exh. F5-1-2, p. 26.

⁴⁰ Tr. Vol. 3, p. 27.

technical, the Board observes that many of the comparators in the Towers Perrin study would also require highly technical skills, and some of the comparators also operate nuclear facilities. Indeed the job classifications used in the Towers Perrin report are compared against each other on the basis that they are at least broadly speaking comparable. A number of the positions selected by OPG, such as labourer, also do not appear to be specifically related to highly technical nuclear plant work. In addition, most of the comparators were similarly large and unionized, and perform highly technical, though not necessarily nuclear plant, work. The Board recognizes that the analysis conducted by OPG to produce the chart is not comprehensive, and indeed was not likely intended to be comprehensive. Well over half of OPG's employees are not covered by the 30 positions listed in the chart. The data was not specifically prepared for the purpose of conducting a comprehensive comparison, and the data used in preparing the chart references base salary only.⁴¹ Despite these limitations, the analysis provides sufficient evidence to conclude that for a significant proportion of OPG's staff the compensation is excessive based on market comparisons.

PWU argued that the comparative analysis, which uses non-nuclear entities, is not evidence of imprudence by OPG, and therefore there is no evidence to rebut the presumption that the expenses arising from the collective agreements are prudent. The Board does not agree.

The ratepayers should only be required to bear reasonable costs – and in determining reasonable costs the Board can be guided by market comparisons. It is the responsibility of the Board to send a clear signal that OPG must take responsibility for improving its performance. In order to achieve this, the Board will reduce the allowance for nuclear compensation costs by \$55 million in 2011. This amount is derived by considering a number of factors:

- Reducing the compensation for the 30 positions from the Towers Perrin data would require a reduction of \$37.7 million.
- Given the breadth of positions in the analysis and the prevailing pattern that wages are well in excess of the 50th percentile, it is reasonable to conclude that the same pattern exists for the vast majority of all staff positions in the company. There was certainly no evidence to suggest otherwise. Therefore, the total

⁴¹ The Towers Perrin survey was filed confidentially with the Board as undertaking J8.5. The Towers Perrin Survey includes data both for base salary and total cash compensation. However, OPG appears to have used only the base salary information in preparing the chart. See Tr. Vol. 8, pp. 175-176.

adjustment to move all regulated staff to the 50th percentile is substantially in excess of \$37.7 million.

- In determining the appropriate adjustment, the Board recognizes that it will be difficult for OPG to make significant savings through compensation levels alone in the short to medium-term given the collective agreements with its unions.
- OPG has already indicated that there will be no increase in management salaries through April 1, 2012, and this reduction was not incorporated into the original filing.
- The ScottMadden benchmarking analysis supports the conclusion that there is excess staff overall and that this is one component of OPG's relatively poor performance (in comparison to its peers). A further reduction in the allowance for compensation is warranted for this factor.
- The ScottMadden benchmarking analysis also demonstrates that OPG's overall performance is poor on certain key benchmarks, for example non-fuel operating costs. Compensation is a significant cost driver for this metric, and OPG's poor ranking supports the Board's decision to make reductions on account of compensation costs

The same reduction will apply in 2012, but there will also be an additional reduction of \$35 million to represent further progress toward the 50th percentile, further progress in reducing excess headcount, and further progress toward achieving a reasonable level of cost performance. The total reduction for 2012 is \$90 million.

While a more aggressive reduction was argued by some intervenors, the Board recognizes that changes to union contracts, to staffing levels and movement to the 50th percentile benchmark will take time. Indeed, the Board recognizes that OPG may not be able to achieve \$145 million in savings in the test period through compensation reductions alone. The Board is making these adjustments so that payment amounts are based on a reasonable level of performance. If costs are in excess of a reasonable level of performance, then those excess costs are appropriately borne by the shareholder.

The Board is allocating this adjustment solely to the nuclear business for the purposes of setting the payment amounts. The Board is not ordering any reductions for the hydroelectric business because the benchmarking evidence for that business supports the conclusion that it is operated reasonably efficiently from an overall perspective, and therefore the Board is less concerned with the specific compensation levels for that part

of the company. For the nuclear business the evidence is clear that overall performance is poor in comparison to its peers and the staffing levels and compensation exceed the comparators. On this basis an adjustment is necessary to ensure the payment amounts are just and reasonable.

Lastly, the Board directs OPG to conduct an independent compensation study to be filed with the next application. As noted above, OPG's compensation benchmarking analysis to date has not been comprehensive. The Board remains concerned about compensation costs, in light of the company's overall poor nuclear performance, and would be assisted by a comprehensive benchmarking study comparing OPG's total compensation with broadly comparable organizations. The study should cover a significant proportion of its positions. Compensation costs are a significant proportion of the total revenue requirement; OPG's position that such a study would be too expensive and of little value is therefore not reasonable. Consultation with Board staff and stakeholders concerning the scope of the study, in advance of issuing a Terms of Reference, is advised. The costs of the study are to be absorbed within the overall revenue requirement allowed for in this Decision. This has been already accounted for in the Regulatory Affairs budget, which anticipates studies in support of the company's next application.

6.2 Pension and Other Post Employment Benefits

Costs related to Pension and Other Post Employment Benefits ("OPEB") for the test period were forecast based on discount rates and assumptions in OPG's 2010-2014 business plan. The total amount requested for the test period is approximately \$633 million. On September 30, 2010, OPG filed an Impact Statement in which it identified a significant decline in discount rates causing an increase in forecast pension and OPEB costs for the test period. Rather than revising the proposed revenue requirement, OPG requested approval for a variance account, "to record the revenue requirement impact of differences between forecast and actual pension and OPEB costs." The total forecast increase as a result of the update is \$264.2 million, as summarized in the following table.

ORIGINAL

CITATION: Ontario Power Generation Inc. v. Ontario (Energy Board), 2012 ONSC 729

DIVISIONAL COURT FILE NOS.: 184/11, 180/11, 194/11

DATE: 2012/02/14

ONTARIO

SUPERIOR COURT OF JUSTICE

DIVISIONAL COURT

Aitken, Swinton and Hoy J.J.

BETWEEN:

ONTARIO POWER GENERATION INC.

Appellant

- and -

ONTARIO ENERGY BOARD

Respondent

AND BETWEEN:

**POWER WORKERS' UNION, CANADIAN
UNION OF PUBLIC EMPLOYEES,
LOCAL 1000**

Appellant

- and -

**ONTARIO ENERGY BOARD and
ONTARIO POWER GENERATION INC.**

Respondents

COURT FILE NO.: 184/11

John B. Laskin and Crawford Smith,
for the Respondent *Ontario Power
Generation Inc.*

**Glen Zacher and Patrick Duffy, for
the Respondent *Ontario Energy Board***

COURT FILE NO.: 180/11

**Richard P. Stephenson and
Emily Lawrence**, for the Appellant
*Power Workers' Union, Canadian
Union of Public Employees, Local 1000*

**Glen Zacher and Patrick Duffy, for
the Respondent *Ontario Energy Board***

**John Laskin and Crawford Smith, for
the Respondent *Ontario Power
Generation Inc.***

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AND BETWEEN:

SOCIETY OF ENERGY PROFESSIONALS
Appellant

- and -

ONTARIO ENERGY BOARD and
ONTARIO POWER GENERATION INC.
Respondents

COURT FILE NO.: 194/11

Paul J.J. Cavalluzzo, Jo-Anne Pickel
and Adrienne Telford for the
Appellant *Society of Energy
Professionals*Glen Zacher and Patrick Duffy, for
the Respondent *Ontario Energy Board*John Laskin and Crawford Smith, for
the Respondent *Ontario Power
Generation Inc.*Robert Warren, for the Intervenor
Consumers Council of CanadaJay Shepherd, for the Intervenor
Ontario Education Services Corporation

HEARD at Toronto: October 18, 2011

Supplemental written submissions of the
Power Workers' Union, Canadian
Union of Public Employees, Local
1000, the Consumers Council of
Canada, Society of Energy
Professionals, Ontario Energy Board
and Ontario Power Generation Inc. filed
January 16, 2012HOY J.

REASONS FOR DECISION

OVERVIEW

[1] Ontario Power Generation Inc. ("OPG"), Power Workers' Union, Canadian Union of Public Employees, Local 1000 (the "PWU"), and The Society of Energy Professionals (the "Society") appeal from the Decision with Reasons (the "Decision") of the Ontario Energy Board (the "OEB") released March 20, 2011.

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[2] OPG is Ontario's largest electricity generator. It is a monopoly subject to rate regulation by the OEB. OPG applied to the OEB pursuant to s. 78.1 of the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Sched. B (the "Act") for approval of payment amounts - essentially the amounts it could pass on to consumers through the rates it charges - for OPG's generation facilities for the test period of January 1, 2011 through December 31, 2012. The OEB disallowed \$145 million of the forecast nuclear compensation costs for the test period.

[3] Approximately ninety percent of OPG's work force are members of either PWU or the Society and OPG is bound by collective agreements with them. PWU and the Society were among the thirteen intervenors in the proceedings before the OEB.

[4] The Consumers Council of Canada ("CCC") and Ontario Education Services Corporation ("ESC") intervened in the proceeding before the OEB, are intervenors on this appeal, and support the Decision.

[5] At issue are: (1) whether, in assessing the reasonableness of OPG's compensation costs, the OEB was (as the appellants argue) restricted to considering whether the collective agreements with PWU and the Society were prudent at the time they were entered into and should have presumed those agreements were prudent; and (2) the adequacy of the OEB's reasons for its Decision.

THE REGULATORY FRAMEWORK

[6] The OEB regulates the Ontario electricity and gas sectors. Two of its principal statutory obligations are "to protect the interests of consumers with respect to prices and the adequacy, reliability and quality of electricity service" and to "promote economic efficiency and cost effectiveness in the generation...of electricity and facilitate the maintenance of a financially viable electricity industry".¹ The OEB fulfills this mandate by, *inter alia*, regulating the rates and payment amounts charged by monopoly electric utilities, including OPG.

[7] Pursuant to s. 78.1 of the Act, the OEB is to fix payment amounts that it finds to be "just and reasonable". Its authority to determine just and reasonable amounts is not limited by any statutory directions. Regulation 53/05 (*Payments Under Section 78.1 of the Act*) provides that the OEB "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".²

[8] As noted in *TransCanada Pipelines Ltd. v. Canada (National Energy Board)*, [2004] FCA 149, at paras. 31 and 32, where a regulator is not constrained by statute, there are a number of methodologies for determining just and reasonable rates. One of those is the cost of service methodology, which *TransCanada* describes as compensating the utility through rates for its prudently incurred costs, including its cost of capital. The Court of Appeal in *Natural Resource Gas Ltd. v. Ontario Energy Board*, [2006] O.J. No. 2961 (C.A.) also recognized the entitlement of a utility to recover its prudently incurred costs.

¹ Act, ss. 1(1)

² This Court in *Advocacy Centre for Tenants-Ontario v. Ontario (Energy Board)*, [2008] O.J. No. 1970 (Div. Ct.) at para. 23, has confirmed the OEB is not limited to the traditional cost of service regulation.

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[9] In this case, OPG requested to have payment amounts set on a forecast cost of service methodology. It sought approval of a "revenue requirement" comprised of a forecast of its costs over the test period of January 1, 2011 through December 31, 2012. It was therefore required to undergo a prudence review, and satisfy the OEB that those costs were reasonable before passing those costs on to consumers. See *Great Lakes Power Limited v. Ontario (Energy Board)*, 2010 ONCA 399.

[10] Pursuant to s. 78.1(6) of the Act, the burden of proving that the payment amounts sought are just and reasonable is on the applicant.

[11] Pursuant to ss. 33(1) and (2) of the Act, an appeal of a decision of the OEB lies to this court and may be made only upon a question of law or jurisdiction.

FACTUAL BACKGROUND

[12] OPG emerged in 1999 as one of the successor corporations to Ontario Hydro. Its regulated facilities include three nuclear generating stations and six hydroelectric plants, generating approximately half of Ontario's electricity. OPG's sole shareholder is the Province of Ontario.

[13] OPG employs approximately 10,000 staff in its regulated business, ninety-five percent of whom are associated with OPG's nuclear business. As indicated above, ninety percent of the staff in the regulated businesses are unionized. Sixty percent are represented by PWU and thirty percent are represented by the Society.

[14] At the time of the underlying application, OPG was party to a collective agreement with PWU for nuclear employees with a term of April 1, 2009 to March 31, 2012. The agreement provides for a three percent wage increase in each of 2011 and 2012. OPG was also bound by a collective agreement with the Society with a term of January 1, 2006 to December 31, 2010. OPG and the Society were engaged in collective bargaining during the OEB's hearing of this matter. A collective agreement was subsequently awarded by an interest arbitrator on February 3, 2011, following the OEB's hearing in this case. The arbitrator awarded a 3% increase effective January 2011, 2% effective January 2012 and 1% effective April 2012.

[15] In its application to the OEB, OPG forecast 3% wage increases in each of 2011 and 2012. It also forecast a further 1% increase to account for step progressions and promotions under the collective agreements and an 8.6% staff reduction between 2008 and 2012.

[16] Labour relations for OPG and its employees are governed by the *Labour Relations Act*, 1995, S.O. 1995, c. 1, Sched. A.

[17] As a successor company to Ontario Hydro, OPG was required by law to adopt the collective agreements covering the staff transferred to OPG from Ontario Hydro. Some modifications have since been negotiated. The collective agreements contain provisions which limit the ability of OPG to unilaterally reduce its workforce. The Society's collective agreement contains a no strike/no lockout provision which requires impasses to be resolved by way of a binding mediation/arbitration process.

[18] In addition to being subject to provincial rate regulation, OPG is subject to the jurisdiction of the Canadian Nuclear Safety Commission, an independent federal government agency that is responsible for ensuring compliance with the *Nuclear Safety and Control Act*, S.C. 1997, c. 9. As a result, OPG is subject to operational constraints.

THE DECISION

[19] OPG applied for a total forecast revenue requirement of \$6,909.6 million and deferral and variance account recovery of \$373.1 million for the test period. If approved, this would have resulted in an average increase in payment amounts of 6.2%.

[20] The OEB made various adjustments to the requested amounts which, when considered together, the OEB estimated would limit the increase in payment amounts to 1%. Most significantly, the OEB disallowed \$55 million of forecast nuclear compensation costs for 2011 and \$90 million of forecast compensation costs for 2012. In making its adjustments, the OEB stated that it had broad discretion to adopt the mechanisms it judged appropriate in setting just and reasonable rates, and went on to explain, at pages 18 and 19:

...the Board may take into account a broad suite of factors that affect the company and factors that affect consumers. Both considerations are relevant in determining just and reasonable payment amounts. For example the Board may consider evidence on economic conditions and factors influencing other aspects of electricity rates. These sorts of factors may well be relevant in terms of deciding the appropriate pacing or level of expenditures. The Board must be satisfied that the rates are just and reasonable and it must consider all evidence that it finds relevant for that purpose. For the current proceeding, the Board finds that evidence regarding the economic situation and the trend in overall electricity costs is a relevant consideration, along with a variety of other factors (such as inflation rates, interest rates, legislation, business needs, benchmarking results.)

OPG and PWU would have the Board constrain its consideration for the various spending proposals to a very few narrow examinations based on the presumption that all proposed expenditures are reasonable unless proved otherwise. In the words of OPG, 'Only costs that are found to be dishonestly incurred, or which are negligent or wasteful losses, may be excluded from the legitimate operating costs of the utility in determining the rates that may be charged.' The Board disagrees. When considering forecast costs, the onus is on the company to make its case and to support its claim that the forecast expenditures are reasonable. The company provides a wide spectrum of such evidence, including business cases, trend analysis, benchmarking data, etc. The test is not dishonesty, negligence, or wasteful loss; the test is reasonableness. And in assessing reasonableness, the Board is not constrained to consider only factors pertaining to OPG. The Board

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has the discretion to find forecast costs unreasonable based on the evidence- and that evidence may be related to the cost/benefit analysis, the impact on ratepayers, comparison with other entities, or other considerations.

The benefit of a forward test period is that the company has the benefit of the Board's decision in advance regarding the recovery of forecast costs. To the extent costs are disallowed, for example, a forward test period provides the company with the opportunity to adjust its plans accordingly. In other words, there is not necessarily any cost borne by shareholders (unless the company decides to continue to spend at the higher level in any event). Somewhat different considerations will come into play when undertaking an after-the-fact prudence review. In the case of an after-the-fact prudence review, if the Board disallows a cost, it is necessarily borne by the shareholder. There is no opportunity for the company to take action to reduce the cost at that point. For this reason, the Board concluded there is a difference between the two types of examination, with the after-the-fact review being a prudence review conducted in the manner which includes a presumption of prudence.

[21] In pages 80-89, the OEB dealt in depth with compensation. At pages 80 to 81, the OEB explained that OPG used the data from a survey prepared by Towers Perrin, comparing compensation data among a variety of employers across Canada where job matches are sufficiently strong, to prepare a chart comparing OPG's salary levels for thirty unionized positions (accounting for 2,804 employees) with those of other organizations in the survey. In preparing the chart, OPG identified from the Towers Perrin survey those companies and those job positions OPG considered comparable. The chart showed that OPG was slightly above the seventy-fifth percentile on an overall basis.

[22] At page 84, the OEB expressed its concern with both the number of staff and the level of compensation paid in light of the overall performance of the nuclear business. It noted the extensive use of overtime in the nuclear business.

[23] It opined that OPG had the opportunity to reduce the overall number of employees further as a means of controlling total costs and enhancing productivity. It noted that the "ScottMadden Phase 2 report"³ observed that OPG's staffing levels per unit exceed both the industry median and those of Bruce Power, a competitor. The OEB expressed disappointment that in response to a staffing analysis of OPG's Radiation Protection Function by ScottMadden, which concluded that thirteen full-time positions could be eliminated, OPG had eliminated only one position.

³ OPG retained ScottMadden to provide benchmarking consulting services in response to the OEB directive in EB-2007-0905 Decision with Reasons, (page 37) that OPG should target cost and operational performance improvement as well as develop specific initiatives and actions to meet those performance targets. See Exhibit F2-T1-S1, Business Planning and Benchmarking-Nuclear, para. 3.2. ScottMadden is a management consulting firm specialized in serving clients in the utility sector. It produced a Phase 1 Report dated July 2, 2009 and a Phase 2 Report dated September 11, 2009.

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[24] At page 85, the OEB wrote:

Although collective agreements may make it difficult to eliminate positions quickly, it is not reasonable for ratepayers to bear these additional costs in the face of strong evidence that the positions are in excess of reasonable requirements. With 20 to 25% of staff expected to retire between 2010 and 2014, the Board concluded that OPG has a timely opportunity to review its organizational structure, taking actions to reassign functions and eliminate positions. The Board is not suggesting that a specific percentage of the retiring staff will not need to be replaced, but this may provide an opportunity for reducing the overall staffing complement without disrupting negotiated commitments with the unions.

[25] On the issue of compensation levels, the Board found that the compensation benchmark for staff employees should be set at the fiftieth percentile, as with management employees. It held that the OPG had not provided any compelling evidence to conclude that a higher percentile was warranted for non-management staff. The Board found, at page 86, that the OPG's own analysis "provides sufficient evidence to conclude that for a significant proportion of OPG's staff the compensation is excessive based on market comparisons."

[26] The OEB dismissed PWU's argument that there was no evidence to rebut the presumption that the expenses arising from the collective agreements are prudent, writing as follows, at pages 86 and 87:

The ratepayers should only be required to bear reasonable costs – and in determining reasonable costs the Board can be guided by market comparison. It is the responsibility of the Board to send a clear signal that OPG must take responsibility for improving its performance. In order to achieve this, the Board will reduce the allowance for nuclear compensation costs by \$55 million in 2011. This amount is derived considering a number of factors:

- . Reducing the compensation for the 30 positions from the Towers Perrin data would require a reduction of \$37.7 million.

- . Given the breadth of positions in the analysis and the prevailing pattern that wages are well in excess of the 50th percentile, it is reasonable to conclude that the same pattern exists for the vast majority of all staff positions in the company. There was certainly no evidence to suggest otherwise. Therefore, the total adjustment to move all regulated staff to the 50th percentile is substantially in excess of \$37.7 million.

- . In determining the appropriate adjustment, the Board recognizes that it will be difficult for OPG to make

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significant savings through compensation levels alone in the short to medium-term given the collective agreements with its unions.

. OPG has already indicated that there will be no increase in management salaries through April 1, 2012, and this reduction was not incorporated into the original filing.⁴

. The ScottMadden benchmarking analysis supports the conclusion that there is excess staff overall and that this is one component of OPG's relatively poor performance (in comparison to its peers). A further reduction in the allowance for compensation is warranted for this factor.

.The ScottMadden benchmarking analysis also demonstrates that OPG's overall performance is poor on certain key benchmarks, for example non-fuel operating costs. Compensation is a significant costs driver for the metric, and OPG's poor ranking supports the Board's decisions to make reductions on account of compensation costs.

The same reduction will apply in 2012, but there will also be an additional reduction of \$35 million to represent further progress toward the 50th percentile, further progress in reducing excess headcount, and further progress toward achieving a reasonable level of costs performance. The total reduction for 2012 is \$90 million.

While a more aggressive reduction was argued by some intervenors, the Board recognizes that changes to union contracts, staffing levels and movement to the 50th percentile benchmark will take time. Indeed, the Board recognizes that OPG may not be able to achieve \$145 million in savings in the test period through compensation reductions alone. The Board is making these adjustments so that payment amounts are based on a reasonable level of performance. If costs are in excess of a reasonable level of performance, then those excess costs are appropriately borne by the shareholder.

STANDARD OF REVIEW

[27] The parties agree that on the first issue -- which concerns the substance of the OEB's decision disallowing a portion of the compensation costs sought - the appropriate standard of

⁴ At page 81, the OEB indicated that this amounts to a \$12 million saving. Based on the wage freeze required by the subsequently enacted *Public Sector Compensation Restraint to Protect Public Services Act, 2010*, S.O. 2010, c. 1, Sched. 24, OPG updated its evidence to forecast a zero percent increase for non-unionized employees through April 1, 2012, the period covered by that Act.

review is reasonableness. In considering whether the Decision is reasonable, the court must consider both whether there is justification, transparency and intelligibility in the reasons for the Decision and whether the Decision falls "within a range of possible, acceptable outcomes which are defensible in respect of facts and law". *Toronto Hydro-Electric System Ltd. v. Ontario (Energy Board)*, 2010 ONCA 284 at para. 42; *Dunsmuir v. New Brunswick*, [2008] 1 S.C.R. 190 at para. 47.

[28] At the hearing, OPG and the Society argued that the second issue raised - the functional adequacy of the OEB's reasons - was a question of whether the OEB breached natural justice by failing to give adequate reasons. Following the hearing, the Supreme Court of Canada released its decision in *Newfoundland and Labrador Nurses' Union v. Newfoundland and Labrador (Treasury Board)*, 2011 SCC 62. That decision makes clear that where, as here, there are reasons, the decision cannot be attacked on grounds of procedural unfairness; any challenge to the reasoning/result of the decision should be made within the *Dunsmuir* reasonableness analysis. As to the proper approach in considering the reasons, Abella J. writes, at paras. 14 and 16:

Read as a whole, I do not see *Dunsmuir* as standing for the proposition that the "adequacy" of reasons is a stand-alone basis for quashing a decision, or as advocating that a reviewing court undertake two discrete analyses - one for the reasons and a separate one for the result (Donald J. M. Brown and John M. Evans, *Judicial Review of Administrative Action in Canada* (loose-leaf at § 12:5530 and 12:5510). It is a more organic exercise- the reasons must be read together with the outcome and serve the purpose of showing whether the result falls within a range of possible outcomes.

Reasons may not include all the arguments, statutory provisions, jurisprudence or other details the reviewing judge would have preferred, but that does not impugn the validity of either the reasons or the result under a reasonableness analysis. A decision-maker is not required to make an explicit finding on each constituent element, however subordinate, leading to its final conclusion (*Service Employees' International Union, Local No. 333 v. Nipawin District Staff Nurses Assn.*, [1975] 1 S.C.R. 382, at p. 391). In other words, if the reasons allow the reviewing court to understand why the tribunal made its decision and permit it to determine whether the conclusion is within the range of acceptable outcomes, the *Dunsmuir* criteria are met.

WAS THE OEB'S DECISION TO DISALLOW A PORTION OF THE FORECAST COMPENSATION COSTS REASONABLE?

The Enbridge Decision

[29] Much of the argument before this Court focused on *Enbridge Distribution Inc. v. Ontario (Energy Board)* (2005), 75 O.R. (3d) 72 (Div. Ct.); rev'd on other grounds (2006), 210 O.A.C. 4

(C.A.). It is the only case in Canada drawn to our attention that has applied a prudent investment test to anything other than a past capital investment.

[30] Enbridge is a gas distributor and seller regulated by the OEB. It had delivered gas via the TransCanada Pipeline. It entered into four agreements to deliver some of its gas via other pipelines. The new routes proved to be more expensive than TransCanada's pipelines and it sought an increase in rates to cover the higher costs it had incurred. At issue before the OEB was whether those increased costs had been prudently incurred.

While the parties described it in somewhat varying terms, in the Board's view, they were in substantial agreement on the general approach the Board should take to reviewing the prudence of a utility's decision.

The Board agrees that a review of prudence involves the following:

- Decisions made by the utility's management should generally be presumed to be prudent unless challenged on reasonable grounds.
- To be prudent, a decision must have been reasonable under the circumstances that were known or ought to have been known to the utility at the time the decision was made.
- Hindsight should not be used in determining prudence, although consideration of the outcome of the decision may legitimately be used to overcome the presumption of prudence.
- Prudence must be determined in a retrospective factual inquiry, in that the evidence must be concerned with the time the decisions were made and must be based on facts about the elements that could or did enter into the decision at the time.⁵

[31] The OEB disallowed the additional costs associated with two of the new agreements. Enbridge appealed. Neither it nor the OEB took issue with the OEB's description of what a prudence review entailed.

[32] The Divisional Court allowed Enbridge's appeal, holding that while the OEB had correctly described the "prudence test", it had misapplied it, by using hindsight in its determination of prudence.

[33] The Court of Appeal restored the decision of the OEB, holding that when the OEB's decision was read as a whole, it was clear that the OEB had conducted a proper prudence inquiry, and hindsight had only been considered in determining whether the presumption of

⁵ Excerpt from the OEB's decision, quoted at para. 10 of the Court of Appeal's reasons.

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prudence had been rebutted. At para. 11, Doherty J.A. confirmed that if the presumption of prudence is overcome, the onus is on the utility to show that its decision was reasonable under the circumstances that were known to, or ought to have been known to, the utility at the time it made the decision.

The parties' positions

[34] The appellants argue that the test as articulated in *Enbridge* applies, and the OEB failed to apply it. They submit that: the bulk of the costs disallowed by the OEB arise out of the compensation levels established by the collective agreements; there is a presumption that OPG's decision to enter into the collective agreements was prudent and that presumption was not displaced; in any event, the OEB did not attempt to engage in a "retrospective factual inquiry"; and the OEB erred in focusing on the legally irrelevant question of current comparators and the impact on consumers. They submit that unless shown to be imprudent, the impact on consumers is irrelevant in fixing payment amounts. The appellants further submit that the alternatives to entering into the collective agreements - including the difficulty in operating OPG's nuclear plants in the event of a strike or lockout - must be considered in evaluating the reasonableness of OPG's decision to enter into the collective agreements.

[35] Counsel for the Society argued that, given the unique labour relations framework, the terms of collective agreements should be considered *prima facie* reasonable, unless there is cogent evidence to the contrary. This is particularly so, he argues, where, as in the case of the Society, the terms of the collective agreement now in effect were determined by an interest arbitrator with special expertise in deciding fair and reasonable compensation in light of all the relevant factors. Counsel for the Society points to a recent decision where an arbitrator refused to apply the Ontario government's non-legislated compensation restraint policy, and argues the result of any arbitration would likely be an award with increases comparable to those forecast by OPG.

[36] Counsel for the Society also argues that the Decision undermines the collective bargaining process and employees' statutory and constitutional rights and does not adequately take into account OPG's obligations under the *Nuclear Safety and Control Act*.

[37] The OEB argues that both *Enbridge* and *Violet v. Federal Energy Regulatory Commission*, 800 F. 2d 280 (1st Cir. 1986), on which the Divisional Court relied at para. 9 in *Enbridge* in affirming that a prudence review must be done retrospectively, are very different from this case.

[38] The OEB argues that at the time of the application, the compensation costs were forecast costs that had not yet been incurred and were capable of being managed by OPG through, amongst other things, reassigning staff, reducing staff through retirements, reducing the use of overtime, and negotiating new or amended collective agreements. It submits that when considering forecast compensation costs, and not costs already incurred, there is no presumption of prudence and it was not restricted to considering whether it was prudent for OPG to have entered into the collective agreements.

[39] *Violet v. Federal Energy Regulatory Commission* considered whether an investment made in a nuclear plant could be recovered. In *Enbridge*, costs incurred since 2000 were

considered in fixing rates for 2002. The OEB says the analysis in *Enbridge* does not apply where the costs have not yet been incurred and that to hold otherwise would rob regulated utilities of the incentive to manage in a cost-effective manner.

[40] *Enbridge*, it further notes, did not deal with labour costs. The OEB points to *Southwestern Bell Telephone Company v. Arkansas Public Service Commission*, 824 F. 2d 672 (8th Cir. 1987), writ of *certiorari* denied 485 U.S. 989 (1988). Southwestern Bell was bound by collective agreements. In setting rates, the Arkansas Public Service Commission cut Southwestern Bell's compensation costs on the basis that they were unreasonable when compared with expenses for wages and benefits for similar jobs at similar companies in the geographic region. The United States Court of Appeals for the Eighth Circuit dismissed the argument that doing so was, by virtue of the existence of the collective agreements, prohibited by the *National Labour Relations Act*. The OEB argues that *Southwestern Bell*, decided after *Violet*, demonstrates that a retrospective approach need not be taken in assessing labour costs not yet paid.

[41] The OEB submits that the statutory framework gives it a broad discretion in how it sets payment amounts and does not support a presumption of prudence. It argues that its approach was consistent with its statutory objectives to protect the interests of consumers and promote cost effectiveness in the generation of electricity.

[42] The CCC and ESC agree with the OEB's position.

[43] ESC argues that *Enbridge* is also distinguishable because the OEB's statutory objectives with respect to gas regulation do not include promoting economic efficiency and cost effectiveness. These specific statutory objectives with respect to the regulation of electricity, ESC argues, require the OEB to focus on the results of utility decisions, and not just on how prudently those decisions were made. ESC submits that the key element of cost-effectiveness is that actual or proposed costs are tested against a benchmark that is considered reasonable by the regulator, and when they are more than the benchmark, they are *prima facie* not cost effective. Cost effectiveness, it argues, is an entirely results-oriented concept. ESC argues that if the OEB was not able to consider results, the OEB would not be able to carry out its role as a market proxy.

Analysis

[44] I address first the question of a presumption of prudence.

[45] The reasonableness of OPG's compensation costs was challenged by intervenors in this proceeding, and in OPG's 2008 application for approval of payment amounts.

[46] In its Decision with Reasons, EB-2007-0905, dated November 3, 2008, pgs. 22 -24 in response to OPG's 2008 cost of service application for approval of payment amounts, the OEB noted ESC's concern that reports prepared by Mercer Human Resources Consulting and Towers Perrin demonstrated that OPG's labour costs were well above market levels. ESC challenged OPG's compensation costs on reasonable grounds. The OEB significantly cut labour costs in

relation to OPG's nuclear generating facility known as "Pickering A".⁶ Otherwise, it allowed the nuclear compensation costs sought, noting that "A number of the planned expenditures are related to safety and cost improvements." It directed OPG to provide evidence comparing OPG's nuclear operations with those of similar operators.

[47] The ScottMadden Phase 1 and 2 Reports were provided to OPG before it filed its May 26, 2010 application for approval of payment amounts.

[48] In this proceeding, some intervenors again challenged the level of OPG's compensation costs.

[49] If there was a presumption of prudence despite the clear statutory direction that the onus is on the applicant to establish that the amounts it seeks are just and reasonable and the fact that the costs had not yet been incurred, there were reasonable grounds for challenging those forecasts. Therefore, the onus was on OPG to justify them.

[50] I note OPG's argument that the evidence that the increases in labour costs it agreed to were consistent with increases it had agreed to in the past that had been approved by the OEB supports the reasonableness of its compensation costs. As indicated above, in EB-2007-0905 not all of the past increases were approved. Moreover, what is a reasonable rate increase for one period of time is not necessarily a reasonable increase for a subsequent period of time. Economic conditions change.

[51] There was evidence on which the OEB could reasonably conclude that OPG's compensation levels were excessive, based on current market comparisons with other worksites, and that OPG's overtime charges and staffing levels were also excessive.

[52] As the OEB argues, this situation is also quite different from that in *Enbridge*. I agree that a solely retrospective analysis is inappropriate in the present case. In *Enbridge*, amounts had been paid - or to the extent the decision spilled over to amounts still to be paid - the amounts, given the nature of the agreements, were driven directly and wholly by the agreements. Here, while collective agreements are in place, management has the ability to manage, on a go-forward basis, to reduce total compensation costs within the framework of those agreements. The total compensation costs are not solely a result of the collective agreements; they are also a result of how OPG manages its business within the constraints of those agreements. An analysis based solely on whether it was prudent for OPG to have entered into the collective agreements, and OPG's alternatives to entering into those agreements, would not permit the OEB to fulfill its statutory objective of promoting cost-effectiveness in the generation of electricity. Moreover, if the OEB could only consider the current reasonableness of expenses not covered by an existing contract, the ambit of its review, and its ability to protect consumers, would be significantly hampered.

