



# **2014 OVERVIEW**

# **Financial Highlights**

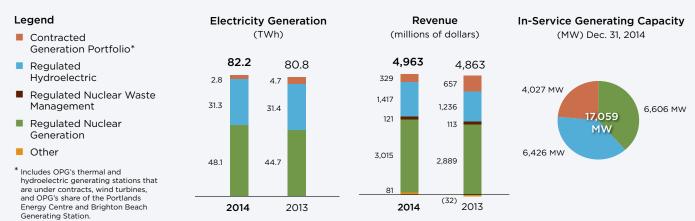
(millions of dollars except where noted)	2014	2013
REVENUE		
Revenue	4,963	4,863
Fuel expense	641	708
Gross margin	4,322	4,155
EXPENSES		
Operations, maintenance and administration	2,615	2,747
Depreciation and amortization	754	963
Accretion on fixed asset removal and nuclear waste management liabilities	797	756
Earnings on nuclear fixed asset removal and nuclear waste funds	(714)	(628)
Property Taxes	32	53
Restructuring	18	50
Other	36	(35)
	3,538	3,906
Income before other income, interest, income taxes, and extraordinary item	784	249
Other income	(3)	(3)
Net interest expense	80	86
Income tax expense	139	31
Income before extraordinary item	568	135
Extraordinary item	243	-
Net Income	811	135
ELECTRICITY PRODUCTION (TWh)	82.2	80.8
CASH FLOW  Cash flow provided by operating activities	1,433	1,174



#### **Electricity Terms**

- One megawatt (MW) is one million watts. Megawatts are a measure of electricity supply capacity at a point in time.
- One kilowatt (kW) is 1,000 watts; one gigawatt (GW) is one billion watts; and one terawatt (TW) is one trillion watts.
- One kilowatt hour (kWh) is a measure of electricity demand or supply per hour. One kilowatt hour is the energy expended by fifty 20-watt compact fluorescent lights burning for one hour. The typical residential customer uses approximately 800 kWh per month.
- One megawatt hour (MWh) is 1,000 kWh; one gigawatt hour (GWh) is one million kWh; and one terawatt hour (TWh) is one billion kWh.

# **Revenue & Operating Highlights**



# **CORPORATE PROFILE**

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Lower Mattagami, Kipling GS construction

## OPG IS ONTARIO'S LARGEST CLEAN ELECTRICITY GENERATOR.

At Dec. 31, 2014, Ontario Power Generation's generating portfolio had an in-service capacity of 17,059 megawatts (MW). OPG operates:

2

Nuclear generating stations 30

**Thermal** generating stations

**65**緣

Hydroelectric generating stations 20

Wind Power turbines

OPG's focus is on the efficient and reliable generation and sale of electricity from its generating assets, while operating in a safe, open and environmentally-responsible manner. OPG was established under the Business Corporations Act (Ontario) and is wholly owned by the Province of Ontario.

The company's diversified generating portfolio consists of two nuclear generating stations, 65 hydroelectric generating stations, and three operating thermal generating stations, one of which is the largest capacity 100 per cent biomass-fuelled plant in North America.

OPG also owns two other nuclear generating stations, which are leased on a long-term basis to Bruce Power L.P. In addition, the company co-owns both the Brighton Beach gas-fired generating station with ATCO Power Canada Ltd., and the gas-fired Portlands Energy Centre with TransCanada Energy Ltd.

# A MESSAGE FROM THE **BOARD CHAIR AND PRESIDENT**

Ontario Power Generation (OPG) produces more than half of the electricity Ontarians rely on each day. Our operations touch all corners of the province and many places in between. We power the province – 24 hours a day, seven days a week - and we do so with a clean, efficient and reliable generating fleet, all at a significantly lower price than the average of all other generators.







Tom Mitchell President and CEO

In 2014, OPG successfully completed its phase-out of coal-fired generation. This is considered to be North America's single largest climate change initiative. With the closure of these units, the electricity we produce is now 99.7 per cent free of greenhouse gas and smog-causing emissions.

## Operating Highlights

Operationally, 2014 was a strong year for OPG. Net income was \$811 million, an increase of \$676 million, compared to 2013. We continued to gain traction with our business transformation, realizing additional savings through business efficiencies, streamlined operations and a further reduction in staff numbers. These efforts have saved over \$500 million since 2011.

OPG's total generation also saw an increase over the previous year as a result of our continued strong generation asset reliability.

## Project Management **Advancements**

By the close of 2014, we successfully completed the \$2.6 billion Lower Mattagami hydroelectric project, more than six months ahead of schedule.

This unique commercial partnership with the Moose Cree First Nation has added 438 megawatts (MW) of clean, renewable electricity to the province. It also created jobs and local economic benefits through employment and the involvement of local businesses. At the peak of construction about 1,600 people were employed, including about 250 First Nation and Métis people.

OPG was honoured to receive the Ontario Waterpower Association's Stewardship Award for its work on the Lower Mattagami project, including efforts relating to sustainable development, environmental preservation, and community capacity development.

We're extremely proud of this one-ofa-kind success story. The Lower Mattagami redevelopment illustrates the power of partnership, a shared vision, and solid project management.



We also successfully converted the Atikokan Generating Station (GS) to biomass fuel. This conversion project is the first of its kind in Ontario and has placed OPG at the forefront of this innovative technology.

With over 200 MW of generating capacity, Atikokan GS is the largest 100 per cent biomass-fuelled power plant in North America, generating renewable, dispatchable, peak-capacity power. The expertise and project

management insights we have acquired through this initiative will be used on other development projects and shared globally.

These development projects have not only provided more clean power to the province, they also have created new economic opportunities and sustainable jobs for Northern Ontario in the green energy and forestry industries.

# Improving Efficiency and Reducing Costs

Three years ago, OPG launched a company-wide business transformation to drive efficiencies and reduce operating costs. The aim is to increase business efficiencies to ensure the company continues to moderate electricity pricing for the people of Ontario while remaining a safe, reliable, generator.















To date, we've implemented a new organization model with fewer staff, streamlined our service delivery and improved our internal processes. Since 2011, efforts have enabled us to reduce our headcount by approximately 2,200 or 20 per cent - largely through attrition - for a savings of over \$500 million. By the end of 2016, we expect to have saved over \$1 billion.

By achieving these reductions in a careful, measured way, we've ensured our focus on safety and performance remains strong.

#### Focus on Refurbishment

Looking ahead, the Darlington refurbishment is OPG's most significant undertaking.

In 2014, we continued to make progress on preparations for the refurbishment with the opening of the Darlington Energy Complex. Energy Minister Bob Chiarelli joined OPG staff to officially open this state-of-the-art training facility in Durham Region. This project was completed ahead of schedule and is part of our extensive planning and preparation to ensure everyone working on the refurbishment will be trained and ready to complete their tasks safely, precisely and efficiently.

Darlington's refurbishment is a milestone project for OPG. It reinforces our role in the province by providing an additional 30 years of clean, affordable electricity, while at the same time producing over 100,000 person

years of employment on the project. These positive economic benefits will be shared across the province.

## **Nuclear Operational** Excellence

During 2014, OPG's nuclear facilities demonstrated strong performance and continuous improvement against industry benchmarks. In April, Darlington Nuclear received its second consecutive excellent safety and performance peer evaluation.

The station also received the highest possible safety and control rating - its fifth consecutive excellent performance evaluation - from the Canadian Nuclear Safety Commission (CNSC).



Pickering Nuclear also received positive safety and control ratings from CNSC staff, with improved performance recognized in the areas of radiation protection and security.

These achievements demonstrate OPG's strong focus on safety and operational excellence. We continue to make investments and improve the performance of the Pickering Nuclear facility, which will provide a reliable electricity supply for Ontario while Darlington undergoes its refurbishment.

## Safety Excellence

OPG's employee safety performance for 2014 continued to show strong results - achieving the best workplace safety record in our company's history. And, for the third straight year, the Canadian Electricity Association recognized OPG's strong commitment to safety with a President's Award of Excellence for Employee Safety.

## Sustaining Success

The solid results we were able to achieve in 2014 are a direct result of the tireless efforts of the women and men who work for OPG. Our employees are dedicated, highly skilled, and committed to providing the province the power it needs, when it's needed.

We thank our employees for their continued contributions.

Looking to the future, OPG will continue to focus on providing maximum value to our shareholder and to the people of Ontario.

This means ensuring our energy production is reliable, safe and environmentally sustainable for Ontarians today and in the future.

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BERNARD LORD **Board Chair** 

TOM MITCHELL President and CEO

# ACHIEVEMENT HIGHLIGHTS OF 2014



## Coal Closure

In April 2014, OPG burned the last piece of coal at its Thunder Bay GS which, as of January 2015, provides dispatchable electricity from advanced biomass fuel. The phase-out of coal in Ontario is considered to be the single largest climate change initiative in North America and is a key milestone in the Ontario government's strategy to move to cleaner electricity. Former coalburning units at Lambton and Nanticoke are currently being preserved for possible conversion to alternate fuels, if required. OPG's generation is now 99.7 per cent free of greenhouse gas and smog-producing emissions.



# Atikokan's Conversion to Biomass

In July 2014, Atikokan GS completed its transition from coal to biomass. The converted station provides renewable electricity generation from a sustainable fuel recognized as beneficial to climate change mitigation. Atikokan is the first of its kind in Ontario and is North America's largest 100 per cent biomassfuelled power plant. The two-year conversion project is another example of OPG's commitment to clean energy.



# Lower Mattagami River Project Completion

The Lower Mattagami hydroelectric project was completed in 2014, six months ahead of schedule and on budget. OPG and the Moose Cree First Nation began working together on the \$2.6 billion, 438 MW project in 2010. Generating units were added to existing stations at Little Long, Harmon and Kipling, and a new three-unit Smoky Falls/Kâpâškilehtehk generating station replaced the 83-year-old station. Over the course of the project about \$1 billion in contracts was awarded to Ontario businesses, including over \$350 million in Northern Ontario.



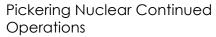
# Business Transformation Savings

Significant savings were achieved through OPG's business transformation in 2014. Since the project began in 2011, the number of OPG employees has decreased by approximately 2,200 with cumulative savings of over \$500 million. The aim is to save approximately \$1 billion by the end of 2016, OPG has created a new centre-led organizational structure and introduced over 100 change initiatives to improve processes and drive efficiencies. Business Transformation wrapped up at the end of 2014, but process and efficiency improvement is a continuous goal for OPG.



# CEA President's Award for Safety Excellence

In November 2014, the Canadian Electricity Association (CEA) presented OPG with a President's Award for Safety Excellence. The CEA presents awards to member organizations ranked at the top of the electricity industry for employee safety. This was the third consecutive year OPG received a CEA award for safety performance. In addition, two employee emergency responders from Pickering Nuclear received the CEA Lifesaving Award.



The Canadian Nuclear Safety
Commission (CNSC) approved OPG's
request for continued operations at its
Pickering nuclear station and authorized
the company to operate the station to
2020. OPG completed extensive studies
to meet the necessary requirements and
demonstrate that Pickering Nuclear can
safely operate until that period.
Pickering is now well-positioned to
support the Darlington refurbishment
when the Darlington units will be offline.



**Darlington Energy Complex** 

Opening



Relationship

Social Responsibility Recognition

The Darlington Energy Complex opened ahead of schedule in 2014. Featuring a life-sized training model of a nuclear reactor face, the complex is part of OPG's intensive planning and preparation to ensure everyone working on refurbishing Darlington's reactors is equipped to complete their tasks safely, precisely and efficiently. Energy Minister Bob Chiarelli officially opened the complex with OPG Board Chair Bernard Lord and President Tom Mitchell. Following the opening, over 3,500 visitors attended community

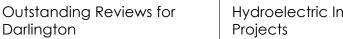
open house events at the complex.

OPG and Kiashke Zaaging Anishinaabek (KZA), also known as Gull Bay First Nation, celebrated a new relationship with the signing of a Final Settlement Agreement and a formal apology by OPG. The settlement and apology were for past grievances related to dams constructed by OPG's predecessor companies on the Nipigon River between 1918 and 1950. OPG has successfully negotiated past grievance settlements with many of Ontario's First Nations.

The CEA awarded OPG the 2014 Sustainable Electricity - Social Responsibility Award for its achievements in First Nations/Métis relations and corporate sustainability. The award recognizes OPG for its strong commitment to building and growing mutually beneficial working relationships with First Nations and Métis communities in Ontario. OPG is currently working with more than 50 First Nations and Métis communities from across the province on numerous projects and partnerships.



# Hydroelectric Improvement



Darlington Nuclear earned top marks for its performance in 2014 from the CNSC. In the CNSC's annual safety assessment, Darlington achieved the highest standard of "Fully Satisfactory" - the only station to achieve that rating. This is the fifth year in a row of sustained top performance by Darlington. The rating by the regulator was followed by an excellent peer evaluation and maintains the station's standing as among the top performing nuclear plants in the world.

OPG invested in several major hydro improvement projects in 2014 to ensure strong ongoing performance:

Sir Adam Beck Pump Storage facility near Niagara Falls - turbine upgrades and rehabilitation;

Chats Falls GS, near Ottawa - dam rehabilitation;

Pine Portage GS, near Nipigon turbine runner replacement and generator upgrade;

Des Joachims GS, near Pembroke overhaul and upgrade of Unit 5, part of an extensive asset improvement program to upgrade the entire station;

McVittie GS, near Sudbury - two new sluice gates.



In May, OPG participated in Exercise Unified Response at the Darlington nuclear station. The mock emergency response involved more than 1,000 people and 54 agencies who demonstrated how they would protect and inform the public in the unlikely event an accident similar in scale to Japan's Fukushima disaster. Wellversed in emergency planning exercises, OPG demonstrated our capabilities to a spectrum of stakeholders and received congratulations from an independent evaluator impressed with the comprehensive drill.

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# ONTARIO POWER GENERATION INC.

## MANAGEMENT'S DISCUSSION AND ANALYSIS

This Management's Discussion and Analysis (MD&A) should be read in conjunction with the audited consolidated financial statements and accompanying notes of Ontario Power Generation Inc. (OPG or Company) as at and for the year ended December 31, 2014. OPG's consolidated financial statements are prepared in accordance with United States generally accepted accounting principles (US GAAP) and are presented in Canadian dollars.

As required by *Ontario Regulation 395/11*, as amended, a regulation under the *Financial Administration Act* (Ontario) (FAA), OPG adopted US GAAP for the presentation of its consolidated financial statements, effective January 1, 2012. In the first quarter of 2014, the Ontario Securities Commission (OSC) approved an exemption which allows OPG to apply US GAAP up to January 1, 2019. The term of the exemption is subject to certain conditions, which may result in the expiry of the exemption prior to January 1, 2019. For details, refer to the heading, *Exemptive Relief for Reporting under US GAAP*, in the section *Changes in Accounting Policies and Estimates*. This MD&A is dated March 13, 2015.

#### FORWARD-LOOKING STATEMENTS

The MD&A contains forward-looking statements that reflect OPG's current views regarding certain future events and circumstances. Any statement contained in this document that is not current or historical is a forward-looking statement. OPG generally uses words such as "anticipate", "believe", "foresee", "forecast", "estimate", "expect", "schedule", "intend", "plan", "project", "seek", "target", "goal", "strategy", "may", "will", "should", "could" and other similar words and expressions to indicate forward-looking statements. The absence of any such word or expression does not indicate that a statement is not forward-looking.

All forward-looking statements involve inherent assumptions, risks and uncertainties, including those set out under the section *Risk Management*. All forward-looking statements could be inaccurate to a material degree. In particular, forward-looking statements may contain assumptions such as those relating to OPG's fuel costs and availability, generating station performance, cost of fixed asset removal and nuclear waste management, performance of investment funds, conversion of coal-fired generating stations, refurbishment of existing facilities, development and construction of new facilities, pension and other post-employment benefit (OPEB) obligations, income taxes, electricity spot market prices, proposed new legislation, the ongoing evolution of the Ontario electricity industry, environmental and other regulatory requirements, health, safety and environmental developments, business continuity events, the weather, and the impact of regulatory decisions by the Ontario Energy Board (OEB). Accordingly, undue reliance should not be placed on any forward-looking statement. The forward-looking statements included in this MD&A are made only as of the date of this MD&A. Except as required by applicable securities laws, OPG does not undertake to publicly update these forward-looking statements to reflect new information, future events or otherwise.

#### THE COMPANY

OPG is an Ontario-based electricity generation company whose principal business is the generation and sale of electricity in Ontario. OPG was established under the Business Corporations Act (OBCA) and is wholly owned by the Province of Ontario (Province or Shareholder).

As at December 31, 2014, OPG's electricity generation portfolio had an in-service capacity of 17,059 megawatts (MW). OPG operates two nuclear generating stations, three thermal generating stations, 65 hydroelectric generating stations, and two wind power turbines. In addition, OPG and TransCanada Energy Ltd. co-own the 550 MW Portlands Energy Centre (PEC) gas-fired combined cycle generating station (GS). OPG and ATCO Power Canada Ltd. co-own the 560 MW Brighton Beach (Brighton Beach) gas-fired combined cycle GS. OPG's 50 percent share of the in-service capacity and generation volume of these co-owned facilities is included in the generation portfolio statistics set out in this report. The income of the co-owned facilities is accounted for using the equity method of accounting, and OPG's share of income is presented in Income from investments subject to significant influence under the Contracted Generation Portfolio segment.

OPG also owns two other nuclear generating stations, which are leased on a long-term basis to Bruce Power L.P. (Bruce Power). Income from these leased stations is included in revenue under the Regulated – Nuclear Generation segment. The leased stations are not included in the generation portfolio statistics set out in this report.

#### **OPG's Reporting Structure**

Effective January 1, 2014, OPG revised the composition of its reportable business segments to reflect changes in its generation portfolio and its internal reporting. These changes primarily reflect 48 of OPG's hydroelectric generating facilities which were prescribed for rate regulation beginning in 2014, and ending the use of coal at the Nanticoke and Lambton generating stations in 2013. OPG's reportable business segments, effective January 1, 2014, are as follows:

- Regulated Nuclear Generation
- Regulated Nuclear Waste Management
- Regulated Hydroelectric
- Contracted Generation Portfolio
- Services, Trading, and Other Non-Generation.

OPG receives regulated prices for electricity generated from most of its hydroelectric facilities and all of the nuclear facilities that it operates. This includes the following facilities (collectively, prescribed or regulated facilities):

- Sir Adam Beck 1, 2 and Pump hydroelectric generating stations
- DeCew Falls 1 and 2 hydroelectric generating stations
- R.H. Saunders hydroelectric GS
- 48 hydroelectric stations which were prescribed for rate regulation beginning in 2014, under the amended Ontario Regulation 53/05
- Pickering Nuclear GS (Pickering GS)
- Darlington Nuclear GS (Darlington GS).

The operating results related to these regulated facilities are described under the Regulated – Nuclear Generation, Regulated - Nuclear Waste Management, and Regulated - Hydroelectric segments. For the remainder of OPG's operating generating facilities, the operating results are described under the Contracted Generation Portfolio segment. A description of all OPG's segments is provided under the section, Business Segments.

#### **In-Service Generating Capacity**

OPG's in-service generating capacity by business segment as of December 31 was as follows:

(MW)	2014	<b>2013</b> (adjusted)
Regulated – Nuclear Generation	6,606	6,606
Regulated – Hydroelectric <sup>1</sup>	6,426	6,432
Contracted Generation Portfolio <sup>2</sup>	4,027	3,748
Total	17,059	16,786

Includes the capacity of 48 of OPG's hydroelectric generating facilities which were prescribed for rate regulation beginning in 2014, per the amended Ontario Regulation 53/05. The generating capacity of the comparative period has been adjusted to include the capacity of these facilities.

The in-service capacity of the Regulated - Nuclear Generation and Regulated - Hydroelectric segments as of December 31, 2014 was largely consistent with the capacity as of December 31, 2013.

During 2014, the in-service capacity of the Contracted Generation Portfolio segment increased by 279 MW. As a result of placing in-service all six new generating units constructed as part of the Lower Mattagami River project, the segment capacity increased by 438 MW, net of the existing 52 MW Smoky Falls station which was removed from service in July 2014 in preparation for its planned decommissioning. This increase was partially offset by the removal from service of one coal-fired unit at the Thunder Bay GS. The closure of OPG's coal-fired generating units was mandated by the Province. The capacity of the second unit at the Thunder Bay GS, which was being converted to use advanced biomass fuel as at December 31, 2014, is included in the total capacity of the Contracted Generation Portfolio segment. The converted unit was placed in-service in January 2015.

<sup>&</sup>lt;sup>2</sup> Includes OPG's share of in-service generating capacity of 275 MW for PEC and 280 MW for Brighton Beach. The generating capacity of the comparative period has been adjusted to include OPG's share of the capacity of PEC and Brighton Beach.

#### REVENUE MECHANISMS FOR REGULATED AND UNREGULATED GENERATION

#### **Regulated Generation**

The OEB sets the prices for electricity generated from OPG's regulated nuclear and hydroelectric facilities. The following are the OEB authorized regulated prices for electricity generated from these facilities for the years ended December 31:

		2014	2013
<u>(\$/MWh)</u>	Effective November 1	Prior to November 1	
Regulated – Nuclear Generation			
Base regulated price	59.29	51.52	51.52
Rate rider	4.18	4.18	6.27
	63.47	55.70	57.79
Regulated – Hydroelectric			
Existing regulated hydroelectric generating stations			
Base regulated price	40.20	35.78	35.78
Rate rider	2.02	2.02	3.04
	42.22	37.80	38.82
Hydroelectric generating stations prescribed for rate regulation beginning in 2014			
Base regulated price	41.93	N/A	N/A

The base regulated prices effective November 1, 2014 were established by the OEB's order issued in December 2014 on OPG's application for new regulated prices. Effective November 1, 2014, the OEB also established regulated prices for the 48 hydroelectric facilities that were prescribed for rate regulation beginning in 2014. Prior to November 1, 2014, the revenue for these 48 hydroelectric facilities was based on the Ontario electricity spot market price. The base regulated prices approved by the OEB are expected to remain in effect until superseded by a subsequent order of the OEB.

Rate riders are established by the OEB to recover or repay approved balances in OEB-authorized regulatory variance and deferral accounts. The rate riders in effect during 2014 and 2013 reflected the terms of a settlement agreement between OPG and intervenors, which provided for the recovery or repayment of most OEB-authorized regulatory variance and deferral account balances as at December 31, 2012. The settlement agreement was approved by the OEB in March 2013.

The OEB's order issued in December 2014 authorized the recovery of certain variance and deferral account balances as at December 31, 2013 over the period from January 1, 2015 to December 31, 2015. The approved 2015 riders are \$1.33 per megawatt hour (MWh) for nuclear generation and \$6.04/MWh for the existing regulated hydroelectric generation.

In December 2014, OPG filed an application with the OEB requesting additional nuclear and regulated hydroelectric rate riders, effective July 1, 2015, for disposition of the December 31, 2014 balances, not already being recovered or repaid, in most of the OEB-authorized variance and deferral accounts as at December 31, 2014.

Further details regarding the OEB's December 2014 order and OPG's application to recover amounts in approved variance and deferral accounts are discussed under the heading, Recent Developments.

#### **Unregulated Generation**

Electricity generated from OPG's unregulated assets receives the Ontario electricity spot market price, except where an Energy Supply Agreement (ESA) with the Independent Electricity System Operator (IESO) or a cost recovery agreement is in place.

Effective January 1, 2015, the Ontario Power Authority (OPA) merged with the IESO. The new entity continued under the name Independent Electricity System Operator (IESO). As such, the IESO is substituted as the counterparty of ESAs or other agreements that were previously executed with the OPA.

The thermal generating facilities that had an agreement in effect during 2014 are:

- Lennox GS: Capacity provided by, and production from, this station are subject to an agreement with the IESO for the period from January 1, 2013 to September 30, 2022.
- Atikokan GS: Capacity provided by, and production from, this station are subject to an ESA with the IESO.
- Lambton GS and Nanticoke GS: During 2014, these coal-fired stations were subject to a Contingency Support Agreement with the Ontario Electricity Financial Corporation (OEFC). The agreement provided for the recovery of the costs of these stations after the Shareholder's resolution and regulations pertaining to carbon dioxide (CO<sub>2</sub>) emission reductions. On November 1, 2013, the OEFC provided written notice that it would terminate the Contingency Support Agreement, effective December 31, 2013, and triggered an amendment that allowed OPG to recover certain costs related to these stations for the 2014 year. Neither the Contingency Support Agreement nor the amendment provide for recovery of costs for periods after 2014. For further details refer to the disclosure under the heading, *Thermal Generating Assets*, under the section *Core Business and Strategy*.

In addition, during 2014 hydroelectric ESAs with the IESO were in effect for the following facilities:

- Lac Seul GS and Ear Falls GS
- Healey Falls GS
- Sandy Falls GS, Wawaitin GS, Lower Sturgeon GS, and Hound Chute GS
- Little Long GS, Harmon GS, Smoky Falls GS, and Kipling GS (collectively the Lower Mattagami River
  project generating stations). Payments under this ESA for the generation from the new units of these
  stations commenced in January 2014, when the first new unit was declared in-service. Payments under this
  ESA for the generation from the existing units of these stations commenced in December 2014 when the
  last new unit was declared in-service.

#### **HIGHLIGHTS**

#### **Overview of Results**

This section provides an overview of OPG's operating results for 2014 and 2013.

(millions of dollars – except where noted)	2014	2013
Revenue	4,963	4,863
Fuel expense	641	708
Gross margin	4,322	4,155
Operations, maintenance and administration	2,615	2,747
Depreciation and amortization	754	963
Accretion on fixed asset removal and nuclear waste management liabilities	797	756
Earnings on nuclear fixed asset removal and nuclear waste management funds	(714)	(628)
Regulatory disallowance related to the Niagara Tunnel project	` 77	
Income from investments subject to significant influence	(41)	(35)
Property taxes	32	`53 <sup>°</sup>
Restructuring	18	50
	3,538	3,906
Income before other income, interest, income taxes, and extraordinary item	784	249
Other income	(3)	(3)
Income before interest, income taxes, and extraordinary item	787	252
Net interest expense	80	86
Income before income taxes and extraordinary item	707	166
Income tax expense	139	31
THOUTHOU LEAK CAPOTION	100	01
Income before extraordinary item	568	135
Extraordinary item	243	-
Net income	811	135
Net income attributable to the Shareholder	804	135
Net income attributable to fine Shareholder  Net income attributable to non-controlling interest <sup>1</sup>	7	-
Tret income attributable to non-controlling interest		_
Electricity production (TWh) <sup>2</sup>	82.2	80.8
Cash flow		
Cash flow provided by operating activities	1,433	1,174

Relates to the 25 percent interest of the Amisk-oo-Skow Finance Corporation, a corporation wholly owned by the Moose Cree First Nation, in the Lower Mattagami Limited Partnership (LMLP).

Includes OPG's share of generation volume from its 50 percent ownership interests in PEC and Brighton Beach. Electricity production for the comparative period has been adjusted to include 50 percent of the production from PEC and Brighton Beach.

Net income attributable to the Shareholder was \$804 million for 2014, an increase of \$669 million, compared to 2013. Income before interest, income taxes, and extraordinary item for 2014 increased by \$535 million. The following are the significant factors which caused the variance:

Significant factors that increased income before interest, income taxes, and extraordinary item:

- higher gross margin of \$177 million for the Regulated Nuclear Generation segment as a result of higher electricity generation of 3.4 terawatt hours (TWh), due to fewer unplanned outage days at the Darlington and Pickering nuclear generating stations
- higher revenue of \$132 million from the Regulated Hydroelectric segment primarily due to higher electricity spot market prices during the first quarter of 2014 as a result of the unseasonably cold winter, partially offset by lower electricity spot market prices later in the year
- higher earnings on the Used Fuel Segregated Fund (Used Fuel Fund) of \$79 million primarily due to a higher return on the Used Fuel Fund related to the first 2.23 million used fuel bundles
- higher earnings of \$53 million from the six new hydroelectric units constructed as part of the Lower Mattagami River project, which were declared in service in 2014
- lower salary costs of \$57 million due to improved business efficiencies reflected in lower staff numbers
- increase in net trading revenue of \$51 million primarily due to higher margins from physical energy sold to neighbouring markets as a result of unseasonably cold temperatures and high natural gas prices in the first quarter of 2014
- lower nuclear operations, maintenance and administration (OM&A) expenses as a result of lower outage costs in 2014
- lower restructuring expense due to the recognition of severance costs of \$50 million in 2013 related to the Lambton, Nanticoke, and Thunder Bay stations.

Significant factors that reduced income before interest, income taxes, and extraordinary item:

- write-off of \$77 million as a result of a regulatory disallowance by the OEB related to the Niagara Tunnel project
- higher accretion expense of \$41 million which reflects the increase in fixed asset removal and nuclear waste management liabilities in 2014, compared to 2013, due to the increase in the present value of the underlying obligation to reflect the passage of time
- lower revenue of \$30 million from the Thunder Bay GS, primarily due to lower contract revenue due to the expiry of the reliability must run contract at the end of 2013.

Income tax expense increased by \$108 million in 2014, compared to 2013, largely as a result of the increase in income in 2014.

Forty-eight of OPG's previously unregulated hydroelectric facilities were prescribed for rate regulation beginning in 2014 pursuant to an amendment to Ontario Regulation 53/05. During 2014, OPG recognized additional regulatory assets related to previously recognized deferred income taxes expected to be recovered from customers through future regulated prices in respect of these newly regulated facilities, resulting in an extraordinary gain of \$243 million in the consolidated statements of income.

#### **Segment Results**

The following table summarizes OPG's income before interest, income taxes, and extraordinary item by business segment for the years ended December 31. Significant factors which contributed to the higher income during 2014, compared to 2013, are discussed above. A detailed discussion of OPG's performance by reportable segment is included in the section *Discussion of Operating Results by Business Segment*.

(millions of dollars)	2014	<b>2013</b> (adjusted)
Income (loss) before interest, income taxes, and extraordinary item		
Regulated – Nuclear Generation	217	(24)
Regulated – Hydroelectric	502	405
Contracted Generation Portfolio	111	(49)
Total electricity generation business segments	830	332
Regulated – Nuclear Waste Management	(76)	(122)
Services, Trading, and Other Non-Generation	<b>`33</b>	` 42 <sup>′</sup>
	787	252

#### **Electricity Generation**

Electricity generation for the years ended December 31 was as follows:

(TWh)	2014	<b>2013</b> (adjusted)
Regulated – Nuclear Generation Regulated – Hydroelectric	48.1	44.7
Existing regulated hydroelectric generating stations	19.2	18.9
Hydroelectric generating stations prescribed for rate regulation beginning in 2014	12.1	12.5
Contracted Generation Portfolio <sup>1</sup>	2.8	4.7
Total OPG electricity generation	82.2	80.8
Total electricity generation by all other generators in Ontario	72.2	73.7

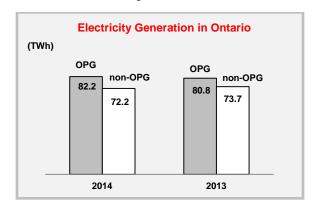
<sup>&</sup>lt;sup>1</sup> Includes OPG's share of generation volume from its 50 percent ownership interests in PEC and Brighton Beach.

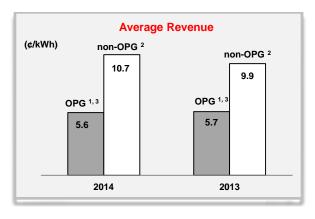
The increased generation in 2014, compared to 2013, was primarily a result of:

- higher electricity generation from the Regulated Nuclear Generation segment due to fewer unplanned outage days at the Darlington GS and Pickering GS
- an increase in generation from OPG's existing regulated hydroelectric stations due to higher water flows during 2014 on the Niagara and St. Lawrence Rivers, partially offset by
- lower electricity generation from the Contracted Generation Portfolio segment due to ceasing operation of coal-fired units at the Lambton and Nanticoke generating stations in 2013, in accordance with the Shareholder declaration issued in March 2013
- lower generation from OPG's hydroelectric generating stations prescribed for rate regulation beginning in 2014 due to an increase in the prevalence of surplus baseload generation (SBG) conditions in 2014, described below.

OPG's operating results are affected by changes in electricity demand resulting from variations in seasonal weather conditions and changes in economic conditions. Ontario's primary demand was 139.8 TWh in 2014, down slightly from 140.7 TWh in 2013. Baseload supply surplus to Ontario demand continued to increase in 2014 as a result of lower primary demand combined with increased baseload generation mainly from Units 1 and 2 of the Bruce A GS, and new wind and solar capacity. The surplus to the Ontario market is managed by the IESO, mainly through

generation reductions at hydroelectric stations, nuclear stations, and grid-connected renewable resources. Generation reductions at hydroelectric stations for SBG management will often result in spilling of water. As dispatching hydroelectric units down to reduce production is the first measure the IESO uses to manage SBG, OPG's hydroelectric generation was significantly affected, reducing generation by approximately 3.2 TWh in 2014. The net income impact of SBG conditions on OPG's existing regulated hydroelectric stations and, beginning November 1, 2014, the newly regulated hydroelectric stations was offset by the impact of a regulatory variance account. Of OPG's 3.2 TWh of lost generation due to SBG conditions, the volume that was offset by an OEB-authorized regulatory variance account during 2014 was 1.9 TWh.





- Average revenue for OPG (OPG Average Revenue) is comprised of regulated revenues, market based revenues, revenues from ESAs, and other energy revenue from cost recovery agreements. In 2014, average revenue for OPG excludes the revenue from the cost recovery agreement for costs related to the Nanticoke GS and Lambton GS as these stations ended coal-fired operation in 2013. Average revenue for OPG also excludes OPG's share of revenues and generation from PEC and Brighton Beach.
- Average revenue for other electricity generators (Non-OPG Average Revenue) is comprised of hourly Ontario demand multiplied by the HOEP, plus total global adjustment payments, plus the sum of hourly net exports multiplied by the HOEP, less OPG's generation revenue.
- <sup>3</sup> Regulated revenues included in the average revenue for OPG reflect regulated prices, including rate riders established by the OEB. Refer to the section Revenue Mechanisms for Regulated and Unregulated Generation for the regulated prices in effect during 2014 and 2013.

#### **Average Revenue and Average Sales Prices**

OPG's average revenue reflects the average sales prices for all of its electricity generation segments. The majority of OPG's generation is from the Regulated – Nuclear Generation and Regulated – Hydroelectric segments. The regulated prices authorized by the OEB for electricity generated from nuclear facilities operated by OPG and OPG's regulated hydroelectric generating stations are discussed in the section *Revenue Mechanisms for Regulated and Unregulated Generation*.

The average sales price for the Regulated – Nuclear Generation segment during 2014 was 5.6 ¢/kWh compared to 5.7 ¢/kWh during 2013. The decrease was primarily due to a lower rate rider during 2014 related to the recovery of approved variance and deferral account balances, partially offset by a higher OEB approved base regulated price, effective November 1, 2014.

The average sales price for the Regulated – Hydroelectric segment during 2014 was 4.0 ¢/kWh compared to 3.5 ¢/kWh during 2013. The increase was primarily due to higher sales prices received during the first quarter of 2014, compared to the same quarter in 2013, for the production from the 48 hydroelectric stations which were prescribed for rate regulation beginning in 2014. Prior to the OEB's order establishing regulated prices for these stations effective November 1, 2014, the revenue for generation from these stations was based on the Ontario electricity spot market price. The average sales price for these stations during 2014 was 5.0 ¢/kWh compared to 2.8 ¢/kWh during 2013. The increase in 2014 was primarily due to the unseasonably cold temperatures during the first quarter of 2014, compared to the same quarter in 2013, which led to higher natural gas prices and higher Ontario primary demand.

#### **Cash Flow from Operations**

Cash flow provided by operating activities for 2014 was \$1,433 million, compared to \$1,174 million for 2013. The increase in operating cash flow was primarily the result of higher cash receipts from generation and lower nuclear OM&A expenses in 2014. Higher cash receipts from generation was primarily due to fewer outage days at OPG's nuclear stations, higher electricity spot market prices resulting from the unseasonably cold temperatures during the first quarter of 2014, and revenue from the existing and new units in the Lower Mattagami River project. The increase in operating cash flow was partially offset by lower cash receipts from lower rate riders for regulated generation in 2014.

#### **Funds from Operations Interest Coverage**

Funds from Operations (FFO) Interest Coverage is an indicator of OPG's ability to meet interest obligations from operating cash flows. The FFO Interest Coverage remained at 2.8 times for 2014 and 2013. The FFO Interest Coverage in 2014 reflects an increase in operating cash flows in 2014, compared to 2013, offset by the impact of higher adjusted interest expense used in the calculation of the indicator. The increase in interest expense was primarily due to higher pension and OPEB discount rates at the end of 2013 and an increase in pension and OPEB benefit obligations.

The FFO Interest Coverage is not a measure in accordance with US GAAP. It should not be considered as an alternative measure to net income, cash flows from operating activities, or any other measure of performance under US GAAP. OPG believes that this non-GAAP financial measure is an effective indicator of performance and is consistent with its corporate strategy to operate on a financially sustainable basis. The definition and reconciliation of FFO Interest Coverage can be found under the headings, Key Generation and Performance Indicators and Supplementary Non-GAAP Financial Measures, respectively.

#### **Return on Equity**

Return on Equity (ROE) is an indicator of OPG's performance consistent with its objectives to operate on a financially sustainable basis and to maintain value for the Shareholder. ROE is measured over a 12-month period.

ROE for 2014 was 8.5 percent, compared to 1.5 percent for 2013. ROE increased for the year primarily due to higher net income attributable to the Shareholder, including an extraordinary gain of \$243 million recognized in 2014 related to the 48 hydroelectric facilities prescribed for rate regulation beginning in 2014. The 2014 ROE, calculated using net income attributable to the Shareholder excluding extraordinary gain, was 6.0 percent, which was also an improvement over the 2013 ROE of 1.5 percent.

OPG's ROE reflects the relatively higher equity component in its capital structure, compared to the capital structure used by the OEB in determining regulated prices. The OEB establishes the allowed return on OPG's investment in regulated assets, which represent approximately 90 percent of the Company's operations, using a prescribed rate of return and a deemed capital structure. In its November 2014 decision, the OEB adjusted the deemed capital structure to 45 percent equity and 55 percent debt, from 47 percent equity and 53 percent debt. OPG's actual capital structure (excluding accumulated other comprehensive income (AOCI)) contains approximately 60 percent equity. The higher equity component in OPG's actual capital structure, compared to the deemed capital structure prescribed by the OEB, results in a reduced actual ROE.

ROE is not a measure in accordance with US GAAP. It should not be considered an alternative measure to net income, cash flows from operating activities, or any other performance measure under US GAAP. The definition and reconciliation of ROE can be found under the headings, Key Generation and Performance Indicators and Supplementary Non-GAAP Financial Measures, respectively.

#### **Recent Developments**

#### **OPG's OEB Applications**

New Regulated Prices and Regulation of Previously Unregulated Hydroelectric Facilities

The OEB's decision on OPG's September 2013 application for new regulated prices for its nuclear and existing regulated hydroelectric generation was issued on November 20, 2014, following a public hearing process. This decision was followed by the OEB's order on December 18, 2014 establishing new regulated prices for these facilities effective November 1, 2014. Consistent with the effective date of the decision, for the period from January 1, 2014 to October 31, 2014, OPG continued to record additions to the existing variance and deferral accounts for the nuclear and existing regulated hydroelectric facilities pursuant to the OEB's previous decisions and orders. These additions reflected differences between actual and forecast amounts embedded in the regulated prices in effect prior to November 1, 2014. The cost of service regulated prices and rate riders for 2014 and 2013 are outlined under the section, *Revenue Mechanisms for Regulated and Unregulated Generation*.

The OEB's decision and order also established a regulated price for the generation from OPG's 48 previously unregulated hydroelectric facilities, which were prescribed for rate regulation effective July 1, 2014 pursuant to an amendment to *Ontario Regulation 53/05*. In establishing the regulated price for these facilities effective November 1, 2014, the OEB determined that the price for the generation from these facilities for the period from July 1, 2014 to October 31, 2014 would be based on the Ontario electricity spot market price, which these facilities had continued to receive during this period on an interim basis pursuant to an earlier order by the OEB. The accounting impact of applying rate-regulated accounting to the newly regulated hydroelectric facilities is discussed under the heading, *Critical Accounting Policies and Estimates*.

The new regulated prices for all of OPG's regulated facilities were established using a two-year forecast cost of service methodology based on revenue requirements, taking into account a forecast of production and operating costs for the regulated facilities and a return on rate base. Rate base is a regulatory construct that represents the average net level of investment in regulated fixed and intangible assets, and an allowance for working capital.

The OEB determined the new regulated prices for the nuclear and existing regulated hydroelectric facilities based on a total OEB-approved 24-month revenue requirement for 2014 and 2015 of \$7.3 billion. This reflected a reduction of \$833 million from the revenue requirement submitted. The regulated price for the 48 newly regulated hydroelectric facilities was established based on an approved 18-month revenue requirement for July 1, 2014 to December 31, 2015 of \$752 million, a reduction of \$101 million from OPG's submission. The most significant adjustments to OPG's rate application request were as follows:

- Allowed pension and OPEB amounts were limited to a forecast of OPG's 2014 and 2015 cash expenditures for its pension and OPEB plans, which were approximately \$600 million lower, including related tax impacts, than OPG's submission based on forecast accrual costs. While this negatively affects OPG's cash flows, OPG's 2014 income was not materially affected, as the OEB also authorized a deferral account for the difference between OPG's cash expenditures on pension and OPEB plans and accrual costs. The regulatory treatment and future recovery of pension and OPEB costs is discussed further below
- A reduction in overall compensation costs of \$100 million in each of 2014 and 2015 across all regulated facilities
- An increase in the forecast nuclear production of 0.5 TWh annually used to set the regulated prices, which had the effect of further reducing the approved nuclear regulated price
- In establishing the new regulated price for OPG's existing regulated hydroelectric generation, the OEB
  approved the inclusion of \$1,365 million in rate base related to the Niagara Tunnel project, which was
  declared in-service in March 2013. This resulted in a write-off of \$77 million, which was charged to
  operations in 2014

In establishing the new regulated price for OPG's nuclear generation, the OEB directed OPG to reduce the 2014 forecast regulatory income tax expense as a result of a regulatory tax loss calculated for 2013, which further reduced the revenue requirement by approximately \$70 million.

In December 2014, OPG filed a motion asking the OEB to review and vary the parts of its decision related to the disallowance of the Niagara Tunnel expenditures, and the application of the 2013 regulatory tax loss to reduce the 2014/2015 revenue requirement. The hearing on the motion has been scheduled for the end of March 2015.

As part of its decision and order, the OEB also approved for recovery, without adjustments, the balances in four variance and deferral accounts as at December 31, 2013 totalling \$189 million. The OEB authorized the recovery of these balances over a 12-month period, through rate riders for nuclear and existing regulated hydroelectric generation effective from January 1, 2015 to December 31, 2015. In addition, the OEB approved OPG's submitted forecast for 2014 and 2015 non-capital costs and in-service capital additions related to the Darlington Refurbishment project.

The OEB also approved the continuation of previously authorized variance and deferral accounts and, effective November 1, 2014, extended all applicable accounts to the newly regulated hydroelectric facilities, as requested by OPG. Variance and deferral accounts related to the existing and newly regulated facilities are discussed further in Note 5 of OPG's audited consolidated financial statements.

#### Pension and OPEB Cost Recovery Methodology

Using the methodology previously applied by the OEB in setting OPG's regulated prices, the revenue requirements submitted by OPG in its September 2013 application included a forecast of pension and OPEB costs for 2014 and 2015 determined on an accrual basis in accordance with US GAAP. In its decision and order, the OEB approved revenue requirements based on OPG's estimated minimum contributions to its registered pension plan, and a forecast of OPG's expenditures on the OPEB and supplementary pension plans. In directing this reduction, the OEB agreed with OPG and certain other parties that a generic proceeding on the regulatory treatment and recovery of pension and OPEB costs would be beneficial. The OEB also indicated that a transition to a cash basis of recovery for pension and OPEB amounts for OPG, if required, would be addressed in a future OPG rate proceeding.

Pending the generic proceeding, the OEB established the Pension & OPEB Cash Versus Accrual Differential Deferral Account. Effective November 1, 2014, this deferral account records the difference between OPG's actual pension and OPEB costs for the regulated business determined on an accrual basis and the corresponding actual cash expenditures for these plans. OPG recorded a regulatory asset of \$36 million for this deferral account, with a corresponding reduction to OM&A expenses, for the two month period from November 1, 2014 to December 31, 2014. The OEB indicated that the disposition of the balance in the account will be based on the outcome of the generic proceeding. The scope and timing of the generic proceeding has not been announced by the OEB.

#### Application to Recover Balances in Variance and Deferral Accounts

In December 2014, OPG filed an application with the OEB requesting additional nuclear and regulated hydroelectric rate riders, effective July 1, 2015, for disposition of the December 31, 2014 balances, not already being recovered or repaid, in most of the OEB-authorized variance and deferral accounts as at December 31, 2014. The application requests the recovery or repayment of these balances to be reflected in new rate riders beginning on July 1, 2015. As updated for actual December 31, 2014 balances, OPG's application requests rate riders for nuclear and regulated hydroelectric generation of \$15.57/MWh and \$3.55/MWh, respectively, based on variance and deferral account balances sought for recovery of approximately \$1.8 billion. The requested regulated hydroelectric rate rider would apply to the generation from both the existing and newly regulated hydroelectric stations. The decision on OPG's application will be made by the OEB following a public hearing process, which commenced in the first quarter of 2015.