[53] Even if *Enbridge* applies, the OEB did not ignore the collective agreements. It clearly appreciated the difficulty in making significant savings through compensation levels alone, given

⁶ It cut OPG's operation, maintenance and administration, or OM&A, costs by 10%. The information in this proceeding is that labour costs average 76.7% of total base OM&A expenditures over the test period. See section 2.2, Exhibit N-T1-S1, Impact Statement. I assume labour costs constituted a comparable percentage in the period under review in 2008.

the collective agreements, and took that into effect in determining the amount of the compensation cuts. Given the complexity of OPG's business, and respecting its management's autonomy, OPG did not try to quantify precisely the amount by which OPG could reduce its forecast compensation costs within the framework of the existing collective bargaining agreements. The OEB has expertise in rate regulation. Its determination of the global amount of the reduction of costs is within a range of acceptable outcomes and is entitled to deference.

[54] The collective agreements were concluded between a regulated monopoly, which passes costs on to consumers, not a competitive enterprise, and two unions which account for approximately 90% of the employees and amount to a near, second monopoly, based on terms inherited from Ontario Hydro and in face of the reality that running a nuclear operation without the employees would be extremely difficult. Given this dynamic, it is in my view important that the regulator - tasked with acting as a market proxy - has the ability to consider current compensation comparators in fixing rates that are just and reasonable to the consumers, as well as OPG.

[55] I agree with counsel for the Society that a collective agreement is different than other types of contracts. In the case of most other contracts, for example, a contract to purchase equipment, a utility has ready options. It considers whether supplier A or supplier B offers the best terms, and those suppliers, aware that the utility has options, bid competitively. In the case of the negotiation of a collective agreement, particularly in the circumstances facing OPG, the employer's options are limited.

[56] Counsel for the Society concedes that the Decision does not alter the obligations of the parties to the collective agreements. He submits that the Decision influences the compensation that an employer can negotiate by restricting its entitlement to recover those costs. An entity's finances are an economic factor in the negotiation of collective agreements. A monopoly utility should be no different. Indeed, Article 15 of the Society's collective agreement stipulates that an arbitrator must weigh, among other things, OPG's financial soundness and its ability to pay. The Decision does not, in my view, amount to an intrusive legal control on the freedom of OPG and the unions to bargain or violate the freedom of association guaranteed by section 2(d) of the *Canadian Charter of Rights and Freedoms*, Part 1 of the *Constitution Act 1982*, being schedule B to the *Canada Act, 1982 (U.K.), 1982, c. 11*. An American court came to a similar conclusion in *Southwestern Bell*. Similarly, the Decision does not purport to absolve OPG of compliance with its safety obligations, of which the OEB, given its expertise, would have been fully aware. It sends a signal to OPG that the OEB is unwilling to pass on compensation costs at the existing levels to consumers, and leaves to OPG the manner in which it will achieve the necessary savings, within the constraints of the collective agreements and its safety obligations.

[57] The appellants' argument that the OEB cannot consider the impact on consumers unless the costs are found to be imprudent is drawn from *TransCanada Pipeline* and EB-2009-0084, the OEB's report on the Cost of Capital for Ontario's Regulated Utilities. In *TransCanada Pipelines*, the National Energy Board (the "NEB") set the tolls for transporting natural gas in a pipeline on a cost-of-service basis. The largest single component of the costs was the cost of capital. The issue before the Federal Court of Appeal was whether the NEB erred in taking consumer interests into account in determining the rate of return on capital it would allow the pipeline to earn. Rothstein J.A. accepted the Pipelines' argument that while, when fixing the final tolls, the impact on consumers was relevant, it was irrelevant when determining the required return on

equity. He found the argument in keeping with the decision of the Supreme Court of Canada in *Northwestern Utilities Ltd. v. Edmonton (City)*, [1929] S.C.R. 186, which, at pp. 192-193, described the duty of a regulator charged with fixing fair and reasonable rates as a duty to fix "rates which under the circumstances, would be fair to the consumer on the one hand, and which, on the other hand, would secure to the company a fair return for the capital invested."

[58] EB-2009-0084 cites the principle in *TransCanada Pipelines* and, like that case, focuses on the entitlement of investors in a regulated utility to a fair return on their invested capital. In this case, the OEB specifically declined to reduce OPG's return on equity to mitigate impacts on consumers on the basis that doing so would violate the fair return standard in EB-2009-0084.⁷ It set the rate of return on equity at 9.43% for 2011 and 9.55% for 2012 (which was an increase over the previous allowed rate of return of 8.75%). At issue on this appeal is compensation for operating costs not yet incurred, not return on equity capital. *TransCanada Pipelines* does not, in my view, establish that the OEB cannot consider consumer interests in assessing the reasonableness of costs not yet incurred and fixing payment amounts.

[59] I also note that while the OEB referred to evidence regarding the economic situation and the trend in overall electricity costs as relevant considerations in the introductory pages to its Decision, they were not cited as a factor in its determination of the amount of the reduction in compensation. Those factors were all specific to OPG.

[60] The setting of just and reasonable rates lies at the heart of the OEB's function and expertise. In my view, both the OEB's conclusion that it was not limited, in assessing the reasonableness of OPG's compensation costs, to considering whether OPG's decision to enter into the collective agreements was reasonable under the circumstances that were known or ought to have been known to OPG at the time the decision was made to enter into the agreements, and the amount by which it reduced OPG's forecast compensation costs, were within a range of possible, acceptable outcomes which are defensible in respect of facts and law.

[61] Aitken J. disagrees with my conclusion. In her view, *Enbridge* applies, and, to the extent OPG's overall forecast nuclear compensation costs were locked in by the rates of compensation provided for in its collective agreements, OPG was only required to prove the reasonableness of those rates based on the circumstances that existed at the time it entered into the collective agreements. She concludes that the OEB erred in failing to specifically consider whether those rates were reasonable at the time agreed to and the Decision is as a result unreasonable. She agrees, however, that the OEB was not required to identify what portion of the reduction related to any particular factors.

[62] Respectfully, OPG would also have to have proven the extent to which its overall forecast nuclear compensation costs for the test period were driven by the rates in the collective agreements and could not be mitigated through management efforts. This would not have been an easy task, particularly given that the OEB had already expressed disappointment with management's efforts in response to ScottMadden's report. Any result would be imprecise. As I have attempted to indicate above, I believe that in moderating the amount of the reduction because of the collective agreements, the OEB achieved the purpose of the analysis that Aitken J. would have the OEB more precisely undertake.

⁷ See p. 120 of the Decision.

DO THE REASONS ALLOW THIS COURT TO UNDERSTAND WHY THE OEB MADE ITS DECISION AND TO DETERMINE WHETHER THE CONCLUSION IS WITHIN THE RANGE OF ACCEPTABLE OUTCOMES?

[63] OPG argues that the OEB's reasons do not permit OPG to understand why the OEB decided to reduce compensation costs by the amount that it did, as opposed to some other amount, and do not indicate how much of the reduction relates to each of the six factors referred to by the OEB as impacting on its determination.

[64] OPG says this case is analogous to *Canadian Assn. of Broadcasters v. Society of Composers, Authors and Music Publishers of Canada*, 2006 FCA 337 ("SOCAN"). The Copyright Board is responsible for fixing the rate of royalties payable by radio stations for the public performance of music and sound recordings. In SOCAN, it found, "based on the evidence taken as a whole", that the previous royalty rate underestimated by between 10% to 15% the value of music to commercial radio stations, and that a 10% increase to the tariffs payable to the Society of Composers Authors and Music Publishers of Canada was warranted. Nothing in the Copyright Board's reasons, or the record, explained how it had arrived at the 10% to 15% range. The Federal Court of Appeal found the Copyright Board's reasons inadequate:

In my view, it was not sufficient in the circumstances of this case for the Board to justify its quantification of the undervaluation by merely referring to the evidence taken as a whole. It is not enough to say in effect: 'We are the experts. This is the figure: trust us.' The Board's reasons on this issue served neither to facilitate a meaningful judicial review, nor to provide future guidance for regulatees. (para. 17)

[65] As indicated by Abella J. in *Newfoundland and Labrador Nurses' Union*, a decision maker is not required to make an explicit finding on each constituent element, however subordinate, leading to its final conclusion. SOCAN predates *Newfoundland and Labrador Nurses' Union*. Moreover, the facts in this case are different than in SOCAN, and, in any event, SOCAN, at para. 19, indicates that it was not necessary for the OEB to quantify what portion of the aggregate reduction related to each of the six factors it identified:

It [the Board] is not bound to quantify each of the components that justify an increase, but may choose simply to explain the reasoning supporting its quantification of the global royalty rate increase.

[66] The Decision is 158 pages long, exclusive of appendices. The OEB's reasons, while comprehensive, are not perfect. Few sets of reasons are. They allowed this court, however, to understand why the OEB made its decision and to determine that its conclusion was within the range of acceptable outcomes.

[67] The OEB indicated the amount of the reduction with respect to each of 2011 and 2012, and the factors which impacted on its calculation. It was not essential that the OEB quantify the amount relating to each of the six factors. That being said, it is clear that compensation levels were the primary factor and, in the case of the fourth factor (that there would be no increase in management salaries through April 1, 2012), the OEB indicated at page 81 that this amounts to

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\$12 million. The OEB is not responsible for managing OPG's business. How OPG manages its business in response to those cuts is left to OPG. The OEB explained the fact that a greater decrease (\$90 million) was made in respect of 2012, than 2011 (\$55 million) through its acknowledgement that time is required to make changes; OPG will have greater ability to effect savings in 2012 than 2011. Also apparent from the record is that the current PWU collective agreement expires in March 2012. This potentially provides an opportunity, in addition to reduction of overtime expenses and of staff through retirement, to address overall compensation levels. It is also clear from the OEB's Decision that it very substantially moderated its compensation cuts given the constraints of the collective agreements.

[68] In summary, the reasons meet the requirements of transparency, intelligibility and justification.

DISPOSITION

[69] For the foregoing reasons, the appeals are dismissed without costs.⁸

Alexander H. J.
Hoy J.

K. Swinton J.
Swinton J.

⁸ The OEB does not seek costs, and under the Act, is not liable for costs in connection with an appeal under s. 33.

AITKEN J. (Dissenting)

[70] The issue which requires me to dissent in part from my colleagues is whether contractual liabilities incurred by OPG in collective agreements entered prior to the payment amount application and the test period (January 1, 2011 through December 31, 2012), but binding during all or part of the test period, should be considered "forecast costs", subject to a reasonableness test, or "costs previously incurred", subject to an after-the-fact, two-step, prudence review.

[71] OPG's collective agreement with PWU entered in April 2009 expires on March 31, 2012, leaving only nine months of the test period during which OPG will not be bound by the terms of the existing collective agreement (aside from any binding arbitration provisions in the existing agreement). OPG's collective agreement with the Society terminated on December 31, 2010; however, it contained a mandatory binding arbitration provision which resulted in an arbitrator's award on February 3, 2011 that imposed a collective agreement on OPG and bound it to certain rates of pay for Society members throughout the test period.

[72] I understand the submissions of OPG, PWU and the Society to be that, to the extent that OPG was bound by the collective agreements in place for PWU and the Society prior to the test period, these contractual liabilities represented costs incurred prior to the application. Therefore, when considering OPG's application, the OEB was required to conduct a prudence review in regard to such liabilities as described in *Enbridge Gas Distribution Inc. v. Ontario (Energy Board)* (2006), 210 O.A.C. 4. Examples of contractual liabilities set out in the collective agreements would be mandated percentage increases in rates of pay or restrictions in the ability of OPG to lay off employees. The prudence review accepted in *Enbridge* is described at para. 10 as follows:

- (1) Decisions made by the utility's management should generally be presumed to be prudent unless challenged on reasonable grounds.
- (2) To be prudent, a decision must have been reasonable under the circumstances that were known or ought to have been known to the utility at the time the decision was made.
- (3) Hindsight should not be used in determining prudence, although consideration of the outcome of the decision may legitimately be used to overcome the presumption of prudence.
- (4) Prudence must be determined in a retrospective factual inquiry, in that the evidence must be concerned with the time the decision was made and must be based on facts about the elements that could or did enter into the decision at the time.

[73] I also understand the submissions of OPG and PWU to be that, to the extent that OPG's nuclear compensation costs were not predetermined by binding collective agreements, the OEB was free to subject such costs to a straight reasonableness analysis, based on current considerations. Factors which influenced OEB's forecasted nuclear compensation costs, but which were not tied to earlier contractual obligations, included the attrition of staff through retirement and other means and OPG's ability to control management salaries and the use of

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overtime. I accept that, in doing a reasonableness assessment of such factors, the OEB can take into account wide-ranging evidence, including cost/benefit analyses, the impact on ratepayers, comparisons with other entities, and current market and economic conditions.

[74] I understand the position of the OEB and the other intervenors to be that all of the nuclear compensation costs dealt with in the OEB Decision were properly considered forecast costs that were not subject to a prudence review. I interpret the Reasons of Hoy J. as accepting that OPG's nuclear compensation costs for the test period were not yet incurred and therefore were not subject to a prudence review. To the extent that any were subject to a prudence review, there was adequate evidence before the OEB to justify a finding that the presumption of prudence had been rebutted. There was also adequate evidence to support the finding of the OEB that the nuclear compensation costs were not reasonable.

[75] Where I differ from my colleagues is as follows. First, I consider any limitation on OPG's ability to manage nuclear compensation costs on a go-forward basis, due to binding collective agreements in effect prior to the application and the test period, to be costs previously incurred and subject to an after-the-fact, two-step, prudence review. Second, I conclude that, in considering OPG's nuclear compensation costs, as set out in its application, the OEB in its analysis (though not necessarily in its final number) was required to differentiate between such earlier incurred liabilities and other aspects of the nuclear compensation cost package that were truly projected and not predetermined. Third, in my view, the OEB was required to undergo a prudence review in regard to those aspects of the nuclear compensation package that arose under binding contracts entered prior to the application and the test period. In regard to the balance of factors making up the nuclear compensation package, the OEB was free to determine, based on all available evidence, whether such factors were reasonable. Fourth, had a prudence review been undertaken, there was evidence upon which the OEB could reasonably have decided that the presumption of prudence had been rebutted in regard to those cost factors mandated in the collective agreements. Unfortunately, I cannot find anywhere in the Decision of the OEB where such an analysis was undertaken. The OEB lumped all nuclear compensation costs together. It dealt with them as if they all emanated from the same type of factors and none reflected contractual obligations to which the OPG was bound due to a collective agreement entered prior to the application and the test period. Finally, I conclude that, when the OEB was considering the reasonableness of the nuclear compensation package, it erred in considering evidence that came into existence after the date on which the collective agreements were entered when it assessed the reasonableness of the rates of pay and other binding provisions in the collective agreements. In my view, this approach ran afoul of the directives in *Enbridge*.

[76] My colleagues are of the view that *Enbridge* can be differentiated from the circumstances of this case in two significant respects. First, in *Enbridge*, the company had already paid additional expenses due to the pipeline contracts it had entered prior to its application for rate increases. In this case, OPG had not yet paid the bulk of its nuclear compensation costs for the test period and therefore had some scope to reduce such costs. Second, legislation defines the type of inquiry to be undertaken by the OEB when dealing with different utilities. The inquiry mandated for a rate review for a gas distributor (as in *Enbridge*) is different from the inquiry mandated for an electricity generator (OPG in this case). In my view, neither of these factors makes the principles enunciated in *Enbridge* inapplicable to this case.

[77] In *Enbridge*, the company had entered contracts with various entities to deliver some of its gas through alternate pipeline routes. The new routes became operational in 2000. It soon became apparent that the cost of using these new pipelines was greater than the cost that would have been incurred had the company shipped its gas through the TransCanada Pipeline System. In mid-2000, the company applied for a rate increase. A provisional agreement was entered pursuant to which the company undertook to set up a Notional Deferral Account to record over a ten-month period the difference between its actual costs for the new pipelines and its hypothetical costs if it had used the TransCanada Pipeline. In 2001, the company applied for approval of increased rates for 2002, based in part on its increased pipeline costs. The application was heard by the OEB in June 2002 and a decision released in December 2002. The OEB decided that Enbridge had not acted prudently in incurring the costs associated with two of the new pipelines and, therefore, Enbridge was not allowed to build such increased costs into the rate increase it was seeking. The OEB, the Divisional Court who heard Enbridge's appeal, and the Ontario Court of Appeal who ultimately decided the case all agreed that, in deciding the application, the OEB had to conduct a prudence review as set out above.

[78] In *Enbridge*, the OEB hearing occurred in June 2002, half-way through the period under consideration, and the Decision was issued on December 18, 2002, close to the end of the period. In this case, the hearing occurred in the fall of 2010, prior to the test period, but the Decision was released on March 10, 2011, almost three months into the test period. Thus, in both cases, when the OEB issued its Decision, the utility would already have paid for some of the costs dealt with in the Decision. In both cases, some of the costs under review were to be paid in the future. Although the OEB Decision in *Enbridge* was issued much closer to the end of the relevant period than the Decision in this case, I do not see this difference, in and of itself, as justifying a different test to be applied by the OEB. As well, in both cases, what is being dealt with is a previously negotiated rate for service: in *Enbridge*, the rate was for the use of a pipeline; in this case, the rate was for labour. I fail to see why the nature of costs previously committed to by contract changes the approach that should be taken to the contract. Employers and unions are obliged under the *Labour Relations Act*, S.O. 1995, c. 1 to bargain in good faith and make every reasonable effort to reach an agreement. Therefore, it is arguable that the prudence review is of greater pertinence to collective agreements than to other commercial contracts. In this particular case, I note that the PWU and Society collective agreements were already in existence at the time of the demerger of Ontario Hydro, and OPG became a party to those agreements pursuant to the provisions of the *Labour Relations Act*. OPG inherited the collective agreements and had to go forward as best it could in the environment created by those agreements.

[79] In regard to the second reason advanced to distinguish *Enbridge*, the wording of the OEB's mandate to approve gas distribution rates is slightly different from the wording of its mandate to regulate payment amounts for electricity generators. However, in both cases, the legislative standard that the OEB must apply in determining whether to approve payments or rates is the "just and reasonable" standard (See the *Ontario Energy Board Act*, 1998, S.O. 1998, c. 15, ss. 36, 78, 78.1). As well, the acknowledged objective in both situations is for the OEB to render a decision that is, at once, fair to ratepayers, sufficient to enable the utility to provide the required service, and adequate to secure to the utility a fair return on capital. I note that the OEB is given the following additional objective in regulating the electricity industry: "[t]o promote the 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"; however, I consider this objective neutral in the discussion at hand.

Promoting economic efficiency and cost effectiveness can be done through the lens of a prudence review.

[80] In substance, there are two significant differences between the two-step prudence review and a current reasonableness assessment. The prudence review starts with a presumption that decisions taken in the past by the utility were prudent when taken. If that presumption is rebutted, then the only significant difference in the two tests is that hindsight cannot be used in a prudence review whereas all relevant evidence can be considered in a straight reasonableness assessment of forecasted future costs. In either circumstance, the OEB can consider whether the decision was prudent or reasonable from the perspective of whether it promotes objectives set for the industry – including economic efficiency and cost effectiveness.

[81] Having concluded that the principles in *Enbridge* are applicable in this case, I conclude that the OEB erred in not following them, and its Decision, therefore, was unreasonable. First, as mentioned above, the OEB did not conduct a separate analysis as to whether the presumption of prudence in regard to OPG's entering the collective agreements with PWU and the Society had been rebutted. If it had, the OEB could have decided that the presumption had been rebutted based not only on the evidence relating to circumstances at the time the agreements were entered, but also based on subsequent evidence regarding benchmarking analyses and recent arbitral awards. This would have placed OPG in the position of having to prove that its decision to enter the collective agreements in question had been reasonable under the circumstances that were known or ought to have been known to OPG when it entered the collective agreements. Instead of applying this standard, the OEB forced OPG to prove that the compensation rates and lay-off restrictions mandated under the collective agreements were reasonable in light of all of the evidence available at the time of the hearing. That evidence included a ScottMadden benchmarking report regarding staffing levels and a Towers Perrin survey comparing compensation data among comparable employers – neither of which had been available to OPG when it entered the collective agreements. In reducing OPG's nuclear compensation costs by \$55 million in 2011 and \$90 million in 2012, the OEB relied heavily on these two studies, as reflected in the following excerpt from the dispositive portion of its Decision:

The ratepayers should only be required to bear reasonable costs – and in determining reasonable costs the Board can be guided by market comparisons. It is the responsibility of the Board to send a clear signal that OPG must take responsibility for improving its performance. In order to achieve this, the Board will reduce the allowance for nuclear compensation costs by \$55 million in 2011. This amount is derived by considering a number of factors:

- Reducing the compensation for the 30 positions from the Towers Perrin data would require a reduction of \$37.7 million.
- Given the breadth of positions in the analysis and the prevailing pattern that wages are well in excess of the 50th percentile, it is reasonable to conclude that the same pattern exists for the vast majority of all staff positions in the company. There was certainly no evidence to suggest

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otherwise. Therefore, the total adjustment to move all regulated staff to the 50th percentile is substantially in excess of \$37.7 million.

- In determining the appropriate adjustment, the Board recognizes that it will be difficult for OPG to make significant savings through compensation levels alone in the short to medium-term given the collective agreements with its unions.
- OPG has already indicated that there will be no increase in management salaries through April 1, 2012, and this reduction was not incorporated into the original filing. *[This is the only itemized factor not related in some way to the collective agreements.]*
- The ScottMadden benchmarking analysis supports the conclusion that there is excess staff overall and that this is one component of OPG's relatively poor performance (in comparison to its peers). A further reduction in the allowance for compensation is warranted for this factor.
- The ScottMadden benchmarking analysis also demonstrates that OPG's overall performance is poor on certain key benchmarks, for example non-fuel operating costs. Compensation is a significant cost driver for this metric, and OPG's poor ranking supports the Board's decision to make reductions on account of compensation costs.

The same reduction will apply in 2012, but there will also be an additional reduction of \$35 million to represent further progress toward the 50th percentile, further progress in reducing excess headcount, and further progress toward achieving a reasonable level of cost performance. The total reduction for 2012 is \$90 million.

While a more aggressive reduction was argued by some intervenors, the Board recognizes that changes to union contracts, to staffing levels and movement to the 50th percentile benchmark will take time. Indeed, the Board recognizes that OPG may not be able to achieve \$145 million in savings in the test period through compensation reductions alone. The Board is making these adjustments so that payment amounts are based on a reasonable level of performance. If costs are in excess of a reasonable level of performance, then those excess costs are appropriately borne by the shareholder.

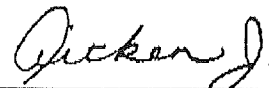
[82] In my view, the OEB's failure to undertake a prudence review in regard to the significant portion of OPG's nuclear compensation costs that were dependent on previously entered

- 23 -

collective agreements, and OEB's use of hindsight in assessing the reasonableness of that portion of OPG's nuclear compensation costs, took its Decision outside the range of possible, acceptable outcomes defensible under the law and rendered its Decision unreasonable.

[82] In arriving at this conclusion, I want to be clear that there are many aspects of the Reasons of Hoy J., with which I take no exception. More particularly, I agree that there was evidence pursuant to which the OEB could reasonably find that any presumption of prudence in regard to the compensation levels and lay-off restrictions in the collective agreements had been rebutted. In finding the presumption of prudence rebutted, the OEB could properly use all relevant evidence available at the hearing – including current benchmarking data and current market and economic conditions. I also agree that, ultimately, when considering the reasonableness of OPG's overall nuclear compensation costs, the OEB could consider the reasonableness, based on all of the evidence, of any factors which OPG had the ability to control during the test period on a go-forward basis. Furthermore, I agree that the onus was on OPG to establish the reasonableness of its overall nuclear compensation costs, including salary and staffing levels. The only point on which I differ is that, to the extent that components of such costs were predetermined, in the sense that they were locked in as a result of collective agreements entered prior to the date of the application and the test period, OPG only had to prove their prudence or reasonableness based on the circumstances that were known or that reasonably could have been anticipated at the time the decision to enter those collective agreements was made. In this limited regard, hindsight could not be used to assess reasonableness. Finally, I agree that, in arriving at a number by which the OEB was reducing OPG's overall nuclear compensation costs, the OEB was not required to stipulate what portion, if any, related to predetermined costs under the collective agreements and what portion related to other factors, as long as the analysis required under the law was first undertaken.

[83] I would return the matter to the same OEB panel with instructions to reconsider its Decision regarding nuclear compensation costs based on the existing record and these directions regarding the need for and the nature of a prudence review for obligations incurred under the two collective agreements.



Aitken J.

Released: February 14, 2012

CITATION: Ontario Power Generation Inc. v. Ontario (Energy Board), 2012 ONSC 729
DIVISIONAL COURT FILE NOS.: 184/11, 180/11, 194/11
DATE: 2012/02/14

ONTARIO

SUPERIOR COURT OF JUSTICE

DIVISIONAL COURT

BETWEEN:

ONTARIO POWER GENERATION INC.

Appellant

- and -

ONTARIO ENERGY BOARD

Respondent

AND BETWEEN:

**POWER WORKERS' UNION, CANADIAN UNION OF
PUBLIC EMPLOYEES, LOCAL 1000**

Appellant

- and -

**ONTARIO ENERGY BOARD and
ONTARIO POWER GENERATION INC.**

Respondents

AND BETWEEN:

SOCIETY OF ENERGY PROFESSIONALS

Appellant

- and -

**ONTARIO ENERGY BOARD and
ONTARIO POWER GENERATION INC.**

Respondents

REASONS FOR DECISION

**Hoy and Swinton JJ.
Aitken J. (Dissenting)**

Released: February 14, 2012

COURT OF APPEAL FOR ONTARIO

CITATION: Power Workers' Union (Canadian Union of Public Employees, Local 1000) v. Ontario (Energy Board), 2013 ONCA 359

DATE: 20130604

DOCKET: C55602, C55641 and C55633

Rosenberg, Goudge and Blair JJ.A.

BETWEEN

Power Workers' Union, Canadian Union of Public Employees, Local 1000

Appellants

and

The Ontario Energy Board, and Ontario Power Generation Inc.

Respondents

AND BETWEEN

Ontario Power Generation Inc.

Appellant

and

Ontario Energy Board

Respondent

AND BETWEEN

Society of Energy Professionals

Appellant

and

The Ontario Energy Board and Ontario Power Generation Inc.

Respondents

Richard Stephenson and Emily Lawrence, for the appellant Power Workers' Union

John B. Laskin and Crawford Smith, for the appellant Ontario Power Generation

Paul Cavalluzzo, for the appellant Society of Energy Professionals

Mark Rubenstein, for the intervenor Ontario Education Services Corporation

Robert B. Warren, for the intervenor Consumers Council of Canada

Glen Zacher and Patrick Duffy, for the respondent Ontario Energy Board

Heard: January 29, 2013

On appeal from the order of the Divisional Court (Justice Catherine D. Aitken, Justice Katherine E. Swinton and Justice Alexandra Hoy), dated February 14, 2012.

By the Court:

Introduction

[1] This is an appeal from the order of the Divisional Court dismissing the appeal from a decision of the respondent Ontario Energy Board (the OEB) in which the OEB reduced by \$145,000,000 the revenue requirements sought by the appellant Ontario Power Generation Inc. (OPG) to cover its nuclear compensation costs for 2011 and 2012.

[2] The sole issue is whether the OEB's decision was reasonable or not. The majority of the Divisional Court found that it was.

[3] In dissent, Aitken J. found that it was not. For the reasons that follow, we agree with her. We would therefore allow the appeal.

Background

[4] OPG is Ontario's largest electricity generator. Its three nuclear generating stations comprise two-thirds of its generation capacity. The remainder comes from six hydro-electric stations.

[5] OPG employs approximately 10,000 people in its regulated business, about 95 percent of whom are associated with its nuclear generation business.

[6] Some 90 percent of OPG's regulated workplace is unionized. The appellant Power Workers' Union (the PWU) represents approximately two-thirds of the unionized staff. The appellant Society of Energy Professionals (the Society) represents the remainder of its unionized workforce.

[7] The *Ontario Labour Relations Act*, S.O. 1995, c. 1, sched. A, s. 17 compels OPG and its unions to bargain in good faith and make every reasonable effort to reach a collective agreement. Once reached, a collective agreement is legally binding on the parties to it for the duration of its term.

[8] OPG entered into a collective agreement with the PWU for the period April 1, 2009 to March 31, 2012. OPG also has a collective agreement with the Society for the period January 1, 2011 to December 31, 2011. These agreements prescribe the compensation rates for each staff position held by its represented employees. They also provide strict terms regulating the staff levels at OPG's stations. Under these agreements OPG is not free to reduce compensation rates unilaterally. Nor can it reduce staffing levels unilaterally, as it wishes. For example, the PWU collective agreement provides that no employee will be involuntarily laid off during the term of the collective agreement.

[9] Independent of the collective agreements, the Canadian Nuclear Safety Commission has also imposed staffing requirements on OPG to ensure safe and reliable operation of its nuclear stations.

[10] On May 26, 2010, OPG filed an application seeking approval of the rates its customers must pay for its electricity. The rates sought provide the revenue required by OPG to cover its projected costs for operating and maintaining its assets, for making new investments, and for earning a fair rate on invested capital.

[11] The application was for the period from January 1, 2011 to December 31, 2012. The terms of the two collective agreements cover the same period, save for nine months, in the case of the PWU contract. The application was for a future period, in other words a “forward test period” in the language used by the OEB.

[12] In the application, OPG’s single largest projected cost related to the operation, maintenance and administration of its nuclear facilities. By far the biggest share of this was the compensation to OPG’s unionized staff in its nuclear operations. That compensation is a product of both compensation rates and staffing levels.

[13] OPG’s application was filed under s. 78.1 of the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, sched. B (“the Act”). It empowers the OEB to fix the rates that OPG is entitled to charge its customers. Section 78.1(5) requires that those rates be “just and reasonable”. In such an application, s. 78.1(6) places the burden of proof on the applicant. As long ago as 1929, the Supreme Court of Canada established that just and unreasonable rates are “rates which, under the circumstances, would be fair to the consumer on the one hand, and which, on the other hand, would secure to the company a fair return for the capital invested”. See *Northwestern Utilities Ltd. v. Edmonton (City)*, [1929] S.C.R. 186 at pp. 192-3.

[14] The OEB heard OPG’s application over 16 days in the fall of 2010. It issued its decision on March 10, 2011.

[15] At pp. 18 and 19 of that decision, the OEB described two approaches it uses to determining rates that are just and reasonable. In the case of forecast costs that can be managed by the applicant going forward, the OEB can and does have regard to a wide variety of considerations including current economic conditions, analyses of economic trends and benchmarking data comparing other entities.

[16] On the other hand, when committed costs are at issue, that is costs that cannot be

reduced by the applicant in the test period, the OEB undertakes a prudence review. In *Enbridge Gas Distribution Inc. v. Ontario (Energy Board)* (2006), 210 O.A.C. 4 (C.A.), leave to appeal to S.C.C. refused, [2006] S.C.C.A. No. 208, this court accepted that approach and outlined what it entails at p. 5:

The Board agrees that a review of prudence involves the following:

- Decisions made by the utility's management should generally be presumed to be prudent unless challenged on reasonable grounds.
- To be prudent, a decision must have been reasonable under the circumstances that were known or ought to have been known to the utility at the time the decision was made.
- Hindsight should not be used in determining prudence, although consideration of the outcome of the decision may legitimately be used to overcome the presumption of prudence.
- Prudence must be determined in a retrospective factual inquiry, in that the evidence must be concerned with the time the decision was made and must be based on facts about the elements that could or did enter into the decision at the time.

[17] The OEB summarized these two approaches at p. 19 of its decision in this case:

The benefit of a forward test period is that the company has the benefit of the Board's decision in advance regarding the recovery of forecast costs. To the extent costs are disallowed, for example, a forward test period provides the company with the opportunity to adjust its plans accordingly. In other words, there is not necessarily any cost borne by shareholders (unless the company decided to continue to spend at the higher level in any event). Somewhat different considerations will come into play when undertaking an after-the-fact prudence review. In the case of an after-the-fact prudence review, if the Board disallows a cost, it is necessarily borne by the shareholder. There is no opportunity for the company to take action to reduce the cost at that point. For this reason, the Board concludes there is a difference between the two types of examination, with the after-the-fact review being a prudence

review conducted in the manner which includes a presumption of prudence.

[18] In the end, the OEB reduced by \$145,000,000 the nuclear compensation costs applied for by OPG: \$55,000,000 for the 2011 year, and a further \$90,000,000 for the 2012 year. The OEB did so because it concluded that OPG's compensation rates and its staffing levels were both too high.

[19] In reaching this conclusion, the OEB relied on information, including staffing and compensation comparison reports, that was not in existence at the time OPG entered into the collective agreements with the PWU and the Society.

[20] The OEB decided that OPG should manage its projected nuclear compensation costs downward over the two years by this total of \$145,000,000. OPG should achieve this reduction by reducing the compensation rates it pays to its unionized staff positions sufficiently to move these costs from the 75th to the 50th percentile in the benchmarking study of comparator employees, and by reducing the number of its staff positions.

[21] The OEB treated both compensation rates and staffing levels as forecast costs that OPG could manage downward. Neither was treated as committed costs. Nowhere did the OEB engage in a prudence review. It did not inquire into whether OPG's decision to enter the collective agreements was prudent based on the information that was known or ought to have been known at the time.

[22] The majority of the Divisional Court found that both the OEB's use of hindsight in determining the reasonableness of OPG's nuclear compensation costs as well as its ultimate decision to require a reduction of \$145,000,000 were reasonable, and should therefore not be disturbed on appeal. The majority agreed with the OEB that OPG could manage these costs downward within the framework of the collective agreements. The majority of the Divisional Court concluded that a prudence review was not required, would not permit the OEB to fulfill its statutory objective of promoting cost effectiveness

in the generation of electricity, and would not allow the OEB to act as a market proxy.

[23] The dissent, on the other hand, concluded that the collective agreements imposed compensation costs on OPG that are committed costs. Rates proposed to recover these costs should therefore be subject to a prudence review to determine whether they are just and reasonable. The OEB did not undertake such an analysis, but assessed the reasonableness of those costs using information that came into existence after the collective agreements were made. The dissent found the OEB's approach to contravene both the principles of the prudence review and the decision of this court in *Enbridge*.

Analysis

[24] As in the Divisional Court, the parties all take the position that the appropriate standard of review is one of reasonableness. We agree.

[25] The issue, therefore, is simply whether the OEB's decision of March 20, 2011, including its reasoning and analysis, was reasonable.

[26] The appellants say that it was not. They all argue that the OEB impermissibly used hindsight in relying on current information that was not available when the collective agreements were made, and in not conducting a prudence review of the nuclear compensation costs proposed by OPG,. The appellants argue that the compensation costs applied for are committed costs because of the collective agreements and that the OEB unreasonably evaluated these costs without a prudence review.

[27] The OEB's position, supported by the two intervenors, is that a prudence review was not needed because such a review does not apply to forecast compensation costs, and in any event is simply a regulatory tool developed for past capital expenditures. The OEB says that these compensation costs can be managed by OPG regardless of the

collective agreements. It argues that it was entitled to rely on current information in finding these compensation costs excessive and that its decision that these costs must be reduced by \$145,000,000 over the two years was reasonable.

[28] In resolving the issue in appeal, it is important to reiterate the difference between committed costs and forecast costs, a difference well-known in the regulation of utilities such as OPG and well-described in the decision of the OEB in this very case in the passage quoted above.

[29] When an application is made by a utility for the approval of rates for a timeframe to cover the costs in that time frame, its committed costs are those that it is committed to pay in that time frame. Those costs cannot be managed or reduced by the utility in that time frame, usually because of contractual obligations. When, as in this case, the timeframe of the application stretches into the future, costs that have been contractually incurred to be paid over the timeframe are nonetheless committed even though they have not yet been paid.

[30] The OEB's assessment of the reasonableness of committed costs is by way of a prudence review. The OEB's jurisprudence says as much. Moreover, this approach was sanctioned by this court in *Enbridge*, at para. 8.

[31] A prudence review of committed costs is not confined to capital costs or to costs that have been paid at the date of the application. In *Enbridge*, no one contested that a prudence review was warranted even though the case involved operating costs rather than capital costs, as well as costs that had not yet been paid as of the date of the application.

[32] Moreover, the rationale behind the prudence review is inconsistent with confining the approach to a certain subset of committed costs. All committed costs must be paid during the time frame under review. The regulator is required to maintain a balance of

fairness between the utility and the consumer. It would upset that balance to evaluate the reasonableness of these costs with the benefit of hindsight using current information that had not been available to the utility when it made the commitment to pay them,

[33] Forecast costs, on the other hand, are costs that the utility can alter by managing them during the timeframe under consideration. The regulator is free to assess the reasonableness of these costs using current information. This approach is sensible because the utility may act on that same information if it chooses to alter these costs during the timeframe under consideration.

[34] In this case, the OEB found that OPG's nuclear compensation costs for 2011 and 2012 were forecast costs and, because of current information, must be reduced by \$145,000,000 through a reduction in the compensation rates for unionized positions and a reduction in the number of staff positions over these two years. The OEB did so without conducting a prudence review of these costs.

[35] In our view, the compensation costs at issue before the OEB were committed costs. Compensation rates for unionized staff positions are, save for several months for the PWU, fixed for 2011 and 2012 by OPG's collective agreements. OPG is legally bound to pay them. It could not reduce the rates, or compel a re-opening of the agreements. OPG is also constrained by safety requirements. Equally, the number of staff positions is strictly regulated by the collective agreements. OPG could not unilaterally reduce that number, nor could it compel unionized staff to retire.

[36] We would conclude, therefore, that the OEB acted unreasonably in two respects. First, the OEB unreasonably assessed the reasonableness of these committed costs using the hindsight of current information unavailable when the collective agreements were made. Second, the OEB unreasonably failed to conduct a prudence review of these costs. Its resulting decision is therefore also unreasonable.

[37] We say this for two reasons. First, the Board's approach to these committed costs is contrary to the approach required by its own jurisprudence and accepted by this court. Second, it is unreasonable to require that OPG manage costs that, by law, it cannot manage.

[38] Our conclusion does not mean that the OEB is powerless to review the compensation rates for OPG's unionized staff positions or the number of those positions. In a prudence review, the evidence may show that the presumption of prudently incurred costs should be set aside, and that the committed compensation rates and staffing levels were not reasonable; however, the OEB cannot resort to hindsight, and must consider what was known or ought to have been known at the time. A prudence review allows for such an outcome, and permits the OEB both to fulfill its statutory mandate and to serve as a market proxy, while maintaining a fair balance between OPG and its customers.

Disposition

[39] As a result, we conclude that the OEB acted unreasonably. The appeal must be allowed and the OEB's decision set aside. OPG's application is remitted to the OEB to be heard in accordance with the principles in these reasons.

[40] The parties have not sought costs. None are ordered.

Released: June 4, 2013 ("S.T.G.")

"M. Rosenberg J.A."
"S.T. Goudge J.A."
"R.A. Blair J.A."

Regulation - LGIC

Proposed Amendment to O. Reg. 53/05 (Payments under Section 78.1 of the Act), made under the Ontario Energy Board Act, 1998

Ministry: Ministry of Energy

**Regulation
Number(s):** 53/05

Bill or Act: Ontario Energy Board Act, 1998

**Summary of
Proposal:** Section 78.1 of the Ontario Energy Board Act, 1998 (OEBA) requires the IESO to make payments to any generator in the province that is prescribed by regulation. In 2005, the Government prescribed OPG's large baseload hydroelectric and Darlington and Pickering nuclear assets under Ontario Regulation 53/05, made under s.78.1 of the OEBA.

OPG owns and operates 59 hydroelectric stations that are currently not regulated by the OEB. Eleven of these stations are under contract with the Ontario Power Authority. The Ministry of Energy proposes amending Ontario Regulation 53/05 in order to prescribe OPG's remaining 48 hydroelectric generation facilities that are unregulated and not under contract. This would subject these facilities to economic regulation by the OEB. The regulatory process to establish and update rates for these assets would be determined by the OEB according to its processes and mandate, subject to Ontario Regulation 53/05.

OPG's unregulated, non-contracted hydroelectric facilities represent the last significant generators in Ontario that receive payment for their output based entirely on HOEP. HOEP is the wholesale market price for electricity in Ontario, and is designed to reflect the marginal cost of electricity based on variable costs of the price-setting generator. Other generators receive payments in addition to HOEP through power purchase contracts or regulation by the OEB.

Prescribing OPG's unregulated, non-contracted hydroelectric assets would improve OPG's ability to properly plan for and maintain these important hydroelectric assets. These facilities are critical to the operation of Ontario's electricity market, as they represent about 3,000 megawatts of reliable, clean generation that are able to respond to changing load demands in the province.

The proposed amendment would improve regulatory efficiency by providing the OEB with the authority to regulate nearly all of OPG's assets. This new process would leverage the OEB's existing, open and transparent rate setting process that it uses to establish rates for OPG's currently prescribed hydroelectric and nuclear assets. Providing for the amendments now makes sense since the OEB is in the midst of updating its processes for regulating OPG's existing regulated assets.

**Further
Information:**  Ontario Power Generation's Hydroelectric Assets to Become Regulated by Ontario Regulation 53/05 (Download Adobe Reader) (Refer to page 3 of this document)
 Ontario Energy Board
 Ontario Energy Board Act, 1998
 Ontario Regulation 53/05

**Proposal
Number:** 13-ENE005

Posting Date: September 13, 2013

Comments Due Date: October 28, 2013

Contact Scott Nelms
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Regulatory Affairs and Strategic Policy
Ministry of Energy
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Toronto Ontario
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**Ontario Power Generation's Hydroelectric Assets to Become Regulated by Ontario
Regulation 53/05**

Arnprior	Big Chute
Barrett Chute	Big Eddy
Calabogie	Bingham Chute
Mountain Chute	Coniston
Stewartville	Crystal Falls
Chats Falls	Elliot Chute
Chenaux	Eugenia Falls
Des Joachims	Frankford
Otto Holden	Hagues Reach
Abitibi Canyon	Hanna Chute
Otter Rapids	High Falls
Lower Notch	Lakefield
Matabitchuan	McVittie
Indian Chute	Merrickville
Aguasabon	Meyersberg
Alexander	Nipissing
Cameron Falls	Ragged Rapids
Caribou Falls	Ranney Falls
Kakabeka Falls	Seymour
Manitou Falls	Sidney
Pine Portage	Sills Island
Silver Falls	South Falls
Whitedog Falls	Stinson
Auburn	Trethewey Falls



ServiceOntario

e-Laws

ONTARIO REGULATION 312/13

made under the

ONTARIO ENERGY BOARD ACT, 1998

Made: November 27, 2013

Filed: November 29, 2013

Published on e-Laws: November 29, 2013

Printed in *The Ontario Gazette*: December 14, 2013

Amending O. Reg. 53/05

(PAYMENTS UNDER SECTION 78.1 OF THE ACT)

1. Section 0.1 of Ontario Regulation 53/05 is amended by adding the following subsection:

(2) For the purposes of this Regulation, the output of a generation facility shall be measured at the facility's delivery points, as determined in accordance with the market rules.

2. Section 2 of the Regulation is amended by adding the following paragraph:

6. As of July 1, 2014, the generation facilities of Ontario Power Generation Inc. that are set out in the Schedule.

3. Sections 4, 5.1 and 5.3 of the Regulation are revoked.

4. (1) Paragraph 7 of subsection 6 (2) of the Regulation is amended by striking out the portion before subparagraph i and substituting the following:

7. The Board shall ensure that the balance recorded in the deferral account established under subsection 5.2 (1) is 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 account, based on the following items, as reflected in the audited financial statements approved by the board of directors of Ontario Power Generation Inc.,

.....

(2) Paragraph 7.1 of subsection 6 (2) of the Regulation is amended by striking out the portion before subparagraph i and substituting the following:

7.1 The Board shall ensure the balance recorded in the variance account established under subsection 5.4 (1) is recovered on a straight line basis over a period not to exceed three years, to the extent the Board is satisfied that,

.....

(3) Subsection 6 (2) of the Regulation is amended by adding the following paragraph:

11. In making its first order under section 78.1 of the Act in respect of Ontario Power Generation Inc. that is effective on or after July 1, 2014, the following rules apply:
- i. The order shall provide for the payment of amounts with respect to output that is generated at a generation facility referred to in paragraph 6 of section 2 during the period from July 1, 2014 to the day before the effective date of the order.
 - ii. The Board shall accept the values for the assets and liabilities of the generation facilities referred to in paragraph 6 of section 2 as set out in Ontario Power Generation Inc.'s most recently audited financial statements that were approved by the board of directors before the making of that order. This includes values relating to the income tax effects of timing differences and the revenue requirement impact of accounting and tax policy decisions reflected in those financial statements.

5. The Regulation is amended by adding the following Schedule:

SCHEDULE

1. Abitibi Canyon.
2. Alexander.
3. Aquasabon.
4. Arnprior.
5. Auburn.
6. Barrett Chute.
7. Big Chute.
8. Big Eddy.
9. Bingham Chute.
10. Calabogie.
11. Cameron Falls.
12. Caribou Falls.
13. Chats Falls.
14. Chenaux.
15. Coniston.
16. Crystal Falls.
17. Des Joachims.
18. Elliott Chute.
19. Eugenia Falls.

20. Frankford.
21. Hagues Reach.
22. Hanna Chute.
23. High Falls.
24. Indian Chute.
25. Kakabeka Falls.
26. Lakefield.
27. Lower Notch.
28. Manitou Falls.
29. Matabitchuan.
30. McVittie.
31. Merrickville.
32. Meyersberg.
33. Mountain Chute.
34. Nipissing.
35. Otter Rapid.
36. Otto Holden.
37. Pine Portage.
38. Ragged Rapids.
39. Ranney Falls.
40. Seymour.
41. Sidney.
42. Sills Island.
43. Silver Falls.
44. South Falls.
45. Stewartville.
46. Stinson.
47. Trethewey Falls.
48. Whitedog Falls.

Commencement

6. This Regulation comes into force on the later of July 1, 2014 and the day it is filed.

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AMPCO Interrogatory #002

Ref: Exhibit A1, Tab 6, Schedule 1, Attachment 3 Proposed Amendment to O. Reg. 53/05

Issue Number: 1.0

Issue: General

Interrogatory

- a) Please provide the status of the proposed amendment to O. Reg. 53/05.
- b) Please discuss OPG's stakeholder consultations regarding the proposed amendments.

Response

a) O. Reg. 53/05 was amended by O. Reg. 312/13 on November 29, 2013 and published in the Ontario Gazette on December 14, 2013. The finalized version of O. Reg. 53/05 has been included as Attachment 1 to this response.

b) The proposed amendments to O. Reg. 53/05 were posted for public comment by the Government on the Regulatory Registry from September 13, 2013 to October 28, 2013 (see Ex. A1-6-1, Attachment 3). OPG did not conduct any stakeholder consultations concerning the proposed amendments.

Ontario Energy Board Act, 1998
Loi de 1998 sur la Commission de l'énergie de l'Ontario

ONTARIO REGULATION 53/05
PAYMENTS UNDER SECTION 78.1 OF THE ACT

Consolidation Period: From November 29, 2013 to the e-Laws currency date.

Last amendment: O. Reg. 312/13.

This Regulation is made in English only.

Definition

0.1 In this Regulation,

“approved reference plan” means a reference plan, as defined in the Ontario Nuclear Funds Agreement, that has been approved by Her Majesty the Queen in right of Ontario in accordance with that agreement;

“nuclear decommissioning liability” means the liability of Ontario Power Generation Inc. for decommissioning its nuclear generation facilities and the management of its nuclear waste and used fuel;

“Ontario Nuclear Funds Agreement” means the agreement entered into as of April 1, 1999 by Her Majesty the Queen in right of Ontario, Ontario Power Generation Inc. and certain subsidiaries of Ontario Power Generation Inc., including any amendments to the agreement. O. Reg. 23/07, s. 1.

Note: On July 1, 2014, section 0.1 is amended by adding the following subsection: (See: O. Reg. 312/13, ss. 1, 6)

(2) For the purposes of this Regulation, the output of a generation facility shall be measured at the facility's delivery points, as determined in accordance with the market rules. O. Reg. 312/13, s. 1.

Prescribed generator

1. Ontario Power Generation Inc. is prescribed as a generator for the purposes of section 78.1 of the Act. O. Reg. 53/05, s. 1.

Prescribed generation facilities

2. The following generation facilities of Ontario Power Generation Inc. are prescribed for the purposes of section 78.1 of the Act:

1. The following hydroelectric generating stations located in The Regional Municipality of Niagara:

i. Sir Adam Beck I.

ii. Sir Adam Beck II.

iii. Sir Adam Beck Pump Generating Station.

iv. De Cew Falls I.

v. De Cew Falls II.

2. The R. H. Saunders hydroelectric generating station on the St. Lawrence River.

3. Pickering A Nuclear Generating Station.

4. Pickering B Nuclear Generating Station.

5. Darlington Nuclear Generating Station. O. Reg. 53/05, s. 2; O. Reg. 23/07, s. 2.

Note: On July 1, 2014, section 2 is amended by adding the following paragraph: (See: O. Reg. 312/13, ss. 2, 6)

6. As of July 1, 2014, the generation facilities of Ontario Power Generation Inc. that are set out in the Schedule.

Prescribed date for s. 78.1 (2) of the Act

3. April 1, 2008 is prescribed for the purposes of subsection 78.1 (2) of the Act. O. Reg. 53/05, s. 3.

Payment amounts under s. 78.1 (2) (a) of the Act

4. (1) For the purpose of clause 78.1 (2) (a) of the Act, the amount of a payment that the IESO is required to make with respect to a unit at a generation facility prescribed under section 2 is,

- (a) for the hydroelectric generation facilities prescribed in paragraphs 1 and 2 of section 2, \$33.00 per megawatt hour with respect to output that is generated during the period from April 1, 2005 to the later of,
 - (i) March 31, 2008, and
 - (ii) the day before the effective date of the Board's first order in respect of Ontario Power Generation Inc.; and
- (b) for the nuclear generation facilities prescribed in paragraphs 3, 4 and 5 of section 2, \$49.50 per megawatt hour with respect to output that is generated during the period from April 1, 2005 to the later of,
 - (i) March 31, 2008, and
 - (ii) the day before the effective date of the Board's first order in respect of Ontario Power Generation Inc. O. Reg. 53/05, s. 4 (1).

(2) Despite subsection (1), for the purpose of clause 78.1 (2) (a) of the Act, if the total combined output of the hydroelectric generation facilities prescribed in paragraphs 1 and 2 of section 2 exceeds 1,900 megawatt hours in any hour, the total amount of the payment that the IESO is required to make with respect to the units at those generation facilities is, for that hour, the sum of the following amounts:

- 1. The total amount determined for those facilities under clause (1) (a), for the first 1,900 megawatt hours of output.
- 2. The product obtained by multiplying the market price determined under the market rules by the number of megawatt hours of output in excess of 1,900 megawatt hours. O. Reg. 53/05, s. 4 (2).

(2.1) The total amount of the payment under subsection (2) shall be allocated to the hydroelectric generation facilities prescribed under paragraphs 1 and 2 of section 2 on a proportionate basis equal to each facility's percentage share of the total combined output in that hour for those facilities. O. Reg. 269/05, s. 1.

(2.2) Subsection (2.1) applies in respect of amounts payable on and after April 1, 2005. O. Reg. 269/05, s. 1.

(3) For the purpose of this section, the output of a generation facility shall be measured at the facility's delivery points, as determined in accordance with the market rules. O. Reg. 53/05, s. 4 (3).

Note: On July 1, 2014, section 4 is revoked. (See: O. Reg. 312/13, ss. 3, 6)

Deferral and variance accounts

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. O. Reg. 23/07, s. 3.

(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. O. Reg. 23/07, s. 3.

(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. O. Reg. 23/07, s. 3.

(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. O. Reg. 23/07, s. 3.

Nuclear liability deferral account, transition

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. O. Reg. 23/07, s. 3.

(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. O. Reg. 23/07, s. 3.

Note: On July 1, 2014, section 5.1 is revoked. (See: O. Reg. 312/13, ss. 3, 6)

Nuclear liability deferral account

5.2 (1) Ontario Power Generation Inc. shall establish a deferral account in connection with section 78.1 of the Act that records, on and after the effective date of the Board's first order under 78.1 of the Act, the revenue requirement impact of changes in its total nuclear decommissioning liability between,

- (a) the liability arising from the approved reference plan incorporated into the Board's most recent order under section 78.1 of the Act; and
- (b) the liability arising from the current approved reference plan. O. Reg. 23/07, s. 3.

(2) Ontario Power Generation Inc. shall record interest on the balance of the account as the Board may direct. O. Reg. 23/07, s. 3.

Nuclear development deferral account, transition

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. O. Reg. 27/08, s. 1.

Note: On July 1, 2014, section 5.3 is revoked. (See: O. Reg. 312/13, ss. 3, 6)

Nuclear development variance account

5.4 (1) Ontario Power Generation Inc. shall establish a variance account in connection with section 78.1 of the Act that records, on and after the effective date of the Board's first order under section 78.1 of the Act, differences between actual non-capital costs incurred and firm financial commitments made and the amount included in payments made under that section for planning and preparation for the development of proposed new nuclear generation facilities. O. Reg. 27/08, s. 1.

(2) Ontario Power Generation Inc. shall record interest on the balance of the account as the Board may direct. O. Reg. 27/08, s. 1.

Rules governing determination of payment amounts by Board

6. (1) 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. O. Reg. 53/05, s. 6 (1).

(2) The following rules apply to the making of an order by the Board that determines payment amounts for the purpose of section 78.1 of the Act:

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.

2. In setting payment amounts for the assets prescribed under section 2, the Board shall not adopt any methodologies, assumptions or calculations that are based upon the contracting for all or any portion of the output of those assets.
3. The Board shall ensure that Ontario Power Generation Inc. recovers the balance 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.
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.
- 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.
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. 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,
 - 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.
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.,

Note: On July 1, 2014, paragraph 7 is amended by striking out the portion before subparagraph i and substituting the following: (Sec: O. Reg. 312/13, ss. 4 (1), 6)

7. The Board shall ensure that the balance recorded in the deferral account established under subsection 5.2 (1) is 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 account, 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.
- 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,

Note: On July 1, 2014, paragraph 7.1 is amended by striking out the portion before subparagraph i and substituting the following: (See: O. Reg. 312/13, ss. 4 (2), 6)

- 7.1 The Board shall ensure the balance recorded in the variance account established under subsection 5.4 (1) is 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.
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.
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. O. Reg. 23/07, s. 4; O. Reg. 27/08, s. 2.

Note: On July 1, 2014, subsection (2) is amended by adding the following paragraph: (See: O. Reg. 312/13, ss. 4 (3), 6)

11. In making its first order under section 78.1 of the Act in respect of Ontario Power Generation Inc. that is effective on or after July 1, 2014, the following rules apply:
 - i. The order shall provide for the payment of amounts with respect to output that is generated at a generation facility referred to in paragraph 6 of section 2 during the period from July 1, 2014 to the day before the effective date of the order.
 - ii. The Board shall accept the values for the assets and liabilities of the generation facilities referred to in paragraph 6 of section 2 as set out in Ontario Power Generation Inc.'s most recently audited financial statements that were approved by the board of directors before the making of that order. This includes values relating to the income tax effects of timing differences and the revenue requirement impact of accounting and tax policy decisions reflected in those financial statements.

7. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 53/05, s. 7.

Note: On July 1, 2014, the Regulation is amended by adding the following Schedule: (See: O. Reg. 312/13, ss. 5, 6)

SCHEDULE

1. Abitibi Canyon.
2. Alexander.
3. Aquasabon.
4. Arnprior.
5. Auburn.
6. Barrett Chute.
7. Big Chute.
8. Big Eddy.
9. Bingham Chute.
10. Calabogie.
11. Cameron Falls.
12. Caribou Falls.
13. Chats Falls.
14. Chenaux.
15. Coniston.
16. Crystal Falls.
17. Des Joachims.
18. Elliott Chute.

19. Eugenia Falls.
20. Frankford.
21. Hagues Reach.
22. Hanna Chute.
23. High Falls.
24. Indian Chute.
25. Kakabeka Falls.
26. Lakefield.
27. Lower Notch.
28. Manitou Falls.
29. Matabitchuan.
30. McVittie.
31. Merrickville.
32. Meyersberg.
33. Mountain Chute.
34. Nipissing.
35. Otter Rapid.
36. Otto Holden.
37. Pine Portage.
38. Ragged Rapids.
39. Ranney Falls.
40. Seymour.
41. Sidney.
42. Sills Island.
43. Silver Falls.
44. South Falls.
45. Stewartville.
46. Stinson.
47. Trethewey Falls.
48. Whitedog Falls.

O. Reg. 312/13, s. 5.

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Lower Electricity Costs for Residential Users

April 23, 2014 1:15 p.m.

Ontario intends to remove the Debt Retirement Charge (DRC) from residential users' electricity bills after Dec. 31, 2015.

The DRC, which is calculated based on electricity consumption, has appeared on electricity bills since May 1, 2002 to help pay down the debt and liabilities of the old Ontario Hydro after it was broken up into smaller entities.

Ontario Electricity Support Program

The electricity bill for a typical household consuming 800 kilowatt hours of electricity per month represents on average eight per cent of the total income of a family with an annual income of \$20,000, while amounting to less than two per cent on average of the total income of a family with an annual income of \$100,000 or more. The Ontario government is working with the Ontario Energy Board (OEB) to develop the Ontario Electricity Support Program. The program would support efforts to reduce poverty in Ontario by providing ongoing assistance directly on the bills of eligible electricity consumers. After Dec. 31, 2015, eligible low-income Ontarians could expect to receive similar relief as currently provided by the Ontario Clean Energy Benefit (OCEB) directly on their electricity bills, when the OCEB is set to expire.

Options for the program's design, including administration, delivery and eligibility criteria, will be developed by the Ontario Energy Board in collaboration with utility companies and social service delivery agents, as well as consultation and engagement with the public. The Ontario Energy Board will be required to report-back to the province with a range of options by December 2014. The government will review these options and decide on the final program design.

Stranded Debt

When the former Ontario Hydro was restructured on April 1, 1999, the Ontario Electricity Financial Corporation (OEFC) was established to manage and retire the former Ontario Hydro's debt and certain other liabilities, which totalled \$38.1 billion. The debt was accumulated by building Ontario's electricity generation and transmission infrastructure.

A portion of the total could be supported by the value of the assets of Ontario Hydro successor companies and other assets; however, OEFC was left with \$19.4 billion in unfunded liabilities (often referred to as stranded debt).

Paying Down Stranded Debt

OEFC receives dedicated revenues to service and retire the stranded debt from a number of sources, including:

- Payments in lieu of taxes (PILs) from Ontario Power Generation (OPG), Hydro One and municipal electricity utilities
- Electricity Sector Dedicated Income from the province in respect of the net incomes of OPG and Hydro One
- DRC paid by electricity users.

As confirmed in the 2011 Auditor General's Annual Report, the DRC is used by OEFC exclusively to meet its mandate, which includes servicing and retiring its debt and liabilities.

The Auditor General audits OEFC's annual financial statements and has provided a clean opinion every year since the initial 1999-2000 financial statements. This includes OEFC's interest expense, which is currently about \$1.6 billion per year and has totalled about \$27.7 billion between April 1, 1999 and March 31, 2013.

The electricity sector reforms in the Electricity Restructuring Act have put the stranded debt recovery plan back on track, leading to nine consecutive years of stranded debt reduction, down to an estimated \$11.3 billion as at March 31, 2013.

Debt Retirement Charge and Residual Stranded Debt

The DRC came into effect on May 1, 2002, when Ontario's electricity market opened to competition. Under the Electricity Act, the DRC will only remain in place as long as there is residual stranded debt, which is the difference between the remaining stranded debt and the estimated value of OEFC's future PILs and certain other dedicated revenues.

The initial estimated residual stranded debt, as at April 1, 1999, was \$7.8 billion.

The Minister of Finance reports annually on the residual stranded debt. In accordance with a regulation made under the Electricity Act, residual stranded debt has been determined to be \$3.9 billion as at March 31, 2013. This is a decrease of \$8 billion from an estimated peak of residual stranded debt of \$11.9 billion as at March 31, 2004.

Estimated End of the Debt Retirement Charge

The 2013 Ontario Economic Outlook and Fiscal Review provided an estimate for when the residual stranded debt would likely be retired of between 2015 and 2018.

The estimated retirement of the residual stranded debt and the end of the DRC has been provided as a range to reflect the uncertainty in forecasting future dedicated revenues to the OEFC. It depends on the financial performance of OPG, Hydro One and municipal electricity utilities, as well as other factors such as future tax rates and interest rates.

It is estimated that the DRC would end for all other electricity users by the end of 2018, in line with the estimates in the 2013 Ontario Economic Outlook and Fiscal Review.

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General Information

DRC Guide 101

Published: March 2005

Content last reviewed: January 2012

ISBN: 978-1-4435-7077-0 (PDF), 978-1-4435-7076-3 (HTML)

This guide provides an overview of the Debt Retirement Charge (DRC) program and explains:

- what is DRC
- who pays DRC
- DRC rates
- registration
- who collects DRC
- self assessment of DRC
- exemptions
- filing returns and remitting payments

What is DRC

DRC is a charge payable on electricity consumed in Ontario. Revenues collected from the DRC are used by the Ontario Electricity Financial Corporation for the purposes of carrying out its objectives which include managing debt, of the former Ontario Hydro, including the stranded debt.

DRC is paid by most electricity users and replaces a portion of debt servicing costs previously included as part of electricity bills prior to the restructuring of the former Ontario Hydro, but not separately identified DRC will end once the residual stranded debt of the former Ontario Hydro is defeased.

Who pays DRC

Most electricity users in Ontario will pay DRC on their electricity consumption. Exemption from the DRC is available to:

- Status Indians and Indian bands purchasing electricity consumed on a reserve;
- representatives of foreign states, and certain international organizations on their consumption of electricity

- transmitters and distributors of electricity lost or unaccounted for when transmitting or distributing electricity
- self-generating users eligible for a station service exemption or an annual exemption.

DRC Rates

The DRC is applied at a rate of 0.7 cents per kilowatt hour of electricity consumed in Ontario with the exception of the reduced rate areas listed below.

The reduced rates apply to all users who consume electricity in the reduced rate service areas, regardless of who supplies the electricity. Collectors are required to charge the correct DRC rate to each user depending on the location of the consumption.

Reduced rate areas are defined as the service areas of the local utilities listed below, as they existed on October 30, 1998. For items 18 and 19, the reduced rate applies only to the specific location mentioned. Any changes to the service areas of the utilities since this date have no impact on the consumers entitled to a reduced rate. For example, consumers in any area serviced on October 30, 1998 by the Hydro-Electric Commission of the City of Ottawa are entitled to a DRC rate of 0.69 cents per kilowatt hour. Consumers in other parts of the recently amalgamated City of Ottawa are not entitled to the reduced rate.

Reduced DRC Rate Table

	SERVICE AREA OF LOCAL UTILITY AS AT OCTOBER 30, 1998	DRC RATES (¢/kWh)
1	Cornwall Street Railway Light and Power Company Limited	0.00
2	Canadian Niagara Power Company Limited	0.00
3	Public Utilities Commission of the City of Sault Ste. Marie	0.20
4	Great Lakes Power Limited	0.20
5	Bracebridge Hydro-Electric Commission	0.46
6	Public Utilities Commission of the Corporation of the Town of Fort Frances	0.47
7	Orillia Water, Light and Power Commission	0.49
8	Hydro Electric Commission of the City of Pembroke	0.49
9	Granite Power Corporation	0.51
10	Public Utilities Commission of the Village of Eganville	0.60
11	Hydro Electric Commission of the Town of Renfrew	0.61
12	Public Utilities Commission of the Town of Parry Sound	0.65
13	Public Utilities Commission of the Town of Bancroft	0.66
14	Peterborough Utilities Commission	0.67
15	St. Catharines Hydro-Electric Commission	0.68
16	Elora Hydro Electric Commission	0.69
17	The Hydro-Electric Commission of the City of Ottawa	0.69
18	Town of Mississippi Mills Public Utilities Commission, only for the Ward of Almonte	0.42
19	Campbellford/Seymour Public Utilities Commission, only for the Town of Cambellford as it existed on December 31, 1997	0.49

Registration

Who is Required to Register

All distributors and retailers required to be licensed by the Ontario Energy Board (OEB) are required to register as DRC collectors before selling or supplying electricity. You may also be required to register if you:

- sell or supply electricity to a user; or

- consume or supply self-generated electricity.

Self-generating users who will self-assess DRC are also required to register. This includes generators whose main generation function is to generate electricity for sale and also consume self-generated electricity.

Who is Not Required to Register

If you consume only exempt self-generated electricity you are not required to register with the DRC program. However, you are required to retain records to prove that the self-generated electricity is exempt.

Exempt self-generated electricity is generated and consumed:

- on an emergency, occasional or temporary basis; or
- from a unit with a load capacity of 15 kilowatts or less; or
- within a vehicle or vessel used to transport goods or people; or
- generated in a net metered generation facility by a person who has entered into a net metering agreement with a distributor in respect of electricity generated by that net metered generation facility.

Self-generating users are not required to register if:

- they do not consume self-generated electricity in the facility where the electricity is generated, otherwise known as "behind the fence"
- a collector bills them for all electricity consumption including self-generated electricity, and
- they do not have an annual exemption.

How to Register

Registration packages are sent to everyone who has registered or applied for an OEB licence.

If you are not licensed by the OEB and think you should be registered with the DRC program please call 1 866 ONT-TAXS (1 866 668-8297) or e-mail DRCRLD@ontario.ca.

There is no fee to register with the DRC program.

Who Collects DRC

Distributors and Retailers

Distributors will collect DRC from all users they invoice under Standard Supply Service, distributor-consolidated billing, or split billing.

Retailers will collect DRC from all users to whom they sell or supply electricity under any other scenario, including retailer-consolidated billings.

Distributors and retailers will collect DRC on the kilowatt hours of electricity consumed by a user exclusive of line losses.

Collectors are not required to collect DRC if they receive an exemption certificate from a user or from an individual who is exempt from the charge.

Independent Electricity System Operator

The Independent Electricity System Operator (IESO) will collect DRC from every user who withdraws energy from the IESO controlled grid, as determined by the IESO's Market Rules.

The IESO will collect DRC from a retailer if the retailer withdrawing energy from the IESO controlled grid is an agent for a user who is a wholesale market participant.

The IESO is not required to collect DRC if the IESO receives an exemption certificate from a market participant or from an individual who is exempt from the charge.

Self-assessment of DRC

Collectors

Collectors who purchase or acquire electricity for resale exempt from DRC will self-assess and remit DRC on all electricity they consume exclusive of electricity lost or unaccounted for in transmission or distribution. Collectors will need to meter their loads to measure electricity that they consume for their own use.

Self-generating Users

Entities that generate electricity for their own use or for the use of others at no charge are referred to as self-generating users.

Self-generated electricity means electricity, other than exempt self-generated electricity, consumed by the person who generates it or by another person at the expense of the person who generates it.