#### New Generating Assets In-Service

During 2014, the following assets were declared in-service:

- Lower Mattagami River project: During 2014, all six new generating units were placed in-service, ahead of
  the target completion date and within the approved budget of \$2.6 billion. The project has increased the
  capacity of the four generating stations on the Lower Mattagami River by 438 MW.
- Atikokan Biomass Conversion: In July 2014, OPG completed the conversion of the Atikokan GS from coal
  to biomass fuel, ahead of its original target completion date. The project cost is expected to be within the
  budget of \$170 million. The converted station has a capacity of 205 MW and is the largest generating
  station in North America fuelled by 100 percent biomass.

OPG completed the conversion of one unit at the Thunder Bay GS to advanced biomass fuel and declared the unit in commercial operation in January 2015. The conversion of the unit was completed ahead of schedule and within the approved budget of \$7 million.

OPG's major generation development projects are discussed under the heading, Project Excellence.

#### Power Workers' Union Collective Agreement

The Power Workers' Union (PWU) represents approximately 5,600 OPG employees or approximately 58 percent of OPG's regular workforce. The current collective agreement between OPG and the PWU has a three-year term, which expires on March 31, 2015. Negotiations for a new labour agreement with the PWU are currently underway.

#### **CORE BUSINESS AND STRATEGY**

OPG's mandate is to reliably and cost-effectively produce electricity from its diversified portfolio of generating assets, while operating in a safe, open, and environmentally responsible manner. OPG's mission is to be Ontario's low cost electricity generator through a focus on three corporate strategies:

- Operational Excellence
- Project Excellence
- Financial Sustainability.

#### **Operational Excellence**

OPG is committed to excellence in the areas of generation, safety and the environment. Operational excellence at OPG's nuclear, hydroelectric, and thermal generating facilities is accomplished by generating electricity in a safe, reliable, and cost-effective manner.

#### **Nuclear Generating Assets**

Operational excellence at OPG's nuclear generating facilities is defined as safely and reliably generating cost-effective electricity. The four cornerstones of all nuclear operations are safety, reliability, human performance, and value for money. Employee, environmental, and nuclear safety are overriding priorities.

During 2014, the nuclear facilities demonstrated strong performance and continuous improvement against industry benchmarks. Nuclear practices and processes are regularly benchmarked against top performing nuclear facilities around the world. This allows OPG to identify, develop, and implement initiatives to further improve performance. The key achievements in 2014 include:

• In April 2014, the Darlington GS received its second consecutive excellent safety and performance evaluation from the World Association of Nuclear Operators.

- In August 2014, the Canadian Nuclear Safety Commission (CNSC) presented its Staff Integrated Safety Assessment of Canadian Nuclear Power Plants for 2013. The Darlington GS achieved the highest possible safety and control rating, its fifth consecutive excellent performance evaluation. The Pickering GS also received positive safety and control ratings from the CNSC staff, with improved performance recognized in the areas of radiation protection and security.
- In January 2015, the CNSC recognized OPG's efforts regarding its Fukushima action plan and confirmed that all of the Fukushima action items are now closed. OPG's Fukushima implementation plan included a number of key safety enhancements on providing additional back-up capability to increase OPG's flexibility to respond to unexpected and highly unlikely external events that can impact multiple nuclear units at the same time. CNSC staff concluded that OPG has strengthened reactor defence and enhanced its emergency response at both the Darlington GS and Pickering GS in response to lessons learned from the Fukushima incident.

These achievements demonstrate OPG's strong focus on safety and commitment to operational excellence.

During 2014, generation and reliability at the nuclear stations improved as a result of a decrease in unplanned outage days at the stations. This is further discussed under the heading. Electricity Generation and section Highlights, and under the heading Regulated - Nuclear Generation Segment and section Discussion of Operating Results by Business Segment.

In 2013, the CNSC approved a five-year operating licence which combined the Pickering A and B nuclear generating stations' licences into a single-site licence. A regulatory hold point was added to the licence related to fuel channels and the original assumed end-of-life dates for Pickering Units 5 to 8. To satisfy these, OPG provided the results of additional safety assessments in a May 2014 Commission Hearing with public participation, as required by the CNSC. In June 2014, the CNSC approved OPG's request to remove the hold point on the licence. The removal of this hold point authorizes the Pickering GS to proceed with plans to operate Units 5 to 8 to 2020. OPG's current licence for the Pickering GS expires on August 31, 2018.

OPG strives to operate and maintain its nuclear facilities to optimize equipment, performance, availability, and electricity generation. Improved equipment reliability generally results in greater nuclear safety and fewer generation interruptions. OPG has made investments to continue to improve the performance of the Pickering GS through to 2020 with a focus on implementing equipment modifications and fuel handling reliability improvements, reducing degraded and broken equipment backlogs, and completing 3,000 work orders of critical/high priority work. Investments in the Pickering GS will help to ensure a reliable electricity supply for Ontario while the Darlington GS reactors are being refurbished. OPG is seeing positive results of that work, including engineering and research assessments that support the safe and reliable operation of the units to their end-of-life. In January 2015, Pickering Unit 5 achieved 523 days of continuous on-line operation since its last planned outage, the second best at the station. OPG is developing resource strategies, including workforce planning, to the end of commercial operations of the Pickering GS, which is expected in 2020, through to the end of the safe storage period.

The successful execution of nuclear outages continues to be a high priority. OPG continues to improve the planning, execution, monitoring, and reporting of outage work. Nuclear inspection and testing programs are largely driven by maintenance and regulatory requirements. These programs are designed to ensure that equipment is performing reliably and safely. The planned outage programs at Pickering Units 5 to 8 also reflect OPG's objective of operating the Pickering units to 2020. In addition, planning activities progressed well in 2014 in preparation for the Vacuum Building Outage (VBO) scheduled to be performed at the Darlington GS in 2015. During the VBO, inspection and testing of key components of the negative pressure containment system will be completed, as well as unit inspections and maintenance activities that include pressure and steam generator inspections, and turbine, generator and valve maintenance. For the Darlington GS, a station-wide VBO is required every 12 years and will require the shutdown of all four units for the duration of the outage. Approximately 1,000 workers will augment station resources to complete the outage work programs, which comprises approximately 40,000 tasks. This is the last VBO prior to the execution

of the Darlington Refurbishment project and, therefore, its execution is a critical step in ensuring the project's success.

Process and procedural compliance is monitored and managed to ensure a strong safety and performance culture at the nuclear stations. OPG continues to implement training programs to improve employee performance and promote leadership development.

Delivering solutions that provide the best combination of safety, cost, and effectiveness, as well as establishing challenging financial targets based on comprehensive benchmarking continues to be a vital part of OPG's strategy to improve performance. Staffing targets continue to be reviewed and adjusted where necessary to reduce operating costs, while ensuring safety is not compromised.

In December 2013, OPG submitted a licence renewal application to the CNSC for the Darlington GS that would span the refurbishment period. The hearing dates for the licence renewal application have not been scheduled, but are expected to take place in August and November 2015. The existing licence for the Darlington GS station expires on December 31, 2015.

#### Hydroelectric Generating Assets

OPG's hydroelectric stations that are currently prescribed for rate regulation are included in the Regulated – Hydroelectric segment. Hydroelectric stations that are not subject to rate regulation by the OEB are included in the Contracted Generation Portfolio segment. A description of OPG's reportable business segments is included in the section *Business Segments*.

OPG's hydroelectric facilities are focused on producing electricity in a safe, reliable, cost-effective, and environmentally responsible manner.

OPG has the following objectives for its hydroelectric facilities:

- sustain and improve the existing assets for long-term operations
- operate and maintain the facilities in an efficient and cost-effective manner
- seek to expand existing stations, where economic
- maintain and improve reliability performance, where practical and economic
- · maintain an excellent employee safety record
- strive for continuous improvement in the areas of dams and waterways, public safety, and environmental performance
- build and improve relationships with First Nations and Métis.

As part of OPG's ongoing strategy to reduce costs and increase efficiency, the operations of its hydroelectric and thermal assets were combined into one organization in regions where opportunities existed to more effectively utilize resources. This was successfully accomplished in both Northwestern and Eastern Ontario regions during 2014. This allowed for a reduction in the number of senior managers and staff by combining reporting and centre-led support functions.

A Dam Safety Review Panel, comprised of internationally recognized experts, has previously concluded that OPG's Dam and Public Safety Program compares with international best practices in a number of areas related to maintaining safe dam operation. OPG continues to develop a new risk-informed approach on behalf of the Ontario Ministry of Natural Resources and Forestry (MNRF) to prioritize and manage risks identified through dam safety assessments. This approach is expected to result in benefits with respect to both safety and costs for future upgrades to existing infrastructure.

OPG continues to evaluate and implement plans to increase capacity, maintain performance, and extend the operating life of its hydroelectric generating assets. These plans are expected to be accomplished through refurbishment or replacement of existing turbine runners, generators, transformers, and controls. This includes

increasing the total capacity of hydroelectric generating stations by approximately 45 MW over the next five years. OPG is also planning to repair, rehabilitate, or replace a number of aging civil structures in the next five years.

During 2014, OPG continued to execute a number of projects, and completed major equipment overhauls and rehabilitation work at several stations. These include:

- completion of major equipment overhauls and rehabilitation work on Unit 5 of the Des Joachims GS, Unit 3 of the Pine Portage GS, and Unit 11 of the R.H. Saunders GS
- completion of a transformer bank replacement at the Pine Portage GS
- completion of the rehabilitation of Unit 3 of the Sir Adam Beck Pump GS
- continued work on the rehabilitation of Unit 5 of the Sir Adam Beck Pump GS, Unit 1 of the Lower Notch GS, and Unit 2 of the Aguasabon GS.

OPG's major hydroelectric development projects are discussed under the heading, *Project Excellence*.

#### **Thermal Generating Assets**

OPG's three operating thermal generating stations operate as peaking facilities, depending on electricity demand. This provides Ontario's electricity system with the flexibility to meet changing daily system demand and capacity requirements, and enables the system to accommodate the expansion of Ontario's renewable generation portfolio.

In April 2014, OPG ended coal-fired generation at the Thunder Bay GS. This marks the end of coal-fired generation by OPG, ahead of the December 31, 2014 deadline mandated by the Province.

Thermal assets that are no longer available to generate electricity are included in the Services, Trading, and Other Non-Generation segment once the assets are removed from service. With the end of coal-fired generation at the Lambton GS and the Nanticoke GS in 2013, OPG continues to preserve the option to convert these stations to natural gas and/or biomass in the future. Converted thermal generating stations can provide Ontario's electricity system with continued flexibility of daily start up and shut down, load-following capability to meet changing system needs, and complement non-dispatchable renewable energy sources. The activities required to preserve this option are reflected in the Services, Trading, and Other Non-Generation segment starting in 2014. OPG is seeking recovery of ongoing costs to preserve the option to convert the units. If recovery is not allowed, OPG will consider all options regarding the future of these stations, including full site closure and decommissioning. The decision to continue to incur preservation costs, in the absence of a cost recovery mechanism, will be revisited in the first half of 2015.

In 2009, OPG entered into a Contingency Support Agreement with the OEFC, following the implementation of CO<sub>2</sub> emissions targets/caps consistent with good utility practice, to maintain the Lambton and Nanticoke generation stations for supply adequacy and system reliability by providing OPG with sufficient revenue to recover the actual direct costs of the stations, and to provide reimbursement of capital expenditures through the recapture of depreciation up to December 31, 2014. As a result of the Shareholder declaration issued in March 2013 mandating that OPG cease the use of coal at the Nanticoke GS and the Lambton GS by the end of 2013 in advance of the previous December 31, 2014 deadline, OPG and the OEFC executed an amendment to the Contingency Support Agreement. The amendment allowed for early termination of the agreement and for OPG to recover actual costs that could not reasonably be avoided or mitigated during the period from the date of the advanced shutdown up to the end of 2014. On November 1, 2013, the OEFC provided written notice that it would terminate the Contingency Support Agreement, effective December 31, 2013, thus triggering the amendment that allowed OPG to recover these costs during 2014. Any preservation costs or staff relocation costs related to the Lambton GS and the Nanticoke GS that were incurred during 2014 are not recoverable under the Contingency Support Agreement.

#### **Environmental Performance**

OPG's Environmental Policy states that "OPG shall meet all legal requirements and any environmental commitments that it makes, with the objective of exceeding these legal requirements where it makes business sense". This policy commits OPG to:

- establish and maintain an environmental management system (EMS)
- work to prevent or mitigate adverse effects on the environment with a long-term objective of continual improvement
- manage its sites in a manner that strives to maintain, or where it makes business sense, enhance significant natural areas and associated species at risk.

Environmental performance targets also form part of OPG's annual business planning process. Performance is monitored and communicated to internal and external stakeholders.

OPG monitors emissions to air and water, and regularly reports the results to regulators, including the Ontario Ministry of the Environment and Climate Change, Environment Canada, and the CNSC. The public also receives ongoing communications regarding OPG's environmental performance. In 2014, OPG maintained ISO 14001 registration of its company-wide EMS. Within this EMS, OPG has developed and implemented internal monitoring, assessment, and reporting programs to manage environmental risks. These risks include air and water emissions, discharges, spills, the treatment of radioactive emissions, and radioactive wastes. OPG also continues to address historical land contamination through a voluntary land assessment and remediation program. Further details regarding OPG's environmental risks can be found under the section Risk Management.

OPG's environmental performance for 2014 met or outperformed targets for spills, infractions, production of low and intermediate level radiological waste, volume of non-processible radioactive waste shipped, and carbon-14 air emissions. Tritium emissions to air and water did not meet targets, but remained less than one percent of the regulatory limit.

Radiation exposure to members of the public is estimated on an annual basis for those individuals who live or work near the nuclear generating stations. The annual dose to the public resulting from operations of each nuclear facility is expressed in microsieverts (µSv) which is an international unit of radiation dose measurement. For 2013, the annual public doses resulting from the Darlington GS operations and the Pickering GS operations were 0.6 µSv and 1.1 µSv, respectively, which is approximately 0.1 percent of the annual legal limit of 1,000 µSv. The doses resulting from the 2014 operating year will not be finalized until the second guarter of 2015. They are not expected to differ significantly from the 2013 levels.

In response to the Ministry of Energy's mandate to end coal-fired generation by December 31, 2014, OPG ended all coal-fired operations in April 2014, as all existing coal inventory was utilized in the last coal-fired unit at the Thunder Bay GS. As a result, emissions from coal-fired generation were minimal in 2014.

For the years ended December 31, CO<sub>2</sub> and acid gas emissions from OPG's coal-fired stations were as follows:

	2014	2013
$CO_2$ (million tonnes)	0.12	3.16
$SO_2$ and $NO_x$ (gigagrams)	0.46	14.73

To further reduce greenhouse gas (GHG) emissions, OPG is implementing the use of biofuels. The conversion of the Atikokan GS to use biomass fuel was completed in July 2014 and the conversion of one unit at the Thunder Bay GS to use advanced biomass fuel was completed in January 2015.

Details of OPG's environmental performance and further initiatives to fulfil the Company's Environmental Policy are available in OPG's 2013 Sustainable Development Report, available on the Company's website at www.opg.com.

#### Safety

OPG is committed to achieving excellent safety performance and striving for continuous improvement with the ultimate goal of zero injuries. Safety performance is measured using two primary indicators:

- All Injury Rate (AIR)
- Accident Severity Rate (ASR).

Overall, OPG's safety performance is consistently one of the best amongst its comparator Canadian electrical utilities. In November 2014, OPG was recognized by the Canadian Electricity Association for the second consecutive year for achieving top quartile performance amongst comparable utilities with its 2013 AIR and ASR results. Based on OPG's results, including achieving its best AIR performance ever in 2014, it is expected that OPG will remain one of the best amongst its comparator Canadian electrical utilities in 2015.

	2014	2013
AIR (injuries per 200,000 hours worked)	0.36	0.61
ASR (days lost per 200,000 hours)	1.31	0.94

OPG remains steadfast in its commitment to safety excellence, sustaining a strong safety culture and continuous improvement in safety management systems. In 2014, OPG successfully implemented an integrated health and safety management system and operational risk control procedures across the Company. This initiative created a single health and safety management system for OPG and consolidated all health and safety governance into one system, increasing efficiency and providing consistent performance expectations across the corporation.

In 2014, OPG launched its Total Health initiative. This initiative aims to create a health culture, similar to OPG's existing safety culture that supports employees and their families in their efforts to achieve an optimal level of health and functioning through health education, health promotion, disease and injury prevention, and crisis intervention.

OPG's contractors are expected to conduct work safely at OPG sites. In support of this expectation, OPG implemented a new contractor pre-qualification process and developed contractor safety governance while providing on-site safety support for many of OPG's major projects.

#### **Project Excellence**

OPG is pursuing several generation development projects. OPG's major projects include the Darlington Refurbishment, new hydroelectric generation and plant expansions, the repository for the management of low and intermediate level waste (L&ILW), and the conversion of coal-fired generating units to alternative fuels.

The status of OPG's major projects as of December 31, 2014 is outlined below.

Project	Cap expend	ditures	Approved budget	Planned in-service	
(millions of dollars)	Year-to-date	Life-to-date		date	
Darlington Refurbishment	696	1,462			A budget and schedule for the refurbishment of the four units are expected to be completed in 2015. See update below.
Lower Mattagami	387	2,369	2,600	June 2015	All six new units have been placed inservice ahead of schedule and on budget. See update below.
Deep Geologic Repository for Low and Intermediate Level Waste <sup>1</sup>	12 <sup>1</sup>	179 <sup>1</sup>			See update below.
Atikokan Biomass Conversion	24	168	170	August 2014	Construction completed ahead of schedule and costs are expected to be within budget. See update below.

<sup>&</sup>lt;sup>1</sup> Expenditures are funded by the nuclear fixed asset removal and nuclear waste management liabilities.

#### **Darlington Refurbishment**

The Darlington generating units are currently forecast to reach their average end-of-life between 2019 and 2020. Refurbishment of the four generating units will extend the operating life of the Darlington GS by approximately 30 years. The Darlington Refurbishment project is a multi-phase program comprised of the following five major project work packages:

- Retube and Feeder Replacement
- **Turbines and Generators**
- Defueling and Fuel Handling
- Steam Generators
- Balance of Plant.

The definition phase of the project is well under way and is on track to be completed in 2015. In 2016, the first unit outage will commence and OPG will start execution of the refurbishment scope on that unit.

As part of the CNSC's regulatory requirements outlined in RD-360: Life Extension of Nuclear Power Plants (RD-360), OPG completed a series of assessments for the Darlington Refurbishment project. Key milestones include the following:

- OPG submitted the Global Assessment Report in December 2013 and it was accepted by the CNSC in April 2014 as meeting all regulatory requirements of RD-360.
- The environmental assessment (EA) was accepted by the CNSC in December 2012 as having met regulatory requirements. In April 2013, the EA was subsequently challenged by way of a judicial review on the grounds that the EA failed to comply with requirements of the Canadian Environmental Assessment Act, 2012 (the Act) and that the hearing deprived the applicants certain procedural rights. In November 2014, after a detailed review of all of the evidence presented, the court dismissed the challenge and it was concluded that the CNSC and Fisheries and Oceans Canada committed no error in their decision under the Act. In December 2014, four environmental groups have appealed the federal court ruling.

- In July 2013, OPG received the CNSC's staff assessment of the Integrated Safety Review (ISR), which confirmed that the ISR meets applicable regulatory requirements. OPG is required to identify and address any new revisions to the Darlington ISR Basis Codes along with any new significant industry experience. In February 2014, this update was completed and provided to the CNSC. No new significant scope items were identified as a result of this review.
- In December 2014, CNSC staff notified OPG that the regulatory scope defined in the Integrated Implementation Plan (IIP) was accepted and is unlikely to change. The CNSC have requested that OPG submit an updated version of the IIP to address some minor non-intent changes that were identified during their review. OPG expects to submit the IIP update in May 2015 for inclusion in the licence renewal hearing in August 2015. Approval of the IIP is expected to be obtained from the CNSC as part of the renewal of the Darlington GS operating licence by December 31, 2015.

In November 2014, OPG's Board of Directors approved the funding for the remainder of the refurbishment's definition phase. This request included funding for 2015 deliverables in the amount of \$1,124 million, and reconfirmed the program life cycle high confidence cost estimate at less than \$10 billion in 2013 dollars, excluding capitalized interest and escalation. A budget and schedule for the four-unit refurbishment are expected to be completed and presented to the Board of Directors for approval in November 2015.

In 2014, OPG completed the mock-up facility as part of the Darlington Energy Complex which is a critical step in the Darlington Refurbishment project. There are a number of pre-requisite projects currently underway at the Darlington GS to be completed in advance of the execution phase of the project. One of the pre-requisite projects, the Heavy Water Storage and Drum Handling Facility, has experienced construction challenges. OPG has established a revised plan to mitigate the construction complexities and schedule risks, including contingency plans to avoid potential impacts on the Darlington Refurbishment project schedule.

The Retube and Feeder Replacement project is the largest work package of the Darlington Refurbishment project and represents a majority of the critical path schedule. The Retube and Feeder Replacement mock-up facility as part of the Darlington Energy Complex was made available for service ahead of schedule in the first quarter of 2014, enabling the next critical phase of tooling prototype development and testing. In September 2014, the first retube platform was installed at the mock-up facility, allowing for the start of prototype tool testing, which represents the final phase of tooling development.

The remaining major project work packages, including Turbines and Generators, Defueling and Fuel Handling, Steam Generators, and Balance of Plant are on schedule.

#### **New Nuclear Units**

The Government of Ontario's 2013 Long-Term Energy Plan (LTEP) indicated that it will not proceed at this time with the construction of two new nuclear reactors at the Darlington site; however, the LTEP also indicated that the Ministry of Energy will work with OPG to maintain the site preparation licence granted by the CNSC. As such, OPG is undertaking activities required to support the EA and existing licence.

On May 14, 2014, OPG received the decision of the Federal Court (Canada) on a judicial review of the issuance of the Power Reactor Site Preparation Licence and a judicial review in relation to the Darlington New Nuclear Project EA. As a result of the decision, the Federal Court nullified the site preparation licence issued by the CNSC. The Federal Court ordered that the EA be returned to the Joint Review Panel (or a duly constituted panel) for additional consideration of three specific matters.

OPG, the Attorney General of Canada, and the CNSC have appealed this decision to the Federal Court of Appeal. A hearing date for the appeal has not yet been set, but is expected in 2015.

#### Deep Geologic Repository for Low and Intermediate Level Waste

OPG's deep geologic repository (DGR) will be designed for the long term management of L&ILW produced from the continued operations of OPG owned or operated nuclear generating stations.

The public hearing days for the EA and the site preparation and construction license concluded in September 2014. OPG made several presentations to the Joint Review Panel (JRP) and responded to a number of inquiries from the JRP, which included questions and motions arising from the public's participation. In November 2014, the JRP closed the public record for the EA as it concluded that all the necessary information to complete its mandate had been received. No further comments or information will be accepted by the JRP. The JRP is expected to provide a report and recommendation on the EA to the federal Minister of Environment by May 2015. A decision from the Minister of Environment on the EA is expected within 120 days from the report submission.

OPG has suspended design activities pending receipt of the site preparation and construction licence from the JRP. Upon completion of the detailed design, development of a schedule and budget, consideration of consultation with the Saugeen Ojibway Nations community, and OPG Board of Directors' approval, OPG will proceed with construction. The in-service date of the DGR is expected to be approximately six to seven years from the start of construction.

#### Lower Mattagami River Project

In June 2010, construction activities commenced on the Lower Mattagami River project to add one additional generating unit at each of the existing Little Long, Harmon and Kipling generating stations and to replace the existing Smoky Falls GS with a new three-unit station. As of December 31, 2014, the entire complex had been placed inservice, ahead of the project's target completion date of June 2015. The project has increased the capacity of these four stations in northeast Ontario by 438 MW and its total cost is within the approved budget of \$2.6 billion.

The capacity and in-service dates for the new generating units are as follows:

	In-Service	
Station	Capacity (MW)	In-Service Date
Little Long GS incremental unit	67	January 2014
Harmon GS incremental unit	78	June 2014
Smoky Falls GS Unit 1 <sup>1</sup>	89	September 2014
Smoky Falls GS Unit 2 1	89	October 2014
Smoky Falls GS Unit 3 <sup>1</sup>	89	December 2014
Kipling GS incremental unit	78	December 2014

<sup>&</sup>lt;sup>1</sup> The new three-unit station at Smoky Falls replaced the existing 52 MW Smoky Falls station.

Under the partnership agreement, as new units are placed in-service, the Amisk-oo-Skow Finance Corporation, a corporation wholly owned by the Moose Cree First Nation, may acquire up to a 25 percent interest in the value of the assets through its investment in LMLP. During 2014, the Amisk-oo-Skow Finance Corporation made contributions of \$141 million to acquire their equity interest in LMLP. As at December 31, 2014, the Amisk-oo-Skow Finance Corporation had a 25 percent interest in LMLP.

#### Atikokan Biomass Conversion

In July 2014, a two-year project to convert the Atikokan GS from coal to biomass fuel was completed, ahead of its original target completion date. The project cost is expected to be within the budget of \$170 million.

The Atikokan GS is currently the largest generating station in North America fuelled by 100 percent biomass. Biomass is a sustainable fuel recognized globally as beneficial to climate change mitigation. The converted station has a capacity of 205 MW and is subject to a 10-year ESA with the IESO until 2024.

#### Thunder Bay Advanced Biomass Conversion

In June 2014, OPG and the IESO executed the 5-year Thunder Bay Biomass ESA for the conversion of one unit at the Thunder Bay GS to advanced biomass fuel. OPG completed the conversion of the unit and declared the unit in commercial operation in January 2015. The converted unit has an in-service capacity of approximately 153 MW. The conversion of the unit was completed ahead of schedule and within the approved cost estimate of \$7 million. The converted unit will be able to provide dispatchable, renewable electricity when required to meet electricity demand.

#### **New Post Creek**

During 2014, OPG and the IESO continued negotiations for a power purchase agreement for the proposed 28 MW Peter Sutherland Sr. GS. The station is expected to be constructed through a partnership between OPG and Coral Rapids Power L.P., a wholly owned subsidiary of the Taykwa Tagamou Nation.

#### **Financial Sustainability**

As a commercial enterprise, OPG's financial priority is to achieve a consistent level of financial performance that will ensure its long-term financial sustainability and maintain the value of its assets for its Shareholder – the Province of Ontario. Inherent in this priority are three objectives:

- enhance profitability by increasing revenue
- · improve efficiency and reduce costs
- ensure a strong financial position that enables OPG to finance its operations and generation development projects.

#### Revenue Growth

OPG's revenue strategy focuses on revenue growth, while taking into account the impact on Ontario electricity ratepayers. OPG has multiple sources of revenue, including:

- regulated revenue from the prescribed nuclear and hydroelectric generating facilities
- prior to November 1, 2014, revenue based on electricity spot market prices for production from the
   48 hydroelectric facilities prescribed for rate regulation beginning in 2014
- contract revenue from ESAs and cost recovery agreements for the unregulated facilities
- non-generation revenues.

Electricity produced from the prescribed facilities receives regulated prices determined by the OEB. OPG's objectives with respect to its regulated operations are to clearly demonstrate that costs for these operations are prudently incurred and should be fully recovered, and to earn an appropriate return on the regulated assets. OPG's revenues from its prescribed facilities have increased as a result of new regulated prices established by the OEB effective November 1, 2014. While these prices represent an increase over the prices previously in effect, they are significantly lower than those requested by OPG based on its forecast costs, which negatively affects OPG's ability to earn the OEB-prescribed rate of return on the regulated assets.

In December 2014, OPG filed a motion asking the OEB to review and vary the parts of its decision establishing new regulated prices effective November 1, 2014 related to the disallowance of the Niagara Tunnel project expenditures, and the application of the 2013 regulatory tax loss to reduce the 2014/2015 revenue requirement. The hearing on the motion is scheduled for the end of March 2015.

In December 2014, OPG also filed an application with the OEB requesting approval to recover the December 31, 2014 balances in most of the authorized regulatory variance and deferral accounts through new rate riders beginning on July 1, 2015. OPG's proposed recovery periods would allow it to realize additional revenue of approximately \$1.3 billion over the 2015/2016 period. This additional revenue would reflect the collection of balances related to

prior periods and, therefore, while this positively impacts cash, it is not expected to have a significant impact on income. Similarly, in the first quarter of 2013, the OEB established rate riders allowing OPG to recover \$633 million over the 2013/2014 period related to the December 31, 2012 balances in most of the authorized variance and deferral accounts.

OPG is expecting a decision from the Supreme Court of Canada relating to the OEB's appeal of OPG's appeal of the Divisional Court of Ontario's decision regarding the March 2011 OEB ruling that disallowed recovery in regulated prices of a portion of OPG's nuclear compensation costs. The Supreme Court of Canada granted the OEB's Application for Leave to Appeal, and the appeal was heard in December 2014. The court's decision is expected in 2015.

In 2015, OPG plans to apply to the OEB for new regulated prices for production from the regulated facilities, effective in 2016. It is the OEB's expectation that these prices would be determined on the basis of an incentive regulation ratemaking methodology for the hydroelectric operations, and a three to five year forecast cost of service ratemaking approach for the nuclear operations. Incentive regulation generally involves greater de-coupling of regulated prices from a regulated entity's actual costs. Starting in December 2014, OPG held several meetings with stakeholders to discuss the details of these ratemaking methodologies as they apply to OPG's regulated operations.

Greater revenue certainty for virtually all of OPG's previously unregulated production that received electricity spot market prices was achieved in 2014 as a result of the 48 previously unregulated hydroelectric stations beginning to receive regulated prices effective November 1, 2014. The placement in-service throughout 2014 of the new units at the Little Long GS, Harmon GS, Smoky Falls GS, and Kipling GS as part of the Lower Mattagami River project is also contributing to revenue certainty and growth for OPG. The Lower Mattagami River project stations are under a hydroelectric ESA with the IESO, which provides for revenue requirement recovery throughout the term of the agreements.

OPG also earns non-electricity generation revenues through a number of sources, including: isotope and heavy water sales; the lease of the Bruce A and B nuclear stations; joint ventures associated with the PEC and the Brighton Beach gas-fired combined cycle generating stations; trading and other non-hedging activities; real estate rentals; and the provision of technical and engineering services to third parties. The benefit of OPG's net revenues from the lease of the Bruce stations and related agreements, and a portion of isotope and heavy water sales, is credited to ratepayers, as it reduces the regulated prices for the generation of the nuclear facilities owned and operated by OPG. To increase non-generation revenues from unregulated operations, OPG, through its wholly-owned subsidiary, Canadian Nuclear Partners Inc. (CNP), continues to explore opportunities to provide management and technical services to other utilities and power sector organizations.

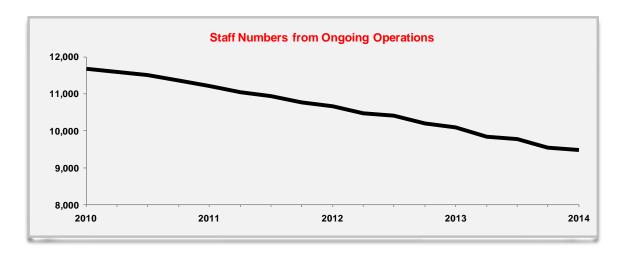
#### Improving Efficiency and Reducing Costs

OPG is focused on reducing costs by aggressively pursuing efficiency and productivity improvements. To accomplish this, OPG launched a multi-year Business Transformation initiative in 2011 to create a streamlined company with a sustainable cost structure. As part of this initiative, OPG implemented a centre-led organizational model to more efficiently utilize its resources. Each business unit also launched initiatives to improve efficiencies and reduce costs. In addition, OPG undertook a large-scale initiative, the Enterprise System Consolidation Project (ESCP), to streamline the company's software systems and further improve business processes by implementing a common enterprise software platform. On January 1, 2015, OPG successfully implemented the ESCP which integrated enterprise systems that support plant operations, purchasing, payments, and time reporting.

OPG's cost reduction initiatives are driving sustainable change, while ensuring that there is no adverse impact on the safety, reliability, and environmental sustainability of OPG's operations. As a result of the efforts over the last four years, the principles and objectives of Business Transformation are now embedded in OPG's values, behaviours, and processes. Going forward, OPG will continue to identify opportunities to reduce costs and work more efficiently.

The implementation of a centre-led organizational model had an impact on existing employee roles and reporting relationships. In 2014, teams comprised of management and union representatives completed the placement of all union represented employees to roles in the new organizational structure to reflect the centre-led model.

To date, OPG has realized cumulative savings of approximately \$550 million through headcount reductions of approximately 2,200 from ongoing operations during the January 1, 2011 to December 31, 2014 period. By the end of 2014, OPG surpassed its 2015 headcount reduction target. OPG plans to reduce headcount by approximately 500 more, primarily through attrition, by 2017.



#### Strengthening Financial Position

In addition to its initiatives to increase revenue, achieve efficiencies, and reduce costs, OPG also employs the following four strategies to strengthen its financial position:

- Ensuring sufficient liquidity: OPG's primary sources of liquidity and capital include funds generated from operations, bank financing, credit facilities provided by the OEFC, and capital market financing. Cash flow provided by operating activities increased by \$259 million in 2014. In 2014, OPG renewed and extended its \$1 billion bank credit facility to May 2019. OPG also had access to a \$500 million general corporate credit facility with the OEFC which expired on December 31, 2014. In December 2014, OPG entered into an \$800 million general corporate credit facility agreement with the OEFC in support of its financing requirements for the 2015/2016 period. OPG intends to continue to access the capital markets, where appropriate, to obtain cost effective financing for future generation development projects.
- Maintaining an investment grade credit rating: OPG's current investment grade credit ratings have enabled it to secure financing at cost effective interest rates. In August 2014, Standard & Poor's re-affirmed OPG's long-term credit rating at A- with a negative outlook. In March 2014, DBRS Ltd. re-affirmed the longterm credit rating on OPG's debt at A (low), and the commercial paper rating at R-1 (low). All ratings from DBRS Ltd. have a stable outlook.
- Ensuring that generation development projects are economic and provide for cost recovery and an appropriate return: OPG evaluates generation development opportunities using detailed financial and risk based analysis. Project funds are committed and released in stages based on specific milestones and taking into consideration the nature and risk of the project. For generation development projects that do not form a part of the assets regulated by the OEB, OPG seeks to secure appropriate revenue arrangements prior to project approval. For generation development projects subject to OEB rate regulation, OPG strives to demonstrate to the OEB that its investment plans and expenditures are prudent. In 2014, OPG continued to negotiate ESAs for new development and conversion projects. Updates on these projects are discussed under the heading Project Excellence in the section, Core Business and Strategy.

• Evaluating financial performance: OPG continuously evaluates its financial performance using key credit rating and financial metrics, including ROE, and FFO Interest Coverage. For further details, refer to the ROE and FFO Interest Coverage disclosure under the heading, Supplementary Non-GAAP Financial Measures.

#### **CAPABILITY TO DELIVER RESULTS**

OPG's capability to execute its corporate strategies and deliver results is dependent on the following key areas:

#### **Generating Assets' Reliability**

OPG continues to implement initiatives to improve the reliability and predictability of its generating asset portfolio. These initiatives are designed to address specific technology requirements and operational experience, and mitigate risks. In 2014, research, inspection and maintenance activities associated with fuel channels were conducted to ensure OPG's nuclear facilities can safely achieve extended service lives as predicted. Investments in plant equipment and backlog reductions continued to improve overall reliability, and fleet wide initiatives were implemented to address industry wide issues and improve efficiencies.

OPG has increased the productive capacity of its hydroelectric stations and has made significant capital investments to replace aging equipment, upgrade turbine runners, increase station automation, and enhance maintenance practices. Programs are in place to maintain and improve the efficiency and availability of existing hydroelectric stations.

#### **Project Planning and Execution**

OPG is pursuing and executing a number of generation development projects and opportunities as described under the section, *Core Business and Strategy*. OPG also continues to plan and execute maintenance and capital improvement projects related to its existing assets. To achieve its strategy of project excellence and successfully deliver projects on budget and on schedule, OPG continues to enhance its ability to plan and execute projects. The project planning and preparation process includes establishing contingency plans to manage potential challenges, creating and maintaining comprehensive risk registers, and tracking progress against clearly established milestones. In addition, project accountability is established at the appropriate level, with oversight by senior management and Board of Directors' committees.

#### **Operating Efficiencies**

OPG is continuing to focus on cost reductions and efficiencies. Progress has been achieved through a restructuring of the Company that combined the hydroelectric and thermal operations, restructuring commercial operations to take advantage of market opportunities, and implementing a scalable, centre-led service delivery model for business support functions. The Company has simplified its operational and project work processes to further streamline operations.

#### **People and Culture**

OPG has leveraged attrition to achieve its human resource targets by realigning work and streamlining processes. OPG is also focusing on the communication and implementation of the Company's values and expected behaviours from its employees in order to achieve a corporate culture change.

OPG continues to focus on improving the capability of its workforce through succession planning, leadership development, and knowledge retention programs. Beginning in 2015, OPG will implement a company-wide high potential development program. This 18-month cross functional development program is designed to identify and develop candidates for future leadership positions while they are still relatively early in their career. OPG expects to develop and acquire talent as needed to continue to drive change and build leadership strength. The Company has an active succession planning program and continues to implement leadership development programs across the organization. In addition, OPG has embarked upon an organization-wide workforce planning effort. The Company has also established monitoring processes to re-assess staffing risks, issues, and opportunities.

Electricity generation involves complex technologies that require highly skilled and trained workers. Many positions at OPG have significant educational prerequisites and rigorous requirements for continuous training and periodic requalification. In addition to maintaining its extensive internal training infrastructure, OPG relies on partnerships with government agencies, other electrical industry partners, and educational institutions to meet the required level of qualification.

As of December 31, 2014, OPG had approximately 9,700 full-time employees and approximately 980 seasonal, casual construction, contract, and non-regular staff. Most of OPG's full-time employees are represented by two unions:

- The PWU This union represents approximately 5,600 OPG employees or approximately 58 percent of OPG's regular workforce. Union membership includes operators, technicians, skilled trades, clerical, and security personnel. The current collective agreement between OPG and the PWU has a three-year term, which expires on March 31, 2015. Negotiations for a new labour agreement with the PWU are currently underway.
- The Society of Energy Professionals This union represents approximately 3,000 OPG employees or approximately 31 percent of OPG's regular workforce. Union membership includes supervisors, professional engineers, scientists, and other professionals. The Company's current collective agreement with The Society was established through an arbitration award issued on April 8, 2013. This agreement has a three-year term, which expires on December 31, 2015. The Society filed a Judicial Review Application in the second quarter of 2013 to the Superior Court of Ontario in the matter of the arbitration award. The case was heard at the Divisional Court of Ontario on October 30, 2014 and a ruling was issued November 27, 2014 dismissing the Society's application. In December 2014, the Society filed a motion for leave to appeal the Divisional Court ruling. The motion has been heard and a decision is expected in the next few months.

In addition to the regular workforce, construction work is performed through 19 craft unions with established bargaining rights on OPG facilities. These bargaining rights are established either through the Electrical Power Systems Construction Association (EPSCA) or directly with OPG. Collective agreements between the Company and its construction unions are negotiated either directly or through EPSCA. A common expiry date for a number of the EPSCA agreements is April 30, 2015 and preparation for the negotiations to renew these agreements is underway.

#### **BUSINESS SEGMENTS**

Effective January 1, 2014, OPG has the following five reportable business segments:

- Regulated Nuclear Generation
- Regulated Nuclear Waste Management
- Regulated Hydroelectric
- Contracted Generation Portfolio
- Services, Trading, and Other Non-Generation.

#### Regulated - Nuclear Generation Segment

The Regulated – Nuclear Generation business segment operates in Ontario, generating and selling electricity from the nuclear generating stations owned and operated by OPG. The business segment includes electricity generated by the Pickering GS Darlington GS. This business segment also includes revenue under the terms of a lease arrangement and related agreements with Bruce Power related to the Bruce Nuclear generating stations. This revenue includes lease revenue and revenue from heavy water sales and services such as detritiation. Revenue is also earned from isotope sales and ancillary services. Ancillary revenues are earned through voltage control and reactive support. Revenues under the agreements with Bruce Power and from isotope sales and ancillary services are included by the OEB in the determination of the regulated prices for OPG's nuclear facilities, which has the effect of reducing OPG's nuclear regulated prices.

# Regulated - Nuclear Waste Management Segment

OPG's Regulated – Nuclear Waste Management segment engages in the management of nuclear used fuel and L&ILW, the decommissioning of OPG's nuclear generating stations (including the stations on lease to Bruce Power), the management of the Used Fuel Fund and the Decommissioning Segregated Fund (Decommissioning Fund) (together the Nuclear Funds), and related activities including the inspection and maintenance of the waste storage facilities. Accordingly, accretion expense, which is the increase in the carrying amount of the Nuclear Liabilities due to the passage of time, and earnings from the Nuclear Funds are reported under this segment.

As the nuclear generating stations operate over time, OPG incurs incremental costs (also known as variable costs) related to used nuclear fuel bundles and L&ILW which increase the Nuclear Liabilities. OPG charges these variable costs to current operations in the Regulated – Nuclear Generation segment to reflect the cost of producing energy and earning revenue under the Bruce Power lease arrangement and related agreements. Since variable costs increase the Nuclear Liabilities in the Regulated – Nuclear Waste Management segment, OPG records an intersegment charge between the Regulated – Nuclear Generation and the Regulated – Nuclear Waste Management segments. The impact of the inter-segment charge is eliminated on OPG's consolidated statements of income and balance sheets.

The Regulated – Nuclear Waste Management segment is considered regulated because the costs associated with the Nuclear Liabilities are included by the OEB in the determination of regulated prices for production from OPG's regulated nuclear facilities.

# Regulated - Hydroelectric Segment

OPG's Regulated – Hydroelectric business segment operates in Ontario, generating and selling electricity from most of the Company's hydroelectric generating stations. The business segment includes the results of the Sir Adam Beck 1, 2 and Pump hydroelectric facilities, DeCew Falls 1 and 2, and the R.H. Saunders hydroelectric facilities. This segment also includes the results of the 48 newly regulated hydroelectric stations. The comparative information for these 48 hydroelectric stations, previously reported under the Unregulated – Hydroelectric segment in OPG's 2013 annual MD&A and consolidated financial statements, has been reclassified to conform to this new presentation.

In addition, the business segment includes ancillary revenues and other revenues are earned through offering available generating capacity as operating reserve and through the supply of other ancillary services including voltage control and reactive support, certified black start facilities, regulation service, and other services. These ancillary revenues and other revenues are included by the OEB in the determination of the regulated prices for these facilities, which has the effect of reducing OPG's hydroelectric regulated prices.

# **Contracted Generation Portfolio Segment**

The Contracted Generation Portfolio business segment operates in Ontario, generating and selling electricity from the Company's generating stations that are not prescribed for rate regulation. The segment primarily includes generating

facilities that are under an ESA with the IESO or other long-term contracts. Activities of generating stations that are not currently subject to a contract or rate regulation, but are available to generate electricity for sale, if required, are also included in the Contracted Generation Portfolio segment.

Since the Lambton GS and Nanticoke GS were generating electricity up to the end of 2013, the activities related to these stations for the comparative period are reported in the Contracted Generation Portfolio segment. These stations ended coal-fired operations as a result of a Shareholder declaration issued in March 2013 mandating that OPG end the use of coal at these stations by the end of 2013. Therefore, effective January 1, 2014, the activities related to the Lambton GS and Nanticoke GS are reported under the Services, Trading, and Other Non-Generation business segment. The comparative information for the unregulated generating stations, previously reported under the Unregulated - Hydroelectric and Unregulated - Thermal segments in OPG's 2013 annual MD&A and consolidated financial statements, has been reclassified to conform to the new presentation.

The Contracted Generation Portfolio segment also includes OPG's share of equity income from its 50 percent ownership interests in the PEC and Brighton Beach stations. Brighton Beach operates under an energy conversion agreement between Brighton Beach and Shell Energy North America (Canada) Inc. and the PEC station is operated under the terms of an Accelerated Clean Energy Supply contract with the IESO. OPG's share of the in-service generating capacity and generation volume from its interests in the PEC and Brighton Beach stations are also included in this segment.

The business segment also includes ancillary revenues and other revenues, which are earned through offering available generating capacity as operating reserve, and the supply of other ancillary services including voltage control and reactive support, certified black start facilities, regulation service, and other services.

#### Services, Trading, and Other Non-Generation Segment

The Services, Trading, and Other Non-Generation segment is a non-generation segment that is not subject to rate regulation. It includes the revenue and expenses related to OPG's trading and other non-hedging activities. As part of these activities, OPG transacts with counterparties in Ontario and neighbouring energy markets in predominantly short-term trading activities of typically one year or less in duration. These activities relate to electricity that is purchased and sold at the Ontario border, financial energy trades, sales of financial risk management products, and sales of energy-related products. In addition, OPG has a wholly owned trading subsidiary that transacts solely in the United States (US) market. All contracts that are not designated as hedges are recorded as assets or liabilities at fair value, with changes in fair value recorded in the revenue of this segment. In addition, this segment includes revenue from real estate rentals and other unregulated service revenues. The above activities were previously reported in the Other category in OPG's 2013 annual MD&A and consolidated financial statements.