Self-generating users will calculate and remit DRC on their consumption of self-generated electricity.

Self-generating users with an annual exemption will calculate DRC on all their consumption of self-generated electricity that exceeds their annual exemption threshold. In addition they may be required to self-assess DRC on purchases of electricity settled with the IESO.

Self-generating users will be required to meter their consumption of self-generated electricity.

Calculating DRC on Self-Generated Consumption

DRC on self-generated electricity consumption is calculated as:

- total electricity generated by the self-generating user; less
- electricity sold by the self-generating user; less
- exempt self-generated electricity generated and consumed.

Exemptions

Station Service Exemption

Generators whose main generation function is to generate electricity for sale to another user or to the spot market may be eligible for a Station Service Exemption from DRC. This exemption is limited to electricity which is generated and consumed "behind the fence". If you qualify for the station service exemption you cannot claim the annual exemption described below.

Annual Exemption for Self-generating Users

Self-generating users may be eligible for an annual exemption if they:

- owned or operated generating units or facilities on October 30, 1998; and
- consumed self-generated electricity from these units or facilities during the period January 1, 1989 to October 30, 1998; and
- do not qualify for the Station Service Exemption.

When you register with the DRC program, you will be asked to complete a schedule to determine your annual exemption.

Filing Returns and Remitting Payments

Filing DRC Returns

Distributors, retailers and self-generating users are required to file their return and remit DRC on or before the 18th day of the month following the end of a filing period. Most registrants will file monthly. However, based on the amount of DRC remitted, filing periods could also be quarterly, semi-annually or annually.

Distributors and retailers will report and remit all DRC collected during the filing period covered by a return. DRC is considered to be collected at the earliest of:

- the date of the collector's invoice;
- the day the collector issues an invoice;
- the day the collector would be expected to issue an invoice, if there is undue delay in issuing an invoice;
- the day the user is required to pay the amount owing to the collector; or
- the day the user pays an amount to the collector for the billing period.

One return will be issued to each registrant for each filing period. If your operations are decentralized you may request and be authorized to file separate returns and remittances.

Method of Payment

Returns and payments may be made at any ServiceOntario Centre or Ministry of Finance Tax Office. The Tax Offices accept returns and payments in the drop boxes provided.
<http://www.fin.gov.on.ca/en/guides/drc/101.html>

DRC payments may be made by cheque, money order or electronic funds transfer (contact the ministry to make arrangements), payable to the Ontario Electricity Financial Corporation (OEFEC) in Canadian funds.

There is a \$35 charge for a non-negotiable cheque.

More Information

Telephone

- 1 866 ONT-TAXS (1 866 668-8297)
- 1 800 263-7776 for teletypewriter (TTY)

Written Interpretation

To obtain a written interpretation on a specific situation not addressed in this publication, please send your request in writing to:

Ministry of Finance
Advisory Services and Program Policy Branch
33 King Street West
Oshawa ON L1H 8H5

Disclaimer and References

The information contained in this publication is provided only as a guideline and is not intended to replace the legislation.

Legislative References

Electricity Act, 1998 ; Part V.1

- Regulation 493/01 (Rates and Exemptions)
- Regulation 494/01 (Administration)
- Regulation 160/99 (Definitions and Exemptions)

Ontario Energy Board Act, 1998

- Regulation 541/05 (Net Metering)

To obtain the most current version of this document, visit ontario.ca/finance and enter 630 in the find page field at the bottom of the webpage or contact the ministry at 1 866 668-8297 (1 800 263-7776 for teletypewriter).

Chapter 4

Ministry of Finance

Section

4.04

Electricity Sector— Stranded Debt

Follow-up to VFM Section 3.04, *2011 Annual Report*

Background

In past Annual Reports, we examined the status of the electricity sector's stranded debt, defined as that portion of the total debt of the old Ontario Hydro that could not be serviced in a competitive market environment after restructuring of the electricity sector in 1999. We provided the last such update in our *2012 Annual Report*, along with information about the Debt Retirement Charge (DRC), a component of nearly every Ontario ratepayer's electricity bill.

The stranded debt came into being under the *Energy Competition Act, 1998*, which provided the legislative framework for a major restructuring of the electricity industry. This included the restructuring of the old Ontario Hydro into four main successor companies: Hydro One, Ontario Power Generation (OPG), the Independent Electricity System Operator (IESO) and the Ontario Electricity Financial Corporation (OEFC). OEFC was given the responsibility to manage the legacy debt of the old Ontario Hydro, along with certain other liabilities not transferred to Hydro One and OPG under the restructuring.

OEFC inherited \$38.1 billion in total debt and other liabilities from Ontario Hydro when the

electricity sector was restructured on April 1, 1999. Less than half of the \$38.1 billion was supported by the value of the assets of Hydro One, OPG and the IESO. The remaining \$20.9 billion not supported by the value of these assets was the initial stranded debt.

The government put in place a long-term plan to service and retire the \$20.9-billion stranded debt, which included dedicating revenue streams to OEFC to help pay down this debt:

- At the time of the restructuring, the estimated present value of future payments in lieu of taxes from the electricity-sector companies (OPG, Hydro One and the municipal electrical utilities), and of future cumulative annual combined profits of OPG and Hydro One in excess of \$520 million a year (the annual interest cost of the government's investment in the two companies) was estimated at \$13.1 billion.
- The remaining \$7.8 billion, called the residual stranded debt, was the estimated portion of the stranded debt that could not be supported by the expected dedicated revenue streams from the electricity companies. The *Electricity Act, 1998* (Act) authorized a new Debt Retirement Charge (DRC), which electricity ratepayers would pay until the residual stranded debt was retired.

The plan was intended to eliminate the stranded debt in a prudent manner while sharing the debt-repayment burden between electricity consumers and the electricity sector.

Collection of the DRC began on May 1, 2002, at a rate of 0.7 cents per kilowatt hour (kWh) of electricity, a level at which it remains today. Currently, the OEFC collects between \$940 million and \$950 million a year in DRC revenue, and had collected a total of about \$10.6 billion as of March 31, 2013.

Our *2011 Annual Report* focused on providing details about:

- how much DRC revenue the government had collected;
- the progress in eliminating the residual stranded debt; and
- when electricity ratepayers might expect to see the DRC fully eliminated.

Section 85 of the Act, entitled “The Residual Stranded Debt and the Debt Retirement Charge,” gave the government the authority to implement the DRC, and this same section specifies when it is to end. The key observations from our *2011 Annual Report* were based on our interpretations of the provisions of section 85, and on our assessment of whether these provisions had been complied with in both spirit and form. Specifically, section 85 requires that the Minister of Finance determine the residual stranded debt “from time to time,” and make these determinations public. When the Minister determines that the residual stranded debt has been retired, collection of the DRC must cease.

While the Act did not specify precisely how the determination of the residual stranded debt was to be done, it does allow the government, by regulation, to establish what is to be included in its calculation. We also observed that the term “from time to time” was not formally defined, and could be left solely up to the government of the day to determine. Our *2011 Annual Report* noted the

Minister had made no such public determination of the outstanding amount of the residual stranded debt since April 1, 1999. Our view was that section 85 conferred on ministers an obligation to provide a periodic update to ratepayers on the progress their payments were making to pay down the residual stranded debt. We concluded that a decade was long enough, and suggested the Minister should provide ratepayers with an update.

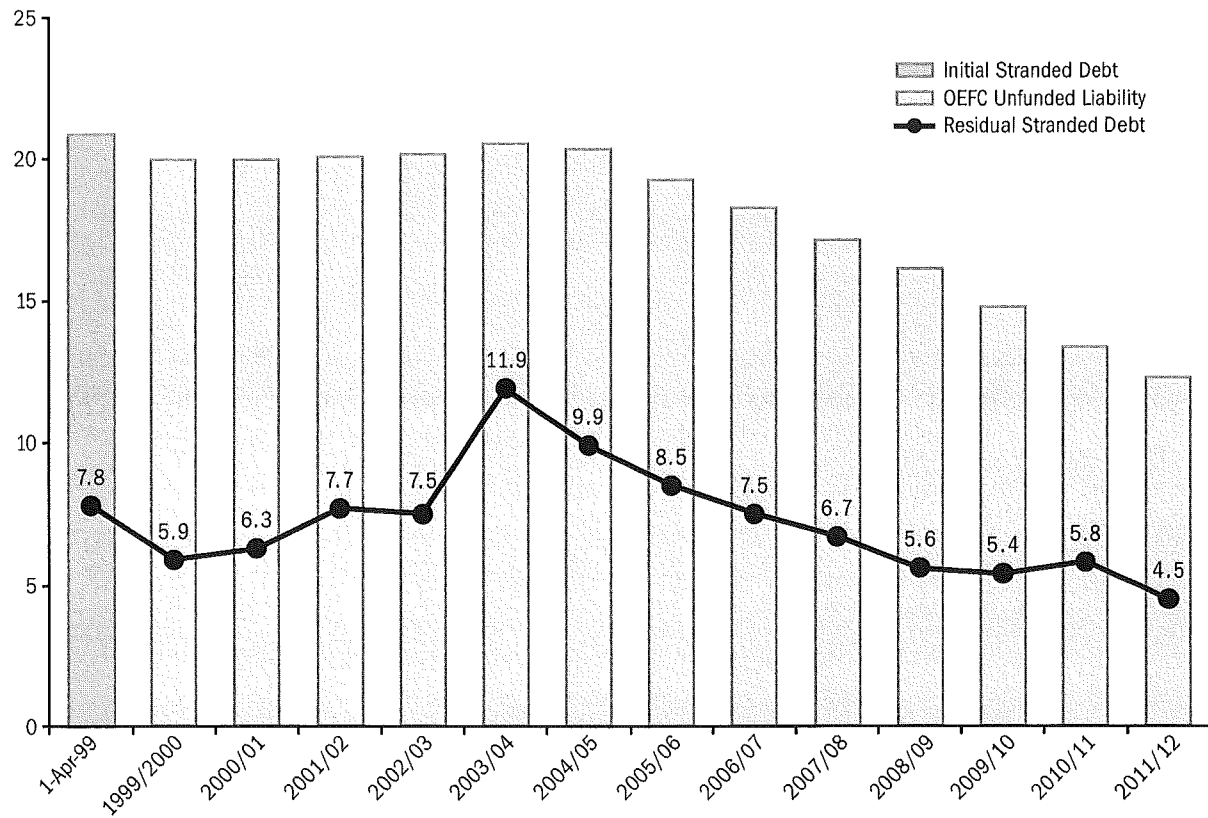
Status of Actions Taken on Recommendations

In response to these observations, the government introduced Regulation 89/12 under the Act on May 15, 2012, to provide transparency and meet reporting requirements on the outstanding amount of residual stranded debt. The new regulation formally establishes how the residual stranded debt is to be calculated, and requires annual reporting of the amount in *The Ontario Gazette*.

We were pleased to see this increased level of transparency was also reflected in the 2012 Ontario Economic Outlook and Fiscal Review and in the 2013 Ontario Budget; both indicated the Minister of Finance determined the residual stranded debt to be \$4.5 billion as at March 31, 2012, consistent with the estimate provided in the 2012 Budget. The 2013 Ontario Budget also contained a chart, reproduced here as Figure 1, reflecting annual residual stranded debt estimates back to April 1, 1999, and amounts going up to March 31, 2012. Under Ontario Regulation 89/12, the determination of residual stranded debt as at March 31, 2013, will be made by the Minister of Finance after the OEFC submits to the Minister its annual report, including the audited financial statements, and by no later than March 31, 2014.

Figure 1: Residual Stranded Debt and OEFC Unfunded Liability for Each Fiscal Year Since 1999 (\$ billion)

Source of data: 2013 Ontario Budget

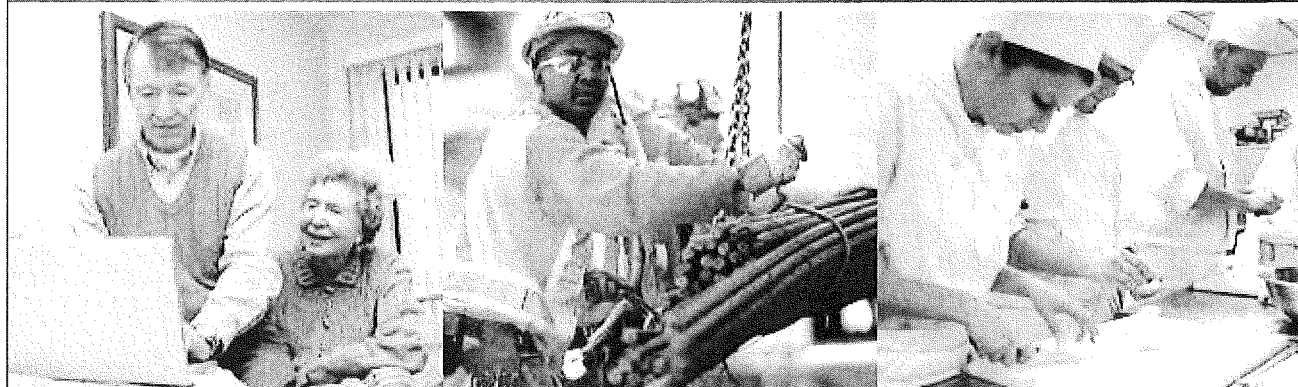




CREATING JOBS AND GROWING THE ECONOMY

2013

ONTARIO ECONOMIC OUTLOOK
AND FISCAL REVIEW



The Honourable **CHARLES SOUSA**
Minister of Finance

BACKGROUND PAPERS



CREATING JOBS AND GROWING THE ECONOMY

2013

**ONTARIO ECONOMIC OUTLOOK
AND FISCAL REVIEW**



The Honourable **CHARLES SOUSA**
Minister of Finance

BACKGROUND PAPERS

For general inquiries regarding the *2013 Ontario Economic Outlook and Fiscal Review, Background Papers*, please call:

Toll-free English & French inquiries:	1-800-337-7222
Teletypewriter (TTY):	1-800-263-7776

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Perspectives économiques et revue financière de l'Ontario de 2013,
Documents d'information

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Residual Stranded Debt Update

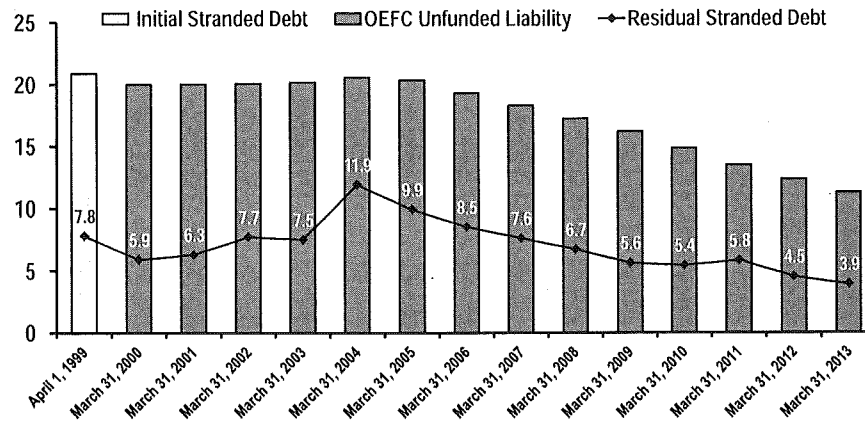
The 2013 annual financial statements of the Ontario Electricity Financial Corporation (OEFC) showed revenue over expense of \$1.0 billion, reducing the OEFC's unfunded liability (or "stranded debt of the electricity sector") from \$12.3 billion as at March 31, 2012, to \$11.3 billion as at March 31, 2013.

In accordance with Ontario Regulation 89/12, the Minister of Finance has determined the residual stranded debt to be \$3.9 billion as at March 31, 2013. This is a decrease of \$0.6 billion compared to residual stranded debt of \$4.5 billion as at March 31, 2012, and a decrease of \$8.0 billion from an estimated peak of residual stranded debt of \$11.9 billion as at March 31, 2004.

CHART 7.2

Residual Stranded Debt since April 1, 1999

(\$ Billions)



Note: Unfunded Liability amounts are from OEFC Annual Reports from 1999–00 to 2012, and the Annual Financial Statements for 2013.

Sources: Residual Stranded Debt value for April 1, 1999, as announced on April 1, 1999. Values for the period from March 31, 2000, to March 31, 2010, as estimated by the Ontario Ministry of Finance in the 2012 Budget and for March 31, 2011, to March 31, 2013, as determined by the Minister of Finance in accordance with a regulation made under the *Electricity Act, 1998*.

The residual stranded debt determination as at March 31, 2013, is based on a stranded debt amount of \$11.3 billion, reduced by the estimated present value of future dedicated revenues to OEFC of \$7.4 billion. This results in the calculated \$3.9 billion of residual stranded debt as at March 31, 2013.

The *Electricity Act, 1998*, provides for the Debt Retirement Charge (DRC) to be paid by consumers until the residual stranded debt is retired. The estimate for when the residual stranded debt will likely be retired is between 2015 and 2018. The estimated timing for residual stranded debt retirement and the end of the DRC is provided as a range to reflect the uncertainty in forecasting future OEFC results and dedicated revenues to OEFC, which depend on the financial performance of Ontario Power Generation, Hydro One and municipal electrical utilities, as well as other factors such as interest rates and electricity consumption.

Excerpt from Minister of Finance 2014 Ontario Budget

Removing the Debt Retirement Charge from Residential Bills

The government is proposing to remove the Debt Retirement Charge (DRC) cost from residential users' electricity bills. Removing the DRC cost for residential electricity users would save a typical residential user about \$70 per year.

The DRC is provided for under the *Electricity Act, 1998*, and has been charged since May 1, 2002, to help service and pay down the debt and other liabilities of the old Ontario Hydro, which are managed by the Ontario Electricity Financial Corporation (OEFC), until the residual stranded debt is retired.

The residual stranded debt has been reduced by an estimated \$8 billion since 2004, from an estimated peak of \$11.9 billion as at March 31, 2004, to \$3.9 billion as at March 31, 2013, as published in the *2013 Ontario Economic Outlook and Fiscal Review*.

In the absence of this initiative, current projections estimate that the residual stranded debt would be retired and the DRC would end in 2017–18. The estimated timing for residual stranded debt retirement along with the end of the DRC is subject to uncertainty in forecasting future dedicated revenues from the electricity sector. Revenues would depend on the financial performance of OPG, Hydro One and municipal electrical utilities, as well as other factors such as electricity consumption.

The government's proposal to eliminate the DRC for residential electricity users after December 31, 2015, would mean ending the DRC almost two years earlier for these users than currently estimated. The charge would remain on all other electricity users' bills until the residual stranded debt is retired — this is currently estimated to occur by the end of 2018, in line with the previous estimated range.

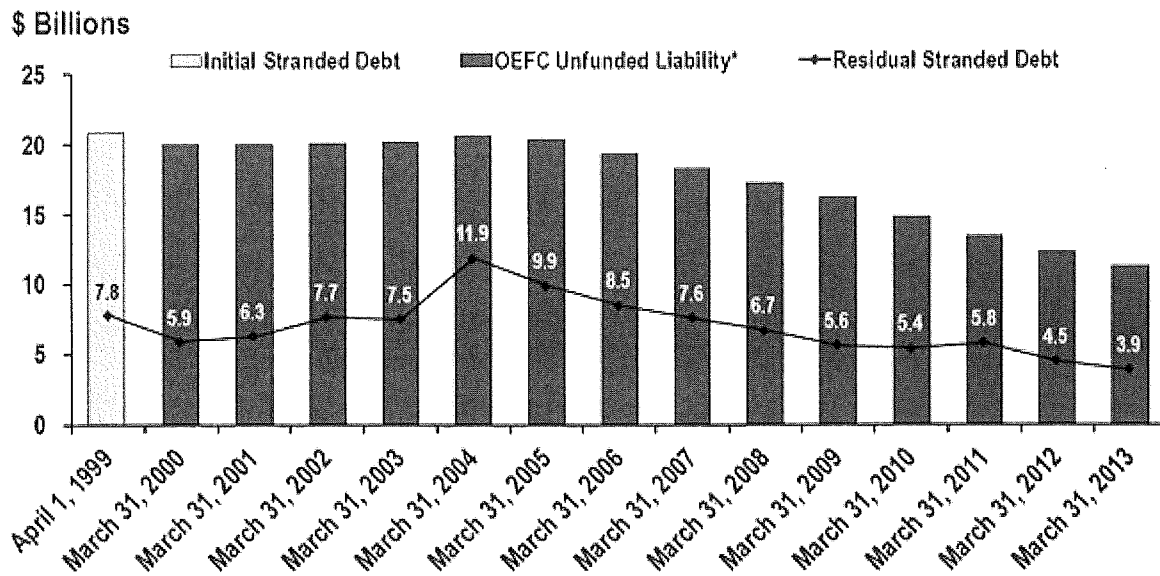
The Minister of Finance will continue to report annually on the residual stranded debt and the estimated date range for retirement of residual stranded debt and the end of the DRC for all non-residential electricity users.

The Auditor General audits OEFC's annual financial statements and has provided an unqualified opinion every year since the initial 1999–2000 financial statements. This includes OEFC's interest expense, which is currently about \$1.5 billion per year and has totalled about \$29.2 billion between April 1, 1999, and March 31, 2014.

The Auditor General's 2012 and 2013 Annual Reports also noted that the Auditor was pleased to see an increased level of transparency with respect to public reporting on the residual stranded debt.

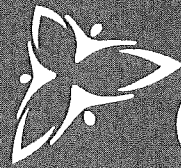
CHART 1.13

Residual Stranded Debt since April 1, 1999



* OEFC's unfunded liability as at April 1, 1999, was \$19.4 billion, which is the initial stranded debt of \$20.9 billion adjusted for \$1.5 billion of additional OEFC assets as of that date, including primarily an accounting asset for deferred debt charges.

Note: Unfunded Liability amounts are from OEFC Annual Reports from 1999–2000 to 2012, and the Annual Financial Statements for 2013. Residual Stranded Debt value for April 1, 1999, as announced on April 1, 1999. Values for the period from March 31, 2000, to March 31, 2010, as estimated by the Ministry of Finance in the 2012 Budget and for March 31, 2011, to March 31, 2013, as determined by the Minister of Finance in accordance with a regulation made under the *Electricity Act, 1998*.



Ontario

Annual Report

OEFC

ONTARIO ELECTRICITY FINANCIAL CORPORATION

2012

Mandate

Ontario Electricity Financial Corporation (OEFC or the Corporation) is one of five entities established by the *Electricity Act, 1998* (the Act) as part of the restructuring of the former Ontario Hydro.

Under the Act, the former Ontario Hydro was restructured into Ontario Power Generation Inc. (OPG), Hydro One Inc. (Hydro One), the Independent Electricity System Operator (IESO), the Electrical Safety Authority (ESA) and OEFC.

In accordance with the Act, OEFC has the following mandate:

- managing its debt, financial risks and liabilities, including the debt of the former Ontario Hydro;
- managing the former Ontario Hydro's contracts with non-utility generators (NUGs) ;
- receiving all payments and administering other assets, liabilities, rights and obligations of the Corporation that were not transferred to another of the former Ontario Hydro successor corporations and disposing of any of these items as it deems appropriate or as directed by the Minister of Finance;
- providing financial assistance to the successor corporations of Ontario Hydro;
- entering into financial and other agreements relating to the supply of electricity in Ontario; and
- performing any additional objects specified by the Lieutenant Governor in Council.

OEFC retains the services of the Ontario Financing Authority (OFA) and the Ministry of Finance to carry out its daily operations on a cost-recovery basis. The OFA is the agency of the Province of Ontario (the Province) responsible for provincial borrowing and debt management.

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Statement from the Chair and Chief Executive Officer

We are pleased to present OEFC's 2012 Annual Report, which describes the Corporation's operational highlights and financial results for the year ended March 31, 2012.

Revenue exceeded expense by \$1.1 billion in 2011–12, reducing the Corporation's unfunded liability from \$13.4 billion to \$12.3 billion as at March 31, 2012.

The unfunded liability has declined for eight consecutive years. It is \$7.1 billion less than the initial unfunded liability on April 1, 1999, when the former Ontario Hydro was restructured. Total debt and liabilities are \$28.9 billion, down from the \$38.1 billion inherited by the Corporation from the restructuring.

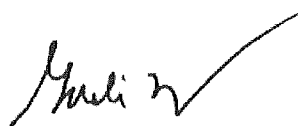
Over the past year, the OFA completed OEFC's long-term public borrowing requirement of \$0.2 billion, primarily to refinance maturing debt.

Cost savings of \$5.9 million were achieved through the management of the power purchase with NUGs.

Looking ahead to 2012–13, the Corporation will continue to manage its debt and liabilities in a cost-effective manner and support the implementation of the government's electricity policies and initiatives.



Steve Orsini
Chair



Gadi Mayman
Vice-Chair and Chief Executive Officer

Management's Discussion and Analysis

Financial Results

Debt and Liabilities

Risk Management

Other Responsibilities

2012–13 Outlook

Management's Discussion and Analysis

2011-12 HIGHLIGHTS:

- Eighth consecutive annual decline in OEFC's unfunded liability
- Completed long-term public borrowing requirement of \$0.2 billion
- Achieved cost-savings of \$5.9 million by managing power purchase agreements

Financial Results

Revenue and Expense

Total revenue for 2011-12 was \$4.3 billion, a decrease of \$159 million from 2010-11. Revenue included \$952 million from the Debt Retirement Charge (DRC); \$1,372 million in power supply contract recoveries; \$742 million in interest income from the Province, OPG and the IESO; and \$367 million in payments-in-lieu (PIL) of taxes.

Total expense was \$3.1 billion, an increase of \$76 million from 2010-11. Expense included interest payments on short- and long-term debt of \$1,592 million, and power supply contract costs of \$1,375 million.

Overall, revenue exceeded expense by \$1.1 billion. In 2010-11, revenue exceeded expense by \$1.4 billion.

Borrowing Program

In 2011-12, the OFA completed the Corporation's long-term public borrowing requirement of \$0.2 billion, most of which was for long-term debt maturities.

Long-term public borrowing was completed in the Canadian dollar market.

Debt and Liabilities

The Corporation inherited \$38.1 billion in total debt and other liabilities from the former Ontario Hydro when the Ontario electricity sector was restructured in 1999. This amount included \$30.5 billion in total debt.

A portion of the \$38.1 billion was supported by the value of the assets of Ontario Hydro successor companies, leaving \$20.9 billion of stranded debt not supported by those assets. The initial unfunded liability of \$19.4 billion was the stranded debt adjusted for \$1.5 billion of additional assets.

As at March 31, 2012, total debt and liabilities were \$28.9 billion, with total debt of \$26.9 billion. These figures compare to total debt and liabilities of \$29.3 billion, with total debt of \$27.1 billion, as at March 31, 2011.

The unfunded liability was \$12.3 billion as at March 31, 2012, a decrease of \$1.1 billion from March 31, 2011. This is the eighth consecutive annual decline in the unfunded liability, \$7.1 billion below the \$19.4 billion level as at April 1, 1999.

Debt Repayment Plan

OEFC services and retires the debt and other liabilities of the former Ontario Hydro from the following revenue and cash flow sources in the electricity sector:

- Outstanding notes receivable from the Province, OPG and IESO
- PIL of corporate income, capital and property taxes and Gross Revenue Charges made by OPG, Hydro One and municipal electric utilities
- DRC paid by electricity consumers
- Electricity sector dedicated income - the Province's combined cumulative net income from OPG and Hydro One in excess of the Province's interest cost of its investment in these subsidiaries

The Debt Retirement Charge and Retirement of Residual Stranded Debt

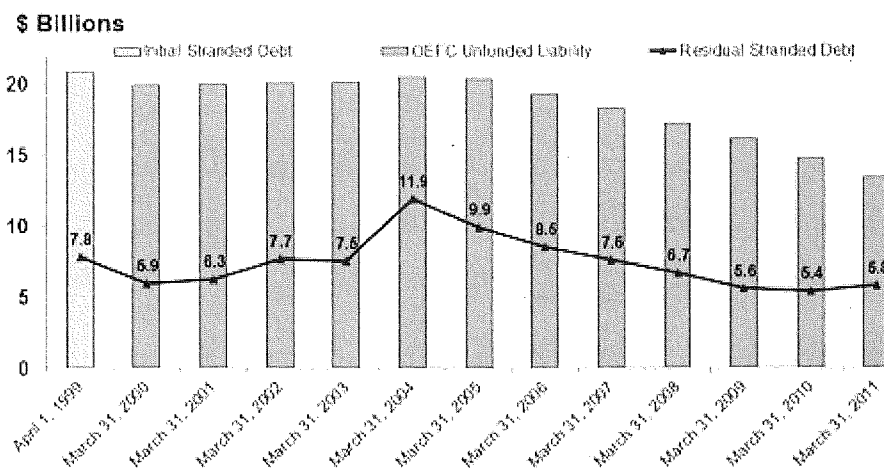
The *Electricity Act, 1998*, provides for the DRC to be paid by consumers until the residual stranded debt is retired.

On May 15, 2012, the government filed regulation 89/12 under the *Electricity Act, 1998*, with an accompanying news release, to provide transparency and meet reporting requirements on the outstanding amount of residual stranded debt.

In accordance with Ontario regulation 89/12, the Minister of Finance determined the residual stranded debt to be \$5.8 billion as at March 31, 2011. This is a decrease of about \$6.1 billion from an estimated peak of residual stranded debt of \$11.9 billion as at March 31, 2004, based on estimates of residual stranded debt for prior years provided by the Ministry of Finance. Under the regulation, the Minister of Finance is to provide a determination of residual stranded debt as of the March 31 end of each fiscal year, following the submission to the Minister of Finance of OEFC's Annual Report.

Retirement of residual stranded debt is projected to occur when the stranded debt is fully offset by the present value of projected future PIL of taxes, Gross Revenue Charge (GRC) and electricity sector dedicated income to be paid to OEFC.

Residual Stranded Debt Since April 1, 1999



Sources: Residual Stranded Debt value for April 1, 1999 as announced April 1, 1999. Values for the period March 31, 2000, to March 31, 2010, as estimated by the Ministry of Finance in Budget 2012, and for March 31, 2011, as determined by the Minister of Finance in accordance with a regulation made under the *Electricity Act, 1998*.

Unfunded Liability amounts are from OEFC Annual Reports from 1999-00 to 2011.

Risk Management

OEFC's risk management policies and procedures are designed to manage risk exposures associated with the Corporation's debt, derivatives and related capital market transactions.

Foreign exchange and net interest rate resetting exposures remained within policy limits in 2011–12.

- Foreign exchange exposure remained at 0.0 per cent of outstanding debt as at March 31, 2012. The foreign exchange exposure limit for OEFC is 5 per cent.
- Net interest rate resetting exposure was 13.2 per cent of outstanding debt as at March 31, 2012, within the limit of 35 per cent.

Other Responsibilities

Management of Power Supply Contracts

Efficiencies were achieved in managing the existing power purchase agreements with the NUGs in 2011–12. Purchase costs dropped by \$5.9 million, compared to a \$3.0 million drop in 2010–11, through curtailments and other transactions that shift the time of electricity generation under the contracts.

Previously, the Corporation purchased power from the NUGs under contractual terms, and sold the power at market prices lower than cost. However, as at January 1, 2005, the Corporation began to receive actual contract prices for power from ratepayers, eliminating losses on power purchase contracts. At that time, the Ministry of Finance estimated most of the liability would be eliminated over 12 years as existing contracts expire. The liability for power purchase agreements was valued at \$1.2 billion as at March 31, 2012, compared to \$1.5 billion as at March 31, 2011.

OEFC continued to monitor and implement a contingency support agreement between OEFC and OPG to provide for the continued reliability and availability of the Lambton and Nanticoke coal-fired stations. Any OEFC net costs under this agreement are to be recovered from electricity consumers. The contingency support agreement was effective as of January 1, 2009, when OPG implemented a strategy to reduce greenhouse gas emissions from its coal-fired stations, as directed by the Province.

Supporting New Electricity Supply Projects

Beginning in 2005, the Corporation began to provide financing on commercial terms to OPG for new electricity supply projects.

For instance, OEFC is providing financing under a loan agreement with OPG for the Niagara Tunnel Project, which will increase electricity generated by the Sir Adam Beck hydro complex in Niagara Falls. OEFC has also agreed to provide financing to OPG for a portion of its investment in the Lower Mattagami project, which will increase the generating capacity of four hydroelectric units in northern Ontario.

These projects, and completed OPG supply projects financed by OEFC for the Portlands Energy Centre and Lac Seul, help Ontario build a clean, modern and reliable electricity system, which is consistent with the government's Long-Term Energy Plan and its direction to the Ontario Power Authority (OPA) to replace coal-fired generation and to continue to expand Ontario's capacity from clean, renewable energy sources.

2012–13 Outlook

The OEFC will focus on the following:

Managing debt and other liabilities cost-effectively

The OFA will continue to manage OEFC's debt and other liabilities in a cost-effective manner. In addition, the OFA will complete OEFC's forecasted 2012–13 long-term public borrowing requirement of \$2.1 billion, mostly to refinance debt maturities.

Managing financial risk within approved policy limits

The debt portfolio will be managed within exposure limits approved by OEFC's Board of Directors (the Board) for 2012–13.

Administering NUG and Lambton and Nanticoke contracts

The Corporation will continue to minimize costs to ratepayers through effective administration of the NUG contracts, and continue to monitor the Lambton and Nanticoke contingent support agreement.

Providing financial assistance as required to the Ontario Hydro successor corporations

The Corporation will facilitate the cash flow requirements of the Ontario Hydro successor corporations as required.

Supporting the implementation of the government's electricity industry policies and analyzing and monitoring the impact on the Corporation

The Corporation will continue to support the government's electricity initiatives as requested, and will monitor and analyze their impact on the Corporation.

Financial Statements

Responsibility for Financial Reporting

Auditor's Report

Statement of Financial Position

Statement of Revenue, Expense and Unfunded Liability

Statement of Cash Flow

Notes to Financial Statements

Responsibility for Financial Reporting

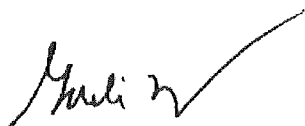
The accompanying financial statements of OEFC have been prepared in accordance with Canadian public sector accounting standards and are management's responsibility. The preparation of financial statements necessarily involves the use of estimates based on management's judgment, particularly when transactions affecting the current accounting period cannot be finalized with certainty until future periods. The financial statements have been properly prepared within reasonable limits of materiality and in light of information available up to June 21, 2012.

Management maintains a system of internal controls designed to provide reasonable assurance that the assets are safeguarded and that reliable financial information is available on a timely basis. The system includes formal policies and procedures and an organizational structure that provides for appropriate delegation of authority and segregation of responsibilities. The Ontario Internal Audit Division of the Ministry of Finance independently evaluates the effectiveness of these internal controls on an ongoing basis and reports its findings to management and the Audit Committee of the Board.

The Board is responsible for ensuring management fulfills its responsibilities for financial reporting and internal controls. The Audit Committee assists the Board in carrying out these responsibilities. The Audit Committee periodically meets with management, the internal auditors and the external auditors to deal with issues raised by them, and to review the financial statements before recommending Board approval.

The financial statements have been audited by the Auditor General of Ontario (the Auditor). The Auditor's responsibility is to express an opinion on whether OEFC's financial statements fairly present OEFC's financial position in accordance with Canadian public sector accounting standards. The Auditor's Report, which appears on the following page, outlines the scope of the Auditor's examination and his opinion.

On behalf of management:



Gadi Mayman
Vice-Chair and Chief Executive Officer

Auditor's Report



Office of the Auditor General of Ontario
Bureau du vérificateur général de l'Ontario

Independent Auditor's Report

To the Ontario Electricity Financial Corporation and to the Minister of Finance

I have audited the accompanying financial statements of the Ontario Electricity Financial Corporation, which comprises the statement of financial position as at March 31, 2012, and the statements of revenue, expense and unfunded liability and cash flow for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Opinion

In my opinion, these financial statements present fairly, in all material respects, the financial position of the Ontario Electricity Financial Corporation as at March 31, 2012 and the results of its operations, and its cash flow for the year then ended in accordance with Canadian public sector accounting standards.

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www.auditor.on.ca

Toronto, Canada
June 21, 2012



Jim McCarter, FCA
Auditor General
Licensed Public Accountant

Ontario Electricity Financial Corporation

Statement of Financial Position

As at March 31, 2012 (\$ millions)

ASSETS

Current Assets

Cash and cash equivalents (Note 4)
Accounts receivable
Interest receivable
Current portion of notes receivable (Note 6)

	2012	2011
	\$ 118	\$ 1
	366	460
	29	26
	235	188
	<u>748</u>	<u>675</u>
Payments-in-lieu of tax receivable (Note 10)	227	142
Due from Province of Ontario (Note 5)	2,750	2,255
Notes and loans receivable (Note 6)	12,882	12,743
Deferred debt costs	—	35
	<u>\$ 16,607</u>	<u>\$ 15,850</u>

LIABILITIES

Current Liabilities

Accounts payable
Interest payable
Short-term debt (Note 7)
Current portion of long-term debt (Note 7)

	\$ 295	\$ 215
	474	430
	1,181	1,174
	1,683	547
	<u>3,633</u>	<u>2,366</u>

Long-term debt (Note 7)
Power purchase contracts (Note 9)
Deferred debt costs

	24,056	25,413
	1,202	1,519
	37	—
	<u>28,928</u>	<u>29,298</u>

Contingencies and guarantees (Note 11)

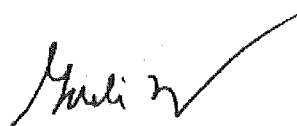
UNFUNDED LIABILITY (Notes 1, 3, 10)

	(12,321)	(13,448)
	<u>\$ 16,607</u>	<u>\$ 15,850</u>

Approved on behalf of the Board:



Steve Orsini
Chair



Gadi Mayman
Vice-Chair and Chief Executive Officer

See accompanying notes to financial statements.

Ontario Electricity Financial Corporation

Statement of Revenue, Expense and Unfunded Liability

For the year ended March 31, 2012 (\$ millions)

	2012	2011
REVENUE		
Debt retirement charge (Notes 1, 10)	\$ 952	\$ 944
Payments-in-lieu of tax (Notes 1, 10)	367	321
Interest	742	742
Power supply contract recoveries (Note 9)	1,372	1,288
Net reduction of power purchase contracts (Note 9)	317	339
Electricity sector dedicated income (Notes 5, 10)	495	771
Other	9	8
Total Revenue	<u>\$ 4,254</u>	<u>\$ 4,413</u>
EXPENSE		
Interest - short-term debt	\$ 13	\$ 13
- long-term debt	1,579	1,581
Amortization of deferred charges	18	26
Power supply contract costs (Note 9)	1,375	1,288
Debt guarantee fee	136	137
Operating	6	6
Total Expense	<u>3,127</u>	<u>3,051</u>
Excess of revenue over expense	1,127	1,362
Unfunded liability, beginning of year	13,448	14,810
Unfunded Liability, end of year	<u>\$ 12,321</u>	<u>\$ 13,448</u>

See accompanying notes to financial statements.

Ontario Electricity Financial Corporation**Statement of Cash Flow**

For the year ended March 31, 2012 (\$ millions)

	2012	2011
CASH FLOWS USED IN OPERATING ACTIVITIES		
Excess of revenue over expense	\$ 1,127	\$ 1,362
Adjustments for:		
Payments-in-lieu of tax (Notes 1, 10)	(85)	241
Net reduction of power purchase contracts (Note 9)	(317)	(339)
Electricity sector dedicated income (Notes 5, 10)	(495)	(771)
Amortization of deferred charges	18	26
Other Items	356	(129)
Cash provided from operations	<u>\$ 604</u>	<u>\$ 390</u>
CASH FLOWS FROM FINANCING ACTIVITIES		
Long-term debt issues:	\$ 236	\$ 1,028
Less long-term debt retired	547	1,253
Long-term debt (retired), net	(311)	(225)
Short-term debt issued (retired), net	7	(27)
Notes receivable advance	(183)	(145)
Cash (required by) financing activities	<u>(487)</u>	<u>(397)</u>
Increase (decrease) in cash and cash equivalents	117	(7)
Cash and cash equivalents, beginning of year	1	8
Cash and cash equivalents, end of year	<u>\$ 118</u>	<u>\$ 1</u>
Interest on debt paid during the year and included in excess of revenue over expense	<u>\$ 1,548</u>	<u>\$ 1,610</u>

See accompanying notes to financial statements.

Notes to Financial Statements

1) Electricity Sector Reform

Effective April 1, 1999, pursuant to the *Electricity Act, 1998* (the Act), Ontario Hydro was continued as a corporation without share capital under the name "Ontario Electricity Financial Corporation" (OEFC). It is exempt from federal and provincial income taxes under paragraph 149(1)(d) of the Income Tax Act (Canada).

OEFC is a Crown agency whose objects include managing the former Ontario Hydro's non-utility generator (NUG) contracts; providing financial assistance to the successor corporations of Ontario Hydro; entering into financial and other agreements relating to the supply of electricity in Ontario; and managing the debt and administering the assets, liabilities, rights and obligations of Ontario Hydro not transferred to other successor entities.

These other successor entities include:

- Ontario Power Generation (OPG), an electricity generation company;
- Hydro One, a regulated electricity transmission and distribution company;
- Independent Electricity System Operator (IESO), the regulated centralized independent system coordinator responsible for directing system operations and operating the electricity market; and
- Electrical Safety Authority (ESA), which performs a regulatory function related to electrical inspections.

On April 1, 1999, the respective business units, including assets, liabilities, employees, rights and obligations of the former Ontario Hydro were transferred to OPG and Hydro One (and their subsidiaries) and the IESO for \$8.5 billion, \$8.6 billion and \$78 million respectively in exchange for debt payable to OEFC. On the same day, the Province of Ontario (the Province) exchanged equity of \$5.1 billion and \$3.8 billion in OPG and Hydro One respectively for debt payable to OEFC.

The opening stranded debt of \$20.9 billion at April 1, 1999 was composed of \$38.1 billion in liabilities assumed from the former Ontario Hydro less the value of assets transferred to OEFC at April 1, 1999, including \$17.2 billion in notes receivable. After receipt of \$1.5 billion in loans receivable and other assets, the opening unfunded liability stood at \$19.4 billion. As at April 1, 1999, the present value of future payments-in-lieu (PIL) of taxes and electricity sector dedicated income was estimated at \$13.1 billion. Subtracting the \$13.1 billion from stranded debt of \$20.9 billion resulted in a difference of \$7.8 billion, known as residual stranded debt.

The OEFC debt, liabilities and associated financing costs will be repaid from interest on notes receivable from the Province and successor entities, and from dedicated electricity revenues in the form of PIL of corporate income, capital and property taxes made under the Act by the successor entities and municipal electric utilities. OEFC also receives the Debt Retirement Charge (DRC) paid by electricity consumers at a rate of 0.7 cents/kWh until the residual stranded debt is retired. The Ontario Financing Authority (OFA), an agency of the Province responsible for borrowing and investing monies for the Province and other public bodies, provides day-to-day management services to OEFC.

On December 9, 2004, the *Electricity Restructuring Act, 2004* was passed, resulting in a combination of a fully regulated and competitive electricity sector with different generators receiving prices set through a variety of mechanisms. Electricity generated from OPG's nuclear and baseload hydro generation assets receive regulated prices, electricity from those generators with existing or new contracts receive prices as determined by their contracts, while other generation receives prices set in the electricity spot market. Consumers pay a blend of these costs including the pass-through of regulated prices for OPG's regulated plants, the full costs for existing and new contracts for generation and market prices for other generation facilities. The Act also created the Ontario Power Authority (OPA) to ensure an adequate long-term supply of electricity.

2) Summary of Significant Accounting Policies

Basis of Accounting

As OEFC is a government organization, these financial statements are prepared in accordance with Canadian public sector accounting standards.

Net Debt Presentation

The statement of changes in net debt is not presented since this information is readily apparent.

Measurement Uncertainty

Uncertainty in the determination of the amount at which an item is recognized in the financial statements is known as measurement uncertainty. Such uncertainty exists when it is reasonably possible there could be a material variance between the recognized amount and another reasonably possible amount, as there is whenever estimates are used. Measurement uncertainty in these financial statements exists in the valuation of the power purchase contracts and payments-in-lieu of tax revenue and tax receivable. Estimates are based on the best information available at the time of preparation of the financial statements.

Deferred Debt Costs

Deferred Debt Costs include the unamortized amounts related to any foreign exchange gains or losses resulting from the translation of long-term debt issued in foreign currencies; discounts, premiums or commissions arising from the issuance of debt or the acquisition of debt prior to maturity; and fees and other costs relating to swaps and other debt related derivatives. These costs are amortized to operations over the life of the underlying debt.

Revenue Recognition

Revenues are recognized in the period in which they are earned.

Foreign Currency Translation

Debt is composed of short, medium and long-term bonds, notes and debentures. Debt denominated in foreign currencies that has been hedged is recorded at the Canadian dollar equivalent using the rates of exchange established by the terms of the hedge agreements. Other foreign currency debt, liabilities and assets are translated to Canadian dollars at year-end rates of exchange and, in accordance with Canadian public sector accounting standards, any exchange gains or losses are deferred and amortized over the remaining term to maturity.

Power Purchase Contracts

The liability for power purchase contracts was originally calculated by discounting estimated losses over the life of the contracts. Under the *Electricity Restructuring Act, 2004*, OEFC began receiving actual contract prices for power from electricity consumers, effective January 1, 2005, and no longer incurs losses on these power purchase contracts. At that time, the Ministry of Finance estimated that the bulk of the liability would be eliminated over 12 years as existing electricity contracts expire.

Future Change in Accounting Policies

Effective April 1, 2012, OEFC will be required to adopt new accounting standards issued by the Public Sector Accounting Board of the CICA. Changes due to the new standards, Section 2601, Foreign Currency Translation and Section 3450, Financial Instruments will be applied prospectively.

3) Going Concern

OEFC is dependent on the Province to borrow funds to finance maturing debt and to cover any cash shortfalls in the Corporation, and on OPG repaying its outstanding notes receivable. It is also dependent on the government's long-term plan to defease the unfunded liability described in Note 10.

4) Cash and Cash Equivalents

Cash and cash equivalents includes cash on deposit and highly liquid investments recorded at cost, which approximates current market value.

5) Due from the Province

The Province has committed to dedicate the cumulative combined net income of OPG and Hydro One in excess of the Province's interest cost of its investment in its electricity subsidiaries to OEFC. Under these arrangements, the Province can recoup all costs associated with its investments in electricity subsidiaries on a cumulative basis before any income can be recognized by OEFC. For the year ended March 31, 2012, OPG and Hydro One earned an aggregate amount of \$1,015 million (2011 – \$1,291 million). After deducting the Province's \$520 million interest cost of its investment in these subsidiaries, there remains an amount of electricity sector dedicated income of \$495 million (2011 – \$771 million).

6) Notes and Loans Receivable

(\$ millions)					
	Maturity Date	Interest Rate	Interest Payable	March 31, 2012	March 31, 2011
The Province	2039-2041	5.85	Monthly	\$ 8,885	\$ 8,885
OPG	2012-2042	3.24 to 6.63	Semi-annually	4,015	3,868
IESO	2013	Variable/2.25	Monthly/Semi-Annually	113	78
				13,013	12,831
Less: Current portion of notes receivable				235	188
				12,778	12,643
Add: Loans receivable from NUGs				104	100
				\$ 12,882	\$ 12,743

OEFC has agreed with OPG and the IESO not to sell notes owing from these successor entities without their prior approval.

OEFC has agreed to provide OPG financing for new generation project development in the form of 10-year and 30-year notes on commercial terms and conditions. These agreements provide for up to \$1.6 billion in loans for the Niagara tunnel project and up to \$700 million in support of OPG's investment in the Lower Mattagami project. Under these agreements, \$915 million has been advanced for the Niagara Tunnel project and there are no outstanding borrowings for the Lower Mattagami project.

OEFC agreed to provide to OPG a \$375 million line of credit to finance existing maturities, expiring on December 31, 2011. Under this agreement, \$300 million was advanced.

Subsequent to the year-end, OEFC agreed to provide to OPG a refinancing facility for up to \$400 million to finance notes maturing with OEFC on April 30, 2012. Under this agreement, \$200 million has been advanced.

Set out below is a summary by year of maturity of OPG's debt to OEFC:

Fiscal Year	Amount (\$ millions)
2012-13	200
2014-15	300
2015-16	200
2016-17	320
2017-18	1,125
2018-19	260
2019-20	505
2020-21	420
2021-22	185
2040-41	150
2041-42	350
Total	\$4,015

In May 2011, OEFC refinanced a loan to the IESO for \$78.2 million for a term of 2 years.

In October 2011, OEFC increased its revolving credit facility to the IESO from \$60 million to \$110 million. The credit facility, expiring on May 1, 2013, bears interest at a floating rate equal to the Province's cost of borrowing for a 30 day term plus 25 basis points for advances up to \$60 million and an additional 25 basis points for advances in excess of \$60 million. The facility will be used for liquidity purposes and to temporarily fund corporate requirements. At March 31, 2012, IESO had drawn \$35 million on the credit facility.

Loans receivable from NUGs increased during the year by \$4 million to \$104 million (2011 – \$100 million), primarily due to interest, which has been added to the principal balance.

7) Debt

Debt at March 31, 2012, is set out below by maturity and by currency of repayment, expressed in Canadian dollars.

(\$ millions) Currency	Canadian Dollars	U.S. Dollars	Other Foreign	2012 Total	2011 Total
Maturing in:					
1 year	\$ 1,981	\$ 765	\$ 118	\$ 2,864	\$ 1,721
2 years	3,514	1,032	370	4,916	2,660
3 years	2,133	553	—	2,686	3,904
4 years	1,950	—	83	2,033	2,686
5 years	2,493	—	487	2,980	2,033
1-5 years	12,071	2,350	1,058	15,479	13,004
6-10 years	5,451	73	339	5,863	6,983
11-15 years	2,967	—	—	2,967	3,687
16-20 years	1,041	—	—	1,041	1,191
21-25 years	788	—	—	788	850
26-50 years	782	—	—	782	1,419
Total	\$23,100	\$2,423	\$1,397	\$26,920	\$27,134

The effective rate of interest on the debt portfolio was 5.86 per cent after considering the effect of derivative instruments used to manage interest rate risk (2011 – 5.87 per cent). The longest term to maturity is to June 2, 2041. Total foreign currency denominated debt at March 31, 2012 was \$3.8 billion, 100 per cent of which was fully hedged to Canadian funds (2011 – \$3.8 billion or 100 per cent). Bonds and notes payable are either held, or guaranteed as to principal and interest, by the Province as set out below:

Debt (\$ millions)	March 31, 2012			March 31, 2011		
	Held by the Province	Guaranteed by the Province	Total	Held by the Province	Guaranteed by the Province	Total
Short-term debt	\$ 1,181	—	\$ 1,181	\$ 1,174	—	\$ 1,174
Current portion of long-term debt	1,683	—	1,683	547	—	547
Long-term debt	16,122	\$7,934	24,056	17,479	\$7,934	25,413
Total	\$18,986	\$7,934	\$26,920	\$19,200	\$7,934	\$27,134

Fair value of debt issued approximates amounts at which debt instruments could be exchanged in a current transaction between willing parties. In valuing OEFC's debt, fair value is estimated using discounted cash flows and other valuation techniques and is compared to public market quotations where available. These estimates are affected by the assumptions made concerning discount rates and the amount and timing of future cash flows.

The estimated fair value of OEFC debt at March 31, 2012 was \$32.2 billion (2011 – \$31.2 billion). This is higher than the book value of \$26.9 billion (2011 – \$27.1 billion) because current interest rates are generally lower than the interest rates at which the debt was issued and because of exchange rate movements. The fair value of debt does not reflect the effect of related derivative contracts.

8) Risk Management and Derivative Financial Instruments

OEFC employs various risk management strategies and operates within strict risk exposure limits to ensure exposure to risk is managed in a prudent and cost-effective manner. A variety of strategies are used including the use of derivative financial instruments ("derivatives"). Derivatives are financial contracts, the value of which is derived from underlying instruments. OEFC uses derivatives for the purpose of hedging and to minimize interest costs. Hedges are created primarily through swaps, which are legal arrangements under which OEFC agrees with another party to exchange cash flows based upon one or more notional amounts during a specified period. This allows OEFC to offset its existing obligations and thereby effectively convert them into obligations with more desirable characteristics. Other derivative instruments used by OEFC include forward foreign exchange contracts, forward rate agreements, futures and options.

Foreign exchange or currency risk is the risk foreign currency debt principal and interest payments and foreign currency transactions will vary in Canadian dollar terms due to fluctuations in foreign exchange rates. To manage currency risk, derivative contracts are used to convert foreign currency cash flows into Canadian dollar denominated cash flows. The current policy allows unhedged foreign currency debt principal, net of foreign currency holding, to reach a maximum of 5 per cent of total debt. At March 31, 2012, the actual unhedged level was 0.0 per cent of total debt (2011 – 0.0 per cent).

Net interest rate resetting risk is the exposure to changes in interest rates. Exposure to rate changes is reduced by entering into derivative contracts that convert floating interest payments to fixed interest payments. The current policy allows unhedged floating rate debt and fixed rate debt maturing within the next 12 months, net of liquid reserves, to reach a maximum of 35 per cent of total debt.

At March 31, 2012, net interest rate resetting risk as a percentage of total debt was 13.2 per cent (2011 – 13.7 per cent).

Liquidity risk is the risk OEFC will not be able to meet its current short-term financial obligations. As explained in Note 3, OEFC is dependent on the Province to borrow funds to finance maturing debt and to cover any cash shortfalls in the Corporation, and on OPG repaying its outstanding notes receivable.

The table below presents a maturity schedule of OEFC's derivatives, by type, outstanding at March 31, 2012, based on the notional amounts of the contracts. Notional amounts represent the volume of outstanding derivative contracts and are not indicative of credit risk, market risk or actual cash flows.

Derivative Portfolio Notional Value									
As at March 31, 2012 (\$ millions)									
Maturity in years Fiscal Year	2013	2014	2015	2016	2017	6-10 Years	Over 10 Years	Total	March 2011
Cross-currency swaps	\$ 978	\$ 1,786	\$ 553	\$ 83	\$ 693	\$ 529	—	\$ 4,622	\$ 4,868
Interest rate swaps	398	1,145	2,049	216	1,123	650	\$ 653	6,594	5,871
Forward foreign exchange contracts	791	—	—	—	—	—	—	791	147
Total	\$ 2,167	\$ 2,931	\$ 2,962	\$ 299	\$ 1,816	\$ 1,179	\$ 653	\$12,007	\$10,886

The use of derivatives introduces credit risk, which is the risk of a counterparty defaulting on contractual derivative obligations in which OEFC has an unrealized gain. The table below presents the credit risk associated with the derivative financial instrument portfolio, measured through the replacement value of derivative contracts, at March 31, 2012.

Credit Risk Exposure (\$ millions)	March 31, 2012	March 31, 2011
Gross credit risk exposure	\$ 440	\$ 472
Less: Netting	(440)	(472)
Net credit risk exposure	\$ 0	\$ 0

OEFC manages its credit risk exposure from derivatives by, among other ways, dealing only with high credit quality counterparties and regularly monitoring compliance to credit limits. In addition, OEFC enters into contractual agreements ("master agreements") that provide for termination netting and, if applicable, payment netting with most of its counterparties. Gross credit risk exposure represents the loss OEFC would incur if every counterparty to which OEFC had credit risk exposure were to default at the same time, and the contracted netting provisions were not exercised or could not be enforced. Net credit risk exposure is the loss including the mitigating impact of these netting provisions.

9) Power Supply Contracts

Power supply contracts include both power purchase contracts and power supply support agreements. Power purchase contracts and related loan agreements were entered into by the former Ontario Hydro with NUGs located in Ontario. As the legal continuation of the former Ontario Hydro, OEFC is the counterparty to these contracts. The contracts, expiring on various dates to 2048, provide for the purchase of power at prices in excess of future market price. Accordingly, a liability was recorded at \$4,286 million on a discounted cash-flow (DCF) basis when the former Ontario Hydro was continued as OEFC on April 1, 1999.

Under legislated reforms to the electricity market, OEFC began receiving actual contract prices for power from ratepayers effective January 1, 2005, and no longer incurs losses on these contracts. At that time, the Ministry of Finance estimated the bulk of the liability to be eliminated over 12 years as existing electricity contracts expire. As a result, the Corporation is amortizing the liability to revenue over that period.

In addition, effective January 1, 2009, OEFC entered into a support contract with OPG whereby OPG agreed to maintain the reliability and availability of Lambton and Nanticoke coal-fired stations following implementation of a greenhouse gas emissions-reduction strategy. Under the contract, OEFC agreed to ensure OPG would recover the actual costs of operating the stations after implementing this strategy. Any costs to OEFC under this agreement, which expires December 31, 2014, are fully recovered from ratepayers.

During the year ended March 31, 2012, OEFC's costs under power supply contracts totalled \$1,375 million, including purchases of power from NUGs of \$1,020 million (2011 – \$1,021 million) and OPG support contract costs of \$355 million (2011 – \$267 million).

Statement of Liability for Power Purchase Contracts (\$ millions)

As at March 31, 2012

	2012	2011
Liability, beginning of year	\$ 1,519	\$ 1,858
Amortization	(317)	(339)
Liability, end of year	\$ 1,202	\$ 1,519

10) Unfunded Liability

Pursuant to the Act and consistent with the principles of electricity restructuring, the government has a long-term plan to defease the unfunded liability from the electricity sector. The plan includes cash flows from the following sources:

Notes receivable from the Province of \$8.9 billion, OPG of \$3.4 billion, Hydro One of \$4.8 billion and IESO for \$0.1 billion, for a total of \$17.2 billion as at April 1, 1999 as a result of the transfer of assets to successor companies;

PIL of corporate income, capital and property taxes made by OPG, Hydro One and municipal electric utilities;

DRC paid by ratepayers based on the consumption of electricity; and

Electricity Sector Dedicated Income Consistent with the government's commitment to keep electricity income in the electricity sector, the cumulative combined net income of OPG and Hydro One in excess of the Province's interest cost of its investment in its electricity subsidiaries will be allocated to help retire OEFC's debt.

11) Contingencies and Guarantees

OEFC is involved in various legal actions arising out of the ordinary course and conduct of business, some of which relate to the former Ontario Hydro prior to the establishment of OEFC on April 1, 1999. For some of these claims, OPG or Hydro One is required to indemnify OEFC for any liability arising from the claim. For claims on which OEFC is provided no indemnification and where the outcome and ultimate disposition of these legal actions is not determinable at this time, the settlements, if any, will be reflected in the period in which settlement occurs.

Subject to a \$10 million deductible, OEFC has agreed to indemnify Hydro One in respect of any adverse claim to title to any asset, right or thing transferred or intended to be transferred to the company at April 1, 1999, and any failure of the transfer order to transfer such assets, rights or things and with respect to payment to or from or other dealing with any equity account of Ontario Hydro, including certain related litigation. The Province has guaranteed any liability arising from these indemnifications. A similar indemnity provided to OPG was terminated as of May 31, 2006.

OEFC is contingently liable under guarantees given to third parties that have provided long-term financing to certain independent power producers in connection with the power purchase agreements described in Note 9. These guarantees total approximately \$20 million at March 31, 2012 (2011 – \$28 million).

12) Related Party Transactions

In the normal course of operations, OEFC has transactions with the following related parties, all of which have been disclosed in the notes to the financial statements. Each of the following entities is included in the Province's financial statements:

- a) Province of Ontario
- b) Ontario Power Generation Inc.
- c) Hydro One Inc.
- d) Independent Electricity System Operator
- e) Ontario Financing Authority

Corporate Governance

Overview

Board of Directors

Risk Management Policies and Procedures

Corporate Governance

Overview

OEFC is an agent of the Crown and is classified by Management Board of Cabinet as an operational enterprise agency.

Corporate governance at OEFC involves processes that permit the effective supervision and management of activities by senior management, the Board, its Audit Committee and the Minister of Finance (the Minister). It includes identifying individuals and groups responsible for the Corporation's activities and specifying their roles.

Accountability and Responsibilities

The OEFC's accountability structure flows from its governing statute, the Act. The Minister is responsible for the administration of the Act in respect of OEFC. The Act together with directives issued by Management Board of Cabinet, or the Minister of Finance, form a framework under which OEFC is governed.

Each year, the Minister is required to submit the OEFC Annual Report to the Lieutenant Governor in Council and then table the Annual Report in the Legislature. In addition, the Minister reviews and approves OEFC's annual business plan. The Minister also maintains communications with OEFC through the Chair of the Board (the Chair) regarding government policies and expectations relevant to OEFC.

The Chair is accountable to the Minister for the performance of OEFC in fulfilling its mandate. The current Chair is also the Deputy Minister of Finance. The Chair is responsible for providing advice and information to the Minister with regard to the operation and affairs of OEFC. In addition, the Chair provides leadership and direction to the Board and the Chief Executive Officer (CEO) and ensures OEFC complies with applicable government policies and directives. As Deputy Minister of Finance, the Chair ensures organizational capacity in the Ministry to monitor OEFC, and that it manages its risks appropriately.

The Board is appointed by the Lieutenant Governor in Council and is accountable to the Minister, through the Chair. The OEFC Board performs a supervisory role. It oversees the management of OEFC and helps to ensure the OEFC's mandate, as determined by the Province, is implemented effectively. The current Board is largely comprised of public servants employed by the Crown. The Board meets at least quarterly and receives regular reports from the CEO and staff of the OFA concerning the operations of OEFC and its compliance with applicable laws and policies. Another function of the Board is the review of the Corporation's major risks and mitigation strategies. Standards of conduct for Board members are set out in a Board-approved Code of Conduct.

The Audit Committee of the Board approves an annual internal audit plan and liaises with the Corporation's internal auditors and the Auditor General of Ontario regarding financial reporting and internal controls. It also reviews financial policies and financial statements and recommends them to the Board.

The CEO is appointed by the Lieutenant Governor in Council on the recommendation of the Minister. The CEO is accountable to the Board, including the Chair, for the day-to-day management of OEFC and for the performance of any other functions assigned by the Board. In addition, the CEO ensures OEFC's policies and procedures remain relevant and effective.

The Corporation does not have employees, although some OFA employees are designated as officers for executing agreements and other documents on the Corporation's behalf. The OFA carries out the Corporation's day-to-day operations under the supervision of the CEO and the Board and pursuant to a Services Agreement between the OFA and OEFC. In addition, the Tax and Benefits Administration Program of the Ministry of Finance collects certain payments on behalf of OEFC.

Financial Reporting

OEFC prepares annual financial statements in accordance with the recommendations of the PSAB of the Canadian Institute of Chartered Accountants. The financial statements are reviewed and recommended by the Audit Committee and approved by the Board. The annual financial statements are audited by the Auditor General who expresses an opinion on whether they present the financial results fairly and in accordance with accounting principles recommended for governments by the Canadian Institute of Chartered Accountants. The findings are reviewed by the Audit Committee and the Board. These audited financial statements are tabled in the Ontario Legislature as part of the Annual Report and are included as a schedule to the Public Accounts of the Province.

Internal Controls

Management is responsible for establishing and maintaining internal controls to provide reasonable assurance regarding the reliability of financial reporting and to safeguard OEFC's assets and manage its liabilities.

In meeting its responsibility for the reliability and timeliness of financial information, OEFC, directly and through the OFA, uses a comprehensive system of internal controls, including organizational and procedural controls. The system of internal controls includes:

- comprehensive business planning
- written communication of policies and procedures governing corporate conduct and risk management
- segregation of duties
- maintenance and retention of detailed records
- responsible delegation of authority and personal accountability
- careful selection and training of personnel
- regularly updated accounting and financial risk policies.

As part of its annual business plan, OEFC conducts a risk assessment of corporate-wide risks and develops appropriate mitigation strategies.

The Ontario Internal Audit Division of the Ministry of Finance develops an annual internal audit plan based on its risk assessment and input from the OEFC Audit Committee and OEFC Management. The internal audit plan is presented for review and approval by the OEFC Audit Committee. The Internal Audit Division reports to the OEFC Audit Committee on the results of their audit work in OEFC.

Board of Directors

Steve Orsini	Chair and Deputy Minister of Finance Date of Initial Appointment to OEFC Board of Directors: December 2011 Current term expires: December 2014
Gadi Mayman	Vice-Chair and Chief Executive Officer Date of initial appointment to OEFC Board of Directors: August, 2000 Current term expires: July 2014
Bruce L. Bennett	Chair, Audit Committee (Former Assistant Deputy Minister, Provincial Controller, Ministry of Finance) Date of initial appointment to OEFC Board of Directors: August 2006 Current term expires: July 2012
Serge Imbrogno	Deputy Minister of Energy Date of initial appointment to OEFC Board of Directors: April 2008 Current term expires: April 2014
John Lieou	Assistant Deputy Minister, Policy and Planning Division, Ministry of Transportation Date of initial appointment to OEFC Board of Directors: June 2010 Current term expires: June 2013
David Lindsay	Deputy Minister, Ministry of Energy Date of initial appointment to OEFC Board of Directors: July 2010 Current term expires: July 2013
Mahmood Nanji	Associate Deputy Minister, Tax and Benefits Administration, Ministry of Finance Date of initial appointment to OEFC Board of Directors: August 2006 Current term expires: August 2012
Nancy Naylor	Assistant Deputy Minister, Postsecondary Education Division, Ministry of Training, Colleges and Universities Audit Committee Member Date of initial appointment to OEFC Board of Directors: August 2006 Current term expires: July 2012
Bohodar Rubashewsky	Assistant Deputy Minister, Family Responsibility Office, Ministry of Community and Social Services Audit Committee Member Date of initial appointment to OEFC Board of Directors: August 2006 Current term expires: August 2014

Total Annual Remuneration paid to the Board of Directors for 2011-12: \$1,000

Directors whose term ended during or after 2011-12

Peter Wallace, Chair, OEFC Board of Directors

Appointment expired: December 2011, upon ceasing to be the Deputy Minister of Finance

David Lindsay, OEFC Board of Directors

Appointment expired: April 2012, upon his retirement from the Ontario Public Service

Risk Management Policies and Procedures

Overview

The Corporation's risk management policies and procedures provide for the management of risk exposures created by capital market activities. Current policies and procedures address market, credit and operational risk exposures as they pertain to debt and derivatives portfolios and capital markets transactions.

These policies were developed following the guidelines and directives of regulatory bodies, such as the Office of the Superintendent of Financial Institutions of Canada and the Bank for International Settlements and by consulting with Canadian bank representatives on their risk management practices.

The Board and Management committees establish and approve risk management policies and monitor the performance of the OFA's capital market activities related to OEFC.

Market Risk Policy

Market risk is the risk of financial loss attributable to changes in interest rates and foreign exchange rates. This policy provides a framework for borrowing activities and integrates several aspects dealing with the management of market risk. The policy includes several limits:

- **Foreign Exchange Limit** — unhedged foreign currency exposure is limited to 5 per cent of outstanding debt. Unhedged foreign exchange exposures are limited to Group of Seven currencies and the Swiss franc.
- **Net Interest Rate Resetting Limit** — the interest rate resetting exposure, net of liquid reserves, is limited to a maximum of 35 per cent of outstanding debt.
- **Management Trigger Level** — this is an aggregate loss trigger level covering both the Province and OEFC to prevent a potentially large loss resulting from capital market transactions.