Information for the comparative period has been adjusted to reflect the changes to OPG's reportable business segments and is labeled "adjusted".

#### KEY GENERATION AND FINANCIAL PERFORMANCE INDICATORS

Key performance indicators that directly pertain to OPG's mandate and corporate strategies are measures of production efficiency, cost effectiveness, environmental performance, and safety performance. OPG evaluates the performance of its generating stations using a number of key indicators. The measures used vary depending on the generating technology.

Effective January 1, 2014, OPG revised the composition of its reportable business segments to reflect changes in its generation portfolio and its internal reporting. After ending coal-fired operations at the Nanticoke GS and the Lambton GS, OPG no longer uses the Thermal Start Guarantee Rate and the Thermal OM&A Expense per MW as indicators of performance. In addition, OPG previously reported Nuclear Production Unit Energy Cost and hydroelectric Equivalent Forced Outage Rate (EFOR). Effective January 1, 2014, OPG has adopted Nuclear Total Generating Cost (TGC) per MWh as a cost performance indicator for its nuclear generating facilities and reports Hydroelectric Availability as the single measure of the reliability of its hydroelectric generating facilities. OPG continues to report the Nuclear Unit Capability Factor as a measure of its nuclear station performance, and Hydroelectric OM&A expense per MWh as a measure of the cost effectiveness of its hydroelectric generating facilities.

#### **Nuclear Unit Capability Factor**

OPG's nuclear stations are baseload facilities. They are not designed for fluctuating production levels to meet peaking demand. The nuclear unit capability factor is a key measure of nuclear station performance. It measures the amount of energy that the unit(s) generated over a period of time, adjusted for externally imposed constraints, such as transmission or demand limitations, as a percentage of the amount of energy that would have been produced over the same period had the unit(s) produced maximum generation. Capability factors are primarily affected by planned and unplanned outages. Capability factors, by industry definition, exclude production losses beyond plant management's control, such as grid-related unavailability.

#### **Nuclear Total Generating Cost per Megawatt hour**

Nuclear TGC per MWh is used to measure the cost performance of OPG's nuclear generating assets. Nuclear TGC per MWh is defined as the total of fully-allocated OM&A expenses from ongoing nuclear operations, including total pension and OPEB costs, nuclear fuel expense including expenses related to used fuel storage and disposal, and capital project costs for ongoing nuclear operations, divided by net nuclear electricity generation.

# **Hydroelectric Availability**

OPG's hydroelectric stations operate as baseload, intermediate, and peaking stations. They provide a safe, reliable and low-cost source of renewable energy. Hydroelectric availability is a measure of the reliability of a hydroelectric generating unit. It is represented by the percentage of time the generating unit is capable of providing service, whether or not it is actually generating electricity, compared to the total time for a respective period.

# Hydroelectric OM&A Expense per MWh

Hydroelectric OM&A expense per MWh is used to measure the cost-effectiveness of OPG's hydroelectric generating stations. It is defined as total hydroelectric OM&A expenses, including allocated centralized support services costs, divided by hydroelectric electricity generation. OM&A expenses exclude expenditures related to past grievances by First Nations.

# **Thermal Equivalent Forced Outage Rate**

A measure of the reliability of the thermal generating stations is the proportion of time they are available to produce electricity when required. EFOR is an index of the reliability of the generating unit. It is measured by the ratio of time a generating unit is forced out of service by unplanned events, including any forced deratings, compared to the amount of time the generating unit was available to operate.

#### **Return on Common Equity**

ROE is an indicator of OPG's performance consistent with its objectives to operate on a financially sustainable basis and to maintain the value for the Shareholder. ROE is defined as Net income attributable to the Shareholder divided by average equity attributable to the Shareholder excluding AOCI for the period. The definition of ROE was refined as of January 1, 2014 as a result of the establishment of a non-controlling interest, which reflects equity contributions made by the Amisk-oo-Skow Finance Corporation, a corporation wholly owned by the Moose Cree First Nation, to LMLP. More details are available under the sections, Highlights - Return on Equity and Supplementary Non-GAAP Financial Measures.

# **Funds from Operations Interest Coverage**

FFO Interest Coverage is an indicator of OPG's ability to meet interest obligations from operating cash flows. FFO Interest Coverage is defined as FFO before interest divided by Adjusted Interest Expense. It is measured over a period of twelve months. More details are available under the sections, Highlights - Funds from Operations Interest Coverage and Supplementary Non-GAAP Financial Measures - FFO Interest Coverage.

ROE and FFO Interest Coverage are not measurements in accordance with US GAAP. They should not be considered as alternative measures to net income or any other measure of performance under US GAAP. However, OPG believes that these non-GAAP financial measures are effective indicators of its performance and are consistent with the objectives to operate on a financially sustainable basis and to maintain the value for the Shareholder.

## **Other Key Indicators**

In addition to performance and cost-effectiveness indicators, OPG has identified certain environmental and safety metrics. These metrics are discussed under the section, Core Business and Strategy.

# DISCUSSION OF OPERATING RESULTS BY BUSINESS SEGMENT

# **Regulated – Nuclear Generation Segment**

(millions of dollars)	2014	2013
Regulated generation sales	2,709	2,552
Variance accounts	(41)	55
Other	347	282
Total revenue	3,015	2,889
Fuel expense	313	296
Variance and deferral accounts	(55)	(59)
Total fuel expense	258	237
Gross margin	2,757	2,652
Operations, maintenance and administration	1,983	2,022
Depreciation and amortization	529	626
Property taxes	28	29
Income (loss) before other income, interest, income taxes, and extraordinary item	217	(25)
Other income	-	(1)
Income (loss) before interest, income taxes, and extraordinary item	217	(24)

Income before interest, income taxes, and extraordinary item from the segment was \$217 million in 2014, compared to a loss before interest and income taxes of \$24 million in 2013. The increase in earnings of \$241 million was primarily a result of an increase in generation and a reduction in OM&A expenses. Earnings were also positively affected by the new regulated prices, effective November 1, 2014, that were approved by the OEB in its December 2014 order.

Higher electricity generation of 3.4 TWh increased gross margin by \$177 million. The increase in generation was attributable to fewer unplanned outage days at the Darlington GS and Pickering GS compared to 2013. The reduction in OM&A expenses was primarily due to lower outage costs and lower salary costs. The lower salary costs were primarily due to improved business efficiencies reflected in the reduction of staff numbers.

The 2014 generation revenue reflected the impact of a lower rate rider, partially offset by higher base regulated prices during November and December, which decreased gross margin by \$35 million. The rate riders were established by the OEB to collect amounts previously recorded in variance and deferral accounts, net of a refund to ratepayers for a portion of the benefit related to lower depreciation expense for the Pickering GS in 2013 and 2014. The impact of the lower rate rider in 2014 was largely offset by a corresponding decrease in amortization expense related to regulatory balances.

During 2014, OPG also recognized \$44 million in other revenue related to the Bruce Power lease agreement (Bruce Lease) due to a change in the value of the derivative embedded in the Bruce Lease resulting from an increase in the expected future annual arithmetic average HOEP (Average HOEP). The increase in lease revenue was offset by the decrease in the regulatory asset for the Bruce Lease Net Revenues Variance Account. For more details, refer to the discussion under the heading, *Leases*, *Partnerships and Subsidiaries*.

The Unit Capability Factors for the Darlington GS and Pickering GS and the Nuclear TGC per MWh for 2014 and 2013 were as follows:

2014	2013
02.4	82.9
	62.9 73.7
	53.93
	92.1 75.3 51.31

The higher capability factors at the Darlington GS and Pickering GS for 2014 were attributable to fewer outages during the year. Darlington GS experienced fewer unplanned outages and executed only one major planned outage in 2014 compared to 2013, which contributed to an increase in the capability factor in 2014.

The decrease in Nuclear TGC per MWh during 2014 was primarily due to increased production and lower OM&A expenditures, partially offset by higher capital expenditures.

Regulated - Nuclear Waste Management Segment

	2014	2013
Revenue	121	113
Operations, maintenance and administration Accretion on nuclear fixed asset removal and nuclear waste management liabilities	129 782	121 742
Earnings on nuclear fixed asset removal and nuclear waste management funds	(714)	(628)
Loss before interest, income taxes, and extraordinary item	(76)	(122)

Loss before interest, income taxes, and extraordinary item for the Regulated – Nuclear Waste Management segment was \$76 million for 2014, compared to \$122 million for 2013. Higher earnings on the Used Fuel Fund contributed to the improved segment earnings in 2014.

An increase in the Ontario Consumer Price Index (CPI) which affects the committed return related to the first 2.23 million used fuel bundles was the primary reason for the higher Used Fuel Fund earnings in 2014. The increased earnings in the segment were partially offset by higher accretion expense. The higher accretion expense

in 2014 reflects the increase in the fixed asset removal and nuclear waste management liabilities in 2014, compared to 2013, due to the increase in the present value of the underlying obligation to reflect the passage of time.

# Regulated - Hydroelectric Segment

(millions of dollars)	2014	<b>2013</b> <sup>1</sup> (adjusted)
Regulated generation sales <sup>2</sup>	858	747
Spot market sales	408	301
Variance accounts	22	51
Other	129	137
Total revenue	1,417	1,236
Fuel expense	325	325
Variance accounts	18	19
Total fuel expense	343	344
Gross margin	1,074	892
Operations, maintenance and administration	325	298
Depreciation and amortization	167	186
Regulatory disallowance related to the Niagara Tunnel project	77	-
Property taxes	1	(1)
Income before other loss, interest, income taxes, and extraordinary item	504	409
Other loss	2	4
Income before interest, income taxes, and extraordinary item	502	405

The comparative amounts have been adjusted to include the activities of 48 of OPG's hydroelectric generating facilities which were prescribed for rate regulation beginning in 2014.

The increase in income before interest, income taxes, and extraordinary item of \$97 million during 2014, compared to 2013, was primarily due to higher generation revenue. The increase in generation revenue was primarily a result of higher electricity spot market prices received during the first quarter of 2014, compared to the same quarter in 2013, for the production from the 48 hydroelectric facilities prescribed for rate regulation beginning in 2014. Prior to the OEB's order establishing regulated prices for these stations effective November 1, 2014, the revenue for generation from these stations was based on the Ontario electricity spot market price. The increase in generation revenue also reflected new regulated prices approved by the OEB for the existing and newly regulated hydroelectric facilities effective November 1, 2014. The impact on generation revenue of the lower rate rider during 2014, compared to 2013, was largely offset by a corresponding decrease in amortization expense related to regulatory balances.

The improvement in income was partially offset by the write-off of costs totaling \$77 million for an OEB disallowance related to the Niagara Tunnel project and higher OM&A expenses. OM&A expenses increased by \$27 million during 2014, compared to 2013, primarily due to an increase in project and work activities in 2014.

The Regulated – Hydroelectric availability and OM&A expense per MWh for 2014 and 2013 were as follows:

	2014	<b>2013</b> (adjusted)
Hydroelectric Availability (%) Hydroelectric OM&A expense per MWh (\$/MWh)	91.4 10.2	91.3 9.5

The hydroelectric availability during 2014 was consistent with the availability during 2013. The slight increase in hydroelectric OM&A expense per MWh was due to higher OM&A expenses.

During 2014 and 2013, the Regulated - Hydroelectric segment generation sales included incentive payments of \$16 million and \$18 million, respectively, related to the OEB-approved hydroelectric incentive mechanism. The mechanism provides a pricing incentive to OPG to shift hydroelectric production from lower market price periods to higher market price periods, reducing the overall costs to ratepayers.

# **Contracted Generation Portfolio Segment**

(millions of dollars)	2014	<b>2013</b> (adjusted)
Davis	220	057
Revenue	329	657
Fuel expense	37	127
Gross margin	292	530
Operations, maintenance and administration	175	408
Depreciation and amortization	38	132
Accretion on fixed asset removal liabilities	8	14
Property taxes	(1)	14
Income from investments subject to significant influence	(41)	(35)
Restructuring	8	50
Income (loss) before other income, interest, income taxes, and extraordinary item	105	(53)
Other income	(6)	(4)
Income (loss) before interest, income taxes, and extraordinary item	111	(49)

For the 2013 comparative period, the Contracted Generation Portfolio segment includes the operating results of the Nanticoke GS and Lambton GS, including generation revenue and expenses and revenue from the Contingency Support Agreement with the OEFC. These stations ended coal-fired generation at the end of 2013 and therefore the activities of these stations, including expenses incurred in 2014 to preserve the option to convert them to natural gas and/or biomass in the future, are being reported in the Services, Trading, and Other Non-Generation segment effective January 1, 2014. Overall, this results in lower gross margin, partially offset by lower OM&A, depreciation and amortization, and restructuring expenses, for the Contracted Generation Portfolio segment in 2014 compared to 2013.

Income before interest, income taxes, and extraordinary item increased by \$160 million during 2014, compared to 2013. In addition to the change in the composition of the segment, discussed above, the increase was primarily due to higher earnings for production from the six new units constructed as part of the Lower Mattagami River project, which were declared in-service in 2014 and began to receive revenue determined under the hydroelectric ESA. In addition, higher generation volume, primarily from the existing assets included in the Lower Mattagami River project, and higher electricity spot market prices for the electricity generation from those assets in the first quarter of 2014 also contributed to the increase in segment income during 2014. The improvement in earnings was partially offset by lower revenue for the Thunder Bay GS as a result of the expiration of the reliability must run contract at the end of 2013.

The hydroelectric availability, hydroelectric OM&A expense per MWh, and the thermal EFOR for the Contracted Generation Portfolio segment for 2014 and 2013 were as follows:

	2014	<b>2013</b> (adjusted)
Hydroelectric Availability (%)	90.2	95.0
Hydroelectric OM&A expense per MWh (\$/MWh) Thermal EFOR (%)	23.8 8.9	36.2 8.6

The hydroelectric availability decreased by 4.8 percent during 2014, compared to the availability during 2013, primarily due to an unplanned outage at Unit 2 of the Kipling GS. The decrease in hydroelectric OM&A expense per MWh during 2014, compared to 2013, was primarily due to the impact of higher generation volume from the hydroelectric stations included in this segment. The thermal EFOR for 2014 was comparable to 2013.

# Services, Trading, and Other Non-Generation Segment

(millions of dollars)	2014	<b>2013</b> (adjusted)
Davis	407	77
Revenue	197	77
Fuel expense	3	-
Gross margin	194	77
Operations, maintenance and administration	119	7
Depreciation and amortization	20	19
Accretion on fixed asset removal liabilities	7	-
Property taxes	4	11
Restructuring	10	-
Income before other loss (income), interest, income taxes, and extraordinary item	34	40
Other loss (income)	1	(2)
Income before interest, income taxes, and extraordinary item	33	42

The inclusion of the results of the Nanticoke GS and the Lambton GS in this segment, as discussed under the section, Business Segments, resulted in higher revenue, OM&A expenses, and restructuring expenses during 2014, compared to 2013. The increase in OM&A expenses was largely offset by revenue for termination costs from the Contingency Support Agreement with the OEFC for these stations. The agreement's early termination provision allowed OPG to recover, during 2014, actual costs incurred that could not reasonably be avoided or mitigated.

Income before interest, income taxes, and extraordinary item decreased by \$9 million during 2014 compared to 2013. The lower income was primarily due to higher pension and OPEB expenses and the recognition of restructuring costs as a result of including the results of Nanticoke GS and Lambton GS in this segment in 2014.

The lower income was partially offset by higher interconnected market sales from the unseasonably cold winter during the first quarter of 2014, which resulted in higher trading margin of \$51 million for electricity sold to neighbouring energy markets.

OM&A expenses of the generation business segments include an inter-segment service fee for the use of certain property, plant and equipment (PP&E), and intangible assets held within the Services, Trading and Other Non-Generation segment. The total service fee of \$32 million in 2014 and \$33 million in 2013 is recorded as a reduction to the segment's OM&A expenses.

# **Net Interest Expense**

Net interest expense for 2014 was \$80 million. This represents a decrease of \$6 million compared to 2013. The decrease was primarily due to amounts capitalized for construction in progress for the Darlington Refurbishment project and as part of various regulatory variance and deferral accounts. This decrease was partially offset by an increase in interest expense related to the Lower Mattagami River project, as the new units were declared in-service during 2014 and interest costs related to the project are no longer being capitalized.

# **Income Taxes**

OPG follows the liability method of tax accounting for all its business segments. The Company also records an offsetting regulatory asset or liability for the deferred taxes that are expected to be recovered or refunded through future regulated prices charged to customers for generation from OPG's regulated facilities.

Income tax expense for 2014 was \$139 million, compared to income tax expense of \$31 million for 2013. The increase in income tax expense was largely due to the increase in income during 2014.

#### LIQUIDITY AND CAPITAL RESOURCES

OPG's primary sources of liquidity and capital are funds generated from operations, bank financing, credit facilities provided by the OEFC, and capital market financing. These sources are used for multiple purposes including: to invest in plants and technologies; to fund obligations such as contributions to the pension fund and the Nuclear Funds; payments under the OPEB plans; and to service and repay long-term debt.

Changes in cash and cash equivalents for 2014 and 2013 are as follows:

(millions of dollars)	2014	2013
Cash and cash equivalents, beginning of period	562	413
Cash flow provided by operating activities Cash flow used in investing activities Cash flow provided by financing activities	1,433 (1,545) 160	1,174 (1,568) 543
Net increase	48	149
Cash and cash equivalents, end of period	610	562

For a discussion regarding cash flow provided by operating activities and FFO Interest Coverage, refer to the details under the heading, *Overview of Results* under the section *Highlights*.

#### **Investing Activities**

Electricity generation is a capital-intensive business. It requires continued investment in plants and technologies to improve operating performance, increase generating capacity of existing stations, invest in new generating stations, and to maintain and improve service, reliability, safety and environmental performance.

Cash flow used in investing activities in 2014 was \$1,545 million, compared to \$1,568 million in 2013. The decrease was primarily due to lower expenditures for the Lower Mattagami River project and the Atikokan Biomass Conversion project as a result of units being declared in-service during 2014, as well as lower capital expenditures for the Niagara Tunnel project which was declared in-service in March 2013. The decrease was partly offset by an increase in capital expenditures related to the Darlington Refurbishment and various upgrades at the Darlington and Pickering nuclear generating stations.

OPG's forecast capital expenditures for 2015 are approximately \$1.7 billion. This includes amounts for hydroelectric development, Darlington Refurbishment, and sustaining capital investments.

# **Financing Activities**

OPG maintains a \$1 billion revolving committed bank credit facility, which is divided into two \$500 million multi-year term tranches. In the second quarter of 2014, OPG renewed and extended both tranches to May 2019. As at December 31, 2014, there were no outstanding borrowings under the bank credit facility.

As at December 31, 2014, OPG maintained \$25 million of short-term, uncommitted overdraft facilities and \$390 million of short-term, uncommitted credit facilities, which support the issuance of the Letters of Credit. OPG uses Letters of Credit to support its supplementary pension plans and for other general corporate purposes. As at December 31, 2014, a total of \$336 million of Letters of Credit had been issued under these facilities. This included \$310 million for the supplementary pension plans, \$25 million for general corporate purposes, and \$1 million related to the operation of the PEC.

The Company has an agreement to sell an undivided co-ownership interest in its current and future accounts receivable to an independent trust. In September 2014, the maximum amount of co-ownership interest that can be sold under this agreement was reduced to \$150 million and the expiry date was extended from November 30, 2014 to

November 30, 2016. As at December 31, 2014, there were Letters of Credit outstanding under this agreement of \$150 million (2013 - \$80 million), which were issued in support of OPG's supplementary pension plans.

OPG maintained a credit facility with the OEFC related to the Niagara Tunnel project for an amount up to \$1.6 billion which expired on December 31, 2014, with no new borrowings in 2014. As at December 31, 2014, advances under this facility were \$1,065 million.

The Lower Mattagami Energy Limited Partnership (LME) maintains a \$600 million bank credit facility to support the funding requirements for the Lower Mattagami River project. The facility consists of two \$300 million multi-year term tranches. In the third quarter of 2014, the maturity of the first tranche was extended to August 2019, from August 2018. The second tranche matures in August 2015. As at December 31, 2014, there was no external commercial paper outstanding under this program. In June 2014, LME issued senior notes totalling \$200 million with a maturity date of June 20, 2024. The effective interest rate for these notes was 3.5 percent and the coupon interest rate was 3.4 percent. In 2011, OPG executed a \$700 million credit facility with the OEFC in support of the Lower Mattagami River project. As at December 31, 2014, there were no outstanding borrowings under the OEFC credit facility.

In October 2014, UMH Energy Partnership (UMH) entered into an \$8 million of short-term, uncommitted overdraft facility and \$16 million of irrevocable, standby letters of credit facilities in support of its operations. As at December 31, 2014, a total of \$14 million of Letters of Credit had been issued.

As at December 31, 2014, OPG's long-term debt outstanding was \$5,730 million, including \$503 million due within one year. OPG maintained a \$500 million general corporate credit facility with the OEFC which expired on December 31, 2014. As of December 31, 2014, there were no outstanding borrowings under the credit facility.

In December 2014, OPG entered into an agreement with the OEFC for an \$800 million general corporate credit facility agreement in support of its financing requirements for 2015 and 2016. As at December 31, 2014, there were no amounts outstanding under this facility.

# **Contractual and Commercial Commitments**

OPG's contractual obligations and other significant commercial commitments as at December 31, 2014, are as follows:

(millions of dollars)	2015	2016	2017	2018	2019	Thereafter	Total
Contractual obligations:							
Fuel supply agreements	193	172	154	134	51	109	813
Contributions under the Ontario Nuclear Funds Agreement <sup>1</sup>	143	150	163	193	288	2,418	3,355
Pension contributions to the OPG registered pension plan <sup>2</sup>	364	370	-	-	-	-	734
Long-term debt repayment	503	273	1,103	398	368	3,085	5,730
Interest on long-term debt	261	249	230	174	155	1,986	3,055
Unconditional purchase obligations	97	8	-	-	-	-	105
Operating lease obligations	16	15	15	13	12	65	136
Commitments related to Darlington Refurbishment <sup>3</sup>	150	-	-	-	-	-	150
Operating licence	22	23	23	18	19	-	105
Accounts payable	295	-	-	-	-	-	295
Other	125	19	14	5	60	9	232
	2,169	1,279	1,702	935	953	7,672	14,710
Significant commercial commitments:	·	,	,			,	,
Lower Mattagami River project	95	-	-	-	-	-	95
Total	2,264	1,279	1,702	935	953	7,672	14,805

Contributions under the Ontario Nuclear Funds Agreement (ONFA) are based on the 2012 ONFA Reference Plan contribution schedule approved in 2012.

The pension contributions include ongoing funding requirements and additional funding requirements towards the deficit, in accordance with the actuarial valuation of the OPG registered pension plan as at January 1, 2014. The next actuarial valuation of the OPG registered pension plan must have an effective date no later than January 1, 2017. The pension contributions are affected by various factors including market performance, changes in actuarial assumptions, plan experience, changes in the pension regulatory environment, and the timing of funding valuations. Funding requirements after 2017 for the OPG registered pension plan are excluded due to significant variability in the assumptions required to project the timing of future cash flows. The amount of OPG's additional voluntary contribution, if any, is revisited from time to time.

Estimated currently committed costs to close the project, including demobilization of project staff and cancellation of existing contracts and material orders.

# **BALANCE SHEET HIGHLIGHTS**

The following section provides highlights of OPG's audited consolidated financial position using selected balance sheet data:

(millions of dollars)	2014	2013
Property, plant and equipment - net	17,593	16,738
The increase was primarily due to construction in progress additions for the Darlington refurbishment and capital expenditures related to the Lower Mattagami River project. The increase was partially offset by depreciation.		
Nuclear fixed asset removal and nuclear waste management funds (current and non-current portions)	14,379	13,496
The increase was primarily due to earnings on the Nuclear Funds and contributions to the Used Fuel Fund, partially offset by reimbursements of expenditures on nuclear fixed asset removal and nuclear waste management.		
Regulatory assets (current and non-current portions)	7,191	5,400
The increase was primarily due to the recognition of regulatory assets related to deferred income taxes, and unamortized amounts recorded in AOCI related pension and OPEB obligations, pertaining to facilities which were prescribed for rate regulation beginning in 2014 and an increase in pension and OPEB costs resulting from the re-measurement of the pension and OPEB liabilities; and additions to the Pension and OPEB Cost Variance Account.		
Long-term debt (including debt due within one year)	5,730	5,625
The increase was due to the issuance of debt of \$200 million for the Lower Mattagami River project, partially offset by debt repayments.		
Fixed asset removal and nuclear waste management liabilities	17,028	16,257
The increase was primarily a result of accretion expense due to the passage of time, partially offset by expenditures on nuclear fixed asset removal and waste management activities.		
Pension liabilities	3,570	2,741
Other post-employment benefit liabilities	3,050	2,628
Pension and OPEB liabilities increased primarily due to their re-measurement at the end of 2014 reflecting lower discount rates. The increase in the liabilities was partially offset by the favourable performance of the pension fund in 2014.		

# **Off-Balance Sheet Arrangements**

In the normal course of operations, OPG engages in a variety of transactions that, under US GAAP, are either not recorded in the Company's consolidated financial statements or are recorded in the Company's consolidated financial statements using amounts that differ from the full contract amounts. Principal off-balance sheet activities for OPG include guarantees and long-term contracts.

#### Guarantees

As part of normal business, OPG and certain of its subsidiaries and joint ventures enter into various agreements to provide financial or performance assurance to third parties. Such agreements include guarantees, standby Letters of Credit and surety bonds. For more details on OPG's guarantees, refer to Note 15 of OPG's audited consolidated financial statements.

#### CRITICAL ACCOUNTING POLICIES AND ESTIMATES

OPG's significant accounting policies, including the impact of future accounting pronouncements, are outlined in Note 3 of the audited consolidated financial statements. Certain of these policies are recognized as critical accounting policies by virtue of the subjective and complex judgments and estimates required around matters that are inherently uncertain and could result in materially different amounts being reported under different conditions or assumptions. The critical accounting policies and estimates that affect OPG's consolidated financial statements are highlighted below.

#### **Rate Regulated Accounting**

The Ontario Energy Board Act, 1998 and Ontario Regulation 53/05 provide that OPG receives regulated prices for electricity generated from the Sir Adam Beck 1, 2 and Pump generating station, DeCew Falls 1 and 2, and R.H. Saunders hydroelectric facilities, and the Pickering and Darlington nuclear facilities. Pursuant to a November 2013 amendment to Ontario Regulation 53/05, 48 of OPG's previously unregulated hydroelectric generating facilities were also prescribed for rate regulation beginning in 2014. OPG's regulated prices for these facilities are determined by the OEB.

The OEB is a self-funding Crown corporation. Its mandate and authority come from the *Ontario Energy Board Act*, 1998, the *Electricity Act*, 1998, and a number of other provincial statutes. The OEB is an independent, quasi-judicial tribunal that reports to the Legislature of the Province through the Minister of Energy. It regulates market participants in Ontario's natural gas and electricity industries. The OEB carries out its regulatory functions through public hearings and other more informal processes such as consultations.

US GAAP recognizes that rate regulation can create economic benefits and obligations that are required by the regulator to be obtained from, or settled with, the ratepayers. When the Company assesses that there is sufficient assurance that incurred costs in respect of the regulated facilities will be recovered in the future, those costs are deferred and reported as a regulatory asset. When the Company is required to refund amounts to ratepayers in the future in respect of the regulated facilities, including amounts related to costs that have not been incurred and for which the OEB has provided recovery through regulated prices, the Company records a regulatory liability.

Certain of the regulatory assets and liabilities recognized by the Company relate to variance and deferral accounts authorized by the OEB, including those authorized pursuant to *Ontario Regulation 53/05*. These accounts typically capture differences between actual costs and revenues and the corresponding forecast amounts approved in the setting of the regulated prices, or record the impact of items not reflected in approved regulated prices. The measurement of these regulatory assets and liabilities is subject to certain estimates and assumptions, including assumptions made in the interpretation of *Ontario Regulation 53/05* and the OEB's decisions. The estimates and assumptions made in the interpretation of the regulation and the OEB's decisions are reviewed as part of the OEB's regulatory process.

Regulatory assets and liabilities for variance and deferral account balances approved by the OEB for inclusion in regulated prices are amortized based on approved recovery or repayment periods. Disallowed balances, including associated interest, are charged to operations in the period that the OEB's decision is issued.

In addition to regulatory assets and liabilities for variance and deferral accounts. OPG recognizes regulatory assets and liabilities for unamortized amounts recorded in AOCI in respect of pension and OPEB obligations, and deferred income taxes, in order to reflect the expected recovery or repayment of these amounts in respect of the regulated operations through future regulated prices charged to customers. There are measurement uncertainties related to these balances due to the assumptions made in the determination of pension and OPEB obligations and deferred income taxes attributed to the regulated facilities.

The regulatory asset for unamortized pension and OPEB amounts recorded in AOCI has reflected the OEB's use, since April 1, 2008, of the accrual basis of accounting for including pension and OPEB amounts in approved regulated prices. This is also the manner in which these costs are recognized in OPG's consolidated financial statements. Therefore, unamortized amounts in respect of OPG's pension and OPEB plans that are recognized in AOCI generally have not been reflected in the regulated prices until they are reclassified from AOCI and recognized as amortization components of the benefit costs for these plans.

In setting the regulated prices effective November 1, 2014, the OEB limited amounts for pension and OPEB allowed in the approved revenue requirements to OPG's cash expenditures on its pension and OPEB plans for the regulated business. It is the Company's position that this decision by the OEB does not constitute a change in the basis of OPG's recovery of pension and OPEB costs. This position is based on the OEB's establishment of the Pension & OPEB Cash Versus Accrual Differential Deferral Account, the OEB's expectation in the November 2014 decision that a transition to a cash basis of recovery for OPG, if required, would be addressed in a future OPG rate proceeding, and the OEB's intention to hold a generic hearing on the regulatory treatment and recovery of pension and OPEB costs. Accordingly, the Company continues to believe that there is sufficient likelihood that unamortized pension and OPEB amounts that have not yet been reclassified from AOCI will be included in future regulated prices as they are recognized in benefit costs. Therefore, the Company has continued to recognize a regulatory asset for these unamortized amounts. If, in a future proceeding, the OEB decides that the recovery basis for pension and OPEB amounts should be changed, OPG may be required to adjust the regulatory assets for unamortized pension and OPEB amounts recorded in AOCI and the Pension & OPEB Cash Versus Accrual Differential Deferral Account.

Further discussion related to OPG's deferred income taxes and pension and OPEB obligations can be found under the headings, Income Taxes and Investment Tax Credits and Pension and Other Post-Employment Benefits, respectively, in the Critical Accounting Policies and Estimates section.

See Notes 3, 5, 8, 9, and 11 of OPG's 2014 audited consolidated financial statements for additional disclosures related to the OEB's decisions, regulatory assets and liabilities, and rate regulated accounting.

# **Income Taxes and Investment Tax Credits**

OPG is exempt from income tax under the Income Tax Act (Canada). However, under the Electricity Act, 1998, OPG is required to make payments in lieu of corporate income taxes to the OEFC. These payments are calculated in accordance with the Income Tax Act (Canada) and the Taxation Act, 2007 (Ontario), as modified by the Electricity Act, 1998 and related regulations. This results in OPG effectively paying taxes similar to what would be imposed under the federal and Ontario tax acts.

OPG's operations are complex and the computation of the provision for income taxes involves interpretation of the various tax statutes and regulations. OPG has taken certain filing positions in calculating the amount of its income tax provision. These filing positions may be challenged on audit and some of them possibly disallowed, resulting in a potential significant change in OPG's tax provision upon reassessment.

OPG follows the liability method of accounting for income taxes. Under the liability method, deferred income tax assets and liabilities are determined based on differences between the accounting and tax bases of assets and liabilities. Deferred amounts are measured using the enacted tax rates and laws that will be in effect when the

differences are expected to reverse. The effect of a change in tax rates on deferred income tax assets and liabilities is included in income in the period the change is enacted.

If management determines that it is more likely than not that some, or all, of a deferred income tax asset will not be realized, a valuation allowance is recorded to report the balance at the amount expected to be realized.

OPG recognizes deferred income taxes associated with its rate regulated operations and records an offsetting regulatory asset or liability for the deferred income taxes that are expected to be recovered or refunded through future regulated prices charged to customers.

Tax benefits associated with income tax positions taken, or expected to be taken, in a tax return and investment tax credits are recorded only when the more likely than not recognition threshold is satisfied. Tax benefits and investment tax credits recognized are measured at the largest amount of benefit that is greater than 50 percent likely of being realized upon settlement.

Investment tax credits are recorded as a reduction to income tax expense. OPG classifies interest and penalties associated with unrecognized tax benefits as income tax expense.

The Company has recognized deferred income tax assets of \$6,231 million (2013 – \$5,757 million) as at December 31, 2014 and the Company believes there will be sufficient future taxable income and capital gains that will permit the use of these deductions and carry-forwards.

The Company has recognized deferred income tax liabilities of \$7,059 million (2013 – \$6,336 million) as at December 31, 2014.

# Property, plant and equipment, Intangible Assets and Depreciation and Amortization

PP&E and intangible assets are recorded at cost. Interest costs incurred during construction and development are capitalized as part of the cost of the asset, based on the interest rates on OPG's long-term debt. Expenditures for replacements of major components are capitalized.

Depreciation and amortization rates for the various classes of assets are based on their estimated service lives. Any asset removal costs that have not been specifically provided for in current or previous periods are charged to OM&A expenses. Repairs and maintenance costs are also expensed when incurred.

PP&E are depreciated on a straight-line basis except for computers and transport and work equipment. These are mostly depreciated on a declining balance basis. Intangible assets, which consist of major application software, are amortized on a straight-line basis.

The accounting estimates related to asset depreciation require significant management judgment to assess the appropriate useful lives of PP&E and intangible assets including consideration of various technological and other factors.

# **Asset Impairment**

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The review is based on the presence of impairment indicators such as the future economic benefit of the assets and external market conditions. The net carrying amount of assets is considered impaired if it exceeds the sum of the estimated undiscounted cash flows expected to result from the asset's use and eventual disposition. In cases where the sum of the undiscounted expected future cash flows is less than the carrying amount, an impairment loss is recognized. This loss equals the amount by which the carrying amount exceeds the fair value. Fair value is determined using expected discounted cash flows when quoted market prices are not available. The impairment is recognized in income in the period in which it is identified.

Various assumptions and accounting estimates are required to determine whether an impairment loss should be recognized and, if so, the value of such loss. This includes factors such as short-term and long-term forecasts of the future market price of electricity, the demand for and supply of electricity, the in-service dates of new generating stations, inflation, fuel prices, capital expenditures and station useful lives. The amount of the future net cash flow that OPG expects to receive from its fixed assets could differ materially from the net book values recorded in OPG's audited consolidated financial statements.

The carrying value of investments accounted for under the equity method are reviewed for the presence of any indicators of impairment. If an impairment exists and is determined to be other-than-temporary, an impairment charge is recognized. This charge equals the amount by which the carrying value exceeds the investment's fair value.

# **Nuclear Fixed Asset Removal and Nuclear Waste Management Funds**

# **Decommissioning Fund**

The Decommissioning Fund was established to fund the future costs of nuclear fixed asset removal, long-term L&ILW management, and certain costs for used fuel storage incurred after the stations are shut down. Upon termination of the ONFA, the Province has a right to any excess funds in the Decommissioning Fund. When the Decommissioning Fund is overfunded, OPG limits the earnings it recognizes in its consolidated financial statements by recording a payable to the Province, such that the balance of the Decommissioning Fund is equal to the cost estimate of the liability based on the most recently approved ONFA Reference Plan. Under the ONFA, if there is a surplus in the Decommissioning Fund such that the liabilities, as defined by the most recently approved ONFA Reference Plan, are at least 120 percent funded, OPG may direct up to 50 percent of the surplus over 120 percent to be treated as a contribution to the Used Fuel Fund and the OEFC would be entitled to a distribution of an equal amount. In such instances, OPG recognized 50 percent of the excess greater than 120 percent in income. The payable to the Province could be reduced in subsequent periods in the event that the Decommissioning Fund earns less than its target rate of return or in the event that a new ONFA Reference Plan is approved with a higher estimated decommissioning liability. When the Decommissioning Fund is underfunded, the earnings on the Decommissioning Fund reflect actual fund returns based on the market value of the assets.

# Used Fuel Fund

The Used Fuel Fund was established to fund future costs of long-term nuclear used fuel waste management. Under the ONFA, the Province guarantees OPG's annual return in the Used Fuel Fund at 3.25 percent plus the change in the Ontario CPI for funding related to the first 2.23 million used fuel bundles (committed return). OPG recognizes the committed return on the Used Fuel Fund and includes it in the earnings on the nuclear fixed asset removal and nuclear waste management funds. The difference between the committed return on the Used Fuel Fund and the actual market return determined based on the fair value of the Used Fuel Fund's assets related to the first 2.23 million used fuel bundles is recorded as due to or due from the Province. The amount due to or due from the Province represents the amount OPG would pay to or receive from the Province if the committed return were to be settled as of the consolidated balance sheet date.

As prescribed under the ONFA, OPG's contributions for the fuel bundles in excess of 2.23 million are not subject to the Province's guaranteed rate of return, but rather earn a return based on changes in the market value of the assets of the Used Fuel Fund.

The Nuclear Safety and Control Act (Canada) requires OPG to have sufficient funds available to discharge the current nuclear decommissioning and waste management liabilities. As required by the terms of the ONFA, the Province has provided a Provincial Guarantee to the CNSC on behalf of OPG. The Provincial Guarantee provides for any shortfall between the CNSC consolidated financial guarantee requirement and the Nuclear Funds. OPG pays the Province an annual guarantee fee of 0.5 percent of the amount of the Provincial Guarantee provided by the Province.

The current value of the Provincial Guarantee of \$1,551 million is in effect through to the end of 2017. In each of January 2014 and 2015, OPG paid a guarantee fee of \$8 million based on a Provincial Guarantee amount of \$1,551 million.

# **Pension and Other Post-Employment Benefits**

The determination of OPG's pension and OPEB costs and obligations is based on accounting policies and assumptions used in calculating such amounts.

# **Accounting Policy**

OPG's post-employment benefit programs consist of a contributory defined benefit registered pension plan, a defined benefit supplementary pension plan, and other post retirement benefits (OPRB) including group life insurance and health care benefits, and long-term disability (LTD) benefits. Post-employment benefit programs are also provided by the Nuclear Waste Management Organization (NWMO), which is consolidated into OPG's financial results. Information on the Company's post-employment benefit programs is presented on a consolidated basis.

OPG accrues its obligations under pension and OPEB plans in accordance with US GAAP. The obligations for pension and OPRB are determined using the projected benefit method pro-rated on service. The obligation for LTD benefits is determined using the projected benefit method on a terminal basis. Pension and OPEB obligations are impacted by factors including interest rates, adjustments arising from plan amendments, changes in demographic assumptions, experience gains or losses, salary levels, inflation, and cost escalation. Pension and OPEB costs, and obligations are determined annually by independent actuaries using management's best estimate assumptions.

Pension fund assets include equity securities, corporate and government debt securities, pooled funds, real estate, infrastructure and other investments. These assets are managed by professional investment managers. The pension fund does not invest in equity or debt securities issued by OPG. Pension fund assets are valued using market-related values for purposes of determining the amortization of actuarial gains or losses and the expected return on plan assets. The market-related value recognizes gains and losses on equity assets relative to a six percent assumed real return over a five-year period.

Pension and OPEB costs include current service costs, interest costs on the obligations, the expected return on pension plan assets, adjustments for plan amendments and adjustments for actuarial gains or losses, which result from changes in assumptions and experience gains and losses. Past service costs or credits arising from pension and OPRB plan amendments are amortized on a straight-line basis over the expected average remaining service life to full eligibility of the employees covered by the plan. Past service costs or credits arising from amendments to LTD benefits are immediately recognized as OPEB costs in the period incurred. Due to the long-term nature of pension and OPRB liabilities, the excess of the net cumulative unamortized gain or loss, over 10 percent of the greater of the benefit obligation and the market-related value of the plan assets (corridor), is amortized over the expected average remaining service life of the employees since OPG expects to realize the associated economic benefit over that period. Actuarial gains or losses for LTD benefits are immediately recognized as OPEB costs in the period incurred.

OPG recognizes on its consolidated balance sheets the funded status of its defined benefit plans. The funded status is measured as the difference between the fair value of plan assets and the benefit obligation on a plan-by-plan basis.

Actuarial gains or losses and past service costs or credits that arise during the year that are not recognized immediately as components of benefit costs are recognized as increases or decreases in other comprehensive income (OCI), net of income taxes. These unamortized amounts in AOCI are subsequently reclassified and recognized as components of pension and OPRB costs as discussed above.

OPG records an offsetting regulatory asset or liability for the portion of the adjustments to AOCI that is attributable to the regulated operations in order to reflect the expected recovery or refund of these amounts through future regulated prices charged to customers. For the recoverable or refundable portion attributable to regulated operations, OPG

records a corresponding change in this regulatory asset or liability for the amount of the increases or decreases in OCI and for the reclassification of AOCI amounts into benefit costs during the period.

When the recognition of the transfer of employees and employee-related benefits gives rise to both a curtailment and a settlement, the curtailment is accounted for prior to the settlement. A curtailment is the loss by employees of the right to earn future benefits under the plan. A settlement is the discharge of a plan's liability.

#### Accounting Assumptions

Assumptions are significant inputs to actuarial models that measure pension and OPEB obligations and related effects on operations. Two critical assumptions - discount rate and inflation - are important elements in the determination of benefit costs and obligations. In addition, the expected return on plan assets is a critical assumption in the determination of registered pension plan costs. These assumptions, as well as other assumptions involving demographic factors such as retirement age, mortality, and employee turnover, are evaluated periodically by management in consultation with independent actuaries. During the evaluation process, the assumptions are updated to reflect past experience and expectations for the future. Actual results in any given year will often differ from actuarial assumptions because of economic and other factors. In accordance with US GAAP, for pension and OPRB, the impact of these updates and differences on the respective benefit obligations is accumulated and amortized over future periods; for LTD benefits, the impact of these updates and differences is immediately recognized as OPEB costs in the period incurred.

The discount rates, which are representative of the AA corporate bond yields, are used to calculate the present value of the expected future cash flows on the measurement date to determine the projected benefit obligations for the Company's employee benefit plans. A lower discount rate increases the benefit obligations and increases benefit costs. The expected rate of return on plan assets is based on the pension fund's asset allocation, as well as the expected return considering long-term historical risks and returns associated with each asset class within the plan portfolio. A lower expected rate of return on plan assets increases pension cost.

# **Asset Retirement Obligation**

As at December 31, 2014, OPG's asset retirement obligation (ARO) was \$17,028 million (2013 - \$16,257 million). OPG's ARO consists of fixed asset removal and nuclear waste management liabilities. The ARO is comprised of expected costs to be incurred up to and beyond termination of operations and the closure of nuclear and thermal generating plant facilities and other facilities. The liabilities associated with decommissioning the nuclear generating stations and long-term used nuclear fuel management comprise the most significant amounts of the total obligation. Costs will be incurred for activities such as:

- preparation for safe storage
- safe storage
- dismantling
- demolition and disposal of facilities and equipment
- remediation and restoration of sites
- ongoing and long-term management of nuclear used fuel bundles and L&ILW material.

Nuclear station decommissioning consists of preparation and placement of stations into a safe state condition followed by a 30-year safe store period prior to station dismantling and site restoration. Under the terms of the lease agreement with Bruce Power, OPG continues to be responsible for the nuclear fixed asset removal and nuclear waste management liabilities associated with the Bruce Nuclear generating stations. Under the lease agreement, Bruce Power must return the Bruce stations together to OPG in a de-watered and de-fueled state. These dewatering and de-fueling costs are not part of OPG's ARO.

The following costs are recognized as a liability:

- the present value of the costs of decommissioning the nuclear and thermal production facilities and other facilities after the end of their useful lives
- the present value of the fixed cost portion of nuclear waste management programs that are required based on the total volume of waste expected to be generated over the assumed life of the stations
- the present value of the variable cost portion of nuclear waste management programs taking into account waste volumes generated to date.

The significant assumptions underlying operational and technical factors used in the calculation of the accrued liabilities are subject to periodic review. Changes to these assumptions, including changes to assumptions on the timing of the programs, station end-of-life dates, financial indicators or the technology employed may result in significant changes to the value of the accrued liabilities. With programs of this duration and the evolving technology to handle nuclear waste, there is a significant degree of uncertainty surrounding the measurement of the costs for these programs. These costs may increase or decrease over time. The estimates of the Nuclear Liabilities are reviewed on an ongoing basis as part of the overall nuclear waste management program. Changes in the Nuclear Liabilities resulting from changes in assumptions or estimates that impact the amount of the originally estimated undiscounted cash flows are recorded as an adjustment to the liabilities. Any resulting changes in the related asset retirement costs are capitalized as part of the carrying amount of nuclear fixed assets.

For the purposes of calculating OPG's nuclear fixed asset removal and nuclear waste management liabilities, as at December 31, 2014, consistent with the current accounting end-of-life assumptions, nuclear station decommissioning is projected to occur over the next 40 years.