Credit Risk Policy

Credit risk is the risk that a counterparty defaults on its financially contracted obligations. Credit risk arises when the OFA undertakes financial and derivative transactions on behalf of OEFC. The minimum credit rating of a new counterparty for swap transactions is AA- and R1-mid, A-1 or P-1 for money market investments. The resulting exposure to a financial counterparty is capped at mark-to-market limits depending on the counterparty's credit rating and capital base.

Policy on the Use of Derivatives and Financial Instruments

Use of derivatives and other financial instruments is restricted to those that the OFA can price and whose risk exposures can be measured by the OFA. Derivatives are used to manage exposures arising from the borrowing and debt management programs in a sound and efficient manner. Risks arising from the use of derivatives are monitored and managed prudently.

Operational Risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people or systems, or external events. The OFA manages operational risk relating to OEFC through reviews and improvements of work processes, documented policies and procedures, data processing systems, contingency plans and staff training.

The OFA maintains a Business Continuity Plan (which covers OEFC's operations), which is regularly updated to facilitate the continuation of essential operational functions with minimal disruption in the event of an emergency.

Policy on Risk Management Reporting

At its regular quarterly meetings, the Board is kept informed of the Corporation's activities:

- The CEO of OEFC provides the Board with a progress report on its borrowing activities and other operational matters. The CEO also reports on compliance with applicable government directives.
- The Director, OFA Risk Control Division, reports on program exposures and performance, as well as exceptions to policies.

In addition, OFA Management is informed of the Corporation's risk exposures and positions on a daily basis so it can direct appropriate actions on behalf of OEFC.

Additional Sources of Information

Internet

Ontario Electricity Financial Corporation	www.oefc.on.ca
Ontario Financing Authority	www.ofina.on.ca
Ministry of Finance	www.fin.gov.on.ca
Ministry of Energy	www.mei.gov.on.ca
Ontario Power Generation Inc.	www.opg.com
Hydro One Inc.	www.hydroone.com
Independent Electricity System Operator	www.ieso.com
Electrical Safety Authority	www.esasafe.com
Ontario Power Authority	www.powerauthority.on.ca

Inquiries

For general information and additional copies of the Report, please contact OEFC at:

Telephone: (416) 325-8000

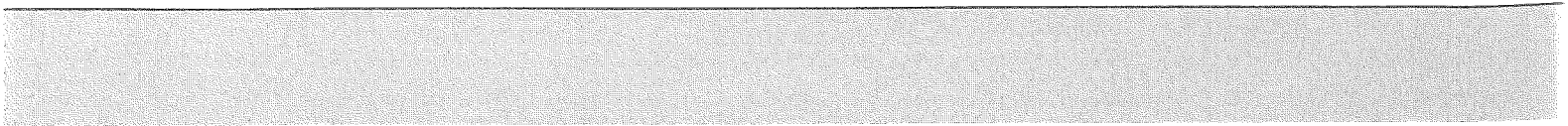
E-mail: investor@oefc.on.ca



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Ontario

Ontario Electricity Financial
Corporation

Chapter 3

Section 3.05

Ontario Power Generation

Ontario Power Generation Human Resources

Background

Ontario Power Generation (OPG), a corporation wholly owned by the province of Ontario, was established in April 1999 as one of the five successor companies to Ontario Hydro. Most of OPG's revenue is regulated by the Ontario Energy Board, which regulates Ontario's natural gas and electricity sectors in the public interest. To the extent that OPG's revenues exceed its expenses, any excess, if sufficient, goes toward paying down the stranded debt that remained when Ontario Hydro was split up.

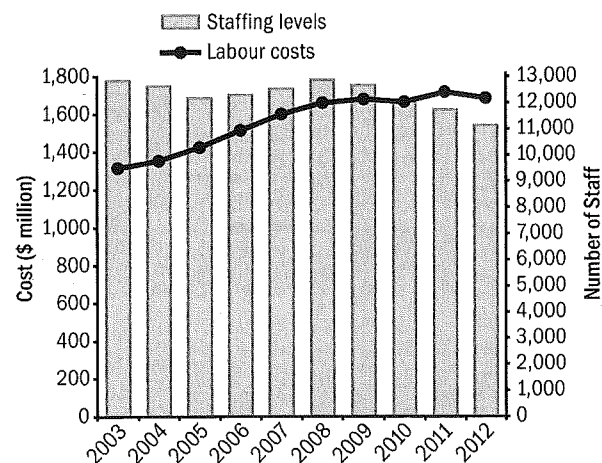
OPG has a generating capacity of more than 19,000 megawatts, making it one of the largest power generators in North America. It produces about 60% of the province's power at its three nuclear stations, five thermal stations, and 65 hydro-electric stations. However, the amount of power that OPG produces has decreased by 23% over the last decade (from 109 terawatt hours in 2003 to 84 terawatt hours in 2012), with the reduction in demand for electricity, closure of coal plants and more private-sector involvement in new power generation.

OPG has been facing considerable challenges in recent years in trying to improve its operational efficiency and reduce its operating costs, especially labour costs. As Figure 1 shows, OPG's labour costs in 2012 were about \$1.7 billion, which accounted

for about 64% of its total operations, maintenance and administration (OM&A) costs. About 90% of OPG's employees are represented by two unions: the Power Workers' Union (PWU) and the Society of Energy Professionals (Society). As Figure 1 also shows, staffing levels at OPG have dropped by 13% over the past 10 years (from about 12,800 employees in 2003 to about 11,100 in 2012). This came mainly from a reduction in non-regular (temporary and contract) staff; regular staffing levels have remained relatively stable at around 11,000.

Figure 1: Staffing Levels* and Labour Costs at OPG, 2003–2012

Source of data: Ontario Power Generation



* These numbers represent year-end staffing levels. They include regular staff and non-regular (temporary and contract) staff but exclude nuclear security staff for reasons of confidentiality.

Audit Objective and Scope

The objective of our audit was to assess whether Ontario Power Generation (OPG) has adequate procedures and systems to:

- ensure that its human resources are acquired and managed with due regard for economy and efficiency, and in accordance with applicable policies, legislative requirements, contractual agreements and sound business practices; and
- measure and report on its results in this regard.

This objective along with our audit criteria were agreed to by senior management at OPG. In conducting our audit, we reviewed applicable policies, files and studies; analyzed data; and interviewed appropriate staff at OPG, the Ministry of Energy and the Ontario Energy Board. OPG had not conducted an employee engagement survey since 2009, so we conducted an anonymous survey of more than 800 non-unionized staff with a response rate of more than 80%. The objective of the survey was to identify common employee concerns about OPG's human resources practices. We did not survey unionized staff as OPG was in collective bargaining with one of the unions at the time of our audit work.

Most of our audit work took place at OPG's corporate office in Toronto, but we also visited power stations and regional offices at Pickering, Darlington, Kipling, Niagara Falls, Whitby and Ajax. As part of our cross-jurisdictional study of government-owned utility organizations in North America, we visited the Tennessee Valley Authority (TVA), whose organizational structure and operations are similar to those of OPG.

We reviewed the work of internal audit in the Ministry of Energy and OPG in planning our audit. We also engaged an independent consultant with expertise in human resources in the energy sector.

Summary

Over the last decade, the amount of electricity OPG generates has been declining, mainly because of reduced demand, coal plant closures and more private-sector involvement in new power generation. Despite the declining demand, electricity prices have been rising in Ontario. Given that OPG still generates about 60% of Ontario's electricity, its operating costs have a significant impact on the cost of electricity, as well as on OPG's profitability, which in turn affects how quickly the legacy debt of the former Ontario Hydro can be paid off.

About two-thirds of OPG's operating costs are human resources-related. It is therefore critical that OPG's human resources expenditures be effectively managed. OPG's operational efficiency has been the subject of many internal and external reviews and studies. Most of these reviews have identified concerns over high staffing and compensation levels.

Recognizing these concerns, OPG initiated a Business Transformation project in 2010. Its target is to reduce staffing levels by 2,000 employees through attrition by 2015. Between January 2011 and the end of our audit fieldwork in April 2013, OPG had reduced its staff by about 1,200 employees. Although OPG projects that it will meet its target by the end of 2015, with the number of staff it needs to operate expected to drop by almost 50% by 2025, we believe it will continue to face significant challenges in making necessary adjustments.

OPG has started to make some progress in reducing its overall staffing levels and labour costs. However, we found several areas where its human resource management practices need further improvement if it is to achieve its Business Transformation objectives. In addition to high staffing and compensation levels, the areas that particularly concerned us were recruitment practices, performance management, succession planning, outsourcing arrangements, overtime usage, absenteeism and staff training. The respondents to our

anonymous survey of over 800 OPG staff echoed many of our concerns. Some of our key audit findings were as follows:

- OPG's overall staffing levels have gone down by 8.5% (from about 12,100 in 2005 to 11,100 in 2012), but the size of its executive and senior management group (directors, vice presidents and above) has increased by 58% (from 152 in 2005 to 238 in 2012). Many respondents to our survey questioned the rationale of reducing overall staffing levels while creating a "top-heavy" organization.
- OPG rehired some of its former employees, mainly for the purpose of identifying, grooming and training successors. Almost all were rehired shortly after leaving OPG. Some continued to receive significant amounts in allowances and Annual Incentive Plan (AIP) awards, and some had already drawn their pensions in single lump-sum payments upon leaving. Many respondents to our survey felt that this was an indication of knowledge transfer and succession planning at OPG not keeping pace with attrition and retirement.
- OPG has reduced staffing levels at its nuclear facilities since 2011. Even after cuts, one of the most overstaffed areas in 2013—facility maintenance, janitorial and custodial services—was still 170% (or 187 staff) above the industry benchmark based on data from other nuclear operators in North America. Some operational functions continue to be understaffed while their associated support functions continue to be significantly overstaffed. For example, in 2013 the staffing level for nuclear plant operations was 8% (or 51 staff) below the benchmark, while support staff for this area was 82% (or 143 staff) above the benchmark.
- Although OPG has adequate policies and procedures in place to govern its recruitment and security clearance processes, we identified areas of non-compliance:
 - About 700 pairs or groups of OPG employees reside at the same address and are likely related. In some cases, OPG had no documentation to show whether family members of existing staff had been hired through the normal recruitment process. In other cases, family members were given jobs although they had not appeared on any interview shortlists following the pre-screening processes.
 - All OPG employees are required to obtain a security clearance and renew it every five years. However, more than 50% of the OPG staff in our sample, including senior staff with access to confidential nuclear information, either had never obtained security clearances or were working with expired clearances.
- We found a number of cases between 2005 and 2012 where the annual base salaries of non-unionized staff exceeded the maximum set out in the base salary schedule by more than \$100,000, and in one case in 2005 and 2006 by more than \$200,000. OPG told us that before 2010 it had treated the maximum as a guideline rather than a limit, and had approved and implemented salary increases before the 2010 pay freeze legislation.
- OPG gives Annual Incentive Plan (AIP) awards to all non-unionized employees. The awards can range from \$1,600 to about \$1.3 million, depending on the employee's job band, base salary level and the score achieved on a scale of "0" (lowest, with no award) through "4" (highest). Therefore, a senior executive in job band A, B or C, for example, would receive an award of 45% to 100% of his or her base salary for a score of "2," and 55% to 150% for a score of "3" or "4." On average, we found that from 2010 to 2012, 67% of executive and senior management staff received high scores ("3" or "4") while only 24% of staff in lower job bands achieved them. Many respondents to our survey felt that there was a lack of transparency in

scoring and that it has been in favour of staff in senior positions. We also found in our review a number of cases with limited documentation to support the score achieved.

- OPG engaged a consultant to conduct a compensation benchmarking study in 2012, which found that base salary, cash compensation and pension benefits for a significant proportion of staff were excessive compared to market data. Our analysis showed that total earnings were significantly higher at OPG than total earnings for comparable positions in the Ontario Public Service (OPS), and many of OPG's senior executives earn more than most deputy ministers.
- OPG has contributed disproportionately more to its pension plan than its employees have. Since 2005, the employer–employee contribution ratio at OPG has been around 4:1 to 5:1, significantly higher than the 1:1 ratio at OPS. OPG is also solely responsible for financing its pension deficit, which was about \$555 million in its latest actuarial valuation.
- OPG provides numerous employee benefits, such as relocation benefits and meal and travel allowances, some of which we found questionable. For example, an employee who transferred to another office received over \$392,000 in housing and moving allowances and related reimbursements from OPG, on top of the proceeds of \$354,000 from the sale of his old residence. Another employee who moved further away from his new work location received over \$80,000 in 2011 and 2012.
- OPG incurred losses on 95 of the 98 purchase guarantees it offered to employees whose properties had not sold within a 90-day listing period, resulting in a total loss of about \$2 million between January 2006 and April 2013.
- OPG has been outsourcing its IT services to the same private-sector vendor since 2001, when it conducted a competitive process and signed a 10-year, \$1-billion contract with the vendor. Under this contract, OPG transferred

about 700 IT staff to the vendor. In 2009, OPG decided to end the contract early and renew it with the same vendor without competition for a term of six years and four months at \$635 million. In awarding a contract of this size on a single-source basis, OPG has not taken advantage of the benefits of open competition, which can help demonstrate fairness and accountability, ensure value for money, eliminate the risks associated with over-reliance on a single supplier, and minimize the perception of conflict of interest.

- OPG's total overtime costs were about \$148 million in 2012. Although they have declined somewhat in recent years, the number of OPG employees earning more than \$50,000 in overtime pay has doubled since 2003, from about 260 to 520 in 2012. Planned outages have resulted in high overtime pay, especially for inspection and maintenance (I&M) technicians. During outages, I&M technicians who are regular day-workers are placed on different schedules and their normal base hours are shown as unpaid leaves while the hours they work are considered overtime and paid at a rate of 1.5 or 2 times their base pay. In 2012, the average overtime pay earned by OPG's 180 I&M technicians was more than \$66,000 each. The perception of many respondents to our survey was that poor planning and scheduling led to unnecessary overtime.
- OPG monitors its nuclear training on a regular basis, but it needs to act on previously identified ways to improve the quality of its training programs, and review the nature and timing of its mandatory training for staff in its hydro/thermal unit.

OVERALL ONTARIO POWER GENERATION RESPONSE

Ontario Power Generation (OPG) is committed to continuous improvement. We regularly benchmark against the performance of our

peers and invite scrutiny to help us further improve. OPG welcomes the Auditor General's audit as an opportunity to strengthen our policies and implement recommended improvements.

To enable OPG to continue to be the lowest-cost generator of electricity for Ontarians, a multi-year Business Transformation initiative was launched in 2010, with the specific objectives of reducing labour costs and creating a sustainable cost structure by implementing over 120 key improvement initiatives. OPG continues to moderate consumer electricity prices, as it currently produces 60% of Ontario's electricity at an average price that is 45% below the average price received by all other electricity generators in Ontario.

Our Business Transformation successes to date include:

- headcount reductions of 1,350 from January 2011 to August 2013 (a further reduction of 150 since April 2013), with a target of 2,000 over the 2011–15 period;
- a forecast productivity (production/headcount) improvement of 11% over 2011–15; and
- a significant decrease in the overall management compensation, and employee business travel and expenses, since 2008.

A review of OPG's cost-saving opportunities conducted by a consulting firm concluded that "OPG has employed a systematic and structured approach to developing a company-wide transformation plan."

The Auditor General conducted an employee survey and noted that the majority of the responses were favourable with some exceptions, recognizing that the survey was conducted during a period of significant reorganization when employees were experiencing uncertainty and stress.

We acknowledge that the findings of the Auditor General demonstrate a need to improve

diligence and further tighten controls in some areas of our company and our culture. OPG is committed to taking actions that will strengthen and further ensure that its human resources practices are managed with due regard for economy and efficiency, and in accordance with applicable legal requirements. OPG has a Code of Business Conduct policy and will follow up on any exceptions identified in the report. OPG will report to the Office of the Auditor General the actions taken to address the report's recommendations, as we did with respect to the Auditor General's 2006 audit of OPG's Acquisition of Goods and Services.

OPG will continue to pursue its Business Transformation initiatives to deliver value to its shareholder and Ontario ratepayers.

Detailed Audit Findings

STAFFING LEVELS AND RECRUITMENT

The Ontario Energy Board (OEB), which regulates the power produced by OPG's nuclear and major hydro stations, raised concerns about overstaffing at OPG in its March 2011 decision on OPG's rate application, stating that "although collective agreements may make it difficult to eliminate positions quickly, it is not reasonable to ratepayers to bear these additional costs in face of strong evidence that the positions are in excess of reasonable requirements." While OPG has started to reduce its staffing levels, given its projected decreases in the amount of energy it will produce, it will face significant challenges in further reducing its staffing levels in the coming years. We also found several areas for improvement in OPG's recruitment practices.

Business Transformation

With the reduction of electricity demand, closure of coal plants and more private-sector involvement

in new power generation, the amount of electricity generated by OPG has been decreasing steadily. The decline has been sharpest over the past four years, dropping 22%, or from 108 terawatt hours in 2008 to 84 terawatt hours in 2012. Over the same period of time, the number of staff at OPG has decreased by 13%, from about 12,800 employees in 2008 to about 11,100 in 2012 (see Figure 2).

OPG's projections show that the amount of electricity it needs to produce will continue to decrease (see Figure 3). Therefore, the number of staff needed to operate, maintain and support its business activities is expected to drop significantly from 2013 to 2025—by close to 50%. As a result, OPG will need only about 5,400–7,000 staff by 2025. In response to these projections, OPG has initiated a Business Transformation project that is expected to reduce its staffing levels through organizational restructuring over a five-year period (2011–15) and save about \$700 million. OPG's target is to reduce the number of its staff by 2,000, going from 11,640 in January 2011 to 9,640 by December 2015.

At the end of our audit fieldwork in April 2013, OPG had about 10,400 staff—a reduction of about 1,200 since January 2011. OPG projected that at its current rate of reducing staff it would meet its staff

reduction target by the end of 2015. Beyond 2015, OPG plans to make further organizational changes and assess whether it needs to reduce staffing levels by a further 500 employees as part of its 2016 business planning.

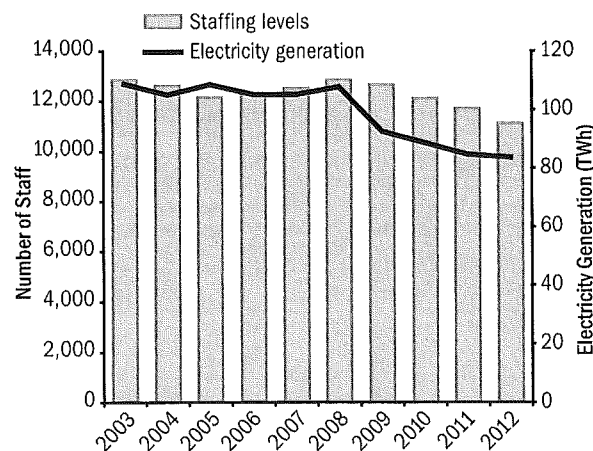
To avoid having to offer staff costly severance packages, the reductions are to take place through attrition (gradually reducing staff through retirement or resignation) and redeployment (relocating staff to areas where they are required) rather than layoffs. OPG informed us that it decided not to lay off staff en masse because a large number of staff are eligible to retire between 2011 and 2015 and because layoffs would pose difficulties in a unionized environment. For example, the collective agreements in place not only give first refusal for voluntary job termination by seniority, they also provide a displacement right that allows a senior staff member to take over the job of a junior staff member instead of being laid off. If unionized staff exercised those rights, OPG would bear severance costs for junior staff as well as relocation and retraining costs for senior staff. In addition, with many people eligible to retire, staff might stay to take advantage of severance packages equivalent to a maximum of 24 months' salary in the event of a layoff announcement. This would curtail the rate of staff leaving through attrition.

OPG told us that to achieve its staff reduction target and sustain its operations with fewer staff, it has introduced 120 initiatives to improve efficiency and eliminate unnecessary work. OPG also informed us that there is no direct correlation between specific initiatives and attrition—the positions vacated will not match up exactly to the areas in which work has been eliminated.

Although OPG informed us that staff who leave through attrition do not receive packages, we noted that its staff reduction in recent years has still cost a significant amount. There has been a fourfold increase in total severance and termination costs (from about \$4 million in 2009 to about \$17 million in 2012). The two key components of these costs are retirement bonuses (equivalent to one month

Figure 2: Electricity Generation and Staffing Levels* at OPG, 2003–2012

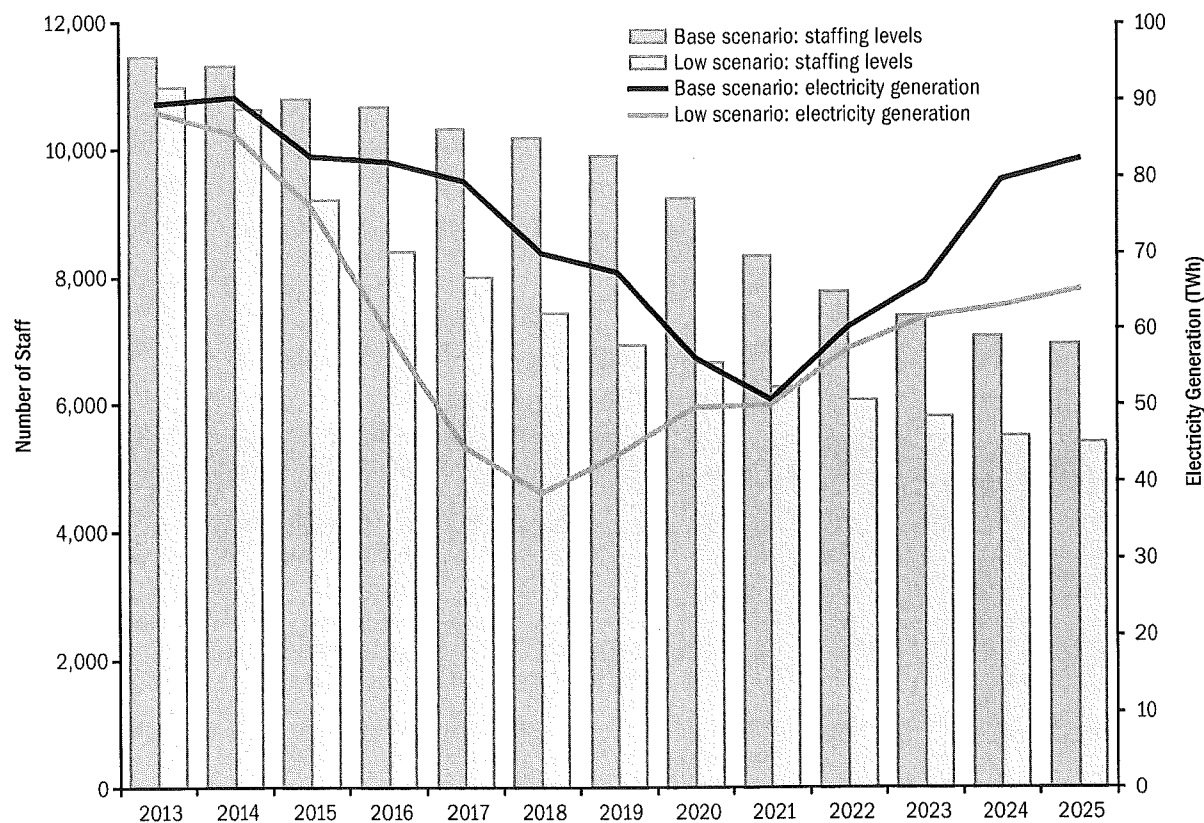
Source of data: Ontario Power Generation



* These numbers represent year-end staffing levels. They include regular staff and non-regular (temporary and contract) staff but exclude nuclear security staff for reasons of confidentiality.

Figure 3: Projected Electricity Generation* and OPG Staffing Levels, 2013–2025

Source of data: Ontario Power Generation



* Projections were prepared by OPG at the end of 2010. Both scenarios assume that all coal production will cease by 2014, that the Darlington refurbishment will begin in 2016 and that hydroelectric projects will proceed as planned. Variations between the scenarios relate to the timing of the nuclear new build, the length of time the Pickering nuclear facility will remain in operation, and the number of thermal units being converted to biomass or gas.

of base pay for unionized staff and three months of base pay for non-unionized staff) and severance pay, which employees negotiate with management along with input from the legal department. In addition, under the *Pension Benefits Act*, employees can choose to receive their pensions in one lump sum as long as they are eligible for early retirement or they resign before age 55. Our review noted that some employees who received lump-sum payouts were rehired by OPG shortly after they retired or resigned (see the section on Rehiring Former Employees as Temporary or Contract Staff).

Respondents to our employee engagement survey generally felt the intention of Business Transformation was valid but raised some concerns about its execution, for example:

- Business Transformation came too late—it should have started much sooner for the financial health of OPG.
- It has been under way for two years but limited practical changes have been made.
- It has put too much focus on staff reduction and not paid enough attention to developing a succession plan, deploying the right people to the right places and reducing workloads.
- The collective agreements and the “culture of entitlement” among staff have restricted OPG from making many changes through Business Transformation.
- There was no consultation to obtain input from all staff before Business Transformation was rolled out, and there has been a lack of

meaningful, informative and effective communication to employees about Business Transformation since rollout.

- “Working in silos” has led to a lack of engagement, commitment and buy-in from OPG employees in response to Business Transformation.

Staffing Levels for Executives and Senior Management

In the rate application it submitted to the OEB in 2007, OPG indicated that it had made changes since 2004 “to signal a return to a more public-sector employment situation.” One of these changes was reducing the number of executives at OPG. However, we noted that this has not been the case in recent years.

Despite the overall reduction OPG has recently made to its staffing levels, the size of its executive and senior management group (directors, vice presidents and above) has moved in the opposite direction. Figure 4 shows the overall number of staff has decreased from about 12,800 in 2003 to

12,100 in 2005 and 11,100 in 2012, a reduction of 8.5% since 2005. However, the number of executives and members of senior management dropped initially from 173 in 2003 to 152 in 2005 but went up again to 238 by 2012, an increase of 58% since 2005. Specifically:

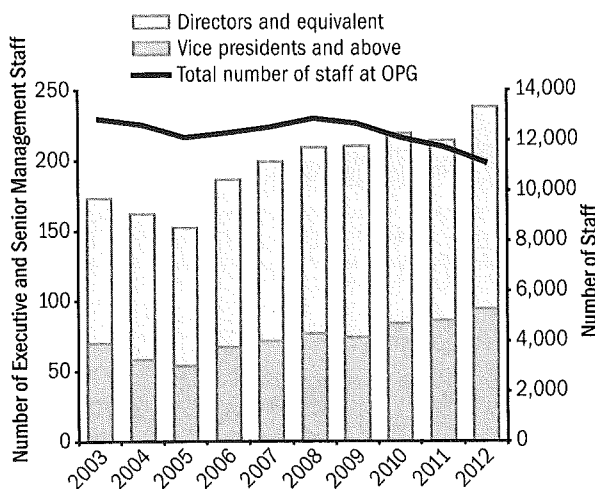
- The number of executives (vice presidents and above) dropped from 70 in 2003 to 54 in 2005 but increased to 94 by 2012—an increase of 74% since 2005.
- The number of senior management staff (directors and equivalent) decreased from 103 in 2003 to 98 in 2005 but increased to 144 by 2012—an increase of 47% since 2005.
- The most obvious jump occurred in 2012, during Business Transformation. Nine vice presidents and 21 directors left OPG that year, but 17 employees were promoted to VPs and 50 to directors, indicating that many of the promotions were for newly created positions rather than to fill vacant positions. OPG informed us that the new positions were part of Business Transformation and for nuclear refurbishment.

We also found that the number of vice presidents and directors with no specific titles or job descriptions has increased considerably, from 12 in 2005 to 40 in 2012. OPG explained that some employees were not assigned specific titles or portfolios because they were working on special projects without job descriptions, or their job descriptions were still being written.

Many of the respondents to our survey questioned the rationality of reducing overall staffing levels while creating a “top-heavy” organization. They felt that the only visible change brought about by Business Transformation was numerous promotions to expand the size of the executive and senior management group. They also felt that promotions had been made hastily with no transparent selection process and had been communicated poorly, creating ill feeling and mistrust among employees.

Figure 4: Number of Staff* vs. Number of Executives and Senior Management Staff at OPG, 2003–2012

Source of data: Ontario Power Generation



* These numbers represent year-end staffing levels. They include regular and non-regular (temporary and contract) staff but exclude nuclear security staff for reasons of confidentiality.

Benchmarking of Staffing Levels at Nuclear Facilities

OPG has been under increasing scrutiny from the OEB to demonstrate that its operations are in line with those of other nuclear stations across Canada and in the United States. In its March 2011 decision, the OEB directed OPG to submit in its next rate application a study comparing staffing levels at its nuclear facilities with industry benchmark data from other nuclear operators in North America.

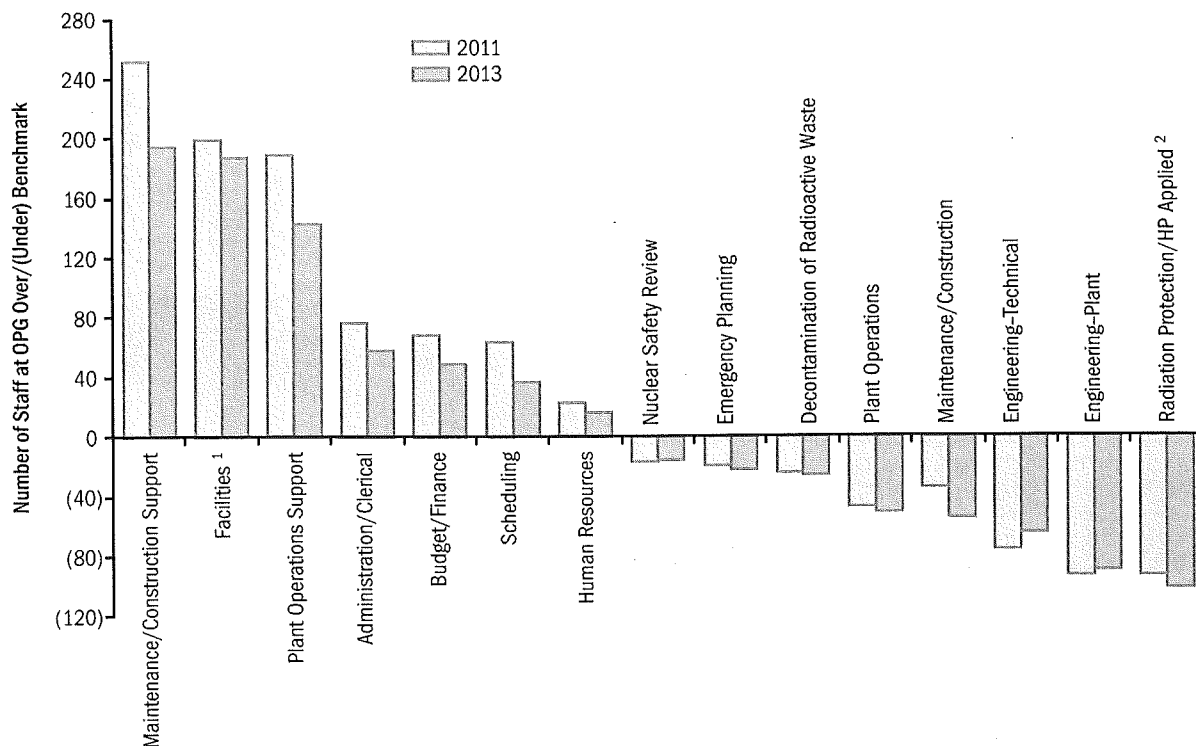
OPG engaged a consultant who produced two reports for OPG's management to measure and report on whether OPG's nuclear staffing level was in line with comparable organizations. The first, issued in February 2012, noted that OPG's nuclear staffing level was 17% (or 866 employees) higher than the benchmark in 2011, with 23 overstuffed areas and 14 understuffed areas. OPG informed us

that it has since adjusted its staff reduction target to address the imbalances. In the second report, issued on the last day of our audit fieldwork in April 2013, the consultant found that OPG's nuclear staffing level was 8% (or 430 employees) above the benchmark, with 23 overstuffed areas and 16 understuffed areas.

Figure 5 shows selected functional areas identified as over- or understuffed in the two studies. Both benchmarking studies found that the overstuffed areas related mainly to support functions (for example, general maintenance, administrative support and human resources) while the understuffed areas related mainly to operational functions (for example, maintenance/construction, plant operations, engineering, emergency planning and safety). We noted that several operational functions were understuffed while their

Figure 5: Selected Areas Identified as Overstuffed/Understuffed at OPG by Nuclear Benchmarking Studies

Source of data: Ontario Power Generation



1. "Facilities" refers to general maintenance and custodial services, such as cleaning and changing light bulbs.

2. "HP" is an acronym for health physics, the physics of radiation protection.

associated support functions were overstaffed. For example, in 2013, Maintenance/Construction was 6% (or 55 staff) under the benchmark, but Maintenance/Construction Support was 78% (or 194 staff) above it. Similarly, Plant Operations was 8% (or 51 staff) below the benchmark while Plant Operations Support was 82% (or 143 staff) over the benchmark in 2013. A similar pattern was shown in 2011.

One of the most overstaffed areas, Facilities (general maintenance, janitorial and custodial services), has improved only slightly. It went from being 173% (or 199 staff) above the benchmark in 2011 to 170% (or 187 staff) above it in 2013. Other key understaffed areas have shown limited or no improvement. For example, staffing levels in the Engineering–Technical and Engineering–Plant areas remained almost unchanged in 2013, still about 30% below the benchmark.