The liability for the nuclear fixed asset removal and nuclear waste management on a present value basis as at December 31, 2014 was \$16,663 million (2013 – \$15,903 million). As at December 31, 2014, the undiscounted cash flows related to expenditures for OPG's nuclear fixed asset removal and nuclear waste management liabilities in 2014 dollars are as follows:

(millions of dollars)	2015	2016	2017	2018	2019	Thereafter	Total
Expenditures for nuclear fixed asset removal and nuclear waste management 1	363	502	539	485	508	32,282	34,679

Most of the above expenditures are expected to be reimbursed by OPG's Nuclear Funds as established by the ONFA. The contributions required under the ONFA are not included in these undiscounted cash flows but are reflected in the table under the heading, Contractual and Commercial Commitments.

OPG sets aside and invests funds held in segregated custodian and trustee accounts specifically for discharging most of its nuclear fixed asset removal and nuclear waste management liabilities. In accordance with the ONFA between OPG and the Province, OPG established a Used Fuel Fund and a Decommissioning Fund. OPG jointly oversees the investment management of the Nuclear Funds with the Province. The assets of the Nuclear Funds are maintained in third party custodian accounts that are segregated from the rest of OPG's assets.

The liability for non-nuclear fixed asset removal was \$365 million as at December 31, 2014 (2013 – \$354 million). This liability primarily represents the estimated costs of decommissioning OPG's thermal generating stations at the end of their service lives. The liability is based on third party cost estimates following an in-depth review of plant sites and an assessment of required clean-up and restoration activities. In 2011, OPG completed a review of the liability for most of its thermal generating stations. For the purpose of measuring the liability, asset removal activities are assumed to take place over the next 15 years. The undiscounted amount of estimated future cash flows associated with the non-nuclear liabilities is approximately \$500 million.

OPG has no legal obligation associated with the decommissioning of its hydroelectric generating facilities and the costs cannot be reasonably estimated because of the long service life of these assets. With either maintenance efforts or rebuilding, the water control structures are assumed to be used for the foreseeable future. Accordingly, OPG has not recognized a liability for the decommissioning of its hydroelectric generating facilities.

#### **Environmental Liabilities**

Current operations are subject to regulation with respect to emissions to air, water, and land as well as other environmental matters by federal, provincial, and local authorities. Environmental liabilities are recorded when it is considered likely that a liability has been incurred and the amount of the liability can be reasonably estimated at the date of the financial statements. The cost of obligations associated with current operations is provided for on an ongoing basis. Management believes it has made adequate provision in the consolidated financial statements to meet certain other environmental obligations. As at December 31, 2014, OPG's environmental liabilities were \$15 million (2013 – \$15 million), the primary component of which relates to the land remediation program.

#### **Fair Value Measurements**

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly arm's-length transaction between market participants at the measurement date. Fair value measurements are required to reflect the assumptions that market participants would use in pricing an asset or liability based on the best available information. These assumptions include the risks inherent in a particular valuation technique, such as a pricing model, and the risks inherent in the inputs to the model.

Financial assets and liabilities, including exchange traded derivatives and other financial instruments, measured at fair value and for which quoted prices in an active market are available, are determined directly from those quoted market prices.

For financial instruments for which quoted market prices are not directly available, fair values are estimated using forward price curves developed from observable market prices or rates. The estimation of fair value may include the use of valuation techniques or models, based wherever possible on assumptions supported by observable market prices or rates prevailing at the consolidated balance sheet dates. This is the case for over-the-counter derivatives and securities, which include energy commodity derivatives, foreign exchange derivatives, interest rate swap derivatives, and fund investments. Pooled fund investments are valued at the unit values supplied by the pooled fund administrators. The unit values represent the underlying net assets at fair values, determined using closing market prices. Valuation models use general assumptions and market data and therefore do not reflect the specific risks and other factors that would affect a particular instrument's fair value. The methodologies used for calculating the fair value adjustments are reviewed on an ongoing basis to ensure that they remain appropriate. If the valuation technique or model is not based on observable market data, specific valuation techniques are used, primarily based on recent comparable transactions, comparable benchmark information, bid/ask spread of similar transactions, and other relevant factors.

OPG's use of financial instruments exposes the Company to various risks, including credit risk, foreign currency risk and interest rate risk. A discussion of how OPG manages these and other risks is found under the heading, Risk Management.

# **Variable Interest Entities (VIE)**

OPG holds a variable interest in the NWMO, of which it is the primary beneficiary. Accordingly, the applicable amounts in the accounts of the NWMO, after elimination of all significant intercompany transactions, are consolidated. Refer to Note 3 of OPG's 2014 audited consolidated financial statements for further details.

#### **CHANGES IN ACCOUNTING POLICIES AND ESTIMATES**

#### **Exemptive Relief for Reporting under US GAAP**

During 2014, OPG received exemptive relief from the OSC requirements of section 3.2 of National Instrument 52-107 *Acceptable Accounting Policies and Auditing Standards*. The exemption allows OPG to file consolidated financial statements based on US GAAP without becoming a Securities and Exchange Commission registrant, or issuing public debt. The exemption will terminate on the earliest of the following:

- January 1, 2019
- the financial year that commences after OPG ceases to have activities subject to rate regulation
- the effective date prescribed by the International Accounting Standards Board for the mandatory application
  of a standard within International Financial Reporting Standards (IFRS) specific to entities with rateregulated activities.

As a result of OPG's 2011 decision to adopt US GAAP, as required by the FAA regulation, OPG's earlier plan to convert to IFRS, effective January 1, 2012, was discontinued. OPG had substantively completed its IFRS conversion project, which included separate diagnostic, development, and implementation phases, when it suspended the project and began the evaluation of converting to US GAAP in the fourth quarter of 2011. If a future transition to IFRS is required, conversion work can effectively be restarted with sufficient lead time to evaluate and conclude on changes that occurred subsequent to the decision to suspend the project.

# Impacts of Regulation of the Newly Regulated Hydroelectric Facilities, and the OEB's 2014 Decision and Order

The OEB's decision on OPG's September 2013 application for new regulated prices for OPG's nuclear and existing regulated hydroelectric generation was issued in November 2014, following a public hearing process. This decision was followed by the OEB's order in December 2014 establishing new regulated prices for these facilities effective November 1, 2014.

The OEB's decision and order also established a regulated price for the generation from the 48 newly regulated hydroelectric facilities. In establishing the regulated price for these facilities effective November 1, 2014, the OEB determined that the price for the generation from these facilities for the period from July 1, 2014 to October 31, 2014 would be based on the Ontario electricity spot market price, which these facilities had continued to receive during this period on an interim basis pursuant to an earlier order of the OEB.

As a result of the rate regulation of these 48 previously unregulated hydroelectric facilities in 2014, OPG recognized regulatory assets related to deferred income taxes, and unamortized amounts recorded in AOCI in respect of pension and OPEB obligations. The increase in the regulatory asset related to deferred income taxes resulted in a net extraordinary gain of \$243 million in the consolidated statement of income for 2014. The increase in regulatory assets related to pension and OPEB obligations resulted in an increase of \$184 million in OCI, net of \$61 million in income taxes.

The OEB's decision and order also approved a \$1,365 million addition to regulated rate base due to the completion and in-service addition of the Niagara Tunnel project in March 2013. The approved rate base amount is lower than the cost of the asset which resulted in a write-off of costs of \$77 million in 2014, including \$1 million of expected project close out costs.

# **Pension and Other Post-Employment Benefits**

The weighted average discount rate used to determine the projected pension benefit obligations and the projected benefit obligations for OPEB as at December 31, 2014 was 4.0 percent. This represents a decrease, compared to the 4.9 percent discount rate that was used to determine the obligations as at December 31, 2013.

The deficit for the registered pension plans increased from \$2,461 million as at December 31, 2013 to \$3,262 million as at December 31, 2014 largely as a result of the decrease in the discount rates at 2014 year end, partially offset by the favourable return on pension fund assets in 2014.

The projected benefit obligations for OPEB increased from \$2,719 million at December 31, 2013 to \$3,143 million as at December 31, 2014. This increase in the obligation was largely due to the decrease in the discount rates.

As at December 31, 2014, the unamortized net actuarial loss and unamortized past service costs for the pension and OPEB plans totalled \$4,869 million (2013 - \$3,899 million). Details of the unamortized net actuarial loss and unamortized past service costs at December 31, 2014 and 2013 are as follows:

	Registered Pension Plans		Supplementary Pension Plans		Other Post- Employment Benefits	
(millions of dollars)	2014	2013	2014	2013	2014	2013
Net actuarial gain not yet subject to amortization due to use of market-related values	(878)	(886)		-	-	-
Net actuarial loss not subject to amortization due to use of the corridor	1,568	1,339	32	29	288	245
Net actuarial loss subject to amortization	3,443	3,043	65	50	350	78
Unamortized net actuarial loss	4,133	3,496	97	79	638	323
Unamortized past service costs	-	-	-	-	1	1

A change in assumptions, holding all other assumptions constant, would increase (decrease) 2014 costs as follows:

(millions of dollars)	Registered Pension Plans <sup>1</sup>	Supplementary Pension Plans <sup>1</sup>	Other Post- Employment Benefits <sup>1</sup>
Expected long-term rate of return			
0.25% increase	(25)	n/a	n/a
0.25% decrease	25	n/a	n/a
Discount rate			
0.25% increase	(51)	(1)	(10)
0.25% decrease	`54 <sup>´</sup>	ì	`12 <sup>′</sup>
Inflation			
0.25% increase	90	1	1
0.25% decrease	(85)	(1)	(1)
Salary increases			
0.25% increase	20	3	1
0.25% decrease			
	(20)	(3)	(1)
Health care cost trend rate			
1% increase	n/a	n/a	75
1% decrease	n/a	n/a	(37)

n/a - change in assumption not applicable.

Excludes the impact of regulatory variance and deferral accounts.

# **Recent Accounting Pronouncements**

#### Revenue from Contracts with Customers

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers* (ASU 2014-09), which supersedes nearly all existing revenue recognition guidance, including industry-specific guidance under US GAAP. The core principle of ASU 2014-09 is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration to which an entity expects to be entitled for those goods or services. ASU 2014-09 defines a five step process to achieve this core principle and, in doing so, more judgement and estimates may be required compared to the requirements under existing US GAAP. The standard will be effective for OPG's 2017 fiscal year, including interim periods in 2017. In applying the standard, entities would have the option between two retrospective transition methods: (i) a full retrospective approach reflecting the application of the standard in each prior reporting period with the option to elect certain practical expedients, or (ii) a retrospective approach with the cumulative effect of initially adopting ASU 2014-09 recognized at the date of adoption and additional disclosures. OPG is currently assessing the impact of this new standard on its consolidated financial statements and has not yet determined the method by which it will adopt the standard in 2017.

#### Consolidation

In February 2015, the FASB issued Accounting Standards Update 2015-02, Consolidation (Topic 810): Amendments to the Consolidation Analysis (ASU 2015-02), which incorporates targeted changes to the consolidation guidance for limited partnerships, limited liability corporations and securitization structures. Specifically for OPG, limited partnerships will now be VIEs unless the limited partners hold substantive "kick-out" or participating rights. It is expected that more limited partnerships will therefore be considered VIEs and where OPG is the primary beneficiary; the limited partnerships that are not currently consolidated would be consolidated. The amendments will be effective for OPG's 2016 fiscal year, including interim periods in 2016. OPG is currently assessing the impact of the standard on its consolidated financial statements and has not yet determined the impact of the standard in 2016.

# **RISK MANAGEMENT**

#### Overview

OPG faces various risks that could significantly impact the achievement of its strategic, operational, financial, environmental, and health and safety goals. The aim of risk management is to identify and mitigate these risks, and to preserve the value of the Shareholder's investment in OPG's assets.

# **Risk Governance Structure**

The Risk Oversight Committee (ROC) of the Board of Directors assists the Board in fulfilling its oversight responsibilities for matters relating to identification and management of the Company's key business risks. An Executive Risk Committee (ERC), which is comprised of the business unit leaders and the Chief Risk Officer (CRO), assists the ROC in fulfilling its governance and oversight responsibilities related to OPG's risk management activities.

#### **Risk Management Activities**

OPG faces a wide array of risks as a result of its business operations. The Enterprise Risk Management (ERM) framework is designed to identify and evaluate risks on the basis of their potential impact on the Company's capacity to achieve specific business plan objectives.

The quarterly risk management reporting activities are coordinated by a centralized ERM group led by the CRO. The activities begin with business units identifying, reviewing, and assessing risks that could prevent achievement of their

business plan objectives. The ERM group reviews, validates, and consolidates this information and prioritizes risks based on their potential to impact OPG's overall business objectives. The ERM group also assesses external developments that may have implications to the corporate risk profile and facilitates the identification and assessment of emerging risks. The ERC then validates the prioritized risks to determine the top risks to the Company.

Senior management sets risk limits for the financing, procurement, and trading activities of the Company. Senior management also ensures that effective risk management policies and processes are in place to ensure compliance with such limits in order to maintain an appropriate balance between risk and return. OPG's ERM process facilitates the monitoring of risk management activities for identified key risks on a regular basis. This allows the ERM group to report significant developments to the ERC and the ROC on a quarterly basis.

For the purpose of disclosure, a number of key risks are presented in five main categories, namely operational, financial, regulatory, enterprise-wide, and environmental. For each category, the key risks are briefly described below.

# **Operational Risks**

# Risks Associated with Existing Generating Operations

OPG is exposed to variable output from its existing generating stations that could adversely impact its financial performance.

Operational risks are those risks normally inherent in the operation of electricity generating facilities. These risks can lead to interruptions in the operations of generating stations or uncertainty in future production. The operational risks of a station are generally a function of the age of the stations and the technology used.

#### **Nuclear Generating Stations**

Operating an aging nuclear fleet exposes OPG to unique risks such as unplanned outages, an increase in cost of operations and risks associated with nuclear waste management operations.

Operating nuclear stations exposes OPG to unique risks, such as greater-than-anticipated deterioration of station components and systems, risks associated with the nuclear industry, supply chain (vendor quality), the handling, storage and disposal of nuclear waste, and the risk of nuclear accident. The primary impacts of these risks are additional safety requirements, potentially lower than expected generation and revenues, and higher operating costs.

The uncertainty associated with the electricity volume generated by OPG's Canadian Deuterium Uranium (CANDU) nuclear generating units is primarily driven by the condition of the station components and systems, which are all subject to the effects of aging. Fuel channels are expected to be the most life-limiting component affecting station end-of-life. Another significant factor identified to date includes degradation of primary heat transport pump motors at the Darlington GS. Additionally, there are fuel handling performance challenges at both the Darlington GS and Pickering GS. To respond to these challenges, OPG continues to implement extensive inspection and maintenance programs to monitor performance, identify corrective actions and projects required to operate reliably and within design parameters. One such major inspection and maintenance program is the planned VBO at the Darlington GS in 2015.

Deterioration of station components may progress in an unexpected manner, resulting in the need to increase monitoring, conduct extensive repairs, or undertake additional remedial measures. To maintain a safe operating margin, a nuclear unit could be derated resulting in reduced generation. When an unexpected condition first appears, a specific monitoring program is established. The primary impact of these conditions on OPG is an increase in the long-term cost of operations. The associated mitigation may create additional outage work, thus increasing the number of outages or extending planned outages.

The process of generating electricity by nuclear generating stations produces nuclear waste. As required by the CNSC, OPG is accountable for the management of used fuel and L&ILW and decommissioning of its nuclear stations and waste management facilities, including the stations on lease to Bruce Power. Currently, there are no licensed facilities in Canada for the permanent disposal of nuclear used fuel or L&ILW.

OPG is developing plans for a DGR to address the need for the long-term management of L&ILW. Special interest group opposition to deep geologic disposal of L&ILW may require OPG to respond accordingly in order to satisfy major stakeholders. There is a risk of further delays to the EA approval and/or the issuance of the site preparation and construction license caused by additional regulatory, political, legal and other requirements. Additionally, there is a risk that prolonged on-site L&ILW storage may be opposed. Other factors impacting the residual risk associated with nuclear waste management operations include human performance and changes in regulatory requirements.

The NWMO has developed a process for moving forward with Adaptive Phased Management as the long-term solution for Canada's nuclear fuel waste. In the interim, OPG is storing and managing used fuel at its nuclear generating station sites.

#### Pickering Continued Operations

Consistent with the 2013 LTEP, OPG plans to continue the safe and reliable operation of the Pickering GS until 2020, and then place these generating units in a safe storage state for eventual decommissioning. The 2013 LTEP indicates that an earlier shutdown of units at the Pickering GS may be possible depending on the following factors:

- projected electricity demand going forward
- the progress of the fleet refurbishment program
- the timely completion of the Clarington Transformer Station.

Inability to achieve continued operations could result in a reduction of OPG's revenue and lead to the advancement of shutdown and station decommissioning expenditures.

Risk factors for Pickering Continued Operations include the discovery of unexpected conditions, equipment failures, critical components in the plant that are reaching end-of-life and are obsolete, and a requirement for significant plant modifications. To mitigate these risks, OPG continues to undertake a number of activities which include the following:

- · work on fuel channel life cycle management
- a regulatory strategy and economic analysis to support optimal reactor end-of-life dates
- modification of the operating and maintenance strategy to support Continued Operations.

In June 2014, the CNSC accepted OPG's assessment supporting continued operations and removed a regulatory hold point on the licence for the Pickering GS. Over the remaining lifespan of the station, risks factors, such as fuel handling system, issues with parts procurement, and a shortage of qualified resources may continue to challenge operational excellence. These risks are being addressed by taking appropriate actions including fuel handling reliability improvements, proactively identifying long lead time for materials, and improving overall planning.

#### **Darlington Operations**

The Darlington generating units, based on original design assumptions, are currently forecast to reach their end-of-life between 2019 and 2020. In July 2014, the CNSC approved the renewal of the Darlington GS operating licence until December 31, 2015. OPG is currently seeking a 13-year licence renewal that covers the life extension activities, including refurbishment, on the four Darlington generating units. The public hearing to consider this long-term renewal of the operating licence is expected to take place in 2015. OPG is managing risks related to the Darlington GS operations by resolving ongoing technical issues related to obsolescence and aging, including fuel channel, fuel handling equipment and primary heat transport pump motors. In preparation for the refurbishment, OPG is required to complete a number of critical projects at the Darlington GS relating to fuel handling, emergency power generator, heavy water storage, and the VBO.

# **Hydroelectric Generating Stations**

OPG's hydroelectric generation is exposed to risks associated with water flows, the age of plant and equipment, and dam safety.

The extent to which OPG can operate its hydroelectric generation facilities depends upon the availability of water. Significant variances in weather, including impacts of climate change, could affect water flows. OPG manages this risk by using production forecasting models that incorporate unit efficiency characteristics, water availability conditions, and outage plans. Inputs to the models are assessed, monitored and adjusted on an ongoing basis. For the existing regulated hydroelectric generation, and effective November 1, 2014, for the 48 newly regulated hydroelectric facilities, the financial impacts of variability in electricity production due to the differences between the water conditions underpinning the hydroelectric regulated prices and actual water conditions are captured in the OEB approved Hydroelectric Water Conditions Variance Account.

OPG's hydroelectric generating stations vary in age and the majority of the hydroelectric generating equipment is over 50 years old. The age of the equipment and civil components creates risks to the reliability of some hydroelectric generating stations. OPG manages these reliability risks by performing inspection and maintenance of critical components and by reviewing mitigation actions. In addition, OPG conducts detailed engineering reviews and station condition assessments. The reviews and assessments are conducted on an ongoing basis and help identify future work required to sustain and, if necessary, upgrade a station.

The hydroelectric facilities operate 229 dams across Ontario and dam safety legislation does not currently exist in the province. In August 2011, the Ministry of Natural Resources (now the MNRF) published a set of technical guidelines following a period of public consultation. These technical guidelines, which are not regulation, represent the government standards for dam safety.

In general, OPG practices in the area of dam safety and public safety around dams exceed the minimum requirements outlined in the MNRF technical guidelines. In addition, OPG is developing a new risk-informed approach on behalf of the MNRF to prioritize the outcomes of dam safety assessments. OPG could eventually incur additional costs for certain dams that it operates in order to comply with any new requirements.

#### Thermal Generating Stations

Preserving the option of OPG's Nanticoke and Lambton units to run on alternate fuels will require a cost recovery mechanism.

The Nanticoke GS and the Lambton GS ceased generating electricity in 2013. OPG has placed the generating units in these stations in a reserve status to preserve the option to convert the units to natural gas and/or biomass in the future, should they be required. OPG would be required to incur costs to maintain these units in this state and there is no mechanism currently in place to recover these preservation costs. The decision to continue to incur preservation costs, in the absence of a cost recovery mechanism, will be revisited in the first half of 2015.

OPG's capability to convert some units at the Lambton and Nanticoke generating stations to alternate fuels such as natural gas, biomass, or dual gas-biomass is dependent upon obtaining appropriate cost recovery agreements with the IESO.

# Risks Associated with Major Development Projects

The risks associated with the cost, schedule, and technical aspects of the major development projects could adversely impact OPG's financial performance and its corporate reputation.

OPG is undertaking a number of capital intensive projects with significant investments. There may be an adverse effect on the Company if it is unable to: effectively manage these projects; obtain necessary approvals; raise the necessary funds; or fully recover capital costs in a timely manner. These projects may also have a significant impact

on OPG's borrowing capacity and credit rating. Some projects may be ultimately reassessed as being uneconomic. Major projects include the Darlington Refurbishment, the Lower Mattagami River project, and other hydroelectric and thermal projects, such as the New Post Creek project.

# **Darlington Refurbishment**

The Darlington generating units, based on original design assumptions, are currently forecast to reach their end-of-life between 2019 and 2020. The refurbishment of the Darlington GS is expected to extend its operating life by approximately 30 years. In the 2014 mandate letter for the Minister of Energy, the Government of Ontario outlined its priorities for the electricity sector including working with OPG to ensure that the refurbishment of the four nuclear units at the Darlington GS is completed efficiently and effectively.

A large proportion of the costs of the Darlington Refurbishment will be paid to contractors and suppliers, including vendors that will engineer, procure, and construct components of the project. There are financial and reputational risk exposures for OPG if actual costs significantly exceed the estimates. The early introduction of corrective actions is expected to reduce this risk. In addition, failure to achieve the objectives of the refurbishment project may result in future forced outages and more complex planned outages, potentially impacting the post-refurbishment performance or useful life of the station. To mitigate this risk, and as part of the project front-end planning process, a component condition assessment has been performed on all critical systems within the station. This assessment has evaluated the current condition of the systems and identified required work to be performed during the refurbishment outages. Key life limiting components such as pressure tubes are included in the base refurbishment scope. It is increasingly important for OPG to demonstrate that it can be an effective executor of large nuclear projects. Ongoing challenges, such as ensuring continuity of skilled leaders within OPG and its vendor partners, as well as the availability of technical resources to support the project through execution will have to be managed. OPG continues to work with its Shareholder to determine an appropriate cost recovery mechanism in connection with the project, while considering the impact to electricity consumers.

# Other Development Projects

Projects that are in the initial development stages are subject to schedule delays or possible cancellation due to unforeseen delays in receiving permits or approvals or establishing sufficient certainty regarding project cost recovery through revenue mechanisms, which may involve various external stakeholders. OPG attempts to mitigate these risks through early involvement and regular communication with applicable government agencies, close consultation with external stakeholders, and ongoing monitoring of contractor performance relative to permits.

These projects could also be faced with increasing costs for equipment and construction that could impact their economic viability. OPG continuously monitors such trends in costs in order to keep abreast of emerging issues. OPG seeks to manage and limit cost increases through contracting strategies, where possible.

#### **Financial Risks**

OPG is exposed to a number of discrete market-related risks that could adversely impact its financial and operating performance.

OPG is exposed to a number of financial risks, many of which arise due to OPG's exposure to volatility in commodity and equity markets, and interest rate fluctuations. Pension and OPEB costs are also impacted by these market and interest rate fluctuations. OPG manages this complex array of risks to reduce the uncertainty or mitigate the potential unfavourable impact on the Company's financial results.

#### Commodity Markets

Changes in the market price of fuels used to produce electricity can adversely impact OPG's earnings and cash flow from operations.

To manage the risk of unpredictable increases in the price of fuels, the Company has fuel hedging programs, which include using fixed price and indexed contracts.

The percentages hedged of OPG's fuel requirements and emission requirements are shown in the following table. These amounts are based on yearly forecasts of generation and supply mix, and as such, are subject to change as these forecasts are updated.

	2015	2016	2017
Estimated fuel requirements hedged <sup>1</sup>	69%	69%	62%
Estimated nitric oxide (NO) emission requirement <sup>2</sup>	100%	100%	100%
Estimated SO <sub>2</sub> emission requirement hedged <sup>2</sup>	100%	100%	100%

Represents the approximate portion of megawatt-hours of expected generation production (and year-end inventory targets) from each type of facility (nuclear and thermal) for which OPG has entered into contractual arrangements or obligations in order to secure the price of fuel. Excess fuel inventories in a given year are attributed to the next year for the purpose of measuring hedge ratios.

#### Financial Markets

The market value of investments held by OPG's Nuclear Funds and registered pension plan could be significantly affected by changes in various market factors such as equity prices, interest rates, inflation, and commodity prices.

## Nuclear Funds Market Risk

The Nuclear Funds contain investment allocations to certain asset classes including fixed income securities, domestic and international equity securities, pooled funds, infrastructure, and Canadian real estate. These funds are managed to achieve the target rate of return specified in the ONFA to fund the expenditures associated with the long term management of used fuel and L&ILW, the storage of L&ILW and used fuel after station shutdown, and the eventual decommissioning of OPG's nuclear stations and waste management facilities. The rates of return earned on these segregated funds are subject to various factors including the current and future financial markets conditions, which are inherently uncertain.

For the Used Fuel Fund, the Province guarantees the annual rate of return at 3.25 percent plus the change in the Ontario CPI for the first 2.23 million fuel bundles. A change in the value of the fund, as a result of changes in capital markets related to the first 2.23 million bundles, does not impact OPG's earnings. Unlike contributions subject to the Province's rate of return guarantee, OPG assumes the market risk for investment of funds set aside for incremental bundles in excess of 2.23 million.

The performance of the Nuclear Funds related to stations leased to Bruce Power is subject to the Bruce Lease Net Revenues Variance Account established by the OEB. The variance account partially mitigates market risk related to the Nuclear Funds as it captures the differences between actual and forecast earnings from the Nuclear Funds related to the nuclear generating stations leased to Bruce Power. Forecast earnings are those approved by the OEB in setting regulated nuclear prices.

Residual risk to OPG's financial results continues to exist due to volatility in the financial and commodity markets, especially risks that affect the Nuclear Funds.

Represents the approximate portion of megawatt-hours of expected thermal production for which OPG has purchased, been allocated or granted emission allowances and Emission Reduction Credits to meet OPG's obligations under Ontario Regulation 397/01.

#### Post-Employment Benefit Obligations Risk

OPG's post-employment benefit obligations include pension, group life insurance, health care, and LTD benefits. OPG's post-employment benefit obligations and costs, and OPG's pension contributions could be materially affected in the future by numerous factors, including: changes in actuarial assumptions such as changes to discount rates; future investment returns; experience gains and losses; the funded status of the pension plans; changes in benefits; changes in the regulatory environment including potential changes to the *Pension Benefits Act* (Ontario); divestitures; changes in OPG's operations; and the measurement uncertainty incorporated into the actuarial valuation process.

The OPG registered pension plan, which covers most employees and retirees, is a contributory defined benefit plan that is indexed to inflation. Contributions to the OPG registered pension plan are determined by actuarial valuations, which are filed with the appropriate regulatory authorities at least every three years. The most recent actuarial valuation of the OPG registered pension plan covering the 3-year period to 2016 was completed as of January 1, 2014. Based on the actuarial valuation, OPG's funding requirements towards the deficit in the registered pension plan have increased from 2013. There is a risk that future actuarial valuations will increase OPG's funding requirements due to market and economic-related risks. A significant decline in the financial markets could trigger an immediate requirement to update the actuarial valuation based on declines in the funded status. OPG will continue to assess the requirements for contributions to the registered pension plan. The next actuarial valuation of the OPG registered plan must have an actuarial valuation date no later than January 1, 2017. OPG's OPEB obligations are not funded and the associated employee benefits are paid from cash flow provided by operating activities.

#### Trading

OPG's financial performance can be affected by its trading activities.

OPG's trading operations are closely monitored and total exposures are measured and reported to senior management on a daily basis. One of the metrics used to measure the financial risk of this trading activity is Value at Risk (VaR). VaR is defined as a probabilistic maximum potential future loss expressed in monetary terms for a portfolio based on normal market conditions over a set period of time. During 2014, the VaR utilization ranged between nil and \$4.2 million compared to nil and \$1 million for 2013.

#### Credit

Deterioration in counterparty credit and non-performance by suppliers and contractors can adversely impact OPG's earnings and cash flows from operations.

The Company's credit risk exposure is a function of its electricity sales, trading and hedging activities, treasury activities including investing, and commercial transactions with various suppliers of goods and services. OPG's credit risk exposure relating to electricity sales is considered low as the majority of sales are through the IESO-administered spot market. The IESO oversees the credit worthiness of all market participants.

Other major components of credit risk exposure include those associated with vendors that are contracted to provide services or products. OPG manages its exposure to various suppliers or counterparties by evaluating their financial condition and ensuring that appropriate collateral or other forms of security are held by OPG.

The following table summarizes OPG's credit exposure to all counterparties from electricity transactions and trading December 31, 2014:

				Potential Exposure for Largest Counterparties		
Credit Rating <sup>1</sup>	Number of Counterparties <sup>2</sup>	Potential Exposure <sup>3</sup> (million of dollars)	Number of Counterparties	Counterparty Exposure (million of dollars)		
Investment grade	20	25	5	22		
Below investment grade	4	2	-	-		
IESO <sup>4</sup>	1	390	1	390		
Total	25	417	6	412		

Credit ratings are based on OPG's own analysis, taking into consideration external rating agency analysis where available, as well as recognizing explicit credit support provided through parental guarantees, Letters of Credit or other forms of security.

#### Liquidity

Rising liquidity requirements can impact OPG's capital investment projects.

OPG operates in a capital intensive business. Significant financial resources are required to fund capital improvement projects. In addition, the Company has other significant disbursement requirements including investments in new generating capacity, funding obligations under the ONFA, pension contributions, payments towards OPEB and other benefit plans, and debt maturities with the OEFC. OPG must ensure it has the financial capacity and sufficient access to cost-effective financing sources to fund its capital requirements. A discussion of corporate liquidity is included under the heading, Liquidity and Capital Resources.

# Nuclear Waste Management and Decommissioning Obligations and Nuclear Funds

The cost estimates of nuclear waste management obligations are based on assumptions that evolve over time and could impact OPG's contributions to the Nuclear Funds to cover these costs.

As required by the CNSC, OPG is responsible for the management of used nuclear fuel and L&ILW, and the eventual decommissioning of its nuclear stations and waste management facilities, including the stations on lease to Bruce Power. OPG is required by various rules and regulations to provide cost estimates associated with its nuclear waste management and decommissioning obligations. The cost estimates are based on numerous underlying assumptions that are inherently uncertain. The assumptions include station end-of-life dates, waste volumes, waste packaging systems, and waste disposal methods. Increased cost estimates for the nuclear waste and decommissioning obligation, or a change in OPG's decommissioning strategy could increase OPG's contributions to the Nuclear Funds. To address the inherent uncertainty, OPG undertakes to review the underlying assumptions and baseline cost estimates at least once every five years. Certain underlying assumptions, such as station end-of-life dates, are reviewed annually, with resulting changes assessed for their impact to the liability. Changing business decisions, such as premature unit closures and refurbishment decisions, are reviewed as they occur, with the existing baseline cost information used to estimate the impacts to the nuclear liability balance. Should changing circumstances be assessed as material or significant, an early re-assessment of baseline costs could be performed before the five-year period is completed. OPG is currently reviewing its nuclear waste management and decommissioning obligations. Any changes to the underlying assumptions and updated lifecycle cost estimates are expected to be developed and submitted to the Province for review and approval in 2016 as part of the next ONFA reference plan update.

OPG's counterparties are defined on the basis of individual master agreements.

Potential exposure is OPG's statistical assessment of maximum exposure over the life of each transaction at a 95 percent confidence interval.

Credit exposure to the IESO peaked at \$646 million during 2014. The credit exposure and associated receivable vary each month based on electricity sales. The monthly receivable from the IESO is typically paid to OPG in the subsequent month as per the IESO payment schedule.

OPG's contributions to the Nuclear Funds are determined by approved ONFA reference plans, which are required to be updated at least every five years. The changes in contribution levels are determined based on changes in the values of the Nuclear Funds as well as associated nuclear waste management and decommissioning obligations. As a result, a decrease in the value of the Nuclear Funds could increase OPG's required contributions under the ONFA.

#### **Regulatory and Legislative Risks**

OPG is subject to extensive federal and provincial legislation and regulations that have an impact on OPG's operations and financial position.

OPG is subject to regulation by various entities including the OEB and the CNSC. The risks that arise from being a regulated entity include: the potential inability to receive full recovery of capital and operating costs; reductions in earnings; and increases in operating costs. Where possible, these unfavourable impacts are mitigated by maintaining close contact with regulators and other authoritative bodies to ensure early identification and discussion of issues.

# Rate Regulation

Significant uncertainties remain regarding the outcome of rate proceedings, which determine the regulated prices, including rate riders, for OPG's rate regulated operations.

The prices for electricity generated from the prescribed facilities are determined by the OEB using forecast information. There is an inherent risk that the prices established by an economic regulator may not provide for recovery of all actual costs incurred by the regulated operations, or may not allow the regulated operations to earn an appropriate rate of return.

In September 2013, OPG filed a cost of service application for new regulated prices. The OEB's November 2014 decision and December 2014 order resulted in a reduction to OPG's rate application request for the 2014/2015 period of approximately \$1 billion. Approximately \$600 million of the reduction relates to the difference between OPG's actual pension and OPEB costs for the regulated business determined on an accrual basis and the corresponding actual cash expenditures for these plans. The OEB also determined that, effective November 1, 2014, the differences between OPG's pension and OPEB costs for the regulated business on an accrual basis and the corresponding cash expenditures are to be recorded in the Pension & OPEB Cash Versus Accrual Differential Deferral Account. In December 2014, OPG filed a motion asking the OEB to review and vary the parts of its November 2014 decision related to the disallowance of the Niagara Tunnel expenditures, and the application of the 2013 regulatory tax loss to reduce the 2014/2015 revenue requirement. The hearing on the motion has been scheduled for the end of March 2015.

In December 2014, OPG filed an application requesting approval for the disposition of the majority of December 31, 2014 balances in its authorized deferral and variance accounts. OPG is seeking to recover approximately \$1.3 billion over the 18-month period from July 2015 to December 2016. There is a level of inherent uncertainty regarding the outcome of this proceeding.

For further details on the pension and OPEB cost recovery methodology and OPG's deferral and variance accounts application, refer to the disclosure under the heading, *Recent Developments*.

#### Legislative Risks

OPG is subject to extensive federal and provincial legislation and regulations that have an impact on OPG's operations and financial position.

OPG's core business and strategy may be impacted by changes in federal and provincial legislation. To mitigate legislative risks, OPG continues to monitor and actively engage with the provincial and federal governments in order to determine if future legislation will impact the Company.

# **Nuclear Regulatory Requirements**

An aging nuclear fleet or changes in technical codes, regulations or laws may increase the risk of additional nuclear regulatory requirements.

The uncertainty associated with nuclear regulatory requirements is primarily driven by plant aging, changes to technical codes, and challenges raised by the public at regulatory hearings. Addressing these requirements could add to the cost of operations, and in some instances, may result in a reduction or elimination of the productive capacity of a station, or in an earlier than planned replacement of a station component. Additionally, the operations of nuclear stations are often directly impacted by circumstances or events that occur at other nuclear stations globally. These circumstances or events may lead to CNSC regulatory changes with a significant impact on the cost and future operation of OPG's nuclear fleet.

In January 2014, the federal government introduced Bill C-22 which contains a new Nuclear Liability and Compensation Act (NLCA). The bill has passed in the House of Commons and is expected to receive Royal Assent in 2015. The legislation of the NLCA will increase OPG's nuclear liability limit from \$75 million to an initial \$650 million, with successive annual increases to \$750 million, \$850 million, and to \$1 billion. OPG is assessing the impact of the increased liability limit on the insurance limits and premiums available to Canadian nuclear operators.

#### **Enterprise-Wide Risks**

OPG's business prospects could be adversely affected by various enterprise-wide risks such as electricity demand and supply, human resources, health and safety, and corporate reputation. Significant risks that could have a potential enterprise-wide impact on OPG's business, reputation, financial condition, operating results and prospects are discussed below.

#### Ontario Electricity Market

Ontario electricity market conditions could impact OPG's revenue and operations.

OPG's generation and market share is impacted by many external factors including: the entrance of new participants into the Ontario market; the competitive actions of market participants; Ontario electricity demand; regulated electricity prices; changes in the regulatory environment; and wholesale electricity prices in the interconnected markets.

SBG has, and will continue to be, an issue when electricity supply exceeds demand. For OPG, SBG can cause hydroelectric spill, reductions in generation from nuclear facilities, and add to wear and tear of station equipment due to increased dispatch. To manage SBG conditions, the IESO may require OPG to reduce hydroelectric generation and spill water. Curtailment of OPG nuclear production is also possible. The Hydroelectric Surplus Baseload Generation Variance Account authorized by the OEB helps mitigate the financial impact of hydroelectric spill due to SBG conditions for the existing regulated hydroelectric facilities and, as of November 1, 2014, for the 48 newly regulated hydroelectric facilities. SBG is not expected to affect OPG's nuclear production, and there currently is no similar variance account for the nuclear facilities.

The structure of the Ontario electricity market is subject to regulation and market rules, changes to which may affect OPG's revenue. The Shareholder, the IESO, the OEB, or another regulatory body may change or institute regulations or rules which can impact OPG's capability to generate revenue or ability to recover appropriate costs.

# People and Culture

OPG's financial position could be affected if skilled human resources are not available or aligned with its operations.

The development of new leaders and retention of staff in critical roles across OPG is a key factor to OPG's success. Another success factor is related to the effective transfer of knowledge from those in critical positions throughout

OPG to future leaders. The risk associated with the alignment and/or availability of skilled and experienced resources continues to exist for OPG in specific areas, including leadership and project management positions. To mitigate this risk, OPG continues to focus on succession planning, leadership development and knowledge retention programs to improve the capability of its workforce. In particular, OPG has introduced an initiative in 2014 to develop employees to help ensure that OPG has leaders with the appropriate skill sets and the culture needed to achieve its business goals, in the present and in the future.

There is also a risk of a mismatch between attrition levels and the resource requirements to meet OPG's future demands. In addition, OPG's continuation of the streamlining process from the Business Transformation initiative is expected to result in the reduction of over 2,600 employees from ongoing operations for the period January 1, 2011 to December 31, 2017. To mitigate the risk impact, OPG has embarked upon an organization-wide workforce planning effort and has established ongoing monitoring processes to re-assess risks, issues and opportunities related to staffing on a regular basis. OPG expects to meet the human resource needs of the business by leveraging attrition through continuing to realign work and streamline processes.

As of December 31, 2014, approximately 90 percent of OPG's regular labour force was represented by a union. OPG's collective agreement with the PWU expires on March 31, 2015 and negotiations commenced in early 2015. In addition to the regular workforce, construction work is performed through 19 craft unions with established bargaining rights on OPG facilities. A majority of these collective agreements will expire on April 30, 2015 and preparation for the negotiations to renew these agreements is underway. In the event of a labour disruption by the PWU or any of the craft unions, OPG could face financial and reputational impacts. OPG has contingency plans in place to minimize the impact. The collective agreement between OPG and The Society expires on December 31, 2015 and negotiations are expected to commence in late 2015. The parties do not have the right to strike or lock-out. If the parties are unable to reach an agreement, the terms of the new collective agreement would be decided through interest mediation/arbitration.

In 2012, legislation associated with the Ontario Provincial budget included measures that affect OPG, such as public sector pension reform, and compensation restraints for executives until Ontario ceases to have a budget deficit. These changes adversely affect OPG's ability to retain and attract qualified employees, including those at the executive level, and may ultimately affect OPG's operations.

# Health and Safety

OPG's operations involve inherent occupational safety risks and hazards. OPG's safety management and risk control program is designed to effectively manage safety risks in high risk areas.

OPG's operations involve inherent occupational safety risks and hazards that could impact the achievement of its health and safety goals. The Company is committed to achieving its goal of zero injuries and continuous improvement through maintenance of a formal safety management system at the corporate level which is integrated at the site levels. This system serves to focus OPG on proactively managing safety risks and hazard exposures to employees and contractors.

# **Corporate Reputation**

OPG is exposed to reputational risk associated with changes in the opinion of various stakeholders regarding its public profile. OPG undertakes various assurance and risk management activities to manage risks to its corporate reputation.

As a provider of a large portion of Ontario's electricity requirements, maintaining a positive corporate reputation is critical for OPG. OPG focuses on building and maintaining its reputation through many practices, including appropriate and transparent governance practices, effective and transparent communication with stakeholders, and corporate citizenship initiatives across the province. In addition, OPG undertakes continuous improvement initiatives

in various assurance and risk management activities. Issue management and response plans are developed to address specific reputational considerations as they arise.

#### <u>Transmission and Interconnection Systems</u>

OPG could face transmission constraints, which could impact its operations and ability to supply electricity to the Ontario electricity markets.

The condition of Ontario's transmission and interconnection systems could impact OPG's revenue and operations. This is because the Company depends on the capacity and reliability of the Ontario transmission system which connects generators to the Ontario grid and ultimately with customers. In Ontario, the capacity of such transmission systems is limited under certain conditions and the OEB's approval is required for system expansion.

# Ownership by the Province

OPG's commitment to maximize the return on the Shareholder's investment in OPG's assets may compete with the obligation of the Shareholder to respond to a broad range of matters.

The Province owns all of OPG's issued and outstanding common shares. Accordingly, the Province determines the composition of the OPG's Board of Directors and can directly influence major decisions including those related to project development, timing and strategy of the applications for regulated prices, asset divestitures, financing, and capital structure. OPG could be subject to Shareholder directions that require OPG to undertake activities that result in increased expenditures, or that reduce revenues or earnings, relative to the business activities or strategies that would have otherwise been undertaken. In addition, OPG's corporate interests and the wider interests of the Province may compete as a result of the obligation of the Province to respond to a broad range of matters affecting OPG's business environment.

# Information Technology

OPG's ability to operate effectively is in part dependent on effectively managing its Information Technology (IT) requirements. IT system failures may have an adverse impact on OPG.

OPG's ability to operate effectively is in part dependent upon developing or subcontracting and managing a complex IT systems infrastructure. Failure to meet IT requirements, effectively deal with cyber security threats, and manage system changes and conversions could result in future system failures, or an inability to align IT systems to support the business. In addition, OPG could be exposed to operational risks, reputational damage and/or financial losses in the event of IT security breaches. To mitigate these risks, OPG closely monitors its IT systems as well as changes in its operating environment, and is proactively implementing appropriate safeguards against IT-related risks. A standing Cyber Security Working Group regularly reviews cyber security programs and initiatives and shares information among business groups in OPG. In December 2014, a comprehensive OPG-wide Integrated Cyber Security Program was initiated to further enhance OPG's cyber security posture across the enterprise and to better align security practices with industry best practices and standards.

#### Suppliers

Non-performance by strategic suppliers or an inability to diversify the supplier base could adversely impact the financial results and reputation of OPG.

OPG's ability to operate effectively is in part dependent upon access to equipment, materials, and service suppliers. Loss of key equipment, materials, and service suppliers, particularly for the nuclear business, could affect OPG's ability to operate effectively. OPG mitigates this risk to the extent possible through effective contract negotiations, contract terms, vendor monitoring, and diversification of its supplier base. In December 2014, an additional vendor was added to be able to supply engineering and construction services, and provide OPG with additional flexibility to respond to the risk of non-performance of the existing vendors.

#### Interconnected Electricity Markets

OPG is one of many market participants that trades competitively in the interconnected markets.

OPG competes in interconnected electricity markets while taking into account many external factors, including: the cost to transmit electricity to these markets; the price of electricity in these markets; the competitive actions of other generators and power marketers; new trade limitations; and costs to comply with environmental standards imposed in these markets. OPG's trading subsidiary, OPG Energy Trading, holds a Federal Energy Regulatory Commission licence.

# Leases, Partnerships and Subsidiaries

OPG's financial performance could be affected if the risks associated with its leases and partnerships materialize.

OPG has leased its Bruce nuclear generating stations to Bruce Power and is a party to a number of partnerships related to the ownership and operation of other generating stations.

Under the Bruce Lease, lease revenue is reduced in each calendar year where the Average HOEP falls below \$30/MWh. The conditional reduction to revenue in the future, embedded in the terms of the Bruce Lease, is treated as a derivative. Derivatives are measured at fair value and changes in fair value are recognized in the consolidated statements of income.

For 2014, the annual Average HOEP was higher than \$30/MWh, which resulted in no reduction in lease revenue. In addition, as a result of an expected increase in future annual Average HOEP, the fair value of the derivative liability decreased by \$44 million during 2014. The derivative liability was \$302 million at December 31, 2014, compared to \$346 million at December 31, 2013. The expected changes in future annual Average HOEP is an annual exposure which will continue until the Bruce units that are subject to this mechanism are no longer in operation, specific units are refurbished, or when the lease agreement is amended. This exposure is mitigated as part of the OEB regulatory process, since revenue from the lease of the Bruce generating stations is included in the determination of nuclear regulated prices and is subject to the Bruce Lease Net Revenues Variance Account.