Recruitment Practices and Requirements

Although we found that OPG had adequate policies and procedures in place to govern its recruitment practices, it did not always follow them. We found non-compliance in several areas.

Hiring Process

We identified about 700 pairs or groups of OPG employees (about 1,400 staff, or more than 10% of OPG employees) who resided at the same address, indicating that they were most likely family members. OPG has no policy prohibiting the hiring of family members so long as proper recruitment practices are followed: family members of the prospective employee cannot be involved in the hiring decision and family members should not be in reporting relationships with one another. We reviewed the personnel files for a sample of 20 pairs or groups and found that it was not evident whether proper recruitment processes had been followed for half the employees in the sample. Specifically:

- Four of the employees were offered jobs although their names had never appeared on interview shortlists following the pre-screening process.
- Another four employees had no documents in their files to show whether they had been hired under the normal recruitment process.
- Two other employees had been hired as temporary staff based on referrals without going through the normal recruitment process and were later offered permanent jobs on the basis of their temporary work experience.

Security Clearance Requirement

All employees are required to obtain security clearances before commencing work with OPG and must renew them every five years. There are three types of security clearance:

1. **Standard:** A Criminal Record Name Check (CRNC) must be completed for staff from hydro/thermal and corporate support units, as well as contractors working in nuclear units for a specific timeframe but with no access to protected areas or nuclear information.
2. **Site Access:** In addition to a CRNC, a Canadian Security Intelligence Service check and verification of employment and education must be completed for staff from nuclear units as well as for some other employees with access to nuclear information.
3. **Level II (Secret):** All the checks in a site access clearance plus a financial credit check must be completed for staff with access to information classified as “secret” by the federal government.

We reviewed security clearances initiated by OPG during a five-year period, from January 2008 to December 2012, and noted the following:

- Aside from the Chair and the CEO, none of the members of OPG’s Board of Directors had obtained security clearances even though they had access to confidential information. OPG indicated that it was in the process of obtaining security clearances for them.

- There were numerous examples of employees who had started working at OPG before their security clearances were issued.
- In a sample of 50 employees who were on OPG's payroll but not on its security clearance record, 13 had never obtained security clearances. OPG informed us that this was because hydro/thermal and corporate support staff hired before May 2003 were exempt from security clearance. One of these employees had held various senior positions in nuclear finance, nuclear reporting and nuclear waste management, and had access to sensitive information. The remaining 37 employees in our sample had joined OPG after May 2003, but more than half of them had never obtained security clearances or were working with expired clearances.

RECOMMENDATION 1

To ensure that staffing levels are reasonable and that it has the right people in the right positions to meet its business needs, Ontario Power Generation should:

- evaluate and align the size of its executive and senior management group with its overall staffing levels;
- address the imbalances between overstaffed and understaffed areas in its nuclear operations; and
- review and monitor compliance with its recruitment and security clearance processes.

ONTARIO POWER GENERATION RESPONSE

In 2010, Ontario Power Generation (OPG) launched a multi-year Business Transformation initiative to reduce labour costs, create a sustainable cost structure and allow OPG to continue to moderate consumer electricity prices.

The number of executive and senior management positions, as well as overall staffing levels, is addressed through Business Transformation.

There are currently a number of interim positions relating to Business Transformation, project work and other new initiatives. By August 2013, there were 218 senior management positions compared to 238 at the end of 2012. This number is forecast to continue to decline.

OPG has conducted extensive benchmarking of its nuclear and other operations. Based on this benchmarking, we are executing several initiatives that are designed to address opportunities for efficiencies, cost reductions and staff imbalances in nuclear operations. In 2012, the Ministry of Energy engaged a consulting firm to assess OPG's existing benchmark studies, and to identify organization and structural opportunities for cost savings. The report validated OPG's Business Transformation initiative and its objectives. We will continue to identify and implement other improvement initiatives.

As recommended by the Auditor General, OPG will review and monitor compliance with its recruitment and security clearance processes. We will also conduct an internal audit of our hiring practices.

COMPENSATION

OPG's labour costs account for most of its total operating costs. This proportion has increased from 55% in 2003 to 64% in 2012. In its March 2011 decision, the OEB also noted the significance of OPG's labour costs compared to its total operating costs and that its compensation levels were a concern in light of the overall poor performance of its nuclear business, in terms of operations and costs, compared to its peers. Therefore, the OEB disallowed \$145 million in compensation costs, stating in its decision that the staffing levels and amount of compensation at OPG were both too high. OPG appealed the OEB's ruling. In June 2013, the Ontario Court of Appeal found that the OEB had based its decision on information that had not been available to OPG when it

was in collective bargaining, concluding that OPG could not unilaterally reduce staffing levels and compensation rates that had already been set by collective agreements.

Compensation Levels

Unionized and Non-unionized Staff

At the time of our audit, OPG had about 11,100 employees. Approximately 90% of them are unionized: 58% are skilled trades, such as electricians and technicians, represented by the Power Workers' Union (PWU); and 32% are professionals, such as engineers and scientists, represented by the Society of Energy Professionals (Society). The extent of unionization at OPG has generally remained constant over the years. As in any unionized environment, changes to compensation can be made only through collective bargaining, grievances or arbitration.

In response to the ballooning provincial deficit, the government passed the *Public Sector Compensation Restraint to Protect Public Services Act* in March 2010 to freeze compensation growth for non-unionized employees in the Ontario Public Service (OPS) and Broader Public Sector (BPS). Although the legislation did not apply to unionized staff, the 2010 Ontario Budget contained a policy statement with clear expectations that new collective agreements would provide no net increase in compensation for at least two years.

OPG's payroll data showed that the average total earnings increased by 7% since the 2010 pay freeze legislation, from about \$102,000 in 2010 to about \$109,000 in 2012 (see Figure 6). Specifically, the average total earnings for unionized staff went up by 6% (from about \$118,000 in 2010 to about \$125,000 in 2012) for Society staff, and by 7% (from about \$99,000 in 2010 to about \$106,000 in 2012) for PWU staff. Meanwhile, the average total earnings for non-unionized staff dropped slightly between 2008 and 2010, even before the 2010 pay freeze legislation, because OPG limited base pay increases and reduced incentive awards to some

extent. Since 2010, the average total earnings for non-unionized staff has increased 3%, from about \$134,000 in 2010 to about \$138,000 in 2012.

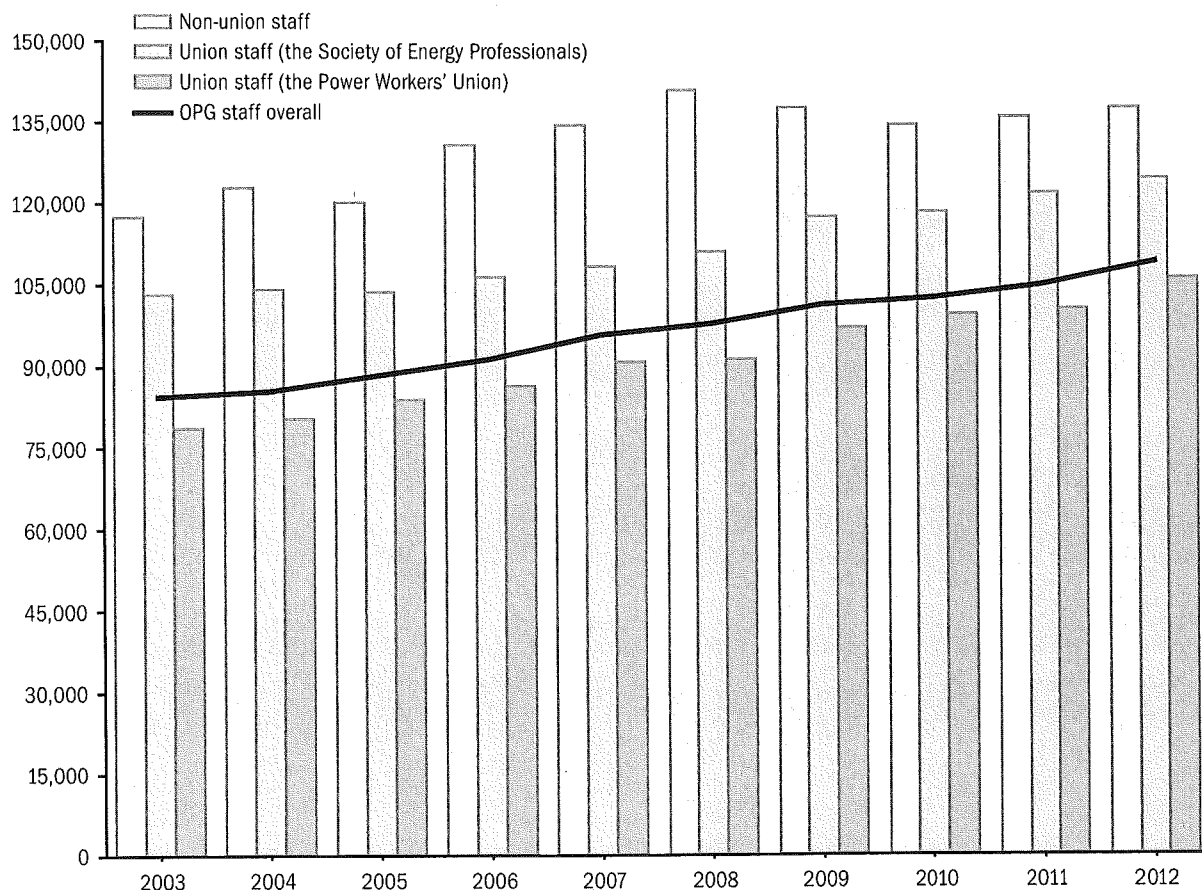
We found a number of reasons for the increase in average total earnings for OPG's staff over the last 10 years. Under collective bargaining, wage increases for unionized staff have been between 2% and 3% per year since 2003. This trend continued through to 2012 because unionized staff were not subject to the 2010 pay freeze legislation, making wage increases possible under their collective agreements so long as the increase could be offset by cost savings elsewhere. Specifically, with OPG's reduction in staffing levels in recent years, the savings gained from paying salaries to fewer staff were more than enough to raise wages for existing staff. This enabled PWU to negotiate wage increases of 2.75% in 2012, in 2013 and in 2014, and the Society to reach wage increases of 0.75% in 2013, 1.75% in 2014 and 1.75% in 2015 through an arbitration process. OPG indicated that these settlements were favourable in comparison with previous settlements and with settlements reached by other organizations in the electricity sector.

Non-unionized staff also received salary adjustments that were exempt from the pay freeze legislation. One such adjustment was incentive awards. For example, the 50 highest earners at OPG saw their earnings increase by an average of about 11% in 2011 from the previous year. Another adjustment was pay increases resulting from promotions; as we have already noted in this report, many OPG employees were promoted to executive and senior management levels in 2012. A third adjustment was made to temporarily mitigate wage compression, where non-unionized supervisors earn less than their unionized subordinates. For example, 680 Society staff earned more than their non-unionized supervisors in 2012, so an adjustment was made to raise the salaries of 220 non-unionized supervisors 3% above their highest-paid unionized subordinates.

We also found in our review of OPG payroll data from 2005 to 2012 a number of non-unionized

Figure 6: Average Total Earnings* for OPG Staff, 2003–2012 (\$)

Source of data: Ontario Power Generation



* Average total earnings include base salary, overtime, incentives and bonuses as well as various types of allowances.

staff whose annual base salaries exceeded the maximum amount set out in the base salary schedule by more than \$100,000, and in one case in 2005 and 2006 by more than \$200,000. OPG told us that before 2010 it had treated the maximum as a guideline rather than a limit, and had approved and implemented salary increases before the 2010 pay freeze legislation. OPG also informed us that since 2010, no salary increases had been provided to the employees whose base salaries already exceeded the maximum.

We found similar instances for about 1,200 unionized staff who had received more than the maximum set out by the base salary schedule in 2012. OPG explained that this was because of the implementation of new base salary schedules for PWU staff in 2002 and Society staff in

2006. Essentially, if an employee's old base salary exceeded the maximum set out in the new schedule, he or she was "green circled" to maintain the old level while still receiving annual wage increases.

Sunshine List

OPG is required by the *Public Sector Salary Disclosure Act, 1996* to disclose annually the names, positions, salaries and total taxable benefits of any employees who made \$100,000 or more in a calendar year. (This disclosure is popularly known as the "Sunshine List.")

The number of OPG staff on the Sunshine List has grown steadily since the organization was created in 1999, albeit at a slower pace after the 2010 pay freeze legislation. Over the last 10 years,

the number has doubled, from 3,980 employees in 2003 to 7,960 in 2012, representing about 62% of the employees on OPG's payroll; the corresponding increases in total salaries and taxable benefits paid to those on the list were \$513 million for 2003 and \$1.11 billion for 2012. The number of OPG top-earners (people who earned \$200,000 or more) on the Sunshine List has increased at an even faster rate—in 2012 it was almost four times higher (448 employees) than it was in 2003 (117 employees).

Compensation and Pension Benchmarking

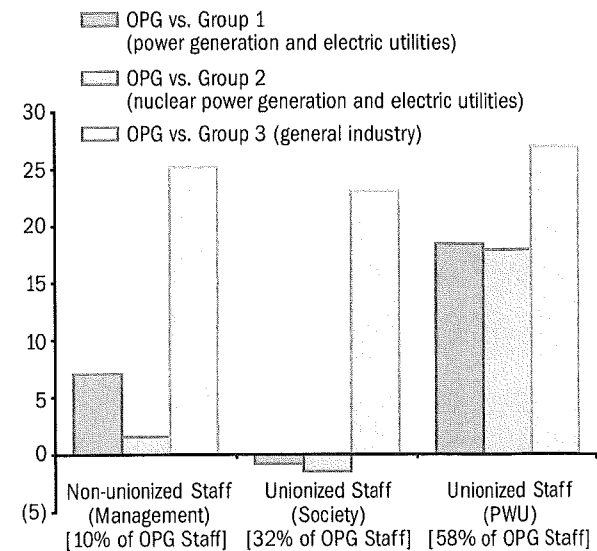
OPG vs. Similar Organizations

In its March 2011 decision, the OEB noted that OPG's compensation benchmarking analysis has not been comprehensive. It directed OPG to file a full, independent compensation study with its next application and recommended that the study cover "a significant proportion of OPG's positions" and that the benchmark should generally be set at the median (50th percentile).

OPG engaged a consulting firm to conduct a compensation benchmarking study in 2012. The study compared base salary levels and total cash compensation for about 50% of staff at OPG with similar organizations, including Bruce Power and utility companies in other Canadian jurisdictions. The study looked at three groups of positions (Power Generation & Electric Utilities, Nuclear Power Generation & Electric Utilities and General Industry) and found that compensation for a significant proportion of OPG's staff was well above the market median (see Figure 7). The study also found that OPG's annual pension and benefits (health, dental and life insurance as well as disability benefits) were higher than the market average, depending on base salary level. For example, the annual pension and benefits of an OPG employee earning a base salary of \$60,000 would be about 19% (\$2,400/year) higher than the market average; for an employee with a base salary of \$220,000, they would be about 38% (\$13,000/year) higher than the market average.

Figure 7: OPG's Total Cash Compensation Above/Below Canadian Market Median, 2012 (%)

Source of data: Ontario Power Generation



OPG vs. Ontario Public Service

In January 2007, the government established an Agency Review Panel to review specific issues at OPG and the other four provincial electricity-sector institutions (Hydro One, the Independent Electricity System Operator, the Ontario Power Authority and the Ontario Energy Board). Commenting on the organizations OPG chose to use as comparators for its compensation benchmarking, the Panel said there appeared to be "a bias in favour of utility/energy organizations in the private sector. To the extent public-sector organizations are used as comparators, it is almost exclusively Canadian utilities (for example, Hydro-Quebec, BC Hydro and Atomic Energy of Canada), and there is only very limited use of a broader public-sector group (for example, Ontario Public Service, provincial and federal Crown corporations or agencies and regulators)."

Given that the Province of Ontario is OPG's sole shareholder, we compared total earnings and pensions at OPG with those in the Ontario Public Service (OPS) for perspective. For total earnings, we selected 16 typical positions below the executive levels at OPG in areas such as administration, finance and human resources to benchmark against

comparable positions in the OPS. For 13 of the 16 positions, the average total earnings at OPG were higher than the maximum total earnings in the OPS (see Figure 8). As for the executive levels, the total earnings for most OPG senior vice presidents significantly exceeded those for most deputy ministers in the OPS.

Pensions are a very significant part of total compensation at OPG. This is especially the case for executives, whose pensionable earnings can be greatly increased when bonuses or awards are added to their base salaries. Unlike the OPS, which has a 50–50 split between employer and employees for making pension contributions and funding pension shortfalls, OPG has unequal cost- and responsibility-sharing between employer and employees. We noted in particular:

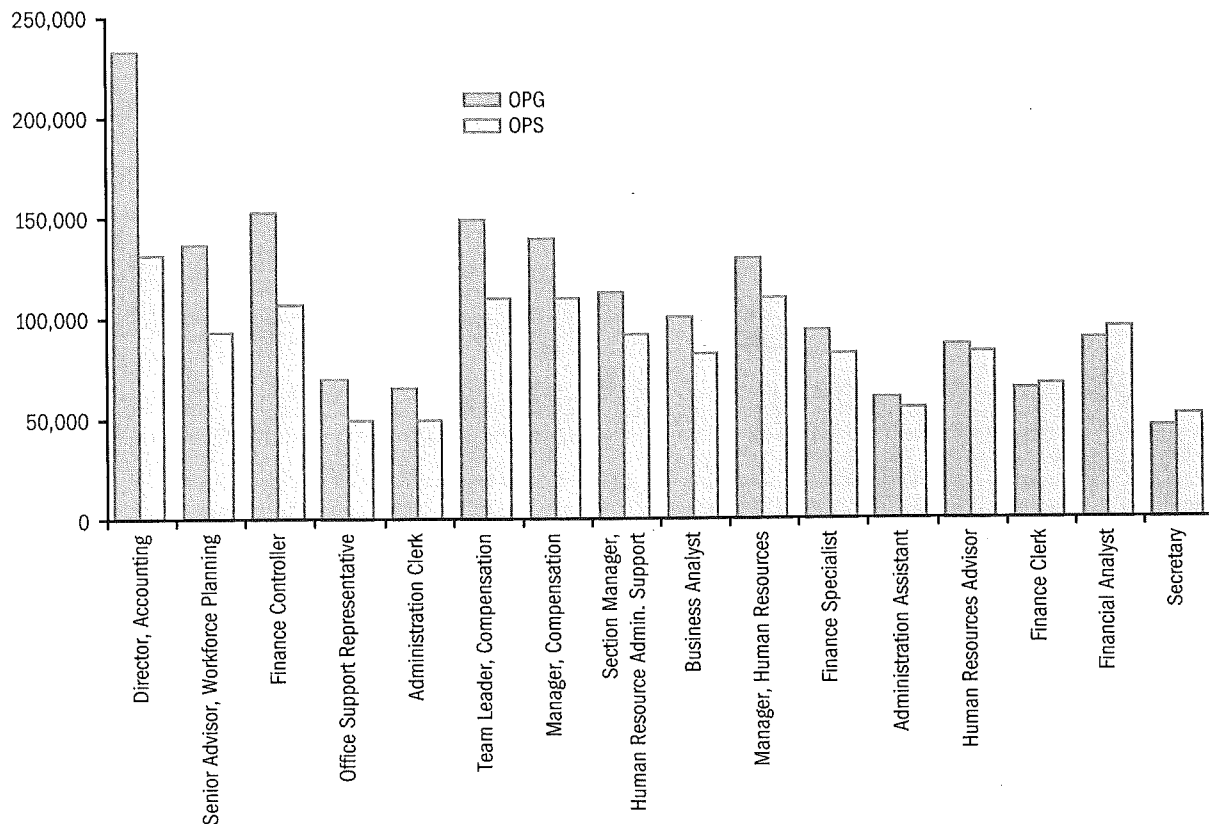
- OPG's contributions to the pension plan have been disproportionately larger than those

of its employees every year. Since 2005, the employer–employee contribution ratio at OPG has been around 4:1 to 5:1, significantly higher than the 1:1 ratio at OPS. For example, employees contributed \$70 million to the pension fund in 2012 while OPG put in \$370 million.

- Executives, who contribute only 7% of their earnings up to a maximum of \$17,254 annually while OPG contributes 18.1%, are eligible for particularly generous pensions. For example, the top five executives at OPG will be eligible to receive annual pensions ranging from \$180,000 to \$760,000 when they reach age 65.
- OPG also bears the responsibility of financing any pension funding shortfalls. The most recent actuarial valuation, as at January 1, 2011, showed OPG's pension fund in a deficit position, with a shortfall of \$555 million. This

Figure 8: Comparison of Average Total Earnings at OPG vs. Maximum Total Earnings at Ontario Public Service (OPS) (\$)

Sources of data: Ontario Power Generation, Ministry of Government Services



was more than twice its projected shortfall of \$239 million as at January 1, 2008. The next actuarial valuation will be prepared as at January 1, 2014.

- In July 2013, Dominion Bond Rating Service (DBRS), a Canadian-owned and globally recognized ratings agency, released its annual pension study reviewing 461 pension plan funds in Canada, the U.S., Japan and Europe. The report highlighted the 20 Canadian funds with the largest pension deficits. OPG was at the top of the list with a deficit of \$3.3 billion. This amount, derived from the accounting valuation used for preparing OPG's financial statements, was different from the \$555-million deficit amount from the most recent actuarial valuation, which is the valuation used for funding purposes.

Compensation and Staff Performance

Non-unionized Staff

In 2004, the OPG Review Committee established by the Ontario government noted that "accountability

and compensation are closely linked. Providing the right incentives can help keep people accountable." However, the Committee found that there was "not a strong enough link between achievement and rewards" at OPG. We found that this was still the case.

Under OPG's Annual Incentive Plan (AIP), non-unionized employees are scored on their job performance on a scale of "0" (the lowest, with no award) to "4" (the highest), and receive an annual cash award for meeting key financial and operational objectives. As Figure 9 shows, awards can range from 4% of base pay (starting at \$1,600) to 150% of base pay (as high as \$1.3 million) depending on an employee's position, base salary level and AIP score. Therefore, a senior executive in job bands A, B or C, for example, would receive an award of 45% to 100% of his or her base salary for a score of "2," and 55% to 150% for a score of "3" or "4."

Figure 10 shows that the distribution of high AIP scores ("3" or "4") has been skewed toward executives and senior management staff (directors, vice presidents and above). On average, 67% of

Figure 9: Annual Incentive Plan (AIP) Award Structure*

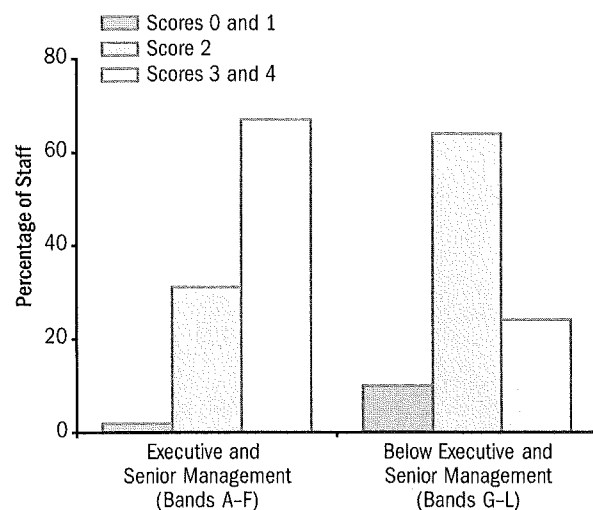
Source of data: Ontario Power Generation

Band	Position Group	Positions (Example)	Base Salary Range (\$)			AIP Score and Associated % Award			
			Min	Mid	Max	1	2	3	4
A	Senior Executive	Chief Executive Officer	580,000	720,000	860,000	50	100	125	150
B		Executive Vice Presidents	315,000	390,000	465,000	22.5	45	55	67.5
C		Senior Vice Presidents	265,000	330,000	395,000	22.5	45	55	67.5
D	Executive	Chief Information Officer	195,000	260,000	325,000	12.5	25	30	37.5
E		Vice Presidents	160,000	200,000	240,000	12.5	25	30	37.5
F	Management	Directors	120,000	150,000	180,000	10	20	25	30
G		Managers	95,000	130,000	160,000	7.5	15	20	22.5
H		Section or First Line Managers	85,000	110,000	140,000	7.5	15	20	22.5
I	Professional	Analyst	65,000	85,000	105,000	5	10	12.5	15
J		Service Co-ordinator	55,000	70,000	90,000	4	8	10	12
K	Administrative	Administrative Assistant	45,000	55,000	65,000	4	8	10	12
L		Secretary	40,000	50,000	60,000	4	8	10	12

* Award amounts are calculated by multiplying the base salary by the percentage that corresponds with the AIP score. Both base salary ranges and AIP structure have remained unchanged since January 2008. There is no award for an AIP score of "0."

Figure 10: Distribution of Annual Incentive Program (AIP) Scores by Job Bands, 2010–2012

Source of data: Ontario Power Generation



executive and senior management staff received high AIP scores from 2010 to 2012. Only 24% of staff in lower job bands received high scores during the same period; the majority of them achieved a score of “2.”

Some executives had incomplete or no performance evaluation documentation to support their high AIP scores. OPG explained that AIP scores are reviewed and validated in calibration meetings, but acknowledged that many performance evaluations were verbal and not documented in writing. We noted one case where an employee received a severance payment of \$450,000 when terminated for ineffective performance and inappropriate behaviour. This employee had received a total of \$760,000 in AIP awards in the previous four years. OPG informed us that the employee’s behaviour had become an issue only in the last few months of his employment and was not related to his performance before then.

The majority of respondents to our survey indicated that they felt AIP was unfair and said they did not feel it encouraged them to be as productive as possible. In particular, respondents cited a lack of transparency in AIP scoring, which they felt had

been to the benefit of senior management staff, and that scores were based on factors other than job performance and productivity.

Unionized Staff

We found that performance evaluations of unionized employees have not been done adequately and consistently. For example, the collective agreement for PWU staff stipulates that progression through steps in salary ranges will be time-based subject to satisfactory performance and successful completion of training, and that progression is to be withheld for six months if performance is not satisfactory. The usual method of determining whether staff performance has been satisfactory is a performance evaluation, but in our review of a sample of 15 PWU staff, we found that only two out of a possible 30 evaluations for 2010 and 2011 had been completed. OPG informed us that it does not have a requirement to prepare and document formal performance evaluations for PWU staff.

The majority of respondents to our survey felt that OPG did not have timely, effective and appropriate performance management in place for its unionized staff. They felt that collective agreements, grievances, arbitrations and automatic progression had created a perception that “nothing can be done” and a tendency to avoid dealing with poor performance.

At the time of our audit, there were 960 unionized employees in managerial and supervisory roles. In 2004, the government’s OPG Review Committee also noted that “many staff members that OPG considers to be managerial belong to a bargaining unit, which may be an obstacle to accountability and effective pursuit of company goals. We strongly encourage all parties to make every effort to put in place a more rational arrangement.” OPG informed us that two-thirds of its unionized staff with managerial or supervisory roles are represented by the Society, and a clause in their collective agreement allows them to perform those functions.

The majority of respondents to our survey also indicated that they felt unionized staff performing managerial or supervisory functions had a negative impact on accountability and performance management. They cited conflicts of interest and reluctance amongst unionized managers or supervisors to carry out performance reviews or deal with performance problems of their unionized subordinates.

Other Employee Benefits

In addition to base salary and incentive awards, OPG grants its employees various other types of benefits. Some were for significant amounts, which we found questionable in some cases.

Housing and Moving Allowances

When regular OPG employees change their work location, they are eligible for housing and moving allowances and relocation benefits that cover various expenses. These include legal fees and disbursements related to the sale and purchase of properties; real estate brokerage fees; upkeep costs on former residences that have not yet sold; interim living expenses before moving into a new residence; packing and shipping of household goods; temporary storage; house-hunting trips; home-inspection fees; and incidental out-of-pocket expenses. OPG indicated that all relocation benefits are subject to Canada Revenue Agency taxation requirements and employees are cautioned to retain receipts in case they are audited.

Payroll data from 2009 to 2012 showed that OPG spent on average about \$1.4 million each year on housing and moving allowances. When we reviewed the files documenting the costs of moving individual employees, we found employees who had not only received housing and moving allowances granted by OPG through payroll but also received further benefits by claiming various other expenses. OPG was unable to locate the supporting documents for some of these claims. For example:

- An employee transferring to another office sold his former residence for about \$354,000 and purchased a new property for \$1.35 million. Payroll data showed that he had received more than \$244,000 for housing assistance and moving expenses. However, when we added up the other expenses his file showed that he had claimed, we found the total amount that he received was actually over \$392,000.
- Another employee chose to rent an apartment instead of buying a property in his new location. Payroll data showed that he had received \$75,000 for rental assistance and moving expenses. However, with the other benefits his file showed that he received, the actual total was \$140,000.
- A third employee, when transferring to another office, sold his old residence for \$380,000 and bought a new property for \$830,000. Payroll data showed that he had received about \$43,000 for housing assistance and moving expenses. With the other benefits his file showed that he received, the actual total was \$79,000.

OPG's policy is that employees must move a minimum of 40 kilometres closer to their new work location to qualify for housing and moving allowances. However, OPG informed us that staff who moved fewer than 40 kilometres closer could qualify if a move caused hardship. In one example of this, an employee who transferred from the Toronto office to Pickering received over \$80,000; however, not only had he moved only 10 kilometres, but he moved further away from his new work location (the move was within the same city as his old residence, which was not Toronto or Pickering).

OPG also provides a purchase guarantee in the event that a transferring employee's property is not sold within a 90-day listing period. It incurred losses for 95 of the 98 properties it purchased and resold on behalf of its employees from January 2006 to April 2013, for a total loss of about \$2 million.

Travel and Miscellaneous Allowances

Payroll data for 2009 to 2012 shows that OPG incurred about \$2.8 million each year on average for travel and miscellaneous allowances. Staff can request these allowances for a number of reasons, some of which we found questionable. For example:

- OPG assigned three employees to work on a rotational job and provided a \$15,000/year allowance to one of them because she was unable to drive and needed to take a taxi to work. However, we noted that OPG had also paid \$15,000 each to the other two employees, who did drive to work.
- OPG offered \$1,500 per month for one year to an employee who had accepted a position in a new location, because he had to drive further to work until he could move into his new home. His letter of employment stated that the allowance was “to offset some of the hardships that he and his family may experience with this move.” His file also noted that he could “live for free until the construction of his new home was completed.” Although payroll data showed that he received about \$17,000 in housing and moving allowances, the amount of total benefits he actually received was close to \$115,000 when other expenses such as groceries, meals out, car rental and a car damage claim were included.
- Payroll data from 2009 to 2012 also showed that OPG spent about \$1.4 million on average each year on “miscellaneous” allowances, mainly for annual, non-pensionable “executive allowances” of various amounts (\$30,000, \$24,000, \$20,000 and \$12,000) depending on the executive’s income and length of service.

RECOMMENDATION 2

To ensure that employees receive appropriate and reasonable compensation in a fair and transparent manner, Ontario Power Generation should:

- make its Annual Incentive Plan (AIP) more effective by creating a stronger link between awards and staff performance based on documented annual evaluations; and
- review salary levels and employee benefits, including pensions, to ensure that they are reasonable in comparison to other similar and broader-public-sector organizations and that they are paid out in accordance with policy, adequately justified and clearly documented.

ONTARIO POWER GENERATION RESPONSE

Ontario Power Generation (OPG) recognizes the importance of strongly linking individual incentive awards with performance. Annual Incentive Plan (AIP) awards are based on individual, business unit and corporate performance. As recommended by the Auditor General, OPG will assess options to further reinforce this linkage.

OPG’s management compensation is currently at the 50th percentile (i.e., median) relative to the benchmark based on data from Canadian organizations in both general and specific industries in sectors such as power generation/utilities, mining, petroleum/natural gas, and nuclear research, development and engineering. We have reduced total management compensation since 2008. Compensation for OPG’s executives, including vice presidents, continues to be frozen. OPG has also reached collective agreements with its unions that reflect government direction regarding compensation constraints.

There are controls in place to ensure employee salaries, benefits and pensions are in accordance with OPG policy, Canada Revenue Agency taxation requirements, and other legislation. As with any pension plan, retiring employees are entitled by law to elect to receive the commuted value of their pension in a single lump-sum payment. As recommended by the Auditor General, OPG will continue to monitor

and amend controls as needed to ensure compensation is justified and clearly documented.

We acknowledge that OPG pension and benefits are higher than market average. As a result, in 2011, we completed a review of pension and benefit plans to reduce costs and improve sustainability. OPG also participated in a 2012 pension reform committee established by the government, and will be participating in the electricity sector working group, consisting of employer and employee representatives, as announced in the 2013 Ontario Budget.

USE OF NON-REGULAR STAFF AND CONTRACT RESOURCES

Apart from regular employees, OPG's other human resources include non-regular staff (temporary and contract), outsourced information technology (IT) workers, and contractors from private-sector vendors. Of particular concern to us were OPG's practice of rehiring former employees, the IT outsourcing arrangement, and management of nuclear contractors.