OPG operated, jointly controlled, and leased facilities are subject to numerous operational, commercial, financial, regulatory, and environmental risk factors.

#### Business Continuity and Emergency Management

Natural, technological, or human-caused hazards may impact OPG's business continuity.

OPG is exposed to potential or actual incidents or developments resulting from natural, technological, or humancaused hazards; significant events against which it is not fully insured or indemnified; or to a party that fails to meet its indemnification obligations.

OPG's Business Continuity program provides a framework to build resilience into critical business processes by facilitating development of risk response plans and business continuity exercises. OPG's Emergency Management program ensures that the corporation can manage an emergency in a timely and effective manner. OPG's plans and various implementation procedures identify immediate response actions that will be taken to protect the health and safety of employees, the public, and to limit the impact of the crisis on site security, production capability, and the environment. The program elements are designed to meet legal and regulatory requirements.

#### First Nations and Métis Communities

OPG is exposed to risks associated with its relationships with First Nations and Métis communities. The quality of OPG's relationships and the outcome of negotiations with First Nations and Métis communities may impact OPG's project and financial performance, as well as its corporate reputation.

OPG may be subject to claims by First Nations and Métis communities. These claims stem from projects and generation development related to the operations of OPG and historic operations of OPG's predecessor company, Ontario Hydro, that may have impacted title and rights of First Nations and Métis communities.

OPG has a First Nations and Métis Relations Policy, which sets out its commitment to build and maintain positive relationships with the First Nations and Métis communities. OPG has been successful in resolving some past grievances. However, the outcome of the ongoing and future negotiations depends on a number of factors, including legislation and regulations, and precedents created by court rulings, which are subject to change over time.

#### **Environmental Risks**

OPG may be subject to orders or charges if it is not in compliance with applicable environmental laws. Charges in environmental regulatory requirements can result in existing operations being in a state of non-compliance, a potential inability to comply, potential liabilities, and costs for OPG.

Changes to environmental laws could create compliance risks and result in potential liabilities that may be addressed by the installation of control technologies, development of new processes, allowances or offsets, or by constraining electricity production. Further, some of OPG's activities have the potential to impair natural habitat, damage aquatic or terrestrial plant and wildlife, or cause contamination to land or water that may require remediation. In addition, a failure to comply with applicable environmental laws may result in enforcement actions, including the potential for orders or charges.

Potential regulatory changes being managed as risks by the Company include electricity production constraints and flow management requirements to protect fish and fish habitat, expanded fish passage requirements, and lower drinking and ground water tritium concentration standards. These changes could impact plant operations and increase costs. OPG continues to monitor and address risks associated with changes to environmental laws and regulatory requirements. There is also a risk that OPG may incur costs to meet heritage conservation program requirements under the Ontario Heritage Act.

## **RELATED PARTY TRANSACTIONS**

Given that the Province owns all of the shares of OPG, related parties include the Province and successor entities of Ontario Hydro, including Hydro One Inc. (Hydro One), the IESO, and the OEFC, and jointly controlled entities. The transactions between OPG and related parties are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

These transactions for the years ended December 31 are summarized below:

	:	2014	2013	
(millions of dollars)	Revenue	Expenses	Revenue	Expenses
Hydro One				
Electricity sales	23	_	15	_
Services	1	13	-	14
Province of Ontario				
Decommissioning Fund excess funding	-	476	_	560
Used Fuel Fund rate of return guarantee	-	439	-	755
Gross revenue charges	-	123	-	124
ONFA guarantee fee	-	8	-	8
Pension benefits guarantee fee	-	2	-	1
OEFC				
Gross revenue charges	-	209	-	208
Interest expense on long-term notes	-	187	-	187
Income taxes, net of investment tax credits	-	136	-	28
Contingency support agreement	83	-	360	-
Capital tax	-	-	-	1
IESO				
Electricity related revenue	4,305	75	4,015	62
	4,412	1,668	4,390	1,948

The receivable and payable balances, as at December 31, between OPG and its related parties are summarized below:

(millions of dollars)	2014	2013
Receivables from related parties		_
Hydro One	1	2
IESO	468	331
OEFC	10	67
PEC	3	2
Accounts payable and accrued charges		
Hydro One	8	3
OEFC	63	65
Province of Ontario	3	2

#### INTERNAL CONTROLS OVER FINANCIAL REPORTING AND DISCLOSURE CONTROLS

Management, including the President and Chief Executive Officer (President and CEO) and the Chief Financial Officer, are responsible for maintaining Disclosure Controls and Procedures (DC&P) and Internal Controls over Financial Reporting (ICOFR). DC&P is designed to provide reasonable assurance that all relevant information is gathered and reported to senior management, including the President and CEO and the Chief Financial Officer, on a timely basis so that appropriate decisions can be made regarding public disclosure. ICOFR is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements in accordance with US GAAP.

An evaluation of the effectiveness of design and operation of OPG's DC&P and ICOFR was conducted as of December 31, 2014. Management, including the President and CEO and the Chief Financial Officer, concluded that, as of December 31, 2014, OPG's DC&P and ICOFR (as defined in National Instrument 52-109 - Certification of Disclosure in Issuers' Annual and Interim Filings, of the Canadian Securities Administrators) were effective.

There were no material changes in OPG's ICOFR during the year ended 2014 that have materially affected or are reasonably likely to materially affect OPG's ICOFR.

Effective January 1, 2015, OPG completed the ESCP implementation, which had no significant impact on OPG's ICOFR at December 31, 2014. The ESCP integrated enterprise systems that support plant operations, purchasing, payments, and time reporting to simplify use, increase efficiencies, and streamline business processes across the organization. As a result of the ESCP, certain processes supporting OPG's ICOFR have changed since the beginning of 2015. Internal controls will be tested for design and operating effectiveness as part of the 2015 CEO and CFO certification process.

## **FOURTH QUARTER**

## **Discussion of Results**

	Three Months Ended December 31	
(millions of dollars) (unaudited)	2014	2013
Regulated generation sales	1,051	801
Spot market sales	13	87
Variance accounts	53	37
Other	201	249
Total Revenue	1,318	1,174
Fuel expense	175	176
Variance and deferral accounts	2	(9)
Total fuel expense	177	167
Gross margin	1,141	1,007
Operations, maintenance and administration	684	720
Depreciation and amortization	208	236
Accretion on fixed asset removal and nuclear waste management liabilities	211	189
Earnings on nuclear fixed asset removal and nuclear waste management funds	(176)	(166)
Regulatory disallowance related to the Niagara Tunnel project	77	` -
Income from investments subject to significant influence	(9)	(7)
Property taxes	10	10
Restructuring	3	2
Income before other income, interest, income taxes, and extraordinary item	133	23
Other income	(5)	-
Income before interest, income taxes, and extraordinary item	138	23
Net interest expense	42	23
Income before income taxes and extraordinary item	96	-
Income tax expense (recovery)	6	(4)
Income before extraordinary item	90	4
Net income	90	4
Net in come attails to the Obsersholder	0.0	
Net income attributable to the Shareholder	86	4
Net income attributable to non-controlling interest	4	-

Net income attributable to the Shareholder for the fourth quarter was \$86 million, compared to \$4 for the same quarter in 2013. The following summarizes the significant factors which caused the variance in net income:

Significant factors that increased income before interest, income taxes, and extraordinary item:

- Higher gross margin of \$101 million for the Regulated Nuclear Generation segment as a result of higher electricity generation of 2.0 TWh
- Higher gross margin of \$79 million primarily as a result of the new regulated prices approved by the OEB, effective November 1, 2014, for OPG's nuclear and hydroelectric generation, including the 48 new regulated hydroelectric stations
- Lower salary costs of \$14 million due to improved business efficiencies reflected in lower staff numbers.

Significant factors that reduced income before interest, income taxes, and extraordinary item:

- Write-off of \$77 million as a result of a regulatory disallowance by the OEB related to the Niagara Tunnel project
- Higher accretion expense of \$22 million which reflects the increase in fixed asset removal and nuclear waste management liabilities in 2014, compared to 2013, due to the change in the present value of the underlying obligation to reflect the passage of time.

# **Average Revenue and Average Sales Prices**

The average revenue was as follows:

		onths Ended ember 31
(¢/kWh)	2014	<b>2013</b> (adjusted)
OPG Average Revenue	5.8	5.6
Non-OPG Average Revenue	11.3	9.8

The increase in the average sales prices for OPG's regulated segments during the fourth quarter of 2014 was a result of the OEB's approval of new regulated prices, effective November 1, 2014. The average sales price for the Regulated - Nuclear Generation segment during the fourth guarter of 2014 was 6.0 ¢/kWh compared to 5.7 ¢/kWh during the same quarter in 2013. The average sales price for the Regulated - Hydroelectric segment during the fourth quarter of 2014 was 3.9 ¢/kWh compared to 3.4 ¢/kWh during the same quarter in 2013.

## **Electricity Generation**

OPG's electricity generation for the three months was as follows:

	Three Months Ended December 31	
(TWh)	2014	<b>2013</b> (adjusted)
Regulated – Nuclear Generation Regulated – Hydroelectric	12.7	10.7
Existing regulated hydroelectric generating stations	4.6	4.8
Hydroelectric generating stations prescribed for rate regulation beginning in 2014	3.0	3.1
Contracted Generation Portfolio <sup>1</sup>	0.6	0.8
Total OPG electricity generation	20.9	19.4
Total electricity generation by all other generators in Ontario	18.5	19.7

<sup>&</sup>lt;sup>1</sup> Includes OPG's share of generation volume from its 50 percent ownership interests in PEC and Brighton Beach.

The increase in electricity generation of 1.5 TWh during the fourth quarter of 2014 was primarily due to higher electricity generation from the Regulated - Nuclear Generation segment primarily as a result of fewer outage days at the Darlington GS. The increase in nuclear generation was partially offset by lower hydroelectric generation as a result of SBG conditions which unfavourably affected the electricity generation by OPG's regulated hydroelectric generating stations. The net income impact of the SBG conditions on OPG's existing regulated hydroelectric stations and, beginning November 1, 2014, on the newly regulated hydroelectric stations was offset by a regulatory variance account.

Ontario's primary demand was 34.5 TWh during the fourth quarter of 2014. This was down from 35.6 TWh during the fourth quarter of 2013 due to changes in economic conditions.

# **Liquidity and Capital Resources**

Cash flow provided by operating activities during the three months ended December 31, 2014 was \$440 million, compared to \$191 million for the same period in 2013. The increase in cash flow was primarily due to higher cash receipts from generation revenue during the fourth quarter of 2014.

Cash flow used in investing activities during the three months ended December 31, 2014 was \$463 million, compared to \$400 million during the same period in 2013. The increase was mainly due to capital expenditures related to various upgrades at the Darlington and Pickering nuclear generating stations and the Darlington Refurbishment project. The increase is partially offset by lower capital expenditures for the Lower Mattagami River project and the Atikokan Biomass Conversion compared to the fourth quarter of 2013.

Cash flow used in financing activities during the three months ended December 31, 2014 was \$4 million, compared to cash flow provided of \$20 million for the same period in 2013. Cash flow provided by financing activities was lower than in the fourth quarter of the prior year due to lower net borrowings through commercial paper.

# **QUARTERLY FINANCIAL HIGHLIGHTS**

The following tables set out selected annual financial information for the last three years and financial information for each of the eight most recently completed quarters. This information is derived from OPG's unaudited interim consolidated financial statements and the audited consolidated financial statements. This financial information has been prepared in accordance with US GAAP.

## **Annual Financial Information**

(millions of dollars)	2014	2013	2012
Revenue	4,963	4,863	4,732
Income before extraordinary	•	,	, -
item	568	135	367
Net income attributable to the			
Shareholder	804	135	367
Income before extraordinary			
item per common share	\$2.19	\$0.53	\$1.43
Net income per common			
share (dollars)	\$3.14	\$0.53	\$1.43
Total assets	41,653	38,091	37,601
Total long-term liabilities	30,491	28,652	28,789
Common shares			
outstanding (millions)	256.3	256.3	256.3

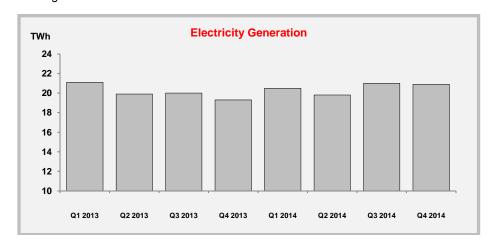
# **Quarterly Financial Information**

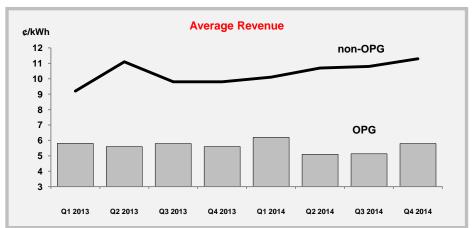
(millions of dollars)	2014 Quarters Ended				
(unaudited)	December 31	September 30	June 30	March 31	Total
Revenue Income before extraordinary	1,318	1,160	1,098	1,387	4,963
item attributable to the Shareholder Income before extraordinary	86	118	115	242	561
item attributable to non- controlling interest	4	1	1	1	7
Income before extraordinary item	90	119	116	243	568
Net income attributable to the Shareholder Net income attributable to	86	361	115	242	804
non-controlling interest	4	1	1	1	7
Net income	90	362	116	243	811
Per share, attributable to the Shareholder (dollars) Income before extraordinary					
item Net income	\$0.34 \$0.34	\$0.46 \$1.41	\$0.45 \$0.45	\$0.94 \$0.94	\$2.19 \$3.14

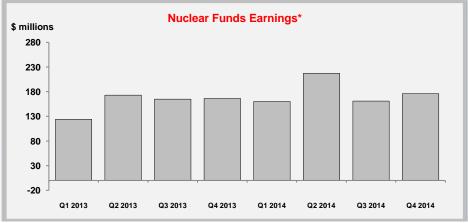
(millions of dollars)		201	3 Quarters End	ded	
(unaudited)	December 31	September 30	June 30	March 31	Total
Revenue Net income attributable to the	1,174	1,244	1,190	1,255	4,863
Shareholder	4	30	73	28	135
Net income per common share (dollars)	\$0.02	\$0.12	\$0.28	\$0.11	\$0.53

# **Trends**

OPG's quarterly results are affected by changes in demand primarily resulting from variations in seasonal weather conditions. Historically, OPG's revenues are higher in the first quarter of a fiscal year as a result of winter heating demands, and in the third quarter due to air conditioning and cooling demands. OPG's financial results are also affected by the earnings on the Nuclear Funds.







\*net of regulatory variance account

Additional items which affected net income (loss) in certain quarters above are described below:

- Increase in outage and maintenance activities during the first and third quarter of 2013 resulted in higher nuclear OM&A expenses and lower net income for those periods
- Restructuring expenses of \$46 million recognized during the third guarter of 2013, primarily related to the Shareholder declaration mandating that OPG cease coal-fired generation at the Lambton GS and the Nanticoke GS by December 31, 2013
- Revenue and net income was lower in the fourth quarter of 2013 due to outage and maintenance activities which resulted in lower generation
- Regulated hydroelectric revenue increased in the first half of 2014 by \$163 million, compared to the same period in 2013, as a result of unseasonably cold weather during the first quarter of 2014. Trading revenue during the same period also increased by \$40 million due to favourable changes in weather patterns and gas prices.
- In-service of new units under the Lower Mattagami River projects throughout 2014 increased the quarterly revenue and income
- Extraordinary gain of \$243 million was recognized during the third guarter of 2014 reflected the recognition of additional regulatory assets in respect of the 48 newly regulated hydroelectric facilities
- a write-off of \$77 million during the fourth quarter of 2014 related to a regulatory disallowance related to the Niagara tunnel project.

Additional information about OPG, including its audited consolidated financial statements and notes thereto can be found on SEDAR at www.sedar.com.

#### SUPPLEMENTARY NON-GAAP FINANCIAL MEASURES

In addition to providing net income in accordance with US GAAP, certain non-GAAP financial measures are also presented in OPG's MD&A and audited consolidated financial statements. These non-GAAP measures do not have any standardized meaning prescribed by US GAAP and, therefore, may not be comparable to similar measures presented by other issuers. OPG utilizes these measures to make operating decisions and assess performance. Readers of the MD&A, audited consolidated financial statements and the notes thereto utilize these measures in assessing the Company's financial performance from ongoing operations. The Company believes that these indicators are important since they provide additional information about OPG's performance, facilitate comparison of results over different periods, and present a measure consistent with the corporate strategy to operate on a financially sustainable basis. These non-GAAP financial measures have not been presented as an alternative to net income in accordance with US GAAP, but as an indicator of operating performance.

The definitions of the non-GAAP financial measures are as follows:

(1) **ROE** is defined as net income attributable to the Shareholder divided by average equity attributable to the Shareholder excluding AOCI, for the period. ROE is measured over a 12-month period. The definition of ROE was refined in 2014 as a result of the non-controlling interest established, which reflects equity contributions made by the Amisk-oo-Skow Finance Corporation, a corporation wholly owned by the Moose Cree First Nation to the LMLP.

(millions of dollars – except where noted)	2014	2013
ROE  Net income attributable to the Shareholder  Divided by: Average equity attributable to the Shareholder, excluding AOCI	804 9,420	135 8,951
ROE (percent)	8.5	1.5

(millions of dollars – except where noted)	2014	2013
ROE  Net income attributable to the Shareholder  Less: Extraordinary gain	804 243	135 -
Net income, excluding extraordinary gain attributable to the Shareholder Divided by: Average equity attributable to the Shareholder, excluding AOCI	561 9,299	135 8,951
ROE (percent)	6.0	1.5

(2) FFO Interest Coverage is defined as FFO before interest divided by Adjusted Interest Expense. FFO before interest is defined as cash flow provided by operating activities adjusted for interest paid, interest capitalized to fixed and intangible assets, and changes to non-cash working capital balances for the period. Adjusted Interest Expense includes net interest expense plus interest income, interest capitalized to fixed and intangible assets, interest applied to regulatory assets and liabilities, and interest on pension and OPEB projected benefit obligations less expected return on plan assets for the period.

FFO Interest Coverage is measured over a 12-month period ended December 31 and is calculated as follows:

(millions of dollars - except where noted)	2014	2013
FFO before interest		
	4 422	4 474
Cash flow provided by operating activities	1,433	1,174
Add: Interest paid	273	255
Less: Interest capitalized to fixed and intangible assets	(135)	(127)
Add: Changes to non-cash working capital balances	(212)	(239)
FFO before interest	1,359	1,063
Adjusted interest expense		
Net interest expense	80	86
Add: Interest income	10	10
Add: Interest capitalized to fixed and intangible assets	135	127
Add: Interest related to regulatory assets and liabilities	75	66
Add: Interest on pension and OPEB projected benefit obligations	179	92
less expected return on pension plan assets	0	02
1000 0xpoolod foldin on ponoion pidir doodo		
Adjusted Interest Expense	479	381
FFO Interest Coverage (times)	2.8	2.8

<sup>(3)</sup> **Gross margin** is defined as revenue less fuel expense.

(4) Earnings are defined as net income.

#### **CORPORATE GOVERNANCE**

National Instrument 58-101, *Disclosure of Corporate Governance Practices*, has been implemented by Canadian securities regulatory authorities to provide greater transparency for the marketplace regarding issuers' corporate governance practices. OPG's corporate governance practices align with National Instrument 58-101 *Disclosure of Corporate Governance Practices* and National Policy 58-201 *Corporate Governance Guidelines*. In addition, OPG has reviewed its governance practices against the principles discussed in the 2014 Report on Building High Performance Boards by the Canadian Coalition for Good Governance and OPG compares favourably to those principles that apply to OPG. Information with respect to OPG's Board of Directors is as follows:

## **Board of Directors**

OPG's Board of Directors is made up of 12 individuals with capability in managing large businesses, managing and operating nuclear stations, managing capital intensive companies, overseeing regulatory, government and public relations, human resources management, financial, legal and corporate governance expertise, knowledge of First Nations, and stakeholder management. The Board exercises its independent supervision over management as follows: the majority of members of the Board of Directors are independent of the Company; meetings of the Board of Directors are held at least five times a year; a formal Charter for the Board of Directors, and for each Board Committee has been adopted and are reviewed annually; the Board and each Board Committee is chaired by an independent Director; and, a portion of each Board and Committee meeting is reserved for Directors to meet without management present.

OPG has a written position description for the Chief Executive Officer (CEO). This position is accountable to the Board of Directors for: ensuring a culture of integrity and ethical conduct; increasing Shareholder value; defining and executing a strategy, including a sustainable business model that will service the long-term power generation needs of the Province; and, providing a standard of leadership that will achieve operational excellence with respect to matters of stakeholder relationships, financial performance, reliability, health, safety, and environmental management and regulatory compliance. In addition, the Board delineates the President and CEO role and responsibilities through the By-laws, the Board Charter, the Board policies and the corporate and CEO annual goals and objectives. The Board sets and monitors performance against annual CEO and OPG targets and objectives.

# <u>Director Independence</u>

On an annual basis, the Governance and Nominating Committee reviews the disclosures made by Directors in the annual Director Questionnaire and reviews each disclosed affiliation's relationship with OPG in order to determine whether the Director is (or remains) independent. The Governance and Nominating Committee reports on its review to the Board of Directors.

Based on the meaning of Independence in Section 1.4 of National Instrument 52-110 *Audit Committees* (NI 52-110) and a review of the applicable factual circumstances against this standard, the Board's Governance and Nominating Committee has determined that all Directors listed are independent, except for Tom Mitchell, who is considered to have a material relationship with OPG by virtue of his position as President and CEO of OPG.

The OPG Board has a Board of Directors Conflict of Interest Policy and Procedure that governs the disclosure and mitigation of Director conflicts or potential conflicts of interest and has adopted an annual process of written disclosure by Directors in order to:

- (i) identify potential conflicts of interest for the purposes of complying with the Board of Directors Conflict of Interest Policy and the *Business Corporations Act* (Ontario) (OBCA);
- (ii) validate their independence and financial literacy for the purposes of complying with securities regulations related to Boards and Audit Committees; and
- (iii) satisfy other disclosures and filings.

To further minimize potential conflicts of interest, the Board of Directors has a policy on interlocking directorships. The Board's policy on interlocking directorships states that no more than two OPG Directors may sit on a Board of another reporting issuer at the same time. Directors must confirm that they are in compliance with OPG's policy on interlocking directorships when disclosing to the Board Chair appointments to other Boards.

# Strategic Planning

OPG's mandate is to reliably and cost-effectively produce electricity from its diversified portfolio of generating assets, while operating in a safe, open, and environmentally responsible manner. OPG's goal is to be Ontario's low-cost electricity generator of choice with a focus on three corporate strategies: operational excellence, project excellence, and financial sustainability.

OPG's Board holds an annual strategy session and devotes a significant portion of each regular Board meeting to strategic discussion. Management is responsible for developing the strategy and presenting it to the Board for discussion.

In 2014, the Board received reports on key strategic issues, risks, competitive developments, and corporate opportunities facing the company. Management ensures that the key strategic elements are incorporated into OPG's business plan, which is reviewed and approved by the Board annually. The Board also receives briefings periodically from external advisors on broad energy industry developments and/or special strategic matters.

## Overseeing the Management of Risk

OPG's Board oversees OPG's approach of identifying, reporting, and mitigating the risks that could significantly impact OPG's capacity to achieve its long-term strategic objectives, as well as specific business plan objectives. To fulfill its risk oversight responsibilities, the Board has established a Corporate Risk Management Policy and a Risk Oversight Committee of the Board, comprised of independent Directors. The Committee's mandate includes oversight of the Enterprise Risk Management Framework that Management uses to manage OPG's risk profile and assists the Board in understanding how the risks may affect the company and how they are being addressed by Management. The Risk Oversight Committee receives quarterly reports from OPG's Chief Risk Officer on enterprise-wide risks, as well as reports on strategic, transactional, and operational risks facing OPG's hydroelectric, thermal, information technology, finance, and corporate operations. In addition, the Chief Risk Officer provides these quarterly reports to the Nuclear Oversight Committee and the Audit and Finance Committee.

Through the Compensation and Human Resources Committee, the Board also monitors the risks associated with the executive compensation program to preclude decision-makers from taking excessive risk in order to achieve incentives under the compensation plans. The Chief Risk Officer and the Senior Vice President, People & Culture jointly review the executive compensation framework on an annual basis to identify any potential for unintended risk-taking. The Chief Risk Officer and the Senior Vice President, People & Culture provide an annual joint report to the Compensation and Human Resources Committee of the Board.

#### **Directors**

The following tables set forth the name, municipality of residence, position with the Corporation and principal occupation of each of the Directors of the Corporation as of March 13, 2015:



**Bernard Lord** Age: 49 Moncton, New Brunswick, Canada

Bernard Lord was appointed Board Chair for Ontario Power Generation on April 1, 2014. Mr. Lord is President and CEO of the Canadian Wireless Telecommunication Association and the Chairman of the Mobile Giving Foundation Canada. He serves as a corporate director for Médavie Blue Cross, Clean Air Power and Ontario Power Generation. He also serves on the North American Advisory Board of Alexander Proudfoot.

Bernard Lord earned a bachelor's degree with a major in economics as well as a bachelor's degree in common law from l'Université de Moncton. He also received honorary doctorate degrees from University of New Brunswick, l'Université de Moncton and Saint Thomas University. He was admitted to the New Brunswick Bar in 1993 and was appointed as Queen's Counsel in 2011.

In 1999, Bernard Lord became one of Canada's youngest Premiers at the age of 33. His majority government was reelected in 2003 and he served as Premier of New Brunswick until October 2006. He was elected four times as a Member of the New Brunswick Legislative Assembly.

His government introduced several new initiatives to support the development of natural resources while also protecting the environment, including a new energy policy that lead to the restructuring of NB Power and the refurbishment of the Point Lepreau Nuclear generating station.

During his terms as Premier, New Brunswick saw the lowest unemployment rate in 30 years, tax cuts each and every year combined with balanced budgets and debt reduction. His government made record investments in health care and education while strengthening local democracy and modernising the Official Languages Act.

Board/Committee Membership:	2014 Atten	dance:
Board (November 2013)	11 of 12	92%
Audit & Finance Committee (December 2013 – March 31, 2014)	0 of 1	0%
Risk Oversight Committee (December 2013 – March 31, 2014)	0 of 1	0%
Ad Hoc Committee (since April 2014)	6 of 6	100%
Executive Talent Committee (since April 2014)	4 of 4	100%
The Board Chair is not a member of any standing Committee. The Board Chair attends all other	23 of 23	100%
Committee meetings.		

Principal Occupation: President and CEO of Canadian Wireless Telecommunications Association (CWTA)

Board Memberships for other Reporting Issuers: Clean Air Power

Independence from OPG: Independent



**Tom Mitchell**Age: 59
Whitby, Ontario, Canada

Tom Mitchell is the President and Chief Executive Officer at Ontario Power Generation Inc. (OPG). He was appointed to his current position in May 2009. Prior to assuming his current position, he was Chief Nuclear Officer responsible for Darlington, Pickering A and Pickering B. He also served as Site Vice President and Senior Vice President, Pickering B. Upon joining OPG in April 2002, he was Vice President, Nuclear Operations and was responsible for providing support to the Pickering and Darlington nuclear stations.

Tom has over 35 years of nuclear experience. Before joining OPG, he held the position of Vice President of the Assistance Division of the Institute of Nuclear Power Operations (INPO) in Atlanta, Georgia. During his career at INPO, he managed the radiological protection, plant analysis and engineering support departments. His considerable operations experience includes the Peach Bottom Atomic Power Station where he served as Manager of Operations Support, Director of Site Engineering, and Site Vice President. During his time with Peach Bottom, the performance of the plant went from being in regulatory shutdown to a recognized leader in safe and reliable operation. Tom's involvement in the nuclear industry has extended outside the United States. He served as the Deputy Director of the Atlanta Center for the World Association of Nuclear Operators (WANO), where he was involved in WANO activities in several parts of the world including CANDU plants at Bruce, Darlington, Pickering, Point Lepreau, Cernavoda and KNPP.

As of January 1, 2012, Tom is the Chair of the WANO Atlanta Centre Governing Board, and by virtue of that appointment, is a member of the WANO Governing Board in London, U.K. He was also asked by WANO to chair and lead a special post-Fukushima commission. Its mandate was to make recommendations on how WANO could improve its programs and structure in the wake of the disaster. In April 2012, Tom was appointed to the Board of Directors of the Electric Power Research Institute.

Tom Mitchell holds a master's degree in Mechanical Engineering from George Washington University and a bachelor's degree in Nuclear Engineering from Cornell University. He also holds an honorary doctorate from the University of Ontario Institute of Technology, conferred in June 2012.

Board/Committee Membership:

2014 Attendance:

Board

The President and CEO attends all Committee meetings, excluding independent Director in-camera meetings/sessions.

12 of 12 100% 40 of 40 100%

**Principal Occupation:** President & Chief Executive Officer, Ontario Power Generation Inc.

Board Memberships for other Reporting Issuers: None

Independence from OPG: Not Independent



**Nicole Boivin** Age: 56 Toronto, Ontario, Canada

Nicole Boivin is a business executive with more than 30 years experience in financial services, telecommunications, and public and not for profit enterprises. Ms. Boivin was the Chief Branding and Communications Officer for Manulife, a leading Canadian based financial services company. In her 14 year career at Manulife, Ms. Boivin has had successive leadership roles in Human Resources, Branding, Marketing and Communications.

Prior to joining Manulife, Ms. Boivin held many roles spanning the public and not for profit sector which she credits for her holistic, creative, and collaborative approach. In the early 1990s, she was the Executive Director of the Sudbury United Way, followed by her role as the Assistant to the President at Laurentian University and, prior to Manulife, was a Director at BCE Media/Bell Canada.

Ms. Boivin is very familiar with all aspects of board governance; as a board member and as an executive working within board processes and dynamics. She is a National Board Member of Pathways to Education and a former provincial appointee to the Board of the Harbourfront Centre in Toronto where she also chaired the Development Committee. Nicole holds an MBA from Laurentian University where she developed her thesis on "Board Governance in Not for Profit organizations". She is also a member of the Institute of Corporate Directors and is fluently bilingual in French and English.

Board/Committee Membership:	2014 Attend	dance:
Board (since April 2014)	11 of 11	100%
Compensation and Human Resources Committee (since April 2014)	6 of 6	100%
Governance and Nominating Committee (since April 2014)	4 of 4	100%

Principal Occupation: Corporate Director

Board Memberships for other Reporting Issuers: None

Independence from OPG: Independent

Interlocking Directorships on Boards of other Reporting Issuers: None



William Coley

Age: 71 Charlotte, North Carolina, U.S.A.

Bill Coley served as Chief Executive of British Energy from 2005 to 2009 when he retired following the successful combination of British Energy and EDF Energy. He was President of Duke Power from 1997 until his retirement in February 2003, holding various officer level positions in engineering, operations and senior management during his 37-year career with the company.

Mr. Coley is a director of Peabody Energy and E.R. Jahna Industries and a member of the International Technical Advisory Committee of Nuclear Electric Insurance Limited. He also served on the WANO Fukushima Commission chaired by Tom Mitchell.

Board/Committee Membership:	2014 Atten	dance
Board (since January 2013)	12 of 12	100%
Audit and Finance Committee (February 2013 – April 2014)	1 of 1	100%
Nuclear Oversight Committee (February 2013)	5 of 5	100%
Governance and Nominating Committee * (since April 2014)	4 of 4	100%
Executive Talent Committee (since April 2014)	4 of 4	100%
Ad Hoc Committee (since April 2014)	6 of 6	100%
* Chair of Committee		

Principal Occupation: Retired Chief Executive of British Energy

Board Memberships for other Reporting Issuers: Peabody Energy

Independence from OPG: Independent



Elisabeth (Lisa) DeMarco Age: 47 Toronto, Ontario Canada

Lisa DeMarco is a senior partner at Zizzo Allan DeMarco LLP with over two decades of experience in law, regulation, policy, and advocacy relating to energy and climate change. She represents several governments and leading energy clients in a wide variety of natural gas, electricity and energy storage matters before various regulatory agencies, including the Ontario Energy Board and the National Energy Board. She has been an adjunct professor at Osgoode Hall Law School and lectures regularly.

Ms. DeMarco also assists leading Canadian energy companies on domestic and overseas power project development, renewable power projects, alternative fuel projects, cleantech development and finance, energy storage, carbon capture and storage, corporate social responsibility, environmental disclosure, clean energy finance, and sustainable business strategy.

She is ranked by Chambers Global as one of the world's leading climate change lawyers and regularly attends and advises on related United Nations negotiations. She is ranked and repeatedly recommended by LEXpert, Expert Guide, International Who's Who, and Chambers Canada as a leading energy (oil and gas) and environment lawyer. Ms. DeMarco has worked for multilateral development banks and energy companies on deals and projects in India, Brazil, Sri Lanka, Thailand, Argentina, Chile, Ireland, Africa, Mexico, China, Russia, California, Alberta, Ontario, and Quebec. She plays an ongoing and active role in the development and drafting of energy and greenhouse gas emissions policy, regulation, and law throughout Canada, and in various countries around the world. She was appointed to the Premier of Ontario's now completed Climate Change Advisory Panel and continues to serve as an appointed member of Ontario's Clean Energy Task Force.

Ms. DeMarco is a member of the Board of Directors of the Ontario Energy Association and a member of the Toronto Atmospheric Fund Investment Committee. She is a graduate of the University of Western Ontario (BSc Hon. - 1990), the University of Toronto (MSc. - 1992), Osqoode Hall Law School, York University (LLB - 1995) and the Vermont Law School (MSEL, summa cum laude - 1995).

**Board/Committee Membership:** Board (since April 2014) Audit and Finance Committee (since April 2014) Risk Oversight Committee (since April 2014)

**Principal Occupation:** Lawyer

Board Memberships for other Reporting Issuers: None

Independence from OPG: Independent

Interlocking Directorships on Boards of other Reporting Issuers: None

2014 Attendance

100%

100%

100%

11 of 11

6 of 6

3 of 3



**Brendan Hawley** Age: 62 Ottawa, Ontario, Canada

Brendan Hawley is the Principal of Brendan Hawley & Associates (BHA) - a bilingual consultancy specializing in advocacy communications that focuses on working with clients in both the public and private sectors.

An Ottawa native and honours graduate in history and journalism from St. Patrick's College, and Carleton University in Ottawa, Mr. Hawley worked for a decade in the federal government, and then in the private sector prior to establishing his firm in 2000. He held senior positions in communications, marketing, and public affairs at several major public and private sector organizations - including the Canadian Council of Professional Engineers, Export Development Corporation, and the Canadian Petroleum Products Institute.

Mr. Hawley has extensive experience in helping clients identify organizational goals in tandem with operational business plans. He also has significant experience in managing education strategies and programs on matters of Canadian energy. He initiated an Energy Summer School for federal MPs to facilitate a greater understanding of the economics of energy, and as part of a broader mandate dealing with federal and provincial issues related to energy pricing, facilities, and products. He also authored a popular guide to conducting advocacy at the federal level.

Mr. Hawley is affiliated with a number of business and philanthropic organizations but has recently focused more time on Ottawa's Canadian Museum of Nature, and the Museum of Science and Technology.

2014 Attendance

100%

100%

100%

11 of 11

6 of 6

4 of 4

**Board/Committee Membership:** 

Board (since April 2014) Compensation and Human Resources Committee (since April 2014) Nuclear Oversight Committee (February 2013)

Principal Occupation: Management Consultant

Board Memberships for other Reporting Issuers: None

Independence from OPG: Independent



**John Herron** Age: 61 Punta Gorda, Florida, U.S.A.

John Herron retired from Entergy where he was the President, CEO and Chief Nuclear Officer of Entergy Nuclear, with responsibility for Entergy's nuclear plants located in New York, Massachusetts, Vermont, Michigan, Louisiana, Mississippi and Arkansas as well as the company's management service to the Cooper Nuclear Station for the state of Nebraska.

He previously served as Entergy's Senior Vice president for nuclear operations handling the operational side of fleet management. Mr. Herron joined Entergy in February 2011 as Vice President, Operations at the Waterford 3 Nuclear Station in Killona, Louisiana. He then moved to New York as the senior Vice President of the Indian Point Energy Center in February 2002.

Mr. Herron began his career in nuclear operations in 1979 at Vermont Yankee Nuclear Power Corporation. Positions there included technical services superintendent, operations manager, technical programs manager, shift supervisor, and supervisory control room operator. In 1994, he moved to Brownville, Nebraska to become plant manager at Nebraska Public Power District's Cooper Nuclear Station.

Mr. Herron then joined the Tennessee Valley Authority as plant manager at Sequoyah Nuclear Plant in Soddy-Daisy, Tennessee, from October 1996 through July 1999. From July 1999 to February 2001, Mr. Herron served as site Vice President at TVA's Browns Ferry Nuclear Plant.

Prior to his career in utilities, he served in the U.S. Navy from 1972 to 1978. He was attached to the USS Tullibee and the S1C NPTU Windsor, where he was an instructor at the Nuclear Submarine Prototype School.

Mr. Herron holds a bachelor's degree in Business Management from Franklin Pierce College in Rindge, New Hampshire. He also attended the Advanced Management Program at the Harvard Business School in May 2005.

Mr. Herron currently serves on the board of directors for Duke Energy. He also served on the board of directors for the Institute of Nuclear Power Operations and on the Nuclear Strategic Issues Advisory Committee of the Nuclear Energy Institute. In the aftermath of Japan's 2011 earthquake, he was named to the WANO Post-Fukushima Commission and the U.S. nuclear industry's Fukushima Response Steering Committee.

Board/Committee Membership:	2014 Atter	ndance
Board (November 2013)	12 of 12	100%
Nuclear Oversight Committee * (December 2013)	5 of 5	100%
Compensation and Human Resources Committee (December 2013)	9 of 10	90%
Executive Talent Committee (since April 2014)	4 of 4	100%
Risk Oversight Committee (since August 2014)	1 of 1	100%
Ad Hoc Committee (since November 2014)	1 of 1	100%
* Chair of Committee		

Principal Occupation: Retired President, Chief Executive Officer and Chief Nuclear Officer, Entergy Nuclear

Board Memberships for other Reporting Issuers: Duke Energy (NYSE)

Independence from OPG: Independent



Roberta Jamieson Age: 62 Ohsweken, Ontario, Canada

Roberta L. Jamieson is a Mohawk woman from Six Nations of the Grand River Territory in Ontario, where she still resides. In November 2004, she was appointed President & CEO of Indspire, Canada's premiere Indigenous led charity, and Executive Producer of the Indspire Awards, a nationally broadcast gala honouring Indigenous achievement.

Under Roberta's leadership, the charity is flourishing. Indspire has disbursed almost \$65 million through close to 20,000 bursaries and scholarships to Indigenous students since its inception. Indspire's annual award disbursements have increased fivefold since Roberta's appointment. She has extended Inspire's youth career conferences to all regions of Canada and launched a recognition programs for educations of Indigenous students. Roberta also led the development of the K-12 Indspire Institute, a virtual resource centre focused on increasing high school completion rates and K-12 success. Under Roberta's leadership, Indspire launched an unprecedented \$20 million fundraising campaign in 2013 to support Indspire's Building Brighter Futures: Bursaries and Scholarships Awards program.

Roberta has enjoyed a distinguished career of firsts. She was the first First Nations woman to earn a law degree; the first non-parliamentarian appointed an ex-officio member of a House of Commons Committee; the first woman Ombudsman of Ontario (1989-1999); and in December 2011, she was the first woman elected Chief of the Six Nations of the Grand River Territory. Roberta also served as Commissioner of the Indian Commission of Ontario from 1986 to 1989.

She has earned numerous awards including the National Aboriginal Achievement Award (Law and Justice 1998); the Indigenous Bar Association's highest award, Indigenous Peoples Council Award (IPC); the Council of Ontario Universities' 2014 David C. Smith Awards; and 23 honorary degrees. She has been named three times to the Women's Executive Network's Top 100 list. She is a Member of the Order of Canada. She also serves on the board of directors of the Elections Canada Advisory Board.

Board/Committee Membership:	2014 Atten	dance:
Board (May 2012)	12 of 12	100%
Governance and Nominating Committee (May 2012)	5 of 5	100%
Risk Oversight Committee * (May 2012)	4 of 4	100%
Executive Talent Committee (since April 2014)	4 of 4	100%
* Chair of Committee		

Principal Occupation: President and CEO of Indspire

Board Memberships for other Reporting Issuers: None

Independence from OPG: Independent



Ira Kagan Age: 52 Toronto, Ontario, Canada

Ira T. Kagan is a founding partner of KAGAN SHASTRI LLP (Lawyers). He received a B.Sc. from the University of Toronto in 1985 and a Juris Doctor from the University of Toronto in 1988. He was called to the Ontario Bar in 1990 and since then has focused on municipal and land use planning law on behalf of both the private (including many of the leading developers in the GTA) and public sector (conservation authorities, local and regional municipalities).

Ira regularly appears before the Ontario Municipal Board and many municipal council, and committees throughout the Greater Toronto Area. His practice includes all aspects of land use planning, including development applications, negotiations and mediations, appeals (both at the Ontario Municipal Board and the courts) and strategic decisions throughout. He is a regular presenter at industry and continuing legal education seminars, and has been involved in many of the leading land use planning cases in the Greater Toronto Area.

In 2005-2006, KAGAN SHASTRI LLP was named the top municipal law firm in the GTA by Nova Res Urbis and since then has consistently ranked in one of the top spots.

Board/Committee Membership:2014 AttendanceBoard (since April 2014)9 of 1182%Audit and Finance Committee (since April 2014)5 of 683%Risk Oversight Committee (since April 2014)2 of 367%

**Principal Occupation:** Lawyer

Board Memberships for other Reporting Issuers: None

Independence from OPG: Independent



M. George Lewis Age: 54 Toronto, Ontario, Canada

As a member of the RBC Group Executive since February 2007, George Lewis is one of eight executives responsible for setting the overall strategic direction of RBC. Canada's largest bank. Mr. Lewis is Group Head, Wealth Management and RBC Insurance, which is the largest wealth manager in Canada and fifth largest globally. Mr. Lewis is also Chairman and a Portfolio Manager of RBC Global Asset Management Inc. Prior to his appointment to Group Executive, Mr. Lewis was Head of Wealth Management for the Canadian Personal and Business banking segment of RBC, as well as serving as Head of Banking Products for that segment. Formerly, he was Managing Director, Head of Institutional Equity Sales, Trading and Research with RBC Capital Markets and was Canada's top-rated equity research analyst for three consecutive years, focusing on electric utilities and natural gas pipelines and telecom companies.

Mr. Lewis has extensive experience in the investment industry and has a Master of Business Administration degree with distinction from Harvard University, a Bachelor of Commerce degree with high distinction from Trinity College at the University of Toronto, and is a chartered financial analyst and an FCA/FCPA, as well as being certified by the Institute of Corporate Directors. Mr. Lewis serves on the Board of Directors of the Canadian Film Centre and the Toronto Symphony Orchestra (Past-Chair), He is a current member and Past Chair of the Bishop's Company of the Anglican Diocese of Toronto, as well as a Patron and member of the Cabinet of the United Way of Greater Toronto. Mr. Lewis also serves as the Honorary Colonel Commandant of the Chaplain Branch of the Canadian Armed Forces.

Board/Committee Membership:	2014 Atten	ndance:
Board (February 2005)	12 of 12	100%
Audit and Finance Committee* (May 2010)	7 of 7	100%
Governance and Nominating Committee (May 2010)	4 of 5	80%
Ad Hoc Committee (September 2012)	8 of 9	89%
Executive Talent Committee (December 2013)	3 of 5	60%
* Chair of Committee		

Principal Occupation: Financial Services Executive

Board Memberships for other Reporting Issuers: None

Independence from OPG: Independent



**Peggy Mulligan** Age: 56 Mississauga, Ontario, Canada

Peggy Mulligan was the Executive Vice President and Chief Financial Officer, Valeant Pharmaceuticals International, Inc. until December 2010. Prior to this, she was a Principal at Priiva Consulting, and before this she served as Executive Vice President and Chief Financial Officer of Linamar Corporation. Prior to Linamar, Mrs. Mulligan was with the Bank of Nova Scotia for eleven years as Executive Vice President, Systems and Operations and Senior Vice President, Audit and Chief Inspector. Before joining Scotiabank, she was an Audit Partner with PricewaterhouseCoopers in Toronto. She holds a B. Math (Honours) from the University of Waterloo and was named a Fellow of the Institute of Chartered Accountants (FCA) of Ontario in 2003.

Board/Committee Membership:	2014 Atten	dance:
Board (December 2005)	12 of 12	100%
Compensation and Human Resources Committee* (March 2012)	10 of 10	100%
Risk Oversight Committee (May 2010 – April 2014)	1 of 1	100%
Ad Hoc Committee (September 2012)	9 of 9	100%
Executive Talent Committee (December 2013)	5 of 5	100%
Audit and Finance Committee (since April 2014)	6 of 6	100%
* Chair of Committee		

Principal Occupation: Corporate Director

Board Memberships for other Reporting Issuers: Capital Power Corporation, Tuckamore Capital

Independence from OPG: Independent

Interlocking Directorships on Boards of other Reporting Issuers: None



**Gerry Phillips** Age: 74 Ajax, Ontario, Canada

Gerry Phillips was the MPP for the east Toronto riding of Scarborough-Agincourt from 1987 to 2011. He served in six cabinet portfolios, including twice as Minister of Energy, where he was OPG's Shareholder from 2007 to 2008 and again on an interim basis from November 2009 to January 2010. Before entering public life, Mr. Phillips graduated from the University of Western Ontario's School of Business and worked in the marketing department of Procter and Gamble. In 1970 he joined the consulting firm of Canadian Marketing Associates and became President in 1977. He later founded two successful spin-off companies - the Sales Development Group in 1979 and the Retail Resource Group in 1982. By 1987, he was Chair of all three companies, with a combined workforce of approximately 300.

Mr. Phillips has an Honours B.A. from the Western School of Business. He was the Chair of the Management Board of Cabinet and Minister responsible for Securities Regulation in Ontario.

Board/Committee Membership:	2014 Atten	dance:
Board (January 2013)	12 of 12	100%
Audit and Finance Committee (February 2013 – April 2014)	1 of 1	100%
Risk Oversight Committee (February 2013)	4 of 4	100%
Ad Hoc Committee (October 2013)	8 of 9	89%
Nuclear Oversight Committee (since April 2014)	4 of 4	100%

Principal Occupation: Retired

Board Memberships for other Reporting Issuers: None

Independence from OPG: Independent

All of the Directors of the Company have been engaged for more than five years in their current principal occupations, except as set out below:

Ms. Boivin was Senior Vice President, Human Resources and Communications at Manulife Financial from June 2007 to December 2011 and Chief Branding & Communications Officer from January 2012 to May 2014 at Manulife Financial.

Ms. DeMarco was Partner at Macleod Dixon LLP from March 2002 to January 2012, Partner at Norton Rose Canada LLP from January 2012 to June 2013 and Partner at Norton Rose Fulbright LLP from June 2013 to December 2014.

Mr. Herron was President, CEO and Chief Nuclear Officer at Entergy Corporation from December 2009 to April 2013.

Ms. Mulligan was Chief Financial Officer of Valeant Pharmaceuticals International Inc. from September 2008 to December 2010.

Mr. Phillips was the Minister without portfolio from June 2008 to October 2011, Ontario Minister of Energy and Infrastructure from November 2009 to January 2010, Chair of Cabinet from June 2008 to October 2011, and Chair of the Select Committee on the TMX Transaction from February 2011 to April 2011.

# **Orientation and Continuing Education**

The Governance and Nominating Committee is responsible for reviewing and recommending appropriate orientation programs. New Directors are provided relevant documentation relating to OPG's governance practices and policies and to its business. Directors attend plant tours of OPG generating facilities, where they also receive comprehensive introductory briefings from OPG senior executives on OPG's operations and business activities.

The Board supports and sponsors the continuing education of OPG Directors, both in the business of OPG and in their duties as Directors. Annual plant tours of OPG's major facilities, site visits to projects with OPG's First Nations business partners, and special presentations by internal and external experts are made to the Board or a Committee on topical business-related issues or on specific aspects of OPG's operations. In 2014, topics included: strategy, energy industry trends, risk, and corporate governance. Directors are provided with articles and publications on current topics of interest. Board members have full access to all Board and Committee materials and records. OPG has developed a Director Governance Handbook which provides Directors with information necessary to fulfill their roles as Directors, including Director Duties and Obligations under the OBCA, relevant corporate policies and procedures. OPG also sponsors Director attendance at the Institute of Corporate Directors "Director Education Program", or equivalent, and sponsors attendance at the Goizueta Director program for members of the Nuclear Oversight Committee.

#### **Ethical Business Conduct**

The Board has adopted a policy for ethical business behaviour and a Code of Business Conduct. The mandate of the Compensation and Human Resources Committee requires that it receive regular reports through the year on the Code of Business Conduct in order to satisfy itself that appropriate codes of conduct and compliance programs are in place, are being enforced, and remedial action is being taken. Both the Compensation and Human Resources Committee and the Audit and Finance Committee receive quarterly reports by Management on the Code of Business Conduct (including reports on substantiated cases of fraud) and the disposition of cases including disciplinary action, as well as an annual report on the Code of Business Conduct and a report on the annual review of the Board policy. A copy of OPG's Code of Business Conduct is available on <a href="www.opg.com">www.opg.com</a> and has been filed on SEDAR (<a href="www.sedar.com">www.sedar.com</a>). The Audit and Finance Committee has also established procedures for the receipt, retention and treatment of complaints received pertaining to accounting, internal accounting controls or auditing matters, and the confidential anonymous submission by employees concerning such matters.

#### **Nomination of Directors**

The Governance and Nominating Committee, which is comprised entirely of independent Directors within the meaning of NI 52-110, is responsible for conducting an annual review of the OPG Board's principles and systems of governance, oversight of annual Board, Committee, and Director evaluations. The Governance and Nominating Committee recommends nominees to the Board. The Board may submit recommended candidates to the Shareholder. Nominations of Directors by the Shareholder may also be considered by the Governance and Nominating Committee. When considering a potential candidate, the Governance and Nominating Committee considers the qualities, experience, and skills that the Board, as a whole, should have in light of the business opportunities and risks facing OPG. The attributes the Governance and Nominating Committee consider in a candidate include diversity, integrity, business judgment and experience, professional expertise, independence from management, financial literacy, communication and listening skills, as well as sufficient time available to fulfill his or her obligations as a Board member. The Board's policy on diversity is to consider a diverse candidate for every vacancy on the Board. OPG defines diversity to include: women, aboriginal peoples, people with disabilities, and visible minorities. These four enumerated groups mirror the four enumerated groups in the definition of "designated groups" in the federal *Employment Equity Act*.

From time to time the Governance and Nominating Committee may engage outside advisors to assist in identifying potential candidates.

## **Director Tenure/Board Renewal**

The OPG Board Charter guideline for board tenure is 10 to 15 years. When considering board renewal, the Governance and Nominating Committee regularly reviews the OPG Board Skills Profile. The Board maintains an "evergreen list" of potential board candidates. From time to time the Committee makes recommendations to add skills to the Board that reflect OPG business opportunities and risks.

# Cease trade orders, bankruptcies, penalties or sanctions

To the knowledge of OPG, no director or executive officer of OPG, or a shareholder holding a sufficient number of securities of OPG to affect materially the control of OPG (a) is, as at the date of the MD&A, or has been within the 10 years before the date of the MD&A, a director or executive officer of any company (including OPG) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or (b) has, within the 10 years before the date of the MD&A, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder, except for:

Bernard Lord was a director of AEA Technology from the fall of 2010 until the fall of 2012 when it became insolvent.

#### Representation of Women

#### **Board of Directors**

As noted under "Nomination of Directors", the Governance and Nominating Committee will consider a diverse candidate for every vacancy on the Board. OPG defines diversity as: women, aboriginal peoples, people with disabilities, and visible minorities. The Board has signed on to the Catalyst Accord. The Board has set a target for diverse representation on the Board of 33 percent. Currently, four of the 12 members of the Board, 33 percent, are women.

## Senior Management

OPG strives to create a workforce that reflects diverse populations of the communities in which it operates. As of December 31, 2014 women filled 21.5% of Corporate Officer roles and 23% of senior management (senior managers and above) positions. This represented a 1% increase from 2013. OPG tracks and monitors diversity succession planning metrics and strives to have a diverse candidates list for senior management positions. A target for representation in executive officer positions is under consideration.

# Compensation

## **Director Compensation**

The OPG Director compensation structure was established in 2005 and has remained largely unchanged. The Governance and Nominating Committee is responsible for monitoring and reviewing the level and nature of compensation of OPG Directors. Pursuant to the recommendations of the 2007 Report of the Agency Review Panel, OPG benchmarks against the 50<sup>th</sup> percentile of compensation levels for a combined private and public sector comparator group. The last review occurred in May 2012. The Governance and Nominating Committee benchmarked OPG's Director Compensation against comparable public and private companies and concluded that OPG Director Compensation was at the 38<sup>th</sup> percentile of comparator companies. However, the Committee recommended that no change be made to the compensation of Directors at this time in view of legislative constraints on compensation of OPG Management.

In March 2012, the government introduced Bill 55, the Strong Action for Ontario Act (Budget Measures), which included measures to extend controls over executive compensation. This act impacts OPG's non-unionized employees and is in effect until the Province of Ontario ceases to have a budget deficit. Bill 55 applies to the Vice President level and up as well as full-time members of the Board of Directors. From March 25, 2010 to March 31, 2012, the Public Sector Compensation Restraint to Protect Public Services Act, 2010, froze the compensation

structures for Members of Provincial Parliament, and non-represented political staff and employees across the Ontario Public Service and Broader Public Sector, including non-represented employees and directors of OPG.

OPG's Director compensation framework provides each Director who is not an employee of OPG with an annual retainer of \$25,000. Directors also receive a \$3,000 annual retainer to chair committees and for each committee that they are a member of. In 2006, the retainer for the Audit and Finance Committee chair was set at \$8,000 in recognition of the increased duties and responsibilities placed upon the chair of the Audit and Finance Committee. In 2010, in recognition of the increased duties and responsibilities placed upon the chair of the Compensation and Human Resources Committee, the annual retainer was set at \$5,000.

Directors are compensated for each meeting that they attend and receive a fee of \$1,500 or \$750, as determined by the Board Chair or respective Committee chair.

In order to retain national and international expertise, non-resident Directors are compensated in U.S. dollars and Directors who travel over certain distances receive a travel fee to cover travel time related to Board and Committee meetings they attend.

Since 2004, the Chair of the Board, in his role as non-executive Chair, receives an all-inclusive annual fee of \$150,000 and is reimbursed for out-of-pocket expenses including travel and other expenses.

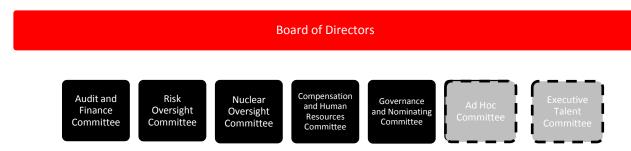
## **CEO Compensation**

The Compensation and Human Resources Committee of the Board consists of four members, all of which are independent of OPG within the meaning of NI 52-110. The Committee oversees, on behalf of the Board, the setting of the CEO's annual goals and objectives and the annual review of CEO performance, and makes recommendations to the Board with respect to CEO compensation. The Compensation and Human Resources Committee may seek input from an independent advisor with regard to monitoring and benchmarking compensation developments.

In July 2009, when the current CEO was appointed, the compensation terms were established based on the benchmarks recommended in the 2007 Report of the Agency Review Panel on Phase 1 of its Review of Ontario's Provincially Owned Electricity Agencies. In March 2012, the government introduced Bill 55, the *Strong Action for Ontario Act (Budget Measures)*, which included measures to extend controls over executive compensation. This act impacts OPG's non-unionized employees and is in effect until the Province of Ontario ceases to have a budget deficit. From March 25, 2010 to March 31, 2012, the *Public Sector Compensation Restraint to Protect Public Services Act, 2010*, froze the compensation structures for Members of Provincial Parliament and for non-represented political staff and employees across the Ontario Public Service and Broader Public Sector, including non-represented employees and Directors of OPG.

#### **Committees of the Board of Directors**

The following Committees are the current Board Committees as of March 13, 2015:



# Audit and Finance Committee

This Committee is responsible for the integrity, quality, and transparency of OPG's financial information, the adequacy of the financial reporting process, the systems of internal controls, and OPG's related principles, policies, and procedures which Management have established. The Committee is responsible for the oversight of the Company's regulatory filings, financial statements, MD&A, and press releases, prior to their disclosures to the public, including approval of quarterly financial statements and recommending approval of the annual financial statements and various other annual disclosures of OPG Inc. to the Board. The Committee is also responsible for the appointment, compensation, and oversight of the external auditor. The Committee provides oversight of OPG's corporate financing strategies including: policies related to financial exposure management; processes for identifying major strategic, operational and transactional financial risks; performance of the OPG Pension Fund, the Used Fuel Fund and the Decommissioning Fund; reviews and approves the audited financial statements of the Funds and the statement of investment policies and procedures for the OPG Pension Fund and the Decommissioning Fund.

As of the date hereof, the Audit and Finance Committee consists of George Lewis (Chair), Elisabeth (Lisa) DeMarco, Ira Kagan, and Peggy Mulligan.

## Risk Oversight Committee

This Committee is responsible for the oversight of enterprise-wide risk and associated risk management activities. including oversight of OPG's environment and dam safety managed systems and OPG's Aboriginal relations. The Committee is also responsible for reviewing Management's assessment of significant operational, transactional, and strategic risks to achieving Business Plan objectives in the Hydro-Thermal Operations, Commercial Operations & Environment, Business Services and Administrative Services and all other non-Nuclear and non-Finance corporate and central support services. The Committee receives the Enterprise Risk Management report, which includes information on nuclear risks and financial risks that are also reported to the Nuclear Oversight Committee and the Audit and Finance Committee, respectively. Additionally, the Risk Oversight Committee is responsible for oversight of the development, risk management, financing, and execution of complex major non-nuclear projects.

As of the date hereof, the Risk Oversight Committee consists of Roberta Jamieson (Chair), Elisabeth (Lisa) DeMarco, John Herron, Ira Kagan, and Gerry Phillips.

## **Nuclear Oversight Committee**

This Committee is responsible for the oversight of safe and efficient operations of OPG's nuclear facilities, including nuclear waste, decommissioning liabilities and operations, and oversight of the refurbishment of OPG's nuclear facilities. The Committee is also responsible for reviewing Management's assessment of significant operational, transactional, and strategic risks to achieving Nuclear Business Plan objectives. Additionally, the Committee is responsible for the development, risk management, financing, and execution of major nuclear projects. The Committee is also responsible for reviewing annually and confirming the appointment of external advisors/assessors of OPG's nuclear operations and Management's response and implementation of the results and major findings from such internal and external assessments. The Committee ensures that OPG's nuclear facilities and materials are in compliance with existing laws and CNSC regulations.

As of the date hereof, the Nuclear Oversight Committee consists of John Herron (Chair), Bill Coley, Brendan Hawley, and Gerry Phillips.

# Compensation and Human Resources Committee

This Committee provides oversight of OPG's human resources and compensation policies and practices, including CEO objectives and compensation, disclosure on compensation and human resources matters, leadership talent review, succession planning, and labour negotiations. The Committee also provides oversight of OPG's pension plans and related policies. The Committee is responsible for ensuring that an effective Code of Business Conduct is in place at OPG and monitoring compliance with the Code.

As of the date hereof, the Compensation and Human Resources Committee consists of Peggy Mulligan (Chair), Nicole Boivin, Brendan Hawley, and John Herron.

## Governance and Nominating Committee

This Committee oversees the Board's governance program and practices that are consistent with high standards of corporate governance, including annually reviewing and assessing the Board's system of corporate governance with a view to maintaining these high standards. The Committee is responsible for overseeing OPG's reputation management plan. The Committee identifies and recommends to the Board candidates for nomination to the Shareholder. Finally, the Committee oversees OPG's processes for Board, Committee, and Director assessments, as well as Director compensation and new Director orientation.

As of the date hereof, the Governance and Nominating Committee consists of Bill Coley (Chair), Nicole Boivin, Roberta Jamieson, and George Lewis.

# Ad Hoc Committee

An ad hoc committee of the Board may, from time to time, identify and assess alternate strategies for OPG.

As of the date hereof, the Ad Hoc Committee consists of Bernard Lord (Chair), Bill Coley, John Herron, George Lewis, Peggy Mulligan, and Gerry Phillips.

## **Executive Talent Committee**

In December 2013, the OPG Board of Directors established an Executive Talent Committee, with a mandate to conduct searches for executive talent.

As of the date hereof, the Executive Talent Committee consists of the Board and committee chairs: Bernard Lord (Board Chair), Bill Coley, John Herron, Roberta Jamieson, Peggy Mulligan, and George Lewis.

With respect to attendance at Committee meetings, Directors may attend other Committee meetings from time to time as required. Directors have access to all Board and Committee meeting material, unless otherwise directed by the Board Chair.

#### **Assessments**

The Governance and Nominating Committee is responsible for the annual process for evaluating the performance of the Board, its Committees, and its individual Directors. The Board and Committee evaluations are based upon the completion of confidential questionnaires regarding assessment of its performance and compliance with the Board and Committee Charters. Director evaluations are based on self-assessment questionnaires, which are submitted in confidence to the Board Chair and the Chair of the Governance and Nominating Committee. In addition, the process

includes a follow-up one-on-one meeting between each Director and the Board Chair. The Governance and Nominating Committee reports the results of the evaluations and makes recommendations to the Board for enhancing the Board's governance and effectiveness.

## **Further Information on OPG Governance**

OPG provides additional information on OPG's governance on its website (www.opg.com) including:

- Memorandum of Agreement with the Shareholder
- Shareholder Directives
- List of Corporate Officers
- Board and Committee Charters
- Board and Committee Chair Position Descriptions
- Board of Directors Conflict of Interest Policy
- First Nation and Métis Relations Policy
- Code of Business Conduct
- Disclosure Policy
- Environmental Policy
- Employee Health and Safety Policy
- Nuclear Safety Policy
- Safe Operations Policy

#### **AUDIT AND FINANCE COMMITTEE INFORMATION**

NI 52-110, has been implemented by Canadian securities regulatory authorities to encourage reporting issuers to establish and maintain strong, effective, and independent audit committees, which enhance the quality of financial disclosure and ultimately foster increased investor confidence in Canada's capital markets. Information on OPG's Audit and Finance Committee, including the Audit and Finance Committee Charter, is as follows:

#### **Audit and Finance Committee Charter**

## Purpose

The basic function and purpose of the Audit and Finance Committee is to assist the Board of Directors in their responsibility for oversight of matters relating to:

- The integrity, quality and transparency of OPG's financial information;
- The adequacy of the financial reporting process;
- The systems of internal controls, and OPG's related principles, policies and procedures which Management have established:
- The performance of OPG's internal audit function and the external auditors;
- The performance, qualifications and independence of OPG's external auditors;
- OPG's compliance with related legal and regulatory requirements and internal policies;
- Corporate financing strategies and vehicles including strategies and policies related to financial exposure management; and
- The OPG Pension Fund and the Used Fuel Fund and Decommissioning Fund.

The function of the Audit and Finance Committee is oversight. Management is responsible for the preparation, presentation and integrity of OPG's financial statements. Management is responsible for maintaining appropriate accounting and financial reporting principles and policies and internal controls and procedures that provide for compliance with accounting standards and applicable laws and regulations.

# **Organization**

#### Members

The Audit and Finance Committee shall consist of three or more Directors as determined by the Board of Directors. All members of the Committee shall be independent as defined by the Ontario Securities Commission, and not "affiliated" with OPG.

The Board shall appoint the members of the Committee and the Chair of the Committee annually. The Board may appoint a member to fill a vacancy which occurs in the Committee between annual elections of Directors. Any member of the Committee may be removed or replaced at any time by the Board.

If a member of the Committee becomes "affiliated" with OPG, the member may continue as a member of the Committee with the approval of the Board Chair, in consultation with the Corporate Secretary.

As a "venture issuer", OPG is exempt from the statutory requirements of National Instrument 52-110 requiring members of Audit Committees be independent and financially literate. However, OPG considers such independence and financial literacy to be "best practice" and therefore each of the members of the Audit and Finance Committee shall satisfy the applicable independence and financial literacy requirements of the laws and regulations governing Audit Committees.

The Board of Directors shall confirm that each member of the Audit and Finance Committee is financially literate; as such qualification is interpreted by the Board of Directors in its business judgment, and in compliance with National Instrument 52-110 and its Companion Policy.

## Meetings

The Committee shall meet as frequently as it determines but not less than quarterly. During quarterly meetings, the Committee will hold separate in camera sessions with the external auditors, the Chief Internal Audit Executive, and Management to discuss any matters that the Committee believes should be discussed and to provide a forum for any relevant issues to be raised.

Notice of the time and place of each meeting of the Committee must be given to each member of the Committee not less than 48 hours before the time of the meeting.

A quorum of the Committee shall be a majority of its members, but not less than two. The powers of the Committee may be exercised at a meeting at which a quorum of the Committee is present in person or by telephone or other electronic means, or by a resolution signed by all members entitled to vote on that resolution at a meeting of the Committee. Each member is entitled to one vote in Committee proceedings.

The Chair shall preside at all meetings of the Committee at which he or she is present (or if not able to be present designate another member of the Committee to chair the meeting) and shall develop the agenda for each Committee meeting. The agenda for each meeting of the committee shall be delivered to each member of the Committee at least 48 hours prior to any meeting of the Committee, together with such other materials as the chair determines necessary.

The Chair shall designate from time to time a person who may, but not need to be, a member of the Committee, to be Secretary of the Committee. Minutes shall be kept of all meetings of the Committee and shall be maintained by the Secretary of the Committee. The procedure at meetings is to be determined by the Committee unless otherwise determined by the by-laws of OPG, by a resolution of the Board or by this Charter.

The Committee may meet in camera (without management present) at any time during the meeting consistent with the Board guideline on the conduct of in camera sessions and the keeping of minutes from in camera sessions.

The Committee may invite any Director, officer or employee of OPG or OPG's counsel or any other person to attend meetings of the Committee to assist in the discussion and examination of the matters under consideration by the Committee.

## Reports

The Committee will report its activities and actions to the Board of Directors with recommendations, as the Committee deems appropriate.

The Committee will provide for inclusion in OPG's financial information or regulatory filings any report from the Audit and Finance Committee required by applicable laws and regulations and stating among other things whether the Audit and Finance Committee has:

- (i) Reviewed and discussed the audited financial statements with Management.
- (ii) Discussed pertinent matters with the internal and external auditors.
- (iii) Received disclosures from the external auditors regarding the auditors' independence and discussed with the auditors their independence.
- (iv) Recommended to the Board of Directors that the audited financial statements be included in OPG's Annual Report.

## **Authority**

While the Audit and Finance Committee has the responsibilities and powers set forth in this Charter, it is not the duty of the Audit and Finance Committee to plan or conduct audits or risk assessments, or to determine that OPG's financial statements and disclosures are complete and accurate and are in accordance with generally accepted accounting principles and applicable rules and regulations. These are the responsibility of Management and, as appropriate, the external auditor.

The Committee is responsible for the oversight of the funds invested in the OPG Pension Fund under the *Ontario Pension Benefits Act*, and the funds invested in the Used Fuel Fund and the Decommissioning Fund under the Ontario Nuclear Funds Agreement with the Province of Ontario.

In carrying out its oversight responsibilities, the Audit and Finance Committee and the Board will necessarily rely on the expertise, knowledge and integrity of OPG Management, and internal and external auditors.

The Audit and Finance Committee shall have the authority to set and pay the compensation for any advisors employed by the Committee.

The Audit and Finance Committee shall have the authority to communicate directly with the internal and external auditors.

## Delegation of Authority

The Committee may delegate to any employee of OPG or a sub-committee the authority to:

- (i) execute or carry out any decision of the Committee; and/or
- (ii) exercise any right, power or function of the Committee on such terms and conditions and within such limits as the Committee may establish, except that the Committee may not delegate its oversight responsibilities.

Access to Management and Outside Advisors

The Audit and Finance Committee shall have unrestricted access to members of Management and relevant information.

The Audit and Finance Committee has the authority to retain legal counsel, accountants or other advisors to assist it in the conduct of any investigation, as it determines necessary to carry out its duties.

## Committee Responsibilities and Duties

The Committee shall perform the duties set out in this Charter and shall perform such other duties as may be necessary or appropriate under applicable law or securities rules, or as may be delegated to the Committee by the Board from time to time.

The Committee maintains oversight of OPG's audit and finance activities and assists the Board by reviewing and making recommendations to the Board with respect to:

## 1. General

- a) Conduct or authorize investigations into any matters within the Committee's scope of responsibilities.
- b) Review and recommend approval to the Board, the appointment or replacement of the Chief Financial Officer (CFO), Chief Internal Audit Executive and the Chief Investment Officer.
- c) Approve on behalf of the Board, quarterly financial statements and disclosures for OPG Inc.
- d) Review and recommend to the Board OPG's rate application to the Ontario Energy Board, including proposed payment amounts, hearing strategies and key issues.
- e) Review and recommend Board approval of OPG's business plan.

#### 2. Internal Controls

- a) Review with Management, reports demonstrating compliance with finance risk management policies.
- b) Review with OPG's General Counsel and others any legal, tax, or regulatory matters that may have a material impact on OPG's operations and the financial statements, including, but not limited to, violations of securities law or breaches of fiduciary duty.
- c) Review with Management, the Chief Internal Audit Executive, and the external auditors, the scope of review of internal control over financial reporting, significant findings, recommendations and Management's responses for implementation of actions to correct weaknesses in internal controls.
- d) Review disclosures made by the Chief Executive Officer and Chief Financial Officer during the certification process regarding significant deficiencies in the design or operation of internal controls or any fraud that involves Management or other employees who have a significant role in OPG's internal controls.
- e) Review the expenses of the Chairman, Board, President and the President's direct reports on an annual basis, and of any other senior officers and employees the Committee considers appropriate.

## 3. Internal Audit

- a) Evaluate the internal audit process and define expectations in establishing the annual internal audit plan. including the organizational structure and the adequacy of resources.
- b) Approve the Charter of the internal audit function annually.
- c) Evaluate the audit scope and role of Internal Audit.
- d) Approve the annual internal audit plan.
- e) Consider and review with Management:
  - (i) Significant findings and Management's response including the significance of the finding, the adequacy of the control processes, and the timetable for implementation of Management actions to correct weaknesses.
  - (ii) Any difficulties encountered in the course of their work (such as restrictions on the scope of their work or access to information).
  - (iii) Any changes required in the planned scope of the audit plan.
  - (iv) The internal audit budget.
- f) Review Internal Audit's confirmation of organizational independence and disclosure of any conflict of interest.

g) Receive reports from the Chief Audit Executive on independent reviews and investigations of fraud allegations and matters that may involve fraud.

#### 4. External Auditor

- a) Recommend to the Board of Directors the external auditor to be nominated for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for OPG, and the compensation of the external auditor.
- b) Oversee the work of the external auditor engaged for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for OPG, including the resolution of disagreements between Management and the external auditor regarding financial reporting.
- c) Review the independence and qualifications of the external auditor.
- d) At least annually, obtain and review a report by the external auditor describing the auditing firm's internal quality control procedures, any material issues raised by the most recent internal quality-control review or peer review of the auditing firm or by any inquiry or investigation by governmental or professional authorities within the preceding five years respecting one or more independent audits carried out by the external auditor and any steps taken to deal with any such issues and all relationships between the external auditors and OPG.
- e) Review the scope and approach of the annual audit plan with the external auditors.
- f) Discuss with the external auditor the quality and acceptability of OPG's accounting principles including all critical accounting policies and practices used, any alternative treatments that have been discussed with Management, as well as any other material communications with Management.
- g) Assess the external auditor's process for identifying and responding to key audit and internal control risks.
- h) Ensure the rotation of the lead audit partner and other audit partners every seven years, and consider regular rotation of the audit firm.
- i) Evaluate the performance of the external auditor annually and present its findings to the Board of Directors.
- j) Conduct a comprehensive review of the external audit firm at least once every five years and present the findings to the Board of Directors.
- k) Determine which non-audit services the external auditor is prohibited by law or regulation, or as determined by the Audit and Finance Committee, from providing and pre-approve all services provided by the external auditors. The Committee may delegate such pre-approval authority to a member of the Committee. The decision of any Committee member to whom pre-approval authority is delegated must be presented to the full Audit and Finance Committee at its next scheduled meeting.
- I) Review and approve all related-party transactions.
- m) Review and approve OPG's hiring policies regarding partners, employees and former partners and employees of the present and former external auditor of OPG.

## 5. Financial Reporting

- a) Review with Management and the external auditors OPG's interim financial information and disclosures under Management Discussion and Analysis (MD&A) and earnings press release, prior to filing.
- b) Review and make recommendations to the Board of the Annual Information Form, if required, prior to filing with securities regulators.
- c) Satisfy itself that adequate procedures are in place for the review of OPG's public disclosure of financial information extracted or derived from OPG's financial statements, other than the public disclosure referred to in subsection 5a above, and periodically assess the adequacy of those procedures.
- d) Review with Management and the external auditors, at the completion of the annual audit:
  - (i) The annual financial statements, MD&A, related footnotes and any documentation required by the Securities Act to be prepared and filed by OPG or that OPG otherwise files with the Ontario Securities Commission.
  - (ii) The external auditors' audit of the financial statements and their report.

- (iii) Any significant changes required in the external auditors' audit plan.
- (iv) Any difficulties or disputes with Management encountered during the audit.
- (v) OPG's accounting principles.
- (vi) Other matters related to conduct, which should be communicated to the Committee under generally accepted auditing standards.
- e) Review significant accounting and reporting issues and understand their impact on the financial statements. These include complex or unusual transactions and highly judgmental areas; major issues regarding accounting principles and financial presentations, including significant changes in OPG's selection or application of accounting principles; the effect of regulatory and accounting initiatives, as well as off-balance sheet arrangements on OPG's financial statements.
- f) Review analysis prepared by Management and/or the external auditor detailing financial reporting issues and judgments made in connection with the preparation of financial information, including analysis of the effects of alternative generally accepted accounting principles methods.
- g) Advise Management, based upon the Audit and Finance Committee's review and discussion, whether anything has come to the Committee's attention that causes it to believe that the financial statements contain an untrue statement of material fact or omit to state a necessary material fact.

#### 6. Investment Funds

The Committee shall review and make recommendations to the Board on:

- a) The appointment of the auditor of the OPG Pension Fund and the Used Fuel Fund and Decommissioning Fund.
- b) The broad objectives, governance frameworks and risk posture for the funds.

In addition, the Committee shall

- c) Approve the appointment of the members of OPG's Pension Committee. In addition, the Committee may, at any time, remove or replace any member of the Pension Committee or fill a vacancy on the Pension Committee. The Pension Committee Chair may temporarily appoint a senior management employee to fill a vacancy on the Pension Committee until the next regularly scheduled Audit and Finance Committee meeting.
- d) Approve the annual audited financial statements for the OPG Pension Fund, the Used Fuel Fund and the Decommissioning Fund.
- e) Approve the investment policies and procedures for the OPG Pension Fund, as required by the *Ontario Pension Benefits Act* and its regulations, and for the Decommissioning Funds, as required by the Ontario Nuclear Funds Agreement.
- f) Approve the design of and modifications to the funds.
- g) Monitor quarterly and annually or by exception, compliance with and appropriateness of the asset mix policy; total fund and asset class returns relative to benchmarks; material compliance with breaches of policies or procedures; and, work conducted by the plan actuary.
- h) Report to the Board at least annually on the status of the Pension Fund and Used Fuel and Decommissioning Fund including funded status; total returns; compliance with fund objectives and risk posture; and, compliance with legislation and governance relating to fund management.

The Committee shall receive a copy of the report to the Nuclear Oversight Committee on the calculation of OPG's nuclear waste liability.

The Committee shall provide advice to the Compensation and Human Resources Committee on the affordability of changes to the OPG Pension Plan.

## 7. Corporate Finance and Strategic, Operational, and Transactional Risks

The Committee shall review and make recommendations and advising the Board with respect to:

- a) Corporate financing objectives, strategies and vehicles, credit facilities, including accessing capital debt markets, and any other related financing activities.
- b) Ensuring a process exists for identifying major strategic, operational, and transactional risks in the financial area.
- c) Reviewing Management's assessment of the significant operational, transactional, and strategic risks to achieving Business Plan objectives in the Finance Business Unit and plans to manage, mitigate and monitor the risks.

# 8. Treatment of Complaints

- a) Establish procedures for the receipt, recording and treatment of complaints received by OPG regarding accounting, internal accounting controls, or auditing matters.
- b) Establish procedures for the confidential and anonymous submission by OPG employees of concerns regarding accounting or auditing matters.

#### 9. Board Policies

The Audit and Finance Committee is accountable for oversight of the following Board policies:

- i. Delegation and Exercise of Authority
- ii. Disclosure

The Committee is responsible for reviewing these Board policies on an annual basis to ensure continuing adequacy of the policies, in addition to receiving at a minimum an annual report from Management compliance with each Board policy. The Committee is also responsible for recommending to the Board the development of any new Board policy it may feel is required in order to fulfill the role and responsibilities of the Committee.

# **Annual Review and Assessment**

The Committee shall conduct an annual review and assessment of its performance, including a review of its compliance with this Charter, in accordance with the evaluation process approved by the Board.

The Committee shall also review and assess the adequacy of this Charter on an annual basis taking into account all legislative and regulatory requirements applicable to the Committee as well as any best practice guidelines recommended by regulators with whom OPG has a reporting relationship, and if appropriate, shall recommend changes to the Board.

# **Composition of the Audit and Finance Committee**

As at March 13, 2015, the members of the Audit and Finance Committee were George Lewis (Chair), Elisabeth (Lisa) DeMarco, Ira Kagan, and Peggy Mulligan. All members are independent with experience in business and financial matters. Each member has an understanding of internal controls and procedures for financial reporting. As part of OPG's Continuing Education Program for Directors, Audit and Finance Committee members are provided with access to both internal and external educational resources, including seminars and courses, in order to maintain or improve upon their financial literacy.

## **Activities of the Audit and Finance Committee**

The Chartered Professional Accountants of Canada (CPA Canada) and the Canadian Public Accountability Board recommended that audit committees perform a comprehensive review of the external audit firm at least once every five years. CPA Canada issued guidelines in early 2014 to help audit committees implement these recommendations. The Audit and Finance Committee conducted its first comprehensive review of its external

auditor, Ernst & Young (E&Y), in 2014 for the period from 2009 to 2013 using the guidelines and format recommended by CPA Canada. E&Y has been OPG's external auditor since OPG's inception in 1999. E&Y provides audit and audit related services to OPG, including the audit of OPG's annual consolidated financial statements, reviews of OPG's quarterly financial statements as well as audits of the financial statements of OPG's consolidated subsidiaries. In conducting the review, the Committee considered input from management, E&Y, and internal audit. The Committee reviewed the information submitted by the three parties, combined with their individual experiences, to evaluate the auditor's performance. The result of this comprehensive review was discussed during the August 2014 Audit and Finance Committee meeting. During the comprehensive review, the Committee considered factors such as the auditors' independence, engagement team quality including its involvement in the selection of E&Y's lead engagement partner, and communication effectiveness between E&Y and the Company. Upon completion of the review, the Committee was satisfied with the performance of E&Y and believed reappointing E&Y is in the best interest of OPG. Therefore, the Committee recommended in November 2014 that the Board of Directors reappoint E&Y for fiscal 2015.

#### **External Auditor Service Fees**

The following Ernst & Young LLP fees were incurred by OPG:

(thousands of dollars)	2014	2013
Audit fees Audit-related fees	2,134 205	1,775 188
All other fees 1	15	15

Comprised of fees related to the subscription of an online accounting research tool.

For further information, please contact: Investor Relations 416-592-6700

1-866-592-6700

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Media Relations 416-592-4008

1-877-592-4008

www.opg.com

www.sedar.com

# STATEMENT OF MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL INFORMATION

Ontario Power Generation Inc.'s (OPG) management is responsible for the presentation and preparation of the annual consolidated financial statements and Management's Discussion and Analysis (MD&A).

The consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles (US GAAP) and the rules and regulations of the United States Securities and Exchange Commission for annual financial statements. The MD&A has been prepared in accordance with the requirements of securities regulators, including National Instrument 51-102 of the Canadian Securities Administrators and its related published requirements.

The consolidated financial statements and information in the MD&A necessarily include amounts based on informed judgments and estimates of the expected effects of current events and transactions with appropriate consideration to materiality. Something is considered material if it is reasonably expected to have a significant impact on the Company's earnings, cash flow, value of an asset or liability, or reputation. In addition, in preparing the financial information we must interpret the requirements described above, make determinations as to the relevancy of information to be included, and make estimates and assumptions that affect the reported information. The MD&A also includes information regarding the impact of current transactions and events, sources of liquidity and capital resources, operating trends, and risks and uncertainties. Actual results in the future may differ materially from our present assessment of this information because future events and circumstances may not occur as expected.

In meeting our responsibility for the reliability of the financial information, we maintain and rely on a comprehensive system of internal controls and internal audits, including organizational and procedural controls and internal controls over financial reporting. Our system of internal controls includes: written communication of our policies and procedures governing corporate conduct and risk management; comprehensive business planning; effective segregation of duties; delegation of authority and personal accountability; careful selection and training of personnel; and accounting policies, which we regularly update. This structure ensures appropriate internal controls over transactions, assets and records. We also regularly audit internal controls. These controls and audits are designed to provide us with reasonable assurance that the financial records are reliable for preparing financial statements and other financial information, assets are safeguarded against unauthorized use or disposition, liabilities are recognized, and we are in compliance with all regulatory requirements.

Management, including the President and Chief Executive Officer (CEO) and Chief Financial Officer (CFO), is responsible for maintaining disclosure controls and procedures (DC&P) and internal controls over financial reporting (ICOFR). DC&P is designed to provide reasonable assurance that all relevant information is gathered and reported to senior management, including the President and CEO and the CFO, on a timely basis so that appropriate decisions can be made regarding public disclosure. ICOFR is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the consolidated financial statements in accordance with US GAAP.

An evaluation of the effectiveness of the design and operation of OPG's DC&P and ICOFR was conducted as of December 31, 2014. Accordingly, we, as OPG's President and CEO and CFO, will certify OPG's annual disclosure documents filed with the Ontario Securities Commission, which includes attesting to the design and effectiveness of OPG's DC&P and ICOFR.

The Board of Directors, based on recommendations from its Audit and Finance Committee, reviews and approves the consolidated financial statements and the MD&A, and oversees management's responsibilities for the presentation and preparation of financial information, maintenance of appropriate internal controls, management and control of major areas of financial risk, and assessment of significant and related party transactions.

The consolidated financial statements have been audited by Ernst & Young LLP, independent external auditors appointed by the Board of Directors. The Independent Auditors' Report outlines the auditors' responsibilities and the scope of their examination and their opinion on OPG's consolidated financial statements. The independent external auditors, as confirmed by the Audit and Finance Committee, had direct and full access to the Audit and Finance Committee, with and without the presence of management, to discuss their audit and their findings therefrom, as to the integrity of OPG's financial reporting and the effectiveness of the system of internal controls.

**Tom Mitchell** 

President and Chief Executive Officer

Mitchell

**Beth Summers** 

Chief Financial Officer

March 13, 2015

# INDEPENDENT AUDITORS' REPORT

#### To the Shareholder of Ontario Power Generation Inc.

We have audited the accompanying consolidated financial statements of Ontario Power Generation Inc., which comprise the consolidated balance sheets as at December 31, 2014 and 2013, and the consolidated statements of income, comprehensive income, cash flows, and changes in shareholder's equity for the years then ended, and a summary of significant accounting policies and other explanatory information.

## Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with United States generally accepted accounting principles, and for such internal controls as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

#### **Auditors' Responsibility**

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal controls relevant to the entity's preparation and fair presentation of the consolidated 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 controls. 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 consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

### **Opinion**

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Ontario Power Generation Inc. as at December 31, 2014 and 2013 and the results of its operations and its cash flows for the years then ended in accordance with United States generally accepted accounting principles.

Toronto, Canada

March 13, 2015

Ernst & Young LLP

Chartered Professional Accountants, Licensed Public Accountants

Ernst + young LLP

# **CONSOLIDATED STATEMENTS OF INCOME**

Years Ended December 31 (millions of dollars except where noted)	2014	2013
Pavanua (Nota 16)	4.062	4.060
Revenue (Note 16)	4,963	4,863
Fuel expense (Note 16)	641	708
Gross margin (Note 16)	4,322	4,155
Expenses (Note 16)		
Operations, maintenance and administration	2,615	2,747
Depreciation and amortization (Note 4)	754	963
Accretion on fixed asset removal and nuclear waste management	797	756
liabilities (Note 8)		
Earnings on nuclear fixed asset removal and nuclear waste management funds (Note 8)	(714)	(628)
· · ·	77	
Regulatory disallowance related to the Niagara Tunnel project (Note 3)		(05)
ncome from investments subject to significant influence	(41)	(35)
Property taxes	32	53
Restructuring (Note 21)	18	50
	3,538	3,906
Income before other income, interest, income taxes, and	784	249
extraordinary item	(0)	(0)
Other income	(3)	(3)
Income before interest, income taxes, and extraordinary item	787	252
Net interest expense (Note 7)	80	86
Income before income taxes and extraordinary item	707	166
ncome tax expense (Note 9)	139	31
Income before extraordinary item	568	135
Extraordinary item <sup>1</sup> (Note 3)	243	133
Extraordinary item (Note 3)	243	-
Net income	811	135
Not become attacked by the Observation	004	105
Net income attributable to the Shareholder	804	135
Net income attributable to non-controlling interests	7	
Basic and diluted net income per common share	2.19	0.53
before extraordinary item (dollars)		
Extraordinary item per common share (dollars)	0.95	_
Basic and diluted net income per common share (dollars)	3.14	0.53
Common shares outstanding (millions)	256.3	256.3

<sup>&</sup>lt;sup>1</sup> Wholly attributable to the Shareholder.

# **CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**

Years Ended December 31	204.4	2042
(millions of dollars)	2014	2013
Net income	811	135
Other comprehensive income, net of income taxes (Note 10)		
Recognition of initial pension and other post-employment benefits regulatory asset related to facilities prescribed for rate regulation beginning in 2014 (Note 3) 1	184	-
Actuarial (loss) gain and past service credits on re-measurement of liabilities for pension and other post-employment benefits <sup>2</sup>	(35)	226
Reclassification to income of amounts related to pension and other post-employment benefits <sup>3</sup>	27	42
Net (loss) gain on derivatives designated as cash flow hedges <sup>4</sup>	(2)	14
Reclassification to income of losses on derivatives designated as cash flow hedges <sup>5</sup>	14	13
Other comprehensive income	188	295
Comprehensive income	999	430
Comprehensive income attributable to the Shareholder	992	430
Comprehensive income attributable to the shareholder  Comprehensive income attributable to non-controlling interests	7	<del>4</del> 30 -

Net of income tax expenses of \$61 million and nil for 2014 and 2013, respectively.

 $<sup>^{2}</sup>$  Net of income tax recoveries of \$12 million and expenses of \$75 million for 2014 and 2013, respectively.

<sup>&</sup>lt;sup>3</sup> Net of income tax expenses of \$10 million and \$15 million for 2014 and 2013, respectively.

<sup>&</sup>lt;sup>4</sup> Net of income tax recoveries of \$1 million and expenses of \$3 million for 2014 and 2013, respectively.

<sup>&</sup>lt;sup>5</sup> Net of income tax expenses of \$2 million and \$2 million for 2014 and 2013, respectively.

# **CONSOLIDATED STATEMENTS OF CASH FLOWS**

Years Ended December 31 (millions of dollars)	2014	2013
Operating activities		
Net income	811	135
Adjust for non-cash items:		
Depreciation and amortization (Note 4)	754	963
Accretion on fixed asset removal and nuclear waste management liabilities (Note 8)	797	756
Earnings on nuclear fixed asset removal and nuclear waste management funds (Note 8)	(714)	(628)
Pension and other post-employment benefit costs (Note 11)	460	455
Extraordinary item (Note 3)	(243)	_
Deferred income taxes and other accrued charges	<b>`</b> 56	(3)
Provision for restructuring (Note 21)	12	50
Mark-to-market on derivative instruments	(52)	39
Provision for used nuclear fuel and low and intermediate level waste (Note 8)	116	109
Regulatory assets and liabilities	(104)	(232)
Provision for materials and supplies	<b>`38</b>	` 43
Regulatory disallowance related to the Niagara Tunnel project (Note 3)	77	-
Other	(14)	(15)
	1,994	1,672
Contributions to nuclear fixed asset removal and nuclear waste	(139)	(184)
management funds (Note 8)	(040)	(400)
Expenditures on fixed asset removal and nuclear waste	(212)	(199)
management (Note 8)		
Reimbursement of expenditures on nuclear fixed asset removal and	77	75
nuclear waste management (Note 8)	(470)	(407)
Contributions to pension funds and expenditures on other	(473)	(407)
post-employment benefits and supplementary pension plans (Note 11)	(O.F.)	(10)
Expenditures on restructuring (Note 21)	(35)	(13)
Net changes to other long-term assets and liabilities	9	(9)
Net changes to non-cash working capital balances (Note 17)	212	239
Cash flow provided by operating activities	1,433	1,174
nvesting activities	(4.545)	(4.500)
nvestment in property, plant and equipment and intangible assets (Notes 4 and 16)	(1,545)	(1,568)
Cash flow used in investing activities	(1,545)	(1,568)
Financing activities		
ssuance of long-term debt (Note 6)	200	515
Repayment of long-term debt (Note 6)	(3)	(4)
Distribution paid to non-controlling interests	(5)	-
ssuance of short-term notes (Note 7)	3,332	914
Repayment of short-term notes (Note 7)	(3,364)	(882)
Cash flow provided by financing activities	160	543
Net increase in cash and cash equivalents	48	149
Cash and cash equivalents, beginning of year	562	413
Cash and cash equivalents, end of year	610	562

# **CONSOLIDATED BALANCE SHEETS**

As at December 31	004.4	0040
(millions of dollars)	2014	2013
Assets		
Current assets		
Cash and cash equivalents	610	562
Receivables from related parties (Note 18)	482	402
Other accounts receivable and prepaid expenses	136	148
Nuclear fixed asset removal and nuclear waste management funds (Notes 8 and 16)	25	25
Fuel inventory (Note 16)	334	390
Materials and supplies (Note 16)	94	95
Regulatory assets (Note 5)	167	306
ncome taxes recoverable	-	51
Deferred income taxes (Note 9)	8	-
	1,856	1,979
Property, plant and equipment (Notes 4, 15, and 16)	25,859	24,441
Less: accumulated depreciation	8,266	7,703
	17,593	16,738
ntangible accets (Notes 4 and 16)	432	402
Intangible assets (Notes 4 and 16)  Less: accumulated amortization	452 356	343
Less. accumulated amortization	76	59
Other assets		
Nuclear fixed asset removal and nuclear waste management		
funds (Notes 8 and 16)	14,354	13,471
Long-term materials and supplies (Note 16)	338	330
Regulatory assets (Note 5)	7,024	5,094
nvestments subject to significant influence (Note 19)	348	359
Other long-term assets	64	61
	22,128	19,315
	41,653	38,091

# **CONSOLIDATED BALANCE SHEETS**

As at December 31	2014	2042
(millions of dollars)	2014	2013
Liabilities		
Current liabilities		
Accounts payable and accrued charges (Note 18)	1,151	1,026
Short-term debt (Note 7)	-	32
Deferred revenue due within one year	12	12
Deferred income taxes (Note 9)	-	14
Long-term debt due within one year (Note 6)	503	5
Income taxes payable	24	-
Regulatory liabilities (Note 5)	5	16
	1,695	1,105
Long-term debt (Note 6)	5,227	5,620
Other liabilities		
	17,028	16.057
Fixed asset removal and nuclear waste management	17,028	16,257
liabilities (Notes 8 and 16) Pension liabilities (Note 11)	2 570	0.744
Other post-employment benefit liabilities (Note 11)	3,570 3,050	2,741 2,628
Long-term accounts payable and accrued charges	529	653
Deferred revenue	212	180
Deferred income taxes (Note 9)	836	565
Regulatory liabilities (Note 5)	39	8
regulatory habilities (Note 5)	25,264	23,032
	=5,=0 :	==,===
Equity		
Common shares (Note 14) 1	5,126	5,126
Retained earnings	4,696	3,892
Accumulated other comprehensive loss (Note 10)	(496)	(684)
Equity attributable to the Shareholder	9,326	8,334
Equity attributable to non-controlling interests (Note 22)	141	
Total equity	9,467	8,334
• •	·	,
	41,653	38,091

<sup>&</sup>lt;sup>1</sup> 256,300,010 common shares outstanding at a stated value of \$5,126 million as at December 31, 2014 and 2013.