Rehiring Former Employees as Temporary or Contract Staff

There were approximately 1,700 temporary staff and contract staff working for OPG in 2012. We noted that about 120 of them had formerly been regular employees. In our review of a sample of temporary and contract staff who were former employees we found that most had been rehired mainly for the purpose of identifying, grooming and training successors or meeting core business needs, suggesting that knowledge transfer and succession planning at OPG has not kept pace with attrition and retirement. We also found that almost all of them had been rehired shortly after leaving OPG. Some of them continued to receive significant amounts in allowances and Annual Incentive Plan (AIP) awards, and some had already drawn their

pensions in single lump-sum payments upon leaving. We noted in particular:

- An employee who chose to receive his pension in a lump sum was rehired by OPG shortly after he retired and continued to work at OPG for about six years. His total earnings in his sixth year as a temporary employee were \$331,000, which included an executive allowance of \$12,000 and an AIP award of \$98,200—double his annual amount as a regular employee.
- Another employee who chose to draw his pension in a significant lump sum returned to work at OPG a month after his retirement. His total earnings that year as a temporary employee working three days a week were \$328,000, which included an AIP award of \$147,000 for his performance before retirement.
- Shortly after leaving OPG, two nuclear employees who chose to receive their pensions in lump-sum payments were rehired as contract employees.

We also found that selection processes and decisions to rehire former employees were not always transparent:

- All the temporary staff in our sample had been selected and rehired by executive or senior management staff without job postings or competitions. OPG explained that these were unnecessary because only former employees would have been suitable for the positions. Most of their original contracts were extended beyond 12 months with only a one- or two-page document attached indicating the contract length and terms but without specifying why the contract needed to be extended.
- For the contract staff in our sample, justifications for extending contracts beyond 12 months had been documented, but no evaluations were kept on file. OPG explained that these were unnecessary because contract employees who did not perform satisfactorily could have their contracts terminated without any significant notice period or penalty payment.

Many of the respondents to our survey expressed concerns similar to ours. They felt that rehiring former employees on an ongoing basis was an indication of poor succession planning. They also felt that better processes should have been put into place to capture the knowledge and experience of retiring staff; to identify and train their successors with sufficient lead time for the transition; and to avoid “double-dipping” by former employees who had withdrawn their pensions in lump sums upon leaving OPG only to return and earn a salary again.

In response to the above concerns, OPG indicated that it was necessary to hire former employees and to pay them at higher rates because it was difficult to find people with the right skills to fill the positions right away, and that it could not influence employees who wished to draw their pensions in single lump sums before returning to work at OPG because this was a personal choice.

Outsourcing of Information Technology Services

OPG has been outsourcing its information technology (IT) function to the same private-sector vendor since February 2001, after it conducted a competitive process and signed a 10-year (February 1, 2001–January 31, 2011), \$1-billion contract with the vendor. They formed a joint venture (ownership: 51% vendor and 49% OPG) for delivering IT services to OPG, and 684 OPG employees (about 400 unionized) were transferred to the joint venture. A little over a year later, in March 2002, OPG accepted the vendor’s offer of purchasing OPG’s share of joint venture ownership.

In March 2007, OPG reviewed its existing outsourcing arrangement and decided to end the contract early in October 2009 and then renew it with the same vendor without competition for a term of six years and four months (October 1, 2009–January 31, 2016) at \$635 million. Including the durations of the original and renewed contracts, the total contract length is 15 years.

Although OPG did not go through an open-competition process, its management did prepare a “single-source justification” form, which indicated that renewing the contract would avoid transition costs of \$25 million and save \$105 million from 2009 to 2015, and identified labour relations as a factor that would make switching to a new vendor unfavourable. OPG informed us that if it stopped using the current vendor, it would have an obligation to reimburse the vendor for severance costs associated with about 270 staff who are former OPG employees. We note, however, that OPG is still responsible for the severance costs whenever these staff leave the vendor’s employ (for example, by being laid off or retiring)—staying with the current vendor simply means the severance payout will not be immediate.

OPG’s management submitted its proposal to renegotiate and renew the contract with the current vendor to its Board on October 1, 2009, and received approval on the same day. However, only after it received this approval did OPG start looking for consultants to validate and endorse the proposal. Two consultants were engaged on October 6, 2009, and issued their final reports within a week.

There are good reasons for public-sector organizations to use open competition rather than non-competitive approaches. Through open competition, organizations can determine a fair market price for the goods and services they require when a variety of suppliers submit competitive bids, and this also helps demonstrate accountability and ensure value for money. In addition, competition eliminates risks associated with over-reliance on a single supplier and minimizes the perception of conflict of interest. By single-sourcing its IT services, OPG did not take full advantage of these benefits.

Time Reporting of Nuclear Contractors

OPG uses Oncore, a web-based time management system, to track the hours and costs of nuclear contractors. It uses a three-step process to do this:

1) Each vendor has “contractor time entry supervisors” who input contractors’ paper timesheets into Oncore; 2) OPG “contract administrators” verify and approve the timesheets in Oncore; 3) OPG “contract owners” give final approval on the timesheets, which are then consolidated into an invoice to be automatically paid by OPG.

Oncore processed the hours reported by about 1,200 contractors in 2011 and 2,200 in 2012, with associated labour costs of about \$56 million in 2011 and \$88 million in 2012. Overtime pay has accounted for a significant percentage of the labour costs for contractors supplied by several large vendors, ranging from 19% to 43%. OPG indicated that overtime was often a result of outages and emergent (unplanned or unscheduled) work.

We selected a sample of contractors and reviewed their hours in Oncore for one week in 2012. The cost of labour for each contractor was high, ranging from about \$8,000 to \$12,000 per week. We noted that the hours in Oncore had not always been reconciled with supporting documents, which could lead to inaccurate time inputs and overpayment to vendors. In 2010, OPG’s Internal Audit department identified a similar issue, which it ranked as high risk and flagged for “prompt management attention.” However, we found that OPG has not fully addressed this issue:

- In 2010, Internal Audit recommended “more detailed information in the contract logbooks, including the start and end times of work activities, the contractor supervisors’ names and titles, the applicable work orders and the contractor workers’ names. This information should be reconciled to the time submitted in Oncore.” We noted that the logbooks often did not contain these details. OPG informed us that the recommendation was never implemented and it had no standard practice for logging contractor activities.
- In 2011, in response to a 2010 Internal Audit recommendation, OPG implemented a system called “Job Clock” to track contractor attendance and time spent on site. The

recommendation noted, “[T]his system has the capability to generate Job Clock reports that can be used by contract administrators to reconcile time entered into Oncore prior to approval.” However, we found that contract administrators often did not do so. We reviewed about 2,600 hours reported by contractors at sites where Job Clock was in place and found that about half of them were not supported by Job Clock reports.

- Overtime hours reported in Oncore were often not supported with documentation showing requests and approvals. OPG contract administrators told us that they either could not locate the documents or had approved the overtime verbally. OPG also informed us it had no standard method for documenting approval of overtime.

RECOMMENDATION 3

To ensure that its non-regular and contract resources are used cost-efficiently, Ontario Power Generation should:

- improve its succession planning, knowledge retention and knowledge transfer processes to minimize the need to rehire retired employees for extended periods;
- conduct an open competitive process for outsourcing its information technology services before the current contract expires; and
- manage and monitor closely the hours reported by the contractors to avoid the risk of overpayment.

ONTARIO POWER GENERATION RESPONSE

Ontario Power Generation’s (OPG) contracting practices are consistent with nuclear industry practices, which address both the need for specialized skills and demographic imbalances of its workforce. Using the short-term services of existing trained and skilled workers also mitigates the need to hire a permanent

workforce during periods of transition or peak work, resulting in substantial cost savings. As recommended by the Auditor General, OPG will review its practices related to rehiring retired employees.

OPG conducted a competitive process when we outsourced our information technology services in 2001. Through an assessment of alternatives initiated in 2007, and through third-party validation, we concluded that renewal under a significantly restructured contract would provide the most significant value to both OPG and rate-payers. We plan to assess all potential options before the current contract expires, including an open competitive process that is consistent with the recommendation of the Auditor General.

OPG concurs with the Auditor General on the importance of accurate contractor payments and will investigate alternatives to manage and monitor contractor hours. In 2012, we enhanced controls by implementing new contracting strategies and will be assessing further control opportunities with regard to time-tracking tools and the time-approval process.

OVERTIME

In its March 2011 decision, the OEB expressed concerns about the “extensive use of overtime, particularly in the nuclear division” at OPG and said that it expected “OPG to demonstrate that it has optimized the mix of potential staffing resources.” In our review of staffing records, we found that management of overtime at OPG still required significant improvement.

Ten-year Overtime Trend

Prior to the OEB’s decision, OPG’s overtime costs rose steadily from \$133 million in 2003 to \$169 million in 2010, and then dropped to \$148 million in 2012. About three-quarters of OPG

staff claimed overtime in each of these years, earning on average about \$15,000 each in overtime pay. The nuclear unit accounts for about 80% of OPG’s annual overtime costs; about half of these were related to planned outages at nuclear facilities, particularly Pickering.

OPG’s overtime cost percentage (overtime costs divided by base salary) dropped from 16.2% in 2008 to 13% in 2011, but was slightly higher than the averages (14.3% in 2008 and 12.1% in 2011) of large utility companies in the U.S. According to OPG, planned outages have been the main driver of its overtime costs because its outage periods are generally much longer than those of its U.S. counterparts due to technical differences and different inspection requirements.

Although OPG’s overtime costs have been decreasing in recent years, its number of high overtime earners has increased significantly. Over the last 10 years, the number of OPG employees who earned more than \$50,000 in overtime pay has doubled, from about 260 in 2003 to 520 in 2012. The number of staff who earned more than \$100,000 in overtime pay has also grown considerably—in 2003 there was only one such employee, but by 2012 there were 33.

Management of Overtime

OPG informed us that all overtime must be pre-approved by a supervisor, who has the discretion to do so as long as his or her overtime budget has not been exceeded. We looked at a sample of employees with high overtime pay and noted that 20% of them had no supporting documents for overtime pre-approvals. We also noted that about one-third of the departments covered in our sample had exceeded their overtime budgets every year since 2009. In addition, each department used different methods of pre-approving overtime—some departments required paper overtime request forms to be submitted and approved before any overtime hours could be worked, but in most departments verbal approvals were sufficient.

We performed an analysis of overtime pay and noted that OPG could improve its deployment of staff, especially for inspection and maintenance (I&M) technicians, who conduct regular inspections and work on outages at nuclear stations. In our review of payroll data, we noted that I&M technicians consistently earned high overtime each year. For example, in 2012 the average overtime pay for OPG's 180 I&M technicians was more than \$66,000 each, representing more than half of their annual base salaries.

OPG acknowledged that planned outages have resulted in high overtime pay, especially for I&M technicians who are regular daytime employees but who are placed on schedules different from their normal hours during outages. Every hour they work that is not one of their normal working hours is considered overtime—even if they work none of their normal hours. Their compensation for those hours is one-and-a-half to twice their basic pay, depending on the days and times they worked. For example, we noted that the highest overtime earner at OPG in 2012 received \$211,000 in overtime pay, but his annual base salary had been reduced from \$135,000 to \$58,000 because when he was put on an outage schedule he no longer followed his normal schedule. His normal base hours therefore showed up as unpaid leaves and all the hours he worked outside his normal schedule were paid at the overtime rate.

The collective agreement stipulates that OPG is responsible for preparing and administering outage schedules. According to OPG, there were about four or five planned outages each year at Pickering and it developed outage plans two years in advance to calculate the number of months each year in which I&M technicians would be required to provide 24/7 coverage.

Many of the respondents to our survey felt that the most common contributor to inappropriate and inefficient uses of overtime was poor planning and scheduling. They also felt that outages could have been planned better by moving around shift schedules instead of using overtime, and that unionized

staff sometimes treated overtime as an avenue to increase their pay.

RECOMMENDATION 4

To ensure that overtime hours and costs are minimized and monitored, Ontario Power Generation should:

- decrease overtime costs for outages by planning outages and arranging staff schedules in a more cost-beneficial way; and
- review other ways to minimize overtime.

ONTARIO POWER GENERATION RESPONSE

Nuclear outages are extremely complex projects that are planned and resourced two years in advance. The scope of work may be affected by emerging issues, unforeseen equipment conditions and changes in regulatory requirements. The majority of overtime costs are associated with activities relating to these outages. Ontario Power Generation (OPG) continuously balances the use of overtime versus contractors and considers the related amount of lost generation and revenue caused by extending the duration of the outage. Our overtime cost percentage is comparable to large utility companies in the United States.

OPG will conduct a cost-benefit analysis to explore various ways, including scheduling and hiring staff and/or contractors, to minimize overtime cost.

ABSENTEEISM

Sick Leave Trend

OPG's sick leave plans are relatively generous compared to those of the Ontario Public Service (see Figure 11). In particular, unionized staff who began working for OPG before 2001 are entitled not only to carry over unused sick days from one year to the

next, but also to restore their used sick days every five years. For example, an employee who took four sick days in Year 1 will receive these four sick day credits back after five years of service in addition to the normal number of sick leave credits he or she is entitled to for the year. As of December 31, 2012, about 5,200 employees—or almost half of OPG's staff—were still under the old plan. On average, each of them has restored and accumulated 162 sick leave credits with full pay and 191 sick leave credits with 75% pay. Unused credits are not paid out on termination or retirement.

The average number of sick days taken per OPG employee, including both short-term absences and major medical absences, has gone up 14% (from 9.2 days in 2003 to 10.5 days in 2012). Direct costs associated with sick days have grown significantly, by 41% (from \$29 million in 2003 to \$41 million in 2012). OPG informed us that sick days and their associated costs have gone up because of the 12-hour shift arrangement that is followed by most of OPG's nuclear staff—if a 12-hour shift worker misses a shift because of illness, it is counted as 1.5 sick days. Compared to other sectors, the average number of sick days taken per employee at OPG was fewer than the public sector's 12.9 days but

more than both the private (8.2 days) and utility (7.3 days) sectors.

Management of Sick Leave

We noted that some of OPG's key sick leave management programs were not being used as effectively as they could be. While we noted no abuses of sick leave credits in our sample testing, a significant accumulation of sick leave credits is possible, leading to a higher risk of abuse if these programs are not used effectively.

The Short-Term Absence Management Program is in place to identify the medical reasons for an employee's absence pattern. Supervisors are expected to regularly examine their staff's attendance records; if an employee's sick leave usage is above the business unit's standard, they are to meet with the employee to discuss the right course of action and document the outcomes. We reviewed the files of a sample of employees whose sick leaves were above the business unit average from 2009 to 2012 and found no documents indicating whether their supervisors had met with them and what the outcomes had been. OPG explained that it had no formal requirements

Figure 11: Sick Leave Plans at OPG vs. Ontario Public Service (OPS)

Sources of data: Ontario Power Generation, Ministry of Government Services

	OPS	OPG		
		Unionized Staff		Non-unionized Staff
		Old Plan (Staff hired before 2001)	New Plan (Staff hired in or after 2001)	
Annual entitlement (100% pay)	6 days	8 days	8 days	130 days
Annual entitlement (75%)	6 months	15 days	6 months	No
Accumulation of unused sick days (100% pay)	No	Indefinitely with no limit ¹	Indefinitely with no limit ¹	No
Accumulation of unused sick days (75% pay)	No	Indefinitely with a limit of 200 days ¹	No	No
Restoration of used sick days	No	Yes ²	No	Yes ³

1. Unused sick day credits are not paid out on termination or retirement.

2. After five years of service, sick day credits used in the first year are restored. From the sixth through fourteenth years, sick day credits used in the five previous years are restored. On the fifteenth year, sick day credits used before the second-last year of service are restored. After that, sick day credits used in the second-last year are restored annually. Unused sick day credits are not paid out on termination or retirement.

3. After one month back to work, the number of sick day credits will increase back to 130 days.

for this documentation to be retained as official records. After we completed our audit fieldwork, OPG informed us that it was implementing a new program with more stringent requirements.

OPG's Disability Management Program is in place to ensure that employees are fit to do their job after longer periods of sick leave (four or more consecutive days for PWU staff and five or more for Society and non-unionized staff). Supervisors are expected to notify OPG's staff nurse about the absences and employees must submit a Medical Absence Report completed by a physician within 14 days of their first day off sick. We reviewed the files of a sample of employees with longer sick leave absences since 2010 and noted that 55% of the employees in our sample should have filed Medical Absence Reports, but almost half of them had not done so on at least one occasion. OPG informed us that the requirement might be waived for recurrent absences caused by chronic disease.

OPG has an automated employee absence calendar to help managers identify unusual sick leave patterns. However, more than half of the respondents to our survey said they were not aware of the calendar or did not use it, and another quarter of them said they used the calendar only infrequently (annually or quarterly). OPG informed us that some managers used the calendar more frequently than others, depending on the types of absences and the size of the department or group.

RECOMMENDATION 5

To minimize the cost of sick leaves and avoid potential misuses or abuses of sick leave entitlements, Ontario Power Generation should:

- review its sick leave plan for staff who joined prior to 2001; and
- monitor the results of sick leave management programs to identify and manage unusual sick leave patterns.

ONTARIO POWER GENERATION RESPONSE

Ontario Power Generation (OPG) is committed to having a healthy and productive workforce while minimizing sick leave costs. The average number of days lost through short-term absences in 2012 was approximately five days per employee, excluding major medical absences. As recommended by the Auditor General, OPG will review its sick leave plans and assess the costs and benefits of any changes that are required through collective bargaining. OPG will continue the Business Transformation efforts already under way to minimize the costs associated with sick leave by proactively supporting employees in improving and maintaining their health, while implementing processes and tools such as the automated employee absence calendar to assist managers in effectively managing sick leave issues.

STAFF TRAINING

In 2012, OPG centralized its staff training into a single business unit called Learning and Development (L&D). Before then, staff training had been managed separately by each functional area: nuclear, hydro/thermal and corporate support. At the time of our audit, OPG had about 290 L&D employees and its training costs for 2012 were \$127 million. About half of this amount was for developing training materials, delivering courses, paying trainers, managing training records, administering tests, and maintaining training simulators and equipment; the other half was for paying workers' salaries while they attended training.

Nuclear Training

OPG provides training to about 7,000 nuclear staff at two learning centres, Pickering and Darlington. OPG's Nuclear Oversight and Performance

Improvement Department oversees the training along with two external organizations, the Canadian Nuclear Safety Commission (CNSC) and the World Association of Nuclear Operators (WANO), who both routinely send out inspection teams to review OPG's nuclear training programs. Both internal and external reviews help OPG's management identify areas for improvement and report on whether OPG's nuclear training programs adhere to applicable standards and requirements.

The majority of OPG's nuclear staff are nuclear operators who fall into two main categories: non-licensed operators (NLOs) and authorized nuclear operators (ANOs). NLO candidates must undergo a 24-month training period. To become an ANO, a candidate must be a fully qualified NLO for at least one year and then complete a 36-month training period. At the time of our audit, OPG had about 950 NLOs and 160 ANOs. The minimum education required to become a nuclear operator in Ontario is completion of Grade 12 with university-preparation course credits in math, physics and chemistry. Accordingly, the training that OPG provides is necessary to ensure that nuclear operators are sufficiently prepared for the job. In 2012, the average annual earnings at OPG for NLOs and ANOs were \$112,000 and \$207,000, respectively.

To identify best practices and opportunities for improvement, OPG benchmarked its NLO and ANO training programs against those at the Pilgrim Nuclear Station in Massachusetts (Pilgrim) in September 2012. OPG informed us that it has prepared improvement plans to address the following issues identified in the benchmarking study:

- OPG's NLO training program was not well-structured, class sizes were larger and training material was not as comprehensive.
- OPG's NLO trainers had varying levels of qualifications, experience and ability.
- OPG's NLO trainees generally lacked hands-on experience in any industry and lacked discipline.
- OPG's ANO training program was lengthy (32 months versus 16 months at Pilgrim),

which OPG believed was preventing it from attracting good candidates.

- The completion rate for the ANO training program at OPG has been around 56%, which was below both its own workforce planning goal (70%) and Pilgrim's completion rate (75%).

We noted some additional areas to address in our review of OPG's nuclear training:

- Only one of OPG's 19 NLO trainers was a Supervisory Nuclear Operator, considered by OPG to be the ideal position for an NLO trainer. Two other trainers had worked as nuclear operators for only one year.
- An ANO can go through additional training to become a Control Room Shift Supervisor (CRSS). The completion rates for CRSS training programs in 2012 at Darlington and Pickering were 0% and 57%, lower than the industry completion rate of 60–65%. OPG informed us that the length of the CRSS training program (32 months) has contributed to low completion rates.

Hydro/Thermal Training

OPG delivers training to about 2,000 hydro/thermal staff at the Etobicoke learning centre and at hydro and thermal stations across Ontario. Unlike the nuclear sector, there is no regulatory oversight of hydro/thermal training, and OPG's training in this area has never been evaluated by itself or third parties. We identified the following issues related to staff training requirements and course attendance in our review of hydro/thermal training:

- In 2012, 30% of the courses OPG requires had not been completed. OPG informed us that even if a training course was recorded as required in the database, supervisors might not send their staff to training if they felt there was no immediate need for them to learn a specific skill set.
- In June 2010, OPG's Hydro/Thermal Training Decision Making Committee raised a concern about last-minute cancellations of scheduled

courses and recommended that plant managers should try to reduce them to optimize the use of training resources. This was still an issue at the time of our audit. In 2012, about 4,500 of 21,000 scheduled courses for trainees had been cancelled. No reasons were given for about 1,400 of the cancellations; the remaining had been cancelled for reasons such as employee no-show, illness, or pre-approved vacation day, among others. We also noted similar course cancellation patterns for 2011.

RECOMMENDATION 6

To ensure that its employees are adequately trained for their jobs, Ontario Power Generation should:

- continue to review and monitor the adequacy, quality and completion rates of its nuclear training programs in order to identify areas for improvement, and address the areas that have already been identified; and
- review the nature and timing of its mandatory training requirements as well as its delivery methods for hydro/thermal staff to ensure they are meeting business needs cost-effectively.

ONTARIO POWER GENERATION RESPONSE

Ontario Power Generation's (OPG) nuclear training programs are extensively benchmarked against industry best practices and are routinely audited by the Canadian Nuclear Safety Commission and the World Association of Nuclear Operators. OPG is in the process of implementing enhancements to its nuclear training programs where there are opportunities for improvement while continuing to build on identified strengths. As recommended by the Auditor General, OPG will continue with its review of the nature, timing and delivery methods of mandatory training requirements for hydro/thermal staff.

CME Interrogatory #001

Ref: 2013 Annual Report of the Office of the Auditor General of Ontario (December 10, 2013)

Issue Number: 1.0

Issue: General

Interrogatory

CME wishes to better understand the process undertaken by OPG following the release of the Annual Report of the Office of the Auditor General of Ontario on December 10, 2013. To this end:

(a) Please provide all presentations, PowerPoint slides, briefing notes, or other written memoranda prepared by OPG for OPG's Board of Directors relating to that Report of the Auditor General; and

(b) Please provide all written questions, comments or directions provided by OPG's Board of Directors to OPG relating to that Report of the Auditor General.

Response

Attachment 1 summarizes OPG's ongoing actions in response to the Auditor General's Report.

The Auditor General's Report was issued months after OPG filed its Application and after the filing of OPG's Impact Statement.

Therefore, any attempt to link the potential outcomes from these responsive actions to changes in OPG's 2014 -2015 costs would be speculative at this point. Many of the actions are still being developed. Moreover, full implementation of these actions would require changes in OPG's collective agreements. Even for non-represented employees, notice may be required before the most significant changes could be made. Thus, OPG declines to produce the requested materials on grounds of relevance.

Dec. 10, 2013

OPG SUMMARY OF KEY ACTIONS 2013 AUDITOR GENERAL REPORT ON HUMAN RESOURCES POLICIES

The Auditor General's report covers a 10-year time period. In some cases the report highlights areas which OPG already had identified and has since addressed, or is currently addressing. In other areas it provides insights into issues the company will act upon and will report back openly and quickly.

In 2010 OPG initiated a business transformation to address culture and process change to ensure OPG meets the expectations and needs of the ratepayers. Since December 2012 the number of senior managers has gone down by six per cent, and since 2010, there's been a nine per cent drop in total base salary costs for management. We will also save an estimated \$1 billion over six years (2011-2016) by reducing the overall headcount, from ongoing operations, by 2,330 or 20 per cent of 2011 levels. The departure of 1,500 people since January 2011 has already saved \$275 million.

We are continuing that transformation, which was recognized by KPMG as the right way to address the needed change. The Ministry of Energy engaged KPMG to assess OPG's existing benchmark studies and to identify organization and structural opportunities for cost savings. KPMG's report validated OPG's business transformation initiative and its objectives.

"KPMG believes that OPG has employed a systematic and structured approach to developing a company-wide transformation plan. OPG has incorporated many leading practices for implementing a large business transformation such as assigning dedicated staff to implement the transformation, establishing a program management office, incorporating change management with a focus on cultural change and incorporating business transformation milestones into executive performance plans." KPMG Dec. 6, 2012.

The following is a summary of key actions OPG is taking (or has taken) to address the findings. A more detailed list of actions will be posted on our website later this week. In the coming weeks and months it will be updated to show our progress.

ACTIONS – PLANNED AND UNDERWAY	PLANNED COMPLETION DATE
Executive and Senior Management Staffing Levels Decrease senior management headcount in proportion to overall headcount reductions. (Reduced by 6% since Dec. 2012).	2016
New senior executives continue to receive lower	Ongoing

compensation than their predecessors. Hiring of all director and above positions will require CEO approval. • Reduce headcount by a further 830, for a total reduction of 2,330 and \$1B savings by 2016.	2016
Benchmarking of Staffing Levels at Nuclear Facilities • Business plans to define continuing actions to move from current 8% over benchmark to benchmark (down from 17% over in Feb. 2012). • CNSC and other external peer groups confirm OPG continues to ensure strong nuclear safety and operational performance.	2016 Ongoing
Recruitment Practices and Requirements • Centralized recruitment function to improve controls, compliance and efficiency of hiring processes. • Amend Code of Conduct to clarify expectation regarding hiring policies. Failure to follow policy will result in disciplinary action. • Conduct compliance reviews for internal/external vacancies. • Reviewed all groups with same addresses to ensure valid hiring process was followed.(reviewed 284 files from 2011, 2012; no documentation retained for others beyond two years; found 4 cases without proper documentation).	Complete Q1 2014 Ongoing Complete
Compensation and Incentive Awards • Implement outcomes of government legislation to regarding broader public sector executive compensation. • Reduce headcount by additional 830 for total reduction of 2,330 and \$1B savings by 2016 (already achieved 1,500 reduction since Jan. 2011); • Reduce all management AIP for 2013 by 10%. Board to review AIP program for 2014 and beyond. • Continue to seek collective agreements that reflect OPG business objectives and government compensation constraints. • Reduced base salary costs for management by 9%	Contingent on government legislation 2016 Q1 2014 Ongoing Completed. Further reductions ongoing.

compared to 2010.	Attachment 1	
Employee Housing and Moving Allowance • Adopt Ontario Public Service Relocation policy for management employees. • Conduct review of practices and controls related to employee relocation, including a review of practices for guarantee house values. • Review OPS relocation policy against collective agreements to determine what if any changes are required.		Q1 2014 Q1 2014 Coterminous with collective bargaining
Security Clearance Requirements • Review security clearance requirements for non-nuclear employees to ensure appropriate levels in place. • Implement enhanced compliance monitoring method. • Implemented controls to ensure immediate security clearance compliance for new hires and ongoing compliance for existing employees. • CNSC, CSIS audits validate that OPG has an industry-leading nuclear security clearance program. All employees who require access to nuclear site or sensitive nuclear information have appropriate clearance. All board members at the time of the AG audit now have security clearance.		Q1 2014 Q3 2014 Complete
Pensions and Benefits • Begin implementation of Board directed management pension and benefits reforms. • Participate in Province's review of electricity sector pension plan reforms. • Any changes to pension and benefits for unionized staff will be a matter for future rounds of collective bargaining.		Q1 2014 TBC – dependent on Ministry of Finance Coterminous with collective bargaining
Managing Contractors and Overtime • Conduct comprehensive assessment of contractor control framework, including contract structures, time capture and approval processes and tools. • Implement time tracking system for contractors at nuclear sites.		Q2 2014 Q1 2014

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Exhibit L
Tab 1.0
Schedule 3 CME-001

Implemented enhanced management approvals and controls to limit individual overtime in Nuclear.	Completed
<i>Use of Non Regular Staff and Contract Resources</i> - Strengthen business case requirements and approvals for hiring retirees as contractors. - Strengthen succession planning and develop knowledge transfer plans for critical roles.	Q2 2014 Q4 2014

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Undertaking

To produce a list additional actions OPG will implement, partially or fully, in 2014 and 2015 in response to the Auditor General's report, and estimate associated cost savings for each, if any.

Response

Please refer to Attachment 1 which reproduces the table provided in the December 10, 2013 backgrounder provided at Ex L-1.0-3 CME-001. Additional columns have been added to show which actions are specifically in response to the AG report (marked with a "✓") and providing an estimate of cost savings resulting from those actions if available. Additional actions added since the December 10, 2013 backgrounder are shown with grey shading and marked "New."

ACTIONS - PLANNED AND UNDERWAY		Planned Completion Date	Actions in Response to AG Report	Associated Cost Savings
Executive and Senior Management Staffing Levels				
Decrease senior management headcount in proportion to overall headcount reductions. (Reduced by 6% since Dec. 2012).		2016		
New senior executives continue to receive lower compensation than their predecessors;		Ongoing		
Hiring of all director and above positions will require CEO approval.		Ongoing	✓	N/A
Reduce headcount by a further 830, for a total reduction of 2,330 and \$1B savings by 2016.		2016		
Benchmarking of Staffing Levels at Nuclear Facilities				
Business plans to define continuing actions to move from current 8% over benchmark to benchmark (down from 17% over in Feb. 2012).		2016		
CNSC and other external peer groups confirm OPG continues to ensure strong nuclear safety and operational performance.		Ongoing		
NEW: Update benchmarking results to measure against changes relative to industry.		Q4 2014	✓	N/A
NEW: Staffing level imbalances in Nuclear will be addressed through business transformation, business planning, redeployment and expected attrition.		2015/16	✓	No estimate available

Recruitment Practices and Requirements - Centralized recruitment function to improve controls, compliance and efficiency of hiring processes. - Amend Code of Conduct to clarify expectation regarding hiring policies. Failure to follow policy will result in disciplinary action. - Conduct compliance reviews for internal/external vacancies. - Reviewed all groups with same addresses to ensure valid hiring process was followed.(reviewed 284 files from 2011, 2012; no documentation retained for others beyond two years; found 4 cases without proper documentation.)	Complete Q1 2014 Ongoing Complete	✓ ✓	N/A N/A
Compensation and Incentive Awards - Implement outcomes of government legislation to regarding broader public sector executive compensation. - Reduce headcount by additional 830 for total reduction of 2,330 and \$1B savings by 2016 (already achieved 1,500 reduction since Jan. 2011); - Reduce all management AIP for 2013 by 10%. Board to review AIP program for 2014 and beyond - Continue to seek collective agreements that reflect OPG business objectives and government compensation constraints. - Reduced base salary costs for management by 9% compared to 2010. NEW: Management staff mandated to enter performance objectives into the electronic system that allows for compliance monitoring.	Contingent on government legislation 2016 Q1 2014 Ongoing Completed. Further reductions ongoing Completed	✓	\$2.7M due to 2013 reduction N/A

Employee Housing and Moving Allowance • Adopt Ontario Public Service Relocation policy for management employees. • Conduct review of practices and controls related to employee relocation, including a review of practices for guarantee house values. • Review OPS relocation policy against collective agreements to determine what if any changes are required.	Q1 2014 Q1 2014 Coterminous with collective bargaining	✓ ✓ ✓	No estimate available N/A N/A
Security Clearance Requirements • Review security clearance requirements for non-nuclear employees to ensure appropriate levels in place. • Implement enhanced compliance monitoring method. • Implemented controls to ensure immediate security clearance compliance for new hires and ongoing compliance for existing employees. • CNSC, CSIS audits validate that OPG has an industry-leading nuclear security clearance program. All employees who require access to nuclear site or sensitive nuclear information have appropriate clearance. • All board members at the time of the AG audit now have security clearance.	Q1 2014 Q3 2014 Complete Complete Complete	✓ ✓	N/A
Pensions and Benefits • Begin implementation of Board directed management pension and benefits reforms. • Participate in Province's review of electricity sector pension plan reforms. • Any changes to pension and benefits for unionized staff will be a matter for future rounds of collective bargaining.	Q1 2014 TBC – dependent on Ministry of Finance Coterminous with collective bargaining	✓	

Managing Contractors and Staff Overtime • Conduct comprehensive assessment of contractor control framework, including contract structures, time capture and approval processes and tools. • Implement time tracking system for contractors at nuclear sites. • Implemented enhanced management process approvals and controls to limit individual overtime in Nuclear. • NEW: Enhanced management processes, approvals and controls to limit individual overtime in Nuclear. Actions allowed within the current collective agreements have been implemented to bring outliers into normal practice and better manage overtime.	Q2 2014 Q1 2014 Completed Completed	✓	N/A
Use of Non Regular Staff and Contract Resources. • Strengthen business case requirements and approvals for hiring retirees as contractors. (NEW: Policy now in place requiring additional business case and approvals requirements for hiring contractors) • Strengthen succession planning and develop knowledge transfer plans for critical roles.	Q2 2014 Q4 2014	✓	N/A
Sick Leave Trend • NEW: Enhance the sick leave management process to identify and manage unusual sick leave pattern through the use of enhanced management and supervisory compliance monitoring metrics and reports.	Q4 2014	✓	No estimate available

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Undertaking

To advise what percentage of the 10,375 headcount appears on the sunshine list.

Response

There were 7,958 OPG employees reported in the 2013 Public Sector Salary Disclosure list.

$$7,958 / 10,375 = 77\%$$

Note that 10,375 is OPG's headcount target at year end 2016 and relates only to regular employees from ongoing operations, while 7,958 is a historical number as of year-end 2013 and relates to all employees of OPG.