Commitments and Contingencies (Notes 6, 9, 11, 12, and 15)

See accompanying notes to the consolidated financial statements

On behalf of the Board of Directors:

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**Bernard Lord** Chairman

M. George Lewis Director

# **CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDER'S EQUITY**

Years Ended December 31		
(millions of dollars)	2014	2013
Common shares (Note 14)	5,126	5,126
Detained cornings		
Retained earnings	2 202	0.757
Balance at beginning of year	3,892	3,757
Net income attributable to the Shareholder	804	135
Balance, end of year	4,696	3,892
Accumulated ather comprehensive less not of income toyon		
Accumulated other comprehensive loss, net of income taxes	(004)	(070)
Balance at beginning of year	(684)	(979)
Other comprehensive income	188	295
Balance, end of year	(496)	(684)
Equity attributable to the Shareholder	9,326	8,334
Equity attributable to non-controlling interests (Note 22)		
Balance at beginning of year	-	-
Equity contribution from non-controlling interests	141	-
Distribution to non-controlling interests	(7)	_
Net income attributable to non-controlling interests	7	_
Balance, end of year	141	-
Total equity	9,467	8,334

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the years ended December 31, 2014 and 2013

#### 1. DESCRIPTION OF BUSINESS

Ontario Power Generation Inc. (OPG or the Company) was incorporated on December 1, 1998 pursuant to the *Business Corporations Act* (Ontario) and is wholly owned by the Province of Ontario (the Province and Shareholder). OPG is an Ontario-based electricity generation company whose principal business is the generation and sale of electricity in Ontario. OPG's mission is to be Ontario's low cost electricity generator through a focus on three corporate strategies: operational excellence, project excellence, and financial sustainability.

#### 2. BASIS OF PRESENTATION

These consolidated financial statements have been prepared and presented in accordance with United States generally accepted accounting principles (US GAAP) and the rules and regulations of the United States Securities and Exchange Commission for annual financial statements, as required by *Ontario Regulation 395/11*, as amended, a regulation under the *Financial Administration Act* (Ontario) effective January 1, 2012.

During the first quarter of 2014, OPG received exemptive relief from the Ontario Securities Commission (OSC) requirements of section 3.2 of National Instrument 52-107 *Acceptable Accounting Policies and Auditing Standards*. The exemption allows OPG to file consolidated financial statements based on US GAAP without becoming a Securities and Exchange Commission registrant, or issuing public debt. The exemption will terminate on the earliest of the following:

- January 1, 2019
- The financial year that commences after OPG ceases to have activities subject to rate regulation
- The effective date prescribed by the International Accounting Standards Board for the mandatory application of a standard within International Financial Reporting Standards specific to entities with rate-regulated activities.

All dollar amounts are presented in Canadian dollars, except in tabular format where noted. Certain of the 2013 comparative amounts have been reclassified from financial statements previously presented to conform to the 2014 consolidated financial statement presentation.

#### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

# Consolidation

The consolidated financial statements of the Company include the accounts of OPG and its majority-owned subsidiaries, and a variable interest entity (VIE) where OPG is the primary beneficiary. All significant intercompany balances and intercompany transactions have been eliminated on consolidation.

Where OPG does not control an investment, but has significant influence over operating and financing policies of the investee, the investment is accounted for under the equity method. OPG co-owns the Portlands Energy Centre (PEC) gas-fired combined cycle generating station with TransCanada Energy Ltd. and co-owns the Brighton Beach gas-fired combined cycle generating station with ATCO Power Canada Ltd. OPG accounts for its 50 percent ownership interest in each of these jointly controlled entities under the equity method.

#### **Variable Interest Entities**

OPG performs ongoing analysis to assess whether it holds any variable interest entities (VIEs). VIEs of which OPG is deemed to be the primary beneficiary are consolidated. The primary beneficiary of a VIE has both the power to direct the activities of the entity that most significantly impact its economic performance and the obligation to absorb losses of the entity that could potentially be significant to the Company. In circumstances where OPG is not deemed to be the primary beneficiary, the VIE is not recorded in OPG's consolidated financial statements.

In 2002, OPG and other Canadian nuclear waste producers established the Nuclear Waste Management Organization (NWMO) in accordance with the *Nuclear Fuel Waste Act* (NFWA). The primary long-term mandate of the NWMO is to implement an approach to address the long-term management of used nuclear fuel. In addition to the above mandate, the NWMO provides project management services for OPG's Deep Geologic Repository project for Low and Intermediate Level Waste (L&ILW) and other nuclear lifecycle liability management services. OPG has the majority of voting rights at the Board of Directors' and members' level. In addition, the NFWA requires the nuclear fuel waste owners to establish and make payments into trust funds for the purpose of funding the implementation of the long-term management plan. OPG currently provides approximately 90 percent of NWMO's funding, primarily towards the Adaptive Phased Management plan for the long-term management of nuclear used fuel. As a result, OPG is expected to absorb a majority of the NWMO's expected losses through future funding in the event of any shortfall. Therefore, OPG holds a variable interest in the NWMO, of which it is the primary beneficiary. Accordingly, the applicable amounts in the accounts of the NWMO, after elimination of all significant intercompany transactions, are consolidated.

## **Use of Management Estimates**

The preparation of financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting periods. Management evaluates the Company's estimates on an ongoing basis based upon historical experience, current conditions, and assumptions believed to be reasonable at the time the assumption is made, with any adjustments recognized in the period incurred. Significant estimates are included in the determination of pension and other post-employment benefits (OPEB), asset retirement obligations (AROs), income taxes (including deferred income taxes), contingencies, regulatory assets and liabilities, valuation of derivative instruments, depreciation and amortization expenses, and inventories. Actual results may differ significantly from these estimates.

### **Cash and Cash Equivalents and Short-Term Investments**

Cash and cash equivalents include cash on deposit and money market securities with a maturity of less than 90 days on the date of purchase. All other money market securities with a maturity on the date of purchase that is greater than 90 days, but less than one year, are recorded as short-term investments. These securities are valued at the lower of cost and market.

#### **Inventories**

Inventories, consisting of fuel and materials and supplies, are measured at the lower of cost and market. Cost is determined as weighted average cost for fuel inventory and average cost for materials and supplies.

# Property, Plant and Equipment, Intangible Assets and Depreciation and Amortization

Property, plant and equipment and intangible assets are recorded at cost. Interest costs incurred during construction and development are capitalized as part of the cost of the asset based on the interest rates on OPG's long-term debt.

Depreciation and amortization rates for the various classes of assets are based on their estimated service lives. Any asset removal costs that have not been specifically provided for in current or previous periods are charged to

operations, maintenance and administration (OM&A) expenses. Repairs and maintenance costs are also expensed when incurred.

Property, plant and equipment are depreciated on a straight-line basis except for computers and transport and work equipment. These are mostly depreciated on a declining balance basis. Intangible assets, which include major application software, are amortized on a straight-line basis. As at December 31, 2014, the amortization periods of property, plant and equipment and intangible assets are as follows:

Nuclear generating stations and major components

Thermal generating stations and major components

Hydroelectric generating stations and major components

Administration and service facilities

Computers, and transport and work equipment assets – declining balance

Major application software

Service equipment

15 to 59 years

10 to 100 years

10 to 50 years

9% to 40% per year

5 years

5 to 10 years

### **Asset Impairment**

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The review is based on the presence of impairment indicators such as the future economic benefit of the assets and external market conditions. The net carrying amount of assets is considered impaired if it exceeds the sum of the estimated undiscounted cash flows expected to result from the asset's use and eventual disposition. In cases where the sum of the undiscounted expected future cash flows is less than the carrying amount, an impairment loss is recognized. This loss equals the amount by which the carrying amount exceeds the fair value. Fair value is determined using expected discounted cash flows when quoted market prices are not available. The impairment is recognized in income in the period in which it is identified.

The carrying value of investments accounted for under the equity method are reviewed annually for the presence of any indicators of impairment. If an impairment exists and is determined to be other-than-temporary, an impairment charge is recognized. This charge equals the amount by which the carrying value exceeds the investment's fair value.

# **Rate Regulated Accounting**

The *Ontario Energy Board Act, 1998* and *Ontario Regulation 53/05* provide that OPG receives regulated prices for electricity generated from the following facilities that are prescribed for rate regulation: the Sir Adam Beck 1, 2 and Pump generating station, DeCew Falls 1 and 2, and R.H. Saunders hydroelectric facilities, the Pickering and Darlington nuclear facilities, and 48 previously unregulated hydroelectric generating facilities that were prescribed for rate regulation beginning in 2014 pursuant to a November 2013 amendment to *Ontario Regulation 53/05*. OPG's regulated prices for these facilities are determined by the Ontario Energy Board (OEB).

The OEB is a self-funding Crown corporation. Its mandate and authority come from the *Ontario Energy Board Act*, 1998, the *Electricity Act*, 1998, and a number of other provincial statutes. The OEB is an independent, quasi-judicial tribunal that reports to the Legislature of the Province through the Minister of Energy. It regulates market participants in Ontario's natural gas and electricity industries. The OEB carries out its regulatory functions through public hearings and other more informal processes, such as consultations.

US GAAP recognizes that rate regulation can create economic benefits and obligations that are required by the regulator to be obtained from, or settled with, the ratepayers. When the Company assesses that there is sufficient assurance that incurred costs in respect of the regulated facilities will be recovered in the future, those costs are deferred and reported as a regulatory asset. When the Company is required to refund amounts to ratepayers in the

As at December 31, 2014, the end of station life for depreciation purposes for the Darlington, Pickering, and Bruce A and B nuclear generating stations ranges between 2019 and 2051. Major components are depreciated over the lesser of the station life and the life of the components.

future in respect of the regulated facilities, including amounts related to costs that have not been incurred and for which the OEB has provided recovery through regulated prices, the Company records a regulatory liability.

Certain of the regulatory assets and liabilities recognized by the Company relate to variance and deferral accounts authorized by the OEB, including those authorized pursuant to *Ontario Regulation 53/05*. These accounts typically capture differences between actual costs and revenues and the corresponding forecast amounts approved in the setting of the regulated prices, or record the impact of items not reflected in approved regulated prices. The measurement of these regulatory assets and liabilities is subject to certain estimates and assumptions, including assumptions made in the interpretation of *Ontario Regulation 53/05* and the OEB's decisions. The estimates and assumptions made in the interpretation of the regulation and the OEB's decisions are reviewed as part of the OEB's regulatory process.

Regulatory assets and liabilities for variance and deferral account balances approved by the OEB for inclusion in regulated prices are amortized based on approved recovery or repayment periods. Disallowed balances, including associated interest, are charged to operations in the period that the OEB's decision is issued. Interest is applied to regulatory balances as prescribed by the OEB, in order to recognize the cost of financing amounts to be recovered from, or repaid to, ratepayers.

Regulatory assets and liabilities for variance and deferral account balances approved by the OEB are classified as current if they are expected to be recovered from, or refunded to, ratepayers within 12 months of the end of the reporting period, based on recovery or repayment periods established by the OEB. All other regulatory asset and liability balances are classified as long-term on the consolidated balance sheets.

In addition to regulatory assets and liabilities for variance and deferral accounts, OPG recognizes regulatory assets and liabilities for unamortized amounts recorded in accumulated other comprehensive income (AOCI) in respect of pension and OPEB obligations, and deferred income taxes, in order to reflect the expected recovery or repayment of these amounts in respect of the regulated operations through future regulated prices charged to customers. There are measurement uncertainties related to these balances due to the assumptions made in the determination of pension and OPEB obligations and deferred income taxes attributed to the regulated facilities.

The regulatory asset for unamortized pension and OPEB amounts recorded in AOCI has reflected the OEB's use, since April 1, 2008, of the accrual basis of accounting for including pension and OPEB amounts in approved regulated prices. This is also the manner in which these costs are recognized in OPG's consolidated financial statements. Therefore, unamortized amounts in respect of OPG's pension and OPEB plans that are recognized in AOCI generally have not been reflected in the regulated prices until they have been reclassified from AOCI and recognized as amortization components of the benefit costs for these plans. The regulatory asset is reversed as underlying unamortized balances are amortized as components of the benefit cost.

In setting new regulated prices effective November 1, 2014, the OEB limited amounts for pension and OPEB allowed in the approved revenue requirements to OPG's cash expenditures on its pension and OPEB plans for the regulated business. It is the Company's position that this decision by the OEB does not constitute a change in the basis of OPG's recovery of pension and OPEB costs. This position is based on the OEB's establishment of the Pension & OPEB Cash Versus Accrual Differential Deferral Account which, effective November 1, 2014, records the difference between OPG's actual pension and OPEB costs for the regulated business determined on an accrual basis and the corresponding actual cash expenditures for these plans, the OEB's expectation in the November 2014 decision that a transition to a cash basis of recovery for OPG, if required, would be addressed in a future OPG rate proceeding, and the OEB's intention to hold a generic hearing on the regulatory treatment and recovery of pension and OPEB costs. Accordingly, the Company continues to believe that there is sufficient likelihood that unamortized pension and OPEB amounts that have not yet been reclassified from AOCI will be included in future regulated prices as they are recognized in benefit costs. Therefore, the Company has continued to recognize a regulatory asset for these unamortized amounts. If, in a future proceeding, the OEB decides that the recovery basis for pension and OPEB

amounts should be changed, OPG may be required to adjust the regulatory assets for unamortized pension and OPEB amounts recorded in AOCI and the Pension & OPEB Cash Versus Accrual Differential Deferral Account.

See Notes 5, 8, 9, and 11 to these consolidated financial statements for additional disclosures related to the OEB's decisions, regulatory assets and liabilities, and rate regulated accounting.

# **Fixed Asset Removal and Nuclear Waste Management Liabilities**

OPG recognizes AROs for fixed asset removal and nuclear waste management, discounted for the time value of money. OPG estimates both the amount and timing of future cash expenditures based on current plans for fixed asset removal and nuclear waste management. The liabilities are initially recorded at their estimated fair value, which is based on a discounted value of the expected costs to be paid.

On an ongoing basis, the liabilities for nuclear fixed asset removal and nuclear waste management (Nuclear Liabilities) are increased by the present value of the incremental cost portion for the nuclear waste generated each year, with the corresponding amounts charged to operating expenses. Variable expenses relating to low and intermediate level nuclear waste are charged to OM&A expenses. Variable expenses relating to the management and storage of nuclear used fuel are charged to fuel expense. The liabilities may also be adjusted due to any changes in the estimated amount or timing of the underlying future cash flows. Upon settlement of the liabilities, a gain or loss would be recorded.

Accretion arises because the nuclear liabilities are reported on a net present value basis. Accretion expense is the increase in the carrying amount of the liabilities due to the passage of time.

The asset retirement cost is capitalized by increasing the carrying value of the related fixed assets. The capitalized cost is depreciated over the remaining service life of the related fixed assets and is included in depreciation and amortization expenses.

#### **Nuclear Fixed Asset Removal and Nuclear Waste Management Funds**

Pursuant to the Ontario Nuclear Funds Agreement (ONFA) between OPG and the Province, OPG established a Used Fuel Segregated Fund (Used Fuel Fund) and a Decommissioning Segregated Fund (Decommissioning Fund) (together the Nuclear Funds). The Used Fuel Fund is intended to fund expenditures associated with the management of radioactive used nuclear fuel bundles, while the Decommissioning Fund was established to fund expenditures associated with nuclear fixed asset removal, long-term L&ILW management, and certain costs for used fuel storage incurred after the nuclear stations are shut down. OPG maintains the Nuclear Funds in third-party custodial accounts that are segregated from the rest of OPG's assets.

OPG's investments in the Nuclear Funds and the corresponding payable/receivable to/from the Province are classified as held-for-trading. The Nuclear Funds are measured at fair value based on the bid prices of the underlying equity and fixed income securities, and, in the case of the alternative investment portfolio, using appropriate valuation techniques as outlined in Note 13 to these consolidated financial statements, with realized and unrealized gains and losses recognized in OPG's consolidated statements of income.

#### **Revenue Recognition**

All of OPG's electricity generation is offered into the real-time energy spot market administered by the Independent Electricity System Operator (IESO). Revenue is recognized as electricity is generated and metered to the IESO.

Effective January 1, 2015, the Ontario Power Authority (OPA) merged with the IESO. The new entity continued under the name Independent Electricity System Operator (IESO). As such, the IESO is substituted as the counterparty of Energy Supply Agreements (ESA) or other agreements that were previously executed with the OPA.

# Revenue Recognition - Regulated Generation

Energy revenue generated from OPG's regulated facilities is based on regulated prices determined by the OEB that currently include a base regulated price and a rate rider for the recovery or repayment of approved variance and deferral account balances.

The base regulated prices in effect during 2014 and 2013 were determined by the OEB using a two-year forecast cost of service methodology based on revenue requirements, taking into account a forecast of production and operating costs for the regulated facilities and a return on rate base. Rate base is a regulatory construct that represents the average net level of investment in regulated fixed and intangible assets and an allowance for working capital. The revenues from the regulated hydroelectric facilities are also subject to the OEB-approved hydroelectric incentive mechanism. The mechanism provides a pricing incentive to OPG to shift hydroelectric production from lower market price periods to higher market price periods, reducing the overall costs to ratepayers.

The rate riders in effect during 2014 and 2013 were established by the OEB following its March 2013 decision approving a settlement agreement between OPG and intervenors on OPG's application to recover or repay balances in most of the OEB-authorized regulatory variance and deferral accounts as at December 31, 2012. The OEB-authorized variance and deferral accounts are discussed in Note 5 to these consolidated financial statements.

#### Revenue Recognition – Unregulated Generation and Other Revenue

The electricity generation from OPG's unregulated assets received the Ontario electricity spot market price, except where an ESA with the IESO or a cost recovery agreement is in place. As at December 31, 2014, virtually all of OPG's operating unregulated assets are subject to an ESA. Revenue generated by generating stations subject to a cost recovery agreement or an ESA is recognized in accordance with the terms of the agreement or contract.

OPG also sells into, and purchases from, interconnected markets of other provinces and the United States (US) northeast and midwest. All contracts that are not designated as hedges are recorded in the consolidated balance sheets at market value, with gains or losses recorded in the consolidated statements of income. Gains and losses on energy trading contracts (including those to be physically settled) are recorded on a net basis in the consolidated statements of income. Accordingly, power purchases of \$131 million were netted against revenue in 2014 (2013 – \$94 million).

OPG derives non-energy revenue under the terms of a lease arrangement and associated agreements with Bruce Power L.P. related to the Bruce nuclear generating stations. This includes lease revenue and revenue from heavy water sales and detritiation services. The benefit of OPG's net revenues from the lease of the Bruce stations and related agreements, including a portion of heavy water sales, are credited to ratepayers, as it reduces the regulated price of the generation of the nuclear facilities owned and operated by OPG. The minimum lease payments are recognized in revenue on a straight-line basis over the term of the lease.

In addition, non-energy revenue includes isotope sales, real estate rentals and other service revenues. Revenues from these activities are recognized as services are provided, or as products are delivered.

### **Derivatives**

All derivatives, including embedded derivatives that must be separately accounted for, generally are classified as held-for-trading and recorded at fair value in the consolidated balance sheets. Transaction costs are expensed as incurred for financial instruments classified or designated as held-for-trading.

Derivatives qualify for hedge accounting if they meet stringent documentation requirements and the derivative instrument that is designated as a hedge is expected to effectively hedge the identified risk throughout the life of the hedged item. At the inception of a hedging relationship, OPG documents the relationship between the hedging instrument and the hedged item, its risk management objective, and its strategy for undertaking the hedge. A documented assessment is made, both at the inception of a hedge and on an ongoing basis, of whether or not the

derivatives that are used in hedging transactions are highly effective in offsetting the changes attributable to the hedged risks in the fair values or cash flows of the hedged items.

All derivative contracts not designated as hedges are recorded on the consolidated balance sheets as derivative assets or liabilities at fair value with changes in fair value recorded in the revenue of the Services, Trading, and Other Non-Generation segment. Refer to Note 12 for a discussion of OPG's risks and the derivative instruments used to manage the risks.

#### **Fair Value Measurements**

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly arm's-length transaction between market participants at the measurement date. Fair value measurements are required to reflect the assumptions that market participants would use in pricing an asset or liability based on the best available information. These assumptions include the risks inherent in a particular valuation technique, such as a pricing model, and the risks inherent in the inputs to the model. OPG uses a fair value hierarchy, grouping assets and liabilities into three levels based on the relative objectivity of the inputs used to measure fair value, with Level 1 representing the most objective. Refer to Note 13 for a discussion of fair value measurements and the fair value hierarchy.

#### **Research and Development**

Research and development costs are expensed in the year incurred. Research and development costs incurred to discharge long-term obligations, such as the nuclear waste management liabilities, for which specific provisions have already been made, are charged to the related liability.

#### Leases

Leases are evaluated and classified as either operating or capital leases for financial reporting purposes. Capital leases, which transfer substantially all of the risks and benefits incidental to ownership of the leased item, are capitalized at the inception of the lease at the fair value of the leased property or, if lower, at the present value of the minimum lease payments. Capital leases are depreciated over the shorter of the estimated useful life of the asset or the lease term.

Leases where the lessor retains substantially all the risks and benefits incidental to ownership of the asset are classified as operating leases. Operating lease payments, other than contingent rentals, are recognized as an expense in the consolidated statements of income on a straight-line basis over the lease term. Where the amount of rent expense recognized is different from the actual operating lease payment, other than contingent rentals, the difference is deferred and included as assets or liabilities on the consolidated balance sheets.

### **Pension and Other Post-Employment Benefits**

OPG's post-employment benefit programs consist of a contributory defined benefit registered pension plan, a defined benefit supplementary pension plan, and other post-retirement benefits (OPRB) including group life insurance and health care benefits, and long-term disability (LTD) benefits. Post-employment benefit programs are also provided by the NWMO, which is consolidated into OPG's financial results. Information on the Company's post-employment benefit programs is presented on a consolidated basis.

OPG accrues its obligations under pension and OPEB plans in accordance with US GAAP. The obligations for pension and OPRB are determined using the projected benefit method pro-rated on service. The obligation for LTD benefits is determined using the projected benefit method on a terminal basis. Pension and OPEB obligations are impacted by factors including interest rates, adjustments arising from plan amendments, changes in demographic assumptions, experience gains or losses, salary levels, inflation, and cost escalation. Pension and OPEB costs and obligations are determined annually by independent actuaries using management's best estimate assumptions.

Assumptions are significant inputs to actuarial models that measure pension and OPEB obligations and related effects on operations. Two critical assumptions - discount rate and inflation - are important elements in the determination of benefit costs and obligations. In addition, the expected return on plan assets is a critical assumption in the determination of registered pension plan costs. These assumptions, as well as other assumptions involving demographic factors such as retirement age, mortality, and employee turnover, are evaluated periodically by management in consultation with independent actuaries. During the evaluation process, the assumptions are updated to reflect past experience and expectations for the future. Actual results in any given year will often differ from actuarial assumptions because of economic and other factors. In accordance with US GAAP, for pension and OPRB, the impact of these updates and differences on the respective benefit obligations is accumulated and amortized over future periods; for LTD benefits, the impact of these updates and differences is immediately recognized as OPEB costs in the period incurred.

The discount rates, which are representative of AA corporate bond yields, are used to calculate the present value of the expected future cash flows on the measurement date to determine the projected benefit obligations for the Company's employee benefit plans. A lower discount rate increases the benefit obligations and increases benefit costs. The expected rate of return on plan assets is based on the pension fund's asset allocation, as well as the expected return considering long-term historical risks and returns associated with each asset class within the plan portfolio. A lower expected rate of return on plan assets increases pension cost.

Pension fund assets include equity securities, corporate and government debt securities, pooled funds, real estate, infrastructure, and other investments. These assets are managed by professional investment managers. The pension fund does not invest in equity or debt securities issued by OPG. Pension fund assets are valued using market-related values for purposes of determining the amortization of actuarial gains or losses and the expected return on plan assets. The market-related value recognizes gains and losses on equity assets relative to a six percent assumed real return over a five-year period.

Pension and OPEB costs include current service costs, interest costs on the obligations, the expected return on pension plan assets, adjustments for plan amendments and adjustments for actuarial gains or losses, which result from changes in assumptions and experience gains and losses. Past service costs or credits arising from pension and OPRB plan amendments are amortized on a straight-line basis over the expected average remaining service life to full eligibility of the employees covered by the plan. Past service costs or credits arising from amendments to LTD benefits are immediately recognized as OPEB costs in the period incurred. Due to the long-term nature of pension and OPRB liabilities, the excess of the net cumulative unamortized gain or loss, over 10 percent of the greater of the benefit obligation and the market-related value of the plan assets (corridor), is amortized over the expected average remaining service life of the employees since OPG expects to realize the associated economic benefit over that period. Actuarial gains or losses for LTD benefits are immediately recognized as OPEB costs in the period incurred.

OPG recognizes on its consolidated balance sheets the funded status of its defined benefit plans. The funded status is measured as the difference between the fair value of plan assets and the benefit obligation on a plan-by-plan basis.

Actuarial gains or losses and past service costs or credits that arise during the year and are not recognized immediately as components of benefit costs are recognized as increases or decreases in other comprehensive income (OCI), net of income taxes. These unamortized amounts in AOCI are subsequently reclassified and recognized as components of pension and OPRB costs as discussed above.

OPG records an offsetting regulatory asset or liability for the portion of the adjustments to AOCI that is attributable to regulated operations in order to reflect the expected recovery or refund of these amounts through future regulated prices charged to customers. For the recoverable or refundable portion attributable to regulated operations, OPG records a corresponding change in this regulatory asset or liability for the amount of the increases or decreases in OCI and for the reclassification of AOCI amounts into benefit costs during the period.

When the recognition of the transfer of employees and employee-related benefits gives rise to both a curtailment and a settlement, the curtailment is accounted for prior to the settlement. A curtailment is the loss by employees of the right to earn future benefits under the plan. A settlement is the discharge of a plan's liability.

#### **Income Taxes and Investment Tax Credits**

OPG is exempt from income tax under the *Income Tax Act* (Canada). However, under the *Electricity Act*, 1998, OPG is required to make payments in lieu of corporate income taxes to the Ontario Electricity Financial Corporation (OEFC). These payments are calculated in accordance with the *Income Tax Act* (Canada) and the *Taxation Act*, 2007 (Ontario), as modified by the *Electricity Act*, 1998 and related regulations. This results in OPG effectively paying taxes similar to what would be imposed under the federal and Ontario tax acts.

OPG follows the liability method of accounting for income taxes. Under the liability method, deferred income tax assets and liabilities are determined based on differences between the accounting and tax bases of assets and liabilities. Deferred amounts are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The effect of a change in tax rates on deferred income tax assets and liabilities is included in income in the period the change is enacted.

If management determines that it is more likely than not that some, or all, of a deferred income tax asset will not be realized, a valuation allowance is recorded to report the balance at the amount expected to be realized.

OPG recognizes deferred income taxes associated with its regulated operations and records an offsetting regulatory asset or liability for the deferred income taxes that are expected to be recovered or refunded through future regulated prices charged to customers.

Tax benefits associated with income tax positions taken, or expected to be taken, in a tax return and investment tax credits are recorded only when the more likely than not recognition threshold is satisfied. Tax benefits and investment tax credits recognized are measured at the largest amount of benefit that is greater than 50 percent likely of being realized upon settlement.

Investment tax credits are recorded as a reduction to income tax expense. OPG classifies interest and penalties associated with unrecognized tax benefits as income tax expense.

## **Changes in Accounting Policies and Estimates**

Impacts of Regulation of the Newly Regulated Hydroelectric Facilities, and the OEB's 2014 Decision and Order

The OEB's decision on OPG's September 2013 application for new regulated prices for OPG's nuclear and existing regulated hydroelectric generation was issued in November 2014, following a public hearing process. This decision was followed by the OEB's order in December 2014 establishing new regulated prices for these facilities effective November 1, 2014.

The OEB's decision and order also established a regulated price for the generation from the 48 newly regulated hydroelectric facilities. The regulated prices for these facilities are also effective November 1, 2014.

As a result of the rate regulation of these 48 previously unregulated hydroelectric facilities in 2014, OPG recognized regulatory assets related to deferred income taxes, and unamortized amounts recorded in AOCI in respect of pension and OPEB obligations. The increase in the regulatory asset related to deferred income taxes resulted in a net extraordinary gain of \$243 million in the consolidated statement of income for 2014. The increase in regulatory assets related to pension and OPEB obligations resulted in an increase of \$184 million in OCI, net of \$61 million in income taxes.

The OEB's decision and order approved a \$1,365 million addition to regulated rate base due to the completion and in-service addition of the Niagara Tunnel project in March 2013. The approved rate base amount is lower than the

cost of the asset. Under Accounting Standards Codification (ASC) Topic 980 *Regulated Operations*, disallowances by a regulator on recently completed assets are generally required to be written off during the period when the regulator's decision is issued. As such, the OEB's cost disallowance on the Niagara Tunnel project resulted in a write-off of costs of \$77 million in 2014, including \$1 million of expected project close out costs. In December 2014, OPG filed a motion asking the OEB to review and vary certain parts of its decision, including the disallowance of the Niagara Tunnel expenditures.

#### **Investment Companies**

For reporting periods beginning January 1, 2014, OPG adopted the updates to ASC Topic 946, *Investment Companies*. Based on the amended scope of the standard, OPG concluded that OPG Ventures Inc., the Decommissioning Fund, the Used Fuel Fund and the Ontario NFWA Trust should be treated as investment entities for accounting purposes. As the investments of these entities are already recorded at fair value, there were no measurement differences upon adoption of this update. Additional disclosures required under ASC Topic 946 are provided in Note 8.

#### Pension and Other Post-Employment Benefits

The weighted average discount rate used to determine the projected pension benefit obligations and the projected benefit obligations for OPEB as at December 31, 2014 was 4.0 percent. This represents a decrease, compared to the 4.9 percent discount rate that was used to determine the obligations as at December 31, 2013.

The deficit for the registered pension plans increased from \$2,461 million as at December 31, 2013 to \$3,262 million as at December 31, 2014 largely as a result of the decrease in the discount rates at 2014 year end, partially offset by the favourable return on pension fund assets in 2014.

The projected benefit obligations for OPEB increased from \$2,719 million at December 31, 2013 to \$3,143 million as at December 31, 2014. This increase in the obligation was largely due to the decrease in the discount rates.

As at December 31, 2014, the unamortized net actuarial loss and unamortized past service costs for the pension and OPEB plans totalled \$4,869 million (2013 – \$3,899 million). Details of the unamortized net actuarial loss and unamortized past service costs at December 31, 2014 and 2013 are as follows:

	Regis Pension		Suppler Pensio	•	Other Emplo Bene	yment
(millions of dollars)	2014	2013	2014	2013	2014	2013
Net actuarial gain not yet subject to amortization due to use of market-related values	(878)	(886)	-	-	-	-
Net actuarial loss not subject to amortization due to use of the corridor	1,568	1,339	32	29	288	245
Net actuarial loss subject to amortization	3,443	3,043	65	50	350	78
Unamortized net actuarial loss	4,133	3,496	97	79	638	323
Unamortized past service costs	_	-	_	_	1	1

A change in assumptions, holding all other assumptions constant, would increase (decrease) 2014 costs as follows:

(millions of dollars)	Registered Pension Plans <sup>1</sup>	Supplementary Pension Plans <sup>1</sup>	Other Post- Employment Benefits <sup>1</sup>
Expected long-term rate of return			
0.25% increase	(25)	n/a	n/a
0.25% decrease	25	n/a	n/a
Discount rate			
0.25% increase	(51)	(1)	(10)
0.25% decrease	`54 <sup>′</sup>	Ì	`12 <sup>′</sup>
Inflation			
0.25% increase	90	1	1
0.25% decrease	(85)	(1)	(1)
Salary increases			
0.25% increase	20	3	1
0.25% decrease	(20)	(3)	(1)
Health care cost trend rate			
1% increase	n/a	n/a	75
1% decrease	n/a	n/a	(37)

n/a - change in assumption not applicable.

### Recent Accounting Pronouncements

#### Revenue from Contracts with Customers

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2014-09, Revenue from Contracts with Customers (ASU 2014-09), which supersedes nearly all existing revenue recognition guidance, including industry-specific guidance under US GAAP. The core principle of ASU 2014-09 is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration to which an entity expects to be entitled for those goods or services. ASU 2014-09 defines a five step process to achieve this core principle and, in doing so, more judgement and estimates may be required, compared to the requirements under existing US GAAP. The standard will be effective for OPG's 2017 fiscal year, including interim periods in 2017. In applying the standard, entities would have the option between two retrospective transition methods: (i) a full retrospective approach reflecting the application of the standard in each prior reporting period with the option to elect certain practical expedients, or (ii) a modified retrospective approach with the cumulative effect of initially adopting ASU 2014-09 recognized at the date of adoption and additional disclosures. OPG is currently assessing the impact of this new standard on its consolidated financial statements and has not yet determined the method by which it will adopt the standard in 2017.

# Consolidation

In February 2015, the FASB issued Accounting Standards Update 2015-02, Consolidation (Topic 810): Amendments to the Consolidation Analysis (ASU 2015-02), which incorporates targeted changes to the consolidation guidance for limited partnerships, limited liability corporations and securitization structures. Specifically for OPG, limited partnerships will now be VIEs unless the limited partners hold substantive "kick-out" or participating rights. It is expected that more limited partnerships will therefore be considered VIEs and where OPG is the primary beneficiary: the limited partnerships that are not currently consolidated would be consolidated. The amendments will be effective for OPG's 2016 fiscal year, including interim periods in 2016, OPG is currently assessing the impact of the standard on its consolidated financial statements and has not yet determined the impact of the standard in 2016.

Excludes the impact of regulatory variance and deferral accounts.

# 4. PROPERTY, PLANT AND EQUIPMENT, INTANGIBLE ASSETS AND DEPRECIATION AND AMORTIZATION

Depreciation and amortization expenses for the years ended December 31 consist of the following:

(millions of dollars)	2014	2013
Depreciation	451	513
Amortization of intangible assets	13	14
Amortization of regulatory assets and liabilities (Note 5)	290	436
	754	963

Property, plant and equipment as at December 31 consist of the following:

(millions of dollars)	2014	<b>2013</b> (adjusted - Note 16)
Nuclear generating stations	9,313	9,116
Regulated hydroelectric generating stations	9,287	9,296
Contracted generation portfolio generating stations	3,600	2,475
Other property, plant and equipment	1,833	414
Construction in progress	1,826	3,140
	25,859	24,441
Less: accumulated depreciation		
Generating stations	6,771	7,478
Other property, plant and equipment	1,495	225
	8,266	7,703
	17,593	16,738

Construction in progress as at December 31 consists of the following:

(millions of dollars)	2014	2013
	4 000	0.50
Darlington Refurbishment	1,309	658
Atikokan Biomass Conversion	6	144
Lower Mattagami River Project	-	1,982
Other	511	356
	1,826	3,140

Interest capitalized to construction and development in progress at an average rate of five percent during 2014 (2013 - five percent) was \$135 million (2013 - \$127 million).

Intangible assets as at December 31 consist of the following:

(millions of dollars)	2014	<b>2013</b> (adjusted - Note 16)
Nuclear generating stations	116	114
Regulated hydroelectric generating stations	4	4
Contracted generation portfolio generating stations	5	5
Computer software and other intangible assets	261	257
Development in progress	46	22
	432	402
Less: accumulated amortization		
Generating stations	109	103
Computer software and other intangible assets	247	240
	356	343
	76	59

The estimated aggregate amortization expense for intangible assets currently recognized for each of the five succeeding years is as follows:

(millions of dollars)	2015	2016	2017	2018	2019
Amortization expense	11	8	4	2	-

# 5. REGULATORY ASSETS AND LIABILITIES

In March 2013, the OEB approved a settlement agreement between OPG and intervenors on all aspects of OPG's application requesting approval to recover or repay balances in most of the authorized variance and deferral accounts as at December 31, 2012 (the Settlement Agreement). In approving the Settlement Agreement, the OEB authorized the disposition of approved balances over periods ranging from two to 12 years beginning on January 1, 2013. In April 2013, the OEB issued an order authorizing OPG to collect \$633 million over the period from January 1, 2013 to December 31, 2014 through rate riders effective during that period. During 2014 and 2013, the Company amortized the regulatory assets and liabilities for the variance and deferral balances approved for disposition based on recovery or repayment periods authorized by the OEB's approval of the Settlement Agreement. Any shortfall or over-recovery of approved balances due to differences between actual and forecast production was recorded in the authorized Nuclear Deferral and Variance Over/Under Recovery Variance Account and Hydroelectric Deferral and Variance Over/Under Recovery Variance Account to be collected from, or refunded to, ratepayers in the future.

The OEB's March 2013 decision and April 2013 order also authorized the continuation of previously existing variance and deferral accounts, including those authorized pursuant to Ontario Regulation 53/05. During the period from January 1, 2013 to October 31, 2014, the Company recognized regulatory assets and liabilities for additions recorded in these variance and deferral accounts as authorized by the OEB, relative to the forecast amounts reflected in the cost of service regulated prices then in effect, where applicable.

In November 2014 and December 2014, respectively, the OEB issued its decision and order establishing new regulated prices for OPG's regulated generation effective November 1, 2014. The OEB's decision and order approved the recovery or repayment of the balances in four variance accounts as at December 31, 2013 totalling \$189 million, without adjustments. The recovery or repayment was approved for the following accounts: the Hydroelectric Incentive Mechanism Variance Account, the Hydroelectric Surplus Baseload Generation Variance Account, the nuclear capital and hydroelectric portions of the Capacity Refurbishment Variance Account, and the

Nuclear Development Variance Account. The OEB authorized the recovery or repayment of these balances over a 12-month period, through rate riders effective from January 1, 2015 to December 31, 2015.

In its decision and order, the OEB also approved the continuation of previously authorized variance and deferral accounts and, effective November 1, 2014, extended all applicable accounts to the 48 newly regulated hydroelectric facilities. During the period from November 1, 2014 to December 31, 2014, the Company recognized regulatory assets and liabilities for additions recorded in these variance and deferral accounts as authorized by the OEB. During this period, the Company also recognized regulatory assets for additions to the Pension & OPEB Cash Versus Accrual Differential Deferral Account and the Pension & OPEB Cash Payment Variance Account, which were established by the OEB effective November 1, 2014.

During 2014 and 2013, OPG recorded interest on the balances of the variance and deferral accounts as authorized by the OEB. For accounts subject to interest during this period, interest was recorded using the OEB-prescribed interest rate of 1.47 percent per annum.

In December 2014, OPG filed an application with the OEB requesting approval of the December 31, 2014 balances in most of the authorized regulatory variance and deferral accounts. The application requests recovery of these balances through new rate riders beginning on July 1, 2015. The decision on OPG's application will be made by the OEB following a public hearing process, which commenced in the first quarter of 2015.

The regulatory assets and liabilities recorded as at December 31 are as follows:

(millions of dollars)	2014	2013
Pagulatory appata		
Regulatory assets		
Variance and deferral accounts authorized by the OEB  Pension and OPEB Cost Variance Account	939	007
		667
Bruce Lease Net Revenues Variance Account	315	353
Nuclear Liability Deferral Account	286	254
Capacity Refurbishment Variance Account	190	100
Hydroelectric Surplus Baseload Generation Variance Account	67	19
Nuclear Development Variance Account	59	57
Other variance and deferral accounts	111	233
	1,967	1,683
Pension and OPEB Regulatory Asset (Note 11)	4,363	3,158
Deferred Income Taxes (Note 9)	861	559
Total control of the	7.404	5 400
Total regulatory assets	7,191	5,400
Less: current portion	167	306
Non-current regulatory assets	7,024	5,094
	,-	-,
Regulatory liabilities		
Variance and deferral accounts authorized by the OEB		
Other variance and deferral accounts	44	24
Total regulatory liabilities	44	24
Less: current portion	5	16
		-
Non-current regulatory liabilities	39	8

The changes in the regulatory assets and liabilities during 2014 and 2013 are as follows:

(millions of dollars)	Pension and OPEB Cost Variance	Bruce Lease Net Revenues Variance	Nuclear Liability Deferral	Capacity Refurbish -ment Variance	Hydro- electric Surplus Baseload Generation Variance	Nuclear Develop- ment Variance	Other Variance and Deferral (net)	Pension and OPEB Regula- tory Asset	Deferred Income Taxes
Net regulatory assets January 1, 2013	324	311	208	14	4	30	384	4,494	668
Increase (decrease)	402	110	123	93	15	26	53	(1,336)	(109)
Interest	1	(5)	(2)	-	-	1	3	-	-
Amortization	(60)	(63)	(75)	(7)	-	-	(231)	-	-
Net regulatory assets December 31, 2013	667	353	254	100	19	57	209	3,158	559
Increase	312	4	82	92	48	1	9	1,205	302
Interest	-	-	-	3	-	1	2		-
Amortization	(40)	(42)	(50)	(5)	-	-	(153)	-	-
Net regulatory assets December 31, 2014	939	315	286	190	67	59	67	4,363	861

#### **Pension and OPEB Cost Variance Account**

As authorized by the OEB, for the period from March 1, 2011 to October 31, 2014, the Pension and OPEB Cost Variance Account recorded the difference between actual pension and OPEB costs for the regulated business determined on an accrual basis and related tax impacts, and the corresponding amounts reflected in the regulated prices then in effect. In its November 2014 decision, the OEB determined that the pension and OPEB amounts for the regulated business reflected in the new regulated prices effective November 1, 2014 would be limited to OPG's estimated minimum contributions to its registered pension plan and a forecast of OPG's expenditures on the OPEB and supplementary pension plans. As such, the OEB ordered the Pension and OPEB Cost Variance Account to record only amortization beginning on November 1, 2014.

In its March 2013 decision and April 2013 order, the OEB authorized the recovery of 2/12 of the balance in the Pension and OPEB Cost Variance Account as at December 31, 2012 over a 24-month period ending December 31, 2014. The OEB also authorized the recovery of 10/12 of the account balance as at December 31, 2012 over a 144-month period ending December 31, 2024. Accordingly, effective January 1, 2013, OPG recorded amortization of the regulatory asset for the account on a straight-line basis over these periods.

### **Bruce Lease Net Revenues Variance Account**

As per Ontario Regulation 53/05, the OEB is required to include the difference between OPG's revenues and costs associated with its ownership of the two nuclear stations on lease to Bruce Power L.P. in the determination of the regulated prices for production from OPG's regulated nuclear facilities. The OEB established a variance account that captures differences between OPG's revenues and costs related to the nuclear generating station on lease to Bruce Power L.P. and the corresponding forecasts included in approved nuclear regulated prices.

In its March 2013 decision and April 2013 order, the OEB ordered the portion of the balance in the Bruce Lease Net Revenues Variance Account as at December 31, 2012 related to the impact of the derivative liability embedded in the Bruce Power lease agreement (Bruce Lease) to be recovered on the basis of OPG's expected rent rebate payments to Bruce Power L.P. and associated income tax impacts. Effective January 1, 2013, OPG recorded amortization of the regulatory asset for this portion of the account on that basis.

The non-derivative portion of the balance as at December 31, 2012 was authorized by the OEB to be recovered over a 48-month period ending December 31, 2016. Effective January 1, 2013, OPG recorded amortization of the regulatory asset for the non-derivative portion of the account on a straight-line basis over this period.

#### **Nuclear Liability Deferral Account**

As per Ontario Regulation 53/05, the OEB has authorized the Nuclear Liability Deferral Account (NLDA) in connection with changes to OPG's liabilities for nuclear used fuel management and nuclear decommissioning and L&ILW management associated with the nuclear facilities owned and operated by OPG, which are comprised of the Pickering and Darlington nuclear generating stations. The deferral account records the revenue requirement impact associated with the changes in these liabilities arising from an approved reference plan, in accordance with the terms of the ONFA. During 2012, the Province approved the 2012 ONFA Reference Plan covering the period from 2012 to 2016, with an effective date of January 1, 2012. As the regulated prices in effect prior to November 1, 2014 did not reflect the impact of the 2012 ONFA Reference Plan, OPG recorded an increase to the regulatory asset for the NLDA during the period from January 1, 2012 to October 31, 2014.

Components of the increase in the regulatory asset for the NLDA relating to the above increase in liabilities, with reductions to corresponding expenses for the years ended December 31, 2014 and 2013 are summarized as follows:

(millions of dollars)	2014	2013
Fuel expense	23	26
Low and intermediate level waste management variable expenses <sup>1</sup>	1	1
	43	52
Depreciation expense Return on rate base <sup>2</sup>	-	2
Interest <sup>3</sup>	-	(2)
Income taxes	15	42
	82	121

Amount was recorded as a reduction to OM&A expenses.

In its March 2013 decision and April 2013 order, the OEB approved the recovery of a portion of the balance in the NLDA as at December 31, 2012 over a 24-month period ending December 31, 2014. Accordingly, effective January 1, 2013, OPG recorded amortization of the regulatory asset for this account on a straight-line basis over this period. As ordered by the OEB per the terms of the Settlement Agreement, effective January 1, 2013, no interest is recorded on the balance of this account.

#### **Capacity Refurbishment Variance Account**

Pursuant to Ontario Regulation 53/05, the OEB has authorized the Capacity Refurbishment Variance Account (CRVA). The account captures variances from forecasts reflected in the regulated prices for capital and non-capital costs incurred to increase the output of, refurbish, or add operating capacity to the regulated facilities. The balance in the account as at December 31, 2014 includes variances related to the Niagara Tunnel project, the refurbishment of the Darlington nuclear generating station, life extension initiatives at the Pickering nuclear generation station, and other projects.

OPG determines amounts to be recovered from, or refunded to, customers with respect to variances in capital costs as the difference from forecast depreciation expense and cost of capital associated with the in-service capital reflected in the regulated prices and associated income tax effects. The cost of capital amount in the account is calculated using the weighted average cost of capital, including a return on equity, as approved by the OEB in determining the regulated prices. In accordance with US GAAP, in recognizing a regulatory asset for the CRVA,

Amount was recorded as a reduction to accretion on fixed asset removal and nuclear waste management liabilities.

Amount in 2013 represents the write-off of interest recorded on the balance of the account as of December 31, 2012, pursuant to the OEB-approved Settlement Agreement.

OPG limits the portion of cost of capital additions recognized as a regulatory asset to the amount calculated using the average rate of capitalized interest applied to construction and development in progress.

As the regulated prices in effect prior to November 1, 2014 did not reflect the impact of the Niagara Tunnel declared in-service in March 2013, the CRVA additions for the period from January 1, 2014 to October 31, 2014 included \$116 million (year ended December 31, 2013 – \$114 million) to be recovered from ratepayers related to the Niagara Tunnel. This amount included \$83 million (2013 - \$83 million) for the capital cost component determined using the weighted average cost of capital. OPG recognized an increase of \$89 million in the regulatory asset for the CRVA related to the Niagara Tunnel in 2014 (2013 – \$88 million), of which \$56 million (2013 – \$56 million) represented the capital cost component determined using the average rate of five percent for capitalized interest applied to construction and development in progress for the year ended December 31, 2014 (2013 - five percent).

In its March 2013 decision and April 2013 order, the OEB approved the recovery of the nuclear non-capital cost portion of the account balance as at December 31, 2012 over a 24-month period ending December 31, 2014. Accordingly, effective January 1, 2013, OPG recorded amortization of the regulatory asset for this portion of the account on a straight-line basis over this period. In setting new regulated prices effective November 1, 2014, the OEB approved the recovery of the December 31, 2013 nuclear capital and hydroelectric portions of the account balance, totaling \$119 million, over a 12-month period beginning on January 1, 2015.

#### **Hydroelectric Surplus Baseload Generation Variance Account**

The Hydroelectric Surplus Baseload Generation Variance Account records the impact of foregone production at OPG's regulated hydroelectric facilities due to surplus baseload generation conditions. The variance account was authorized by the OEB, effective March 1, 2011 for the previously regulated hydroelectric facilities. The OEB extended this account to the applicable newly regulated hydroelectric facilities effective November 1, 2014.

In its November 2014 decision and December 2014 order, the OEB approved the recovery of the account balance as at December 31, 2013 over a 12-month period beginning on January 1, 2015.

# **Nuclear Development Variance Account**

The Nuclear Development Variance Account was established pursuant to Ontario Regulation 53/05 and records differences between actual non-capital costs incurred by OPG in the course of planning and preparing for the development of proposed new nuclear facilities, and the forecast amount of these costs included in the nuclear regulated prices.

In its November 2014 decision, the OEB approved the recovery of the account balance as at December 31, 2013 over a 12-month period beginning on January 1, 2015.

### **Other Variance and Deferral Accounts**

As at December 31, 2014 and 2013, regulatory assets for other variance and deferral accounts included amounts for the Nuclear Deferral and Variance Over/Under Recovery Variance Account and the Hydroelectric Deferral and Variance Over/Under Recovery Variance Account.

As at December 31, 2014, regulatory assets for other variance and deferral accounts also included amounts for the Pension & OPEB Cash Versus Accrual Differential Deferral Account, the Pickering Life Extension Depreciation Variance Account, and the Pension & OPEB Cash Payment Variance Account. The Pickering Life Extension Depreciation Variance Account balance was recorded wholly during the period from November 1, 2014 to December 31, 2014. This balance represents an offset to the ratepayer credit for the reduction in depreciation expense for the Pickering nuclear generating station that was reflected both as a reduction to the new base regulated prices effective November 1, 2014 and the nuclear rate rider in effect to the end of 2014. The Pension & OPEB Cash Payment Variance Account records, effective November 1, 2014, the difference between OPG's actual contributions to its registered pension plans and expenditures on its OPEB and supplementary pension plans for the regulated business, and the corresponding amounts reflected in the regulated prices. As at December 31, 2013, regulatory assets for other variance and deferral accounts also included the Tax Loss Variance Account and the Impact for USGAAP Deferral Account, the OEB-approved balances of which were fully amortized by December 31, 2014.

Regulatory liabilities for other variance and deferral accounts included amounts for the Income and Other Taxes Variance Account and the Hydroelectric Incentive Mechanism Variance Account. The Income and Other Taxes Variance Account includes deviations in income taxes for the regulated business, from those approved by the OEB in setting regulated prices and caused by changes in tax rates and rules, as well as reassessments. The Hydroelectric Incentive Mechanism Variance Account records a credit to ratepayers equal to 50 percent of OPG's Hydroelectric Incentive Mechanism net revenues above a specified threshold for the previously regulated hydroelectric facilities, and, effective November 1, 2014, for the newly regulated hydroelectric facilities.

The regulatory liabilities for other variance and deferral accounts as at December 31, 2014 and the regulatory assets for other variance and deferral accounts as at December 31, 2013 also included amounts for the Ancillary Services Net Revenue Variance Account and the Hydroelectric Water Conditions Variance Account. The Ancillary Services Net Revenue Variance Account was authorized by the OEB to capture differences between actual nuclear and regulated hydroelectric ancillary services net revenue and the forecast amounts of such revenue approved by the OEB in setting regulated prices. The Hydroelectric Water Conditions Variance Account captures the impact of differences in regulated hydroelectric electricity production due to differences between forecast water conditions underlying the production forecast approved by the OEB in setting regulated hydroelectric prices, and the actual water conditions. Both of these accounts apply to the newly regulated hydroelectric stations effective November 1, 2014.

In its March 2013 decision and April 2013 order, the OEB approved the recovery or repayment of the majority of the balances of the other variance and deferral accounts as at December 31, 2012 over a 24-month period ending December 31, 2014. Accordingly, effective January 1, 2013, OPG recorded amortization of the applicable balances on a straight-line basis over this period.

# Pension & OPEB Cash Versus Accrual Differential Deferral Account

The OEB established the Pension & OPEB Cash Versus Accrual Differential Deferral Account in its November 2014 decision. The deferral account records, effective November 1, 2014, the difference between OPG's actual pension and OPEB costs for the regulated business determined on an accrual basis and the corresponding actual cash expenditures for these plans. The OEB established the deferral account as a result of determining that the pension and OPEB amounts reflected in the regulated prices effective November 1, 2014 would be limited to a forecast of OPG's cash expenditures on its pension and OPEB plans, rather than costs determined on an accrual basis in accordance with US GAAP. In making this determination, the OEB indicated that a generic proceeding on the regulatory treatment and recovery of pension and OPEB costs would be beneficial, and that the disposition of the deferral account balance will be based on the outcome of that proceeding. The scope or timing of the generic proceeding has not been announced.

During the year ended December 31, 2014, OPG recognized a regulatory asset of \$36 million for the addition to the Pension & OPEB Cash Versus Accrual Differential Deferral Account. As directed by the OEB, no interest is recorded on the balance of this account.

# **Pension and OPEB Regulatory Asset**

The Pension and OPEB Regulatory Asset represents unamortized amounts in respect of OPG's pension and OPEB plans that have been recognized in OCI and not yet reclassified into the amortization component of the benefit costs in respect of these plans. These amounts are expected to be recovered from ratepayers through future regulated prices. The regulatory asset is reversed as underlying unamortized balances are amortized in components of benefit costs. Refer to Note 3 for a detailed discussion of pension and OPEB cost recovery methodology under the heading Rate Regulated Accounting. The AOCI amounts related to pension and OPEB plans are presented in Note 11.

#### **Deferred Income Taxes**

OPG is required to recognize deferred income taxes associated with its rate regulated operations, including deferred income taxes on temporary differences related to the regulatory assets and liabilities recognized for accounting purposes. In addition, OPG is required to recognize a separate regulatory asset or liability for the amount of deferred income taxes expected to be included in future regulated prices and recovered from, or paid to, customers. Income taxes are discussed in Note 9.

# 6. LONG-TERM DEBT

Long-term debt consists of the following as at December 31:

(millions of dollars)	2014	2013
Long-term debt 1		
Notes payable to the OEFC		
Senior Notes <sup>2</sup>		
3.43% due 2015	500	500
4.91% due 2016	270	270
5.35% due 2017	900	900
5.27% due 2018	395	395
5.44% due 2019	365	365
4.56% due 2020	660	660
4.28% due 2021	185	185
3.30% due 2022	150	150
3.12% due 2023	40	40
5.07% due 2041	300	300
4.36% due 2042	200	200
UMH Energy Partnership debt <sup>3</sup>		
Senior Notes		
7.86% due to 2041	190	193
Lower Mattagami Energy Limited Partnership <sup>4</sup>		
Senior Notes		
2.59% due 2015	-	92
2.35% due 2017	200	200
4.46% due 2021	225	225
3.53% due 2024	200	-
5.26% due 2041	250	250
5.05% due 2043	200	200
4.26% due 2046	275	275
4.26% due 2052	225	225
	5,730	5,625
Less: due within one year	503	5
Long-term debt	5,227	5,620

The interest rates disclosed reflect the effective interest rate of the debt.

OEFC senior debt is entitled to receive, in full, amounts owing in respect of the senior debt and is pari passu to the Lower Mattagami Energy Limited Partnership (LME) senior notes.

These notes are secured by the assets of the Upper Mattagami and Hound Chute project. Principal repayments of approximately \$3 million per year are paid on a semi-annual basis until maturity in 2041 at which time the remaining principal balance of \$116 million becomes due.

These notes are secured by the assets of the Lower Mattagami River project, including existing operating facilities and facilities being constructed, and are recourse to OPG until the recourse release date. These notes rank pari passu to the OEFC senior notes.

OPG maintained a credit facility with the OEFC related to the Niagara Tunnel project for an amount up to \$1.6 billion which expired on December 31, 2014. As at December 31, 2014, advances under this facility were \$1,065 million (2013 – \$1,065 million).

OPG maintained a \$500 million general corporate credit facility with the OEFC which expired on December 31, 2014 with no amounts outstanding. In December 2014, OPG entered into an agreement with the OEFC for an \$800 million general corporate credit facility which expires on December 31, 2016, in support of its financing requirements for the period 2015-2016. As at December 31, 2014, there were no amounts outstanding under this facility.

Interest paid in 2014 was \$273 million (2013 – \$255 million), of which \$264 million (2013 – \$246 million) relates to interest paid on long-term corporate debt.

The book value of the pledged assets as at December 31, 2014 was \$3,271 million (2013 – \$2,756 million).

A summary of the contractual maturities of all long-term borrowings by year is as follows:

(millions of dollars)	
Trillions of donarsy	
2015	503
2016	273
2017	1,103
2018	398
2019	368
Thereafter	3,085
	5,730

# 7. SHORT-TERM DEBT AND NET INTEREST EXPENSE

OPG maintains a \$1 billion revolving committed bank credit facility, which is divided into two \$500 million multi-year term tranches. In May 2014, OPG renewed and extended both tranches by one year to May 2019. As at December 31, 2014 and 2013, there were no outstanding borrowings under the bank credit facility.

The LME maintains a \$600 million bank credit facility to support the funding requirements for the Lower Mattagami River project. The facility consists of two tranches. In August 2014, OPG extended the maturity of the first tranche to August 2019, from August 2018. The second tranche matures in August 2015. As at December 31, 2014, no external commercial paper was outstanding under this program (2013 – \$32 million).

As at December 31, 2014, OPG maintained \$25 million of short-term, uncommitted overdraft facilities and \$390 million of short-term, uncommitted credit facilities, which support the issuance of the Letters of Credit. OPG uses Letters of Credit to support its supplementary pension plans and for other general corporate purposes. As at December 31, 2014, a total of \$336 million of Letters of Credit had been issued. This included \$310 million for the supplementary pension plans, \$25 million for general corporate purposes, and \$1 million related to the operation of the PEC.

The Company has an agreement to sell an undivided co-ownership interest in its current and future accounts receivable to an independent trust. The Company also retains an undivided co-ownership interest in the receivables sold to the trust. Under the agreement, OPG continues to service the receivables. The transfer provides the trust with ownership of a share of the payments generated by the receivables, computed on a monthly basis. The trust's recourse to the Company is generally limited to its income earned on the receivables. In September 2014, the maximum amount of co-ownership interest that can be sold under this agreement was reduced to \$150 million and the expiry date was extended from November 30, 2014 to November 30, 2016. As at December 31, 2014, there were

Letters of Credit outstanding under this agreement of \$150 million (2013 – \$80 million), which were issued in support of OPG's supplementary pension plans.

In October 2014, UMH Energy Partnership (UMH) entered into an \$8 million of short-term, uncommitted overdraft facility and \$16 million of irrevocable, standby letters of credit facilities in support of its operations. As at December 31, 2014, a total of \$14 million of Letters of Credit had been issued under this facility.

The following table summarizes the net interest expense for the years ended December 31:

(millions of dollars)	2014	2013
Interest on long-term debt	291	280
Interest on short-term debt	9	9
Interest income	(10)	(10)
Interest capitalized to property, plant and equipment and intangible assets	(135)	(127)
Interest related to regulatory assets and liabilities <sup>1</sup>	(75)	(66)
Net interest expense	80	86

Includes interest to recognize the cost of financing related to regulatory assets and liabilities, as authorized by the OEB, and interest deferred in the Capacity Refurbishment Variance Account and the Bruce Lease Net Revenues Variance Account.

#### 8. FIXED ASSET REMOVAL AND NUCLEAR WASTE MANAGEMENT LIABILITIES

The liabilities for fixed asset removal and nuclear waste management on a present value basis consist of the following as at December 31:

(millions of dollars)	2014	2013
Liability for nuclear used fuel management	10,459	9.957
Liability for nuclear decommissioning and low and intermediate	6,204	5,946
level waste management	-, -	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Liability for non-nuclear fixed asset removal	365	354
	4= 000	40.057
Fixed asset removal and nuclear waste management liabilities	17,028	16,257

The changes in the fixed asset removal and nuclear waste management liabilities for the years ended December 31 are as follows:

(millions of dollars)	2014	2013
Liabilities, beginning of year	16,257	15,522
Increase in liabilities due to accretion 1	867	826
Increase in liabilities due to nuclear used fuel, nuclear waste management variable expenses and other expenses	116	109
Liabilities settled by expenditures on fixed asset removal and nuclear waste management	(212)	(199)
Change in the liabilities for non-nuclear fixed asset removal	-	(1)
Liabilities, end of year	17,028	16,257

<sup>&</sup>lt;sup>1</sup> The increase in liabilities due to accretion for 2014 excludes the impact of regulatory variance and deferral accounts.

OPG's fixed asset removal and nuclear waste management liabilities are comprised of expected costs to be incurred up to and beyond termination of operations and the closure of nuclear, thermal generating plant facilities, and other facilities. Costs will be incurred for activities such as preparation for safe storage, safe storage, dismantling, demolition and disposal of facilities and equipment, remediation and restoration of sites, and the ongoing and longterm management of nuclear used fuel and L&ILW waste material. Under the terms of the Bruce agreement, OPG

continues to be primarily responsible for the nuclear fixed asset removal and nuclear waste management liabilities associated with the Bruce nuclear generating stations.

The determination of the accrual for fixed asset removal and nuclear waste management costs requires significant assumptions since these programs are long-term in nature. The most recent update of the cost estimates for the nuclear waste management and decommissioning liabilities is contained in the approved 2012 ONFA Reference Plan.

For the purposes of calculating OPG's nuclear fixed asset removal and nuclear waste management liabilities, as at December 31, 2014, consistent with the current accounting end of life assumptions, nuclear station decommissioning is projected to occur over the next 40 years. The estimates for the Nuclear Liabilities include cash flow estimates for decommissioning nuclear stations for approximately 40 years after station shut down and to 2071 for placement of used fuel into the long-term disposal repository followed by extended monitoring.

The significant assumptions underlying operational and technical factors used in the calculation of the accrued Nuclear Liabilities are subject to periodic review. Changes to these assumptions, including changes to assumptions on the timing of the programs, end of life dates, financial indicators, or the technology employed may result in significant changes to the value of the accrued liabilities. With programs of this duration and the evolving technology to handle the nuclear waste, there is a significant degree of uncertainty surrounding the measurement of the costs for these programs, which may increase or decrease over time.

#### **Liability for Nuclear Used Fuel Management Costs**

The liability for nuclear used fuel management represents the cost of managing the highly radioactive used nuclear fuel bundles. The federal NFWA, proclaimed into force in 2002, requires that Canada's nuclear fuel waste owners form a nuclear waste management organization, and that each waste owner establish a trust fund for used fuel management costs. To estimate its liability for nuclear used fuel management costs, OPG has adopted a conservative approach consistent with the Adaptive Phased Management concept approved by the Government of Canada, which assumes a deep geologic repository in-service date of 2035 at the earliest.

# **Liability for Nuclear Decommissioning and L&ILW Management Costs**

The liability for nuclear decommissioning and L&ILW management represents the estimated costs of decommissioning nuclear generating stations after the end of their service lives, as well as the cost of managing L&ILW generated by the nuclear stations. The significant assumptions used in estimating future nuclear fixed asset removal costs include decommissioning of nuclear generating stations on a deferred dismantlement basis, where the reactors will remain in a safe storage state for a 30-year period prior to an approximate 10-year dismantlement period.

The life cycle costs of L&ILW management include the costs of processing and storage of such radioactive wastes during and following the operation of the nuclear stations, as well as the costs of the ultimate long-term management of these wastes. The current assumptions used to establish the accrued L&ILW management costs include a L&ILW deep geologic repository. Agreement has been reached with local municipalities for OPG to develop a deep geologic repository for the long-term management of L&ILW adjacent to the Western Waste Management Facility. OPG has suspended design activities for the L&ILW deep geologic repository pending receipt of the site preparation and construction licence.

# **Liability for Non-Nuclear Fixed Asset Removal Costs**

The liability for non-nuclear fixed asset removal primarily represents the estimated costs of decommissioning OPG's thermal generating stations at the end of their services lives. The liability is based on third-party cost estimates after an in-depth review of plant sites and an assessment of required clean-up and restoration activities. In 2011, OPG

completed a review of the liability for most of its thermal generating stations. For the purpose of measuring the liability, asset removal activities are estimated to take place over the next 15 years.

As at December 31, 2014, in addition to the \$143 million liability for active sites, OPG has an ARO of \$222 million for decommissioning and restoration costs associated with plant sites that are not currently in use for electricity generation, including the Nanticoke and Lambton generating stations.

# **Ontario Nuclear Funds Agreement**

The Decommissioning Fund was established to fund the future costs of nuclear fixed asset removal, long-term L&ILW management, and certain costs for used fuel storage incurred after the stations are shutdown. As at December 31, 2014, the Decommissioning Fund was in an overfunded position.

The Used Fuel Fund was established to fund future costs of long-term nuclear used fuel waste management. OPG is responsible for the risk and liability of cost increases for used fuel waste management, subject to graduated liability thresholds specified in the ONFA, which limit OPG's total financial exposure at approximately \$13.7 billion in present value dollars as at December 31, 2014, based on used fuel bundle projections of 2.23 million bundles, consistent with the station life assumptions included within the initial financial reference plan. The graduated liability thresholds do not apply to additional used fuel bundles beyond 2.23 million.

OPG makes quarterly payments to the Used Fuel Fund over the life of its nuclear generating stations, as specified in the ONFA. Required funding for 2014 under the ONFA was \$139 million (2013 – \$184 million), including a contribution to the Ontario NFWA Trust (the Trust) of \$161 million (2013 – \$154 million). The Trust forms part of the Used Fuel Fund, and contributions to the Trust, as required by the NFWA, may be applied towards OPG's ONFA payment obligations. Based on the approved 2012 ONFA Reference Plan, OPG is required to contribute annual amounts to the Used Fuel Fund, ranging from \$143 million to \$288 million over the years 2015 to 2019. The required contributions are disclosed in Note 15.

As required by the terms of the ONFA, the Province has provided a Provincial Guarantee to the Canadian Nuclear Safety Commission (CNSC) since 2003, on behalf of OPG. The *Nuclear Safety and Control Act* (Canada) requires OPG to have sufficient funds available to discharge the current nuclear decommissioning and waste management liabilities. The Provincial Guarantee provides for any shortfall between the CNSC consolidated financial guarantee requirement and the value of the Nuclear Funds. OPG pays the Province an annual guarantee fee of 0.5 percent of the amount of the Provincial Guarantee provided by the Province. The current value of the Provincial Guarantee amount of \$1,551 million is in effect through to the end of 2017. In each of January 2014 and 2015, OPG paid a guarantee fee of \$8 million based on a Provincial Guarantee amount of \$1,551 million.

# **Decommissioning Fund**

Upon termination of the ONFA, the Province has a right to any excess funds in the Decommissioning Fund, which is the excess of the fair market value of the Decommissioning Fund assets over the estimated completion costs, as per the most recently approved ONFA Reference Plan. When the Decommissioning Fund is overfunded, OPG limits the earnings it recognizes in its consolidated financial statements by recording a payable to the Province, such that the balance of the Decommissioning Fund is equal the cost estimate of the liability based on the most recently approved ONFA Reference Plan. The payable to the Province may be reduced in subsequent periods in the event that the Decommissioning Fund earns less than its target rate of return or in the event that a new ONFA Reference Plan is approved with a higher estimated decommissioning liability. When the Decommissioning Fund is underfunded, the earnings on the Decommissioning Fund reflect actual fund returns based on the market value of the assets.

The Province's right to any excess funding in the Decommissioning Fund upon termination of the ONFA results in OPG capping its annual earnings at 3.25 percent plus long-term Ontario Consumer Price Index (CPI), which is the rate of growth in the liability for the estimated completion cost, as long as the Decommissioning Fund is in an overfunded status.

Under the ONFA, if there is a surplus in the Decommissioning Fund such that the liabilities, as defined by the most recently approved ONFA Reference Plan, are at least 120 percent funded, OPG may direct up to 50 percent of the surplus over 120 percent to be treated as a contribution to the Used Fuel Fund and the OEFC would be entitled to a distribution of an equal amount. In such instances, OPG recognizes 50 percent of the excess greater than 120 percent in income. Since OPG is responsible for the risks associated with liability cost increases and investment returns in the Decommissioning Fund, future contributions to the Decommissioning Fund may be required should the fund be in an underfunded position at the time of the next liability reference plan review.

The investments in the Decommissioning Fund include a diversified portfolio of equities and fixed income securities that are invested across geographic markets, as well as investments in infrastructure and Canadian real estate. The Nuclear Funds are invested to fund long-term liability requirements and, as such, the portfolio asset mix is structured to achieve the required return over a long-term horizon. While short-term fluctuations in market value will occur, managing the long-term return of the Nuclear Funds remains the primary goal.

#### Used Fuel Fund

Under the ONFA, the Province guarantees OPG's annual return in the Used Fuel Fund at 3.25 percent plus the change in the Ontario CPI for funding related to the first 2.23 million used fuel bundles (committed return). OPG recognizes the committed return on the Used Fuel Fund and includes it in the earnings on the nuclear fixed asset removal and nuclear waste management funds. The difference between the committed return on the Used Fuel Fund and the actual market return determined based on the fair value of the Used Fuel Fund's assets related to the first 2.23 million used fuel bundles is recorded as due to or due from the Province. The amount due to or due from the Province represents the amount OPG would pay to or receive from the Province if the committed return were to be settled as of the consolidated balance sheet date. As prescribed under the ONFA, OPG's contributions for fuel bundles in excess of 2.23 million are not subject to the Province's guaranteed rate of return, and earn a return based on changes in the market value of the assets of the Used Fuel Fund.

Under the ONFA, the Province is entitled to any surplus in the Used Fuel Fund, subject to a threshold funded ratio of 110 percent compared to the value of the associated liabilities based on the most recently approved ONFA Reference Plan.

# **Nuclear Funds**

The nuclear fixed asset removal and nuclear waste management funds as at December 31 consist of the following:

	Fair	Value
(millions of dollars)	2014	2013
	7.040	0.504
Decommissioning Fund	7,346	6,591
Due to Province – Decommissioning Fund	(1,100)	(624)
	6,246	5,967
	0.500	0.540
Used Fuel Fund <sup>1</sup>	9,562	8,519
Due to Province – Used Fuel Fund	(1,429)	(990)
	8,133	7,529
Total Nuclear Funds	14,379	13,496
Less: current portion	25	25
Non-current Nuclear Funds	14,354	13,471

The Ontario NFWA Trust represented \$3,114 million as at December 31, 2014 (2013 – \$2,668 million) of the Used Fuel Fund on a fair value basis.

The fair value of the securities invested in the Nuclear Funds as at December 31 is as follows:

	Fair '	Value
(millions of dollars)	2014	2013
Cash and cash equivalents and short-term investments	464	262
Alternative investments	1,003	598
Pooled funds	1,293	2,173
Marketable equity securities	8,176	7,332
Fixed income securities	5,969	4,713
Net receivables/payables	3	32
· ·	16,908	15,110
Due to Province	(2,529)	(1,614)
	14,379	13,496

The nature and type of investments made by OPG have the attributes of an investment company in accordance with ASC Topic 946. As such, beginning January 1, 2014, the Company applied guidance outlined in ASC Topic 946 for all investments owned by the Nuclear Funds. OPG's consolidated financial statements retained investment company accounting for the Nuclear Funds. The adoption of investment company accounting for the Nuclear Funds did not result in an effect on net income or change in net assets from operations, as investments held by OPG's Nuclear Funds continue to be recorded at fair value.

The investments in the Nuclear Funds are segregated from other assets in the consolidated group that are not investment companies.

The historical cost, gross unrealized aggregate appreciation and depreciation of investment, gross unrealized foreign exchange gains, and fair value of the Nuclear Funds as of December 31, 2014 and 2013 are summarized as follows:

(millions of dollars)	Decommissioning Fund	2014 Used Fuel Fund <sup>1</sup>	Total
Historical cost Gross unrealized gains (losses)	6,188	8,163	14,351
Aggregate appreciation	1,218	1,441	2,659
Aggregate depreciation	(150)	(174)	(324)
Foreign exchange	90	132	222
Due to Province	7,346 (1,100)	9,562 (1,429)	16,908 (2,529)
Total fair value	6,246	8,133	14,379
Less: current portion	7	18	25
Non-current fair value	6,239	8,115	14,354

<sup>&</sup>lt;sup>1</sup> The Ontario NFWA Trust represented \$3,114 million as at December 31, 2014 of the Used Fuel Fund on a fair value basis.

	Decommissioning	2013 Used Fuel	
(millions of dollars)	Fund	Fund <sup>1</sup>	Total
Historical cost	5,571	7,240	12,811
Gross unrealized gains (losses)			
Aggregate appreciation	1,111	1,365	2,476
Aggregate depreciation	(118)	(136)	(254)
Foreign exchange	27	50	` 77 <sup>°</sup>
	6,591	8,519	15,110
Due to Province	(624)	(990)	(1,614)
Fair value	5,967	7,529	13,496
Less: current portion	12	13	25
Non-current fair value	5,955	7,516	13,471

<sup>&</sup>lt;sup>1</sup> The Ontario NFWA Trust represented \$2,668 million as at December 31, 2013 of the Used Fuel Fund on a fair value basis.

Net realized and unrealized gains or losses from investments for the years ended December 31, 2014 and 2013 are summarized as follows:

	2014		
	Decommissioning	<b>Used Fuel</b>	
(millions of dollars)	Fund	Fund	Total
Net realized gains			
Realized gains	401	545	946
Realized foreign exchange gains	36	36	72
Net realized gains	437	581	1,018
Net unrealized gains			
Unrealized gains	75	38	113
Unrealized foreign exchange gains	63	82	145
Net unrealized gains	138	120	258

	2013		
	Decommissioning	<b>Used Fuel</b>	
(millions of dollars)	Fund	Fund	Total
Net realized gains			
Realized gains	182	174	356
Realized foreign exchange losses	(9)	(8)	(17)
Net realized gains	173	166	339
Net unrealized gains			
Unrealized gains	410	639	1,049
Unrealized foreign exchange gains	97	114	211
Net unrealized gains	507	753	1,260

The change in the Nuclear Funds for the years ended December 31 is as follows:

	Fair Value	
(millions of dollars)	2014	2013
Decembracioning Fund beginning of year	5,967	F 707
Decommissioning Fund, beginning of year ncrease in fund due to return on investments	•	5,707
	782	854
Decrease in fund due to reimbursement of expenditures	(27)	(34)
Increase in due to Province	(476)	(560)
Decommissioning Fund, end of year	6,246	5,967
Used Fuel Fund, beginning of year	7,529	7,010
ncrease in fund due to contributions made	139	184
ncrease in fund due to return on investments	954	1,131
Decrease in fund due to reimbursement of expenditures	(50)	(41)
Increase in due to Province	(439)	(755)
increase in due to i rovince	(433)	(755)
Used Fuel Fund, end of year	8,133	7,529

The earnings from the Nuclear Funds during 2014 and 2013 were impacted by the Bruce Lease Net Revenues Variance Account authorized by the OEB. The earnings on the Nuclear Funds for the years ended December 31 are as follows:

(millions of dollars)	2014	2013
Decommissioning Fund Used Fuel Fund Bruce Lease Net Revenues Variance Account	306 515 (107)	294 376 (42)
Total earnings	714	628

# 9. INCOME TAXES

OPG follows the liability method of tax accounting for all its business segments. The Company records an offsetting regulatory asset or liability for the deferred income taxes that are expected to be recovered or refunded through future regulated prices charged to customers for generation from OPG's regulated facilities.

During 2014, OPG recorded a decrease in the deferred income tax liability for the income taxes that are expected to be recovered or refunded through regulated prices charged to customers of \$22 million (2013 - \$109 million). Since these deferred income taxes are expected to be refunded through future regulated prices, OPG recorded a corresponding decrease to the regulatory asset for deferred income taxes. As a result, the deferred income tax expense for 2014 and 2013 was not impacted.

The amount of tax refunds received net of taxes paid during 2014 was \$29 million (the amount of taxes paid during 2013 was \$14 million).

The following table summarizes the deferred income tax liabilities recorded for the rate regulated operations that are expected to be recovered through future regulated prices:

(millions of dollars)	2014	2013
January 1:		
Deferred income tax liabilities on temporary differences related to	418	500
regulated operations  Deferred income tax liabilities resulting from the regulatory asset for deferred income taxes	141	168
	559	668
Impact of regulation of the newly regulated facilities:  Deferred income tax liabilities on temporary differences as of June 30,	243	-
related to the hydroelectric facilities prescribed for regulation effective in 2014 (Note 3)		
Deferred income tax liabilities resulting from the regulatory asset for deferred income taxes related to the regulation of hydroelectric facilities effective in 2014 ( <i>Note</i> 3)	81	-
	883	668
Changes during the year:	(4=)	(2.2)
Decrease in deferred income tax liabilities on temporary differences related to regulated operations, including newly regulated hydroelectric facilities effective July 1, 2014	(17)	(82)
Decrease in deferred income tax liabilities resulting from the regulatory asset for deferred income taxes, including newly regulated hydroelectric	(5)	(27)
facilities effective July 1, 2014		
Balance at December 31	861	559

A reconciliation between the statutory and the effective rate of income taxes is as follows:

(millions of dollars)	2014	2013
Income before income taxes and extraordinary item	707	166
Combined Canadian federal and provincial statutory enacted		
income tax rates	26.5%	26.5%
Statutory income tax rates applied to accounting income	187	44
(Decrease) increase in income taxes resulting from:		
Income tax components of regulatory variance and deferral accounts	(79)	(102)
Non-taxable income items	(6)	(3)
Regulatory asset for deferred income taxes	25	113
Scientific Research and Experimental Development investment tax credits	(16)	(22)
Other	28	1
	(48)	(13)
Income tax expense	139	31
Effective rate of income taxes	19.7%	18.7%

Significant components of the income tax expense are presented in the table below:

(millions of dollars)	2014	2013
Current income tax expense (recovery):		
Current payable	123	48
Change in income tax positions	(15)	9
Income tax components of regulatory variance and deferral accounts	(10)	9
Scientific Research and Experimental Development investment tax credits	(29)	(30)
Other	14	7
	83	43
Deferred income tax expense (recovery):		
Change in temporary differences	100	(14)
Income tax components of regulatory variance and deferral accounts	(69)	(111)
Regulatory asset for deferred income taxes	25	113
	56	(12)
Income tax expense	139	31

The income tax effects of temporary differences that give rise to deferred income tax assets and liabilities as at December 31 are as follows:

(millions of dollars)	2014	2013
Defermed in come to constant		
Deferred income tax assets:	4.047	4.055
Fixed asset removal and nuclear waste management liabilities	4,247	4,055
Other liabilities and assets	1,973	1,672
Future recoverable Ontario minimum tax	11	30
	6,231	5,757
D ( )		
Deferred income tax liabilities:	(4, 4==0)	4
Property, plant and equipment and intangible assets	(1,478)	(1,463)
Nuclear fixed asset removal and nuclear waste management funds	(3,595)	(3,374)
Other liabilities and assets	(1,986)	(1,499)
	(7,059)	(6,336)
A	(000)	(570)
Net deferred income tax liabilities	(828)	(579)
Represented by:		
Current portion – asset (liability)	8	(14)
Long-term portion – liability	(836)	(565)
Long-term portion — liability	(030)	(303)
	(828)	(579)

The tax benefit associated with an income tax position is recognized only when it is more likely than not that such a position will be sustained upon examination by the taxing authorities based on the technical merits of the position. The current and deferred income tax benefit is equal to the largest amount, considering possible settlement outcomes, that is greater than 50 percent likely of being realized upon settlement with the taxing authorities.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

(millions of dollars)	2014	2013
The second settles have the horizontal section of	0.4	00
Unrecognized tax benefits, beginning of year	91	82
Additions based on tax positions related to the current year	11	13
Additions for tax positions of prior years	12	-
Reductions for tax positions of prior years	(35)	(4)
Unrecognized tax benefits, end of year	79	91

As at December 31, 2014, OPG's unrecognized tax benefits were \$79 million (2013 - \$91 million), excluding interest and penalties, all of which, if recognized, would affect OPG's effective tax rate. Changes in unrecognized tax benefits over the next 12 months cannot be predicted with certainty.

OPG recognizes interest and penalties related to unrecognized tax benefits as income tax expense. As at December 31, 2014, OPG has recorded interest on unrecognized tax benefits of \$6 million (2013 - \$10 million). OPG considers its significant tax jurisdiction to be Canada. OPG remains subject to income tax examination for years after 2010.

## 10. ACCUMULATED OTHER COMPREHENSIVE LOSS

The changes in the balance of each component of accumulated other comprehensive loss (AOCL), net of taxes, during the years ended December 31, 2014 and 2013 are as follows:

		2014	
(millions of dollars)	Unrealized Gains and Losses on Cash Flow Hedges <sup>1</sup>	Pension and Other Post-Employment Benefits <sup>1</sup>	Total <sup>1</sup>
AOCL, beginning of year Net loss on cash flow hedges	(129) (2)	(555) -	(684) (2)
Recognition of initial pension and OPEB regulatory asset for amounts recorded prior to regulation of facilities, effective July 1, 2014 (Note 3)	-	184	184
Actuarial loss on re-measurement of liabilities for pension and other post-employment benefits	-	(35)	(35)
Amounts reclassified from AOCL	14	27	41
Other comprehensive income for the year	12	176	188
AOCL, end of year	(117)	(379)	(496)

All amounts are net of income taxes.

	2013			
(millions of dollars)	Unrealized Gains and Losses on Cash Flow Hedges <sup>1</sup>	Pension and Other Post-Employment Benefits <sup>1</sup>	Total <sup>1</sup>	
AOCL, beginning of year	(156)	(823)	(979)	
Net gain on cash flow hedges	` 14 <sup>′</sup>	· -′	` 14	
Actuarial gain and past service credits on re-measurement of liabilities for pension and other post-employment benefits	-	226	226	
Amounts reclassified from AOCL	13	42	55	
Other comprehensive income (loss) for the year	27	268	295	
AOCL, end of year	(129)	(555)	(684)	

<sup>&</sup>lt;sup>1</sup> All amounts are net of income taxes.

The significant amounts reclassified out of each component of AOCL, net of income taxes, during the years ended December 31, 2014 and 2013 are as follows:

	Amount Reclass	OCL	
(millions of dollars)	2014	2013	Statement of Income Line Item
Amortization of losses from cash flow hedges			
Losses	16	15	Net interest expense
Income tax expense	(2)	(2)	р
•	14	13	
Amortization of amounts related to pension and other post-employment benefits			
Actuarial losses and past service costs	37	57	See (1) below
Income tax expense	(10)	(15)	. ,
	27	42	
Total reclassifications for the year	41	55	

<sup>&</sup>lt;sup>1</sup> These AOCL components are included in the computation of pension and OPEB costs (see Note 11 for additional details).

#### 11. PENSION AND OTHER POST-EMPLOYMENT BENEFITS

#### **Fund Assets**

The OPG registered pension fund investment guidelines are stated in an approved Statement of Investment Policies and Procedures (SIPP). The SIPP is reviewed and approved by OPG's Audit and Finance Committee at least annually and includes a discussion regarding investment objectives and expectations, asset mix and rebalancing, and the basis for measuring the performance of the pension fund assets.

In accordance with the SIPP, investment allocation decisions are made with a view to achieve OPG's objective to meet obligations of the plan as they come due. The pension fund assets are invested in three categories of asset classes. The first category is liability hedging assets which are intended to hedge the inflation and interest rate sensitivity of the plan liabilities. The second category is return enhancing assets which are intended to obtain higher investment returns compared to the returns expected for liability hedging assets. The third category is return diversifying strategies which are intended to improve the overall return of the pension fund while controlling the amount of downside market risk.

To achieve the above objective, OPG has adopted the following target strategic asset allocation:

	Target
Asset Class	
Liability Hedging Assets	54%
Return Enhancing Assets	33%
Return Diversifying Assets	13%

The plan may enter into derivative securities, such as interest rate swaps and forward foreign exchange contracts, for risk management purposes, where such activity is consistent with its investment objective.

#### Significant Concentrations of Risk in Fund Assets

The assets of the pension fund are diversified to limit the impact of any individual investment. The pension fund is diversified across multiple asset classes. Fixed income securities are diversified among Canadian government provincial bonds, government agency bonds, real return bonds, corporate bonds, and an interest rate overlay hedging program, which is disclosed under pooled funds. Equity securities are diversified across Canadian, US, and non-North American stocks. There are also real estate and infrastructure portfolios that are approximately five percent of the total pension fund assets. Investments in the above asset classes are further diversified across funds, investment managers, strategies, vintages, sectors and geographies, depending on the specific characteristics of each asset class.

Credit risk with respect to the pension fund's fixed income securities is managed by risk tolerance guidelines, which requires that fixed income securities comply with various investment constraints that ensure prudent diversification and prescribed minimum required credit rating quality. Credit risk, as it relates to the pension fund's derivatives, is managed through the use of International Swap and Derivatives Association documentation and counterparty management performed by the fund's investment managers.

## Risk Management

Risk management oversight with respect to the pension fund includes but is not limited to the following activities:

- Periodic asset/liability management and strategic asset allocation studies
- Monitoring of funding levels and funding ratios
- Monitoring compliance with asset allocation guidelines and investment management agreements
- Monitoring asset class performance against asset class benchmarks
- Monitoring investment manager performance against benchmarks
- Monitoring of risk tolerance guidelines.

# Expected Rate of Return on Plan Assets

The expected rate of return on plan assets is based on the fund's asset allocation, as well as the expected return considering long-term historical risks and returns associated with each asset class within the plan portfolio. The asset management decisions consider the economic liabilities of the plan.

## **Fair Value Measurements**

OPG is required to classify fair value measurements using a fair value hierarchy. This hierarchy groups financial instruments into three levels, based on the significance of inputs used in measuring the fair value of the assets and liabilities. Refer to Note 13 for a detailed discussion of fair value measurements and the fair value hierarchy.

The following tables present pension plan assets measured at fair value in accordance with the fair value hierarchy:

		December 31, 2014				
(millions of dollars)	Level 1	Level 2	Level 3	Total		
Cash and cash equivalents	251	-	-	251		
Short-term investments	-	3	-	3		
Fixed income						
Corporate debt securities	-	349	-	349		
Non-US government bonds	-	1,704	-	1,704		
Equities		ŕ		ŕ		
Canadian	1,955	-	-	1,955		
US	2,016	-	-	2,016		
Non-North American	2,147	-	-	2,147		
Pooled funds	12	2,450	866	3,328		
Infrastructure	_		338	338		
Real estate	_	-	300	300		
Other	-	-	5	5		
	6,381	4,506	1,509	12,396 <sup>1</sup>		

The table above excludes pension fund receivables and payables.

		December 31, 2013				
(millions of dollars)	Level 1	Level 2	Level 3	Total		
Cash and cash equivalents	320	-	-	320		
Short-term investments	-	5	-	5		
Fixed income						
Corporate debt securities	-	315	-	315		
Non-US government bonds	-	1,514	-	1,514		
Equities						
Canadian	2,087	-	-	2,087		
US	2,031	-	-	2,031		
Non-North American	2,357	-	-	2,357		
Pooled funds	38	1,959	11	2,008		
Infrastructure	-	-	208	208		
Real estate	-	-	210	210		
Other	-	2	-	2		
	6,833	3,795	429	11,057 <sup>1</sup>		

<sup>&</sup>lt;sup>1</sup> The table above exclude pension fund receivables and payables.

The following tables present the changes in the fair value of financial instruments classified in Level 3:

(millions of dollars)	For the years ended December 31				
	Pooled Funds	Infrastructure	Real Estate	Other	Total
Opening balance, January 1, 2013	8	160	72	-	240
Total realized and unrealized gains	3	19	6	-	28
Purchases, sales, and settlements	-	29	132	-	161
Closing balance, December 31, 2013	11	208	210	-	- 429
Transfer from Level 2 to Level 3	-	-	-	2	2
Total realized and unrealized gains	69	37	76	-	182
Purchases, sales, and settlements	786	93	14	3	896
Closing balance, December 31, 2014	866	338	300	5	1,509

During the years ended December 31, 2014 and 2013, there were no transfers between Level 1 and Level 2.

# **Plan Costs and Liabilities**

Details of OPG's pension and OPEB obligations, pension fund assets and costs are presented in the following tables:

	Registered and Supplementary Pension Plans		Other Post-Employme	
	2014	2013	2014	2013
Weighted Average Assumptions – Benefit Obligations at Year-End				
Rate used to discount future benefits	4.00%	4.90%	4.03%	4.91%
Salary schedule escalation rate - next six years	2.00%	2.50%	2.50%	2.50%
- thereafter	2.50%	2.50%	2.50%	2.50%
Rate of cost of living increase to pensions	2.00%	2.00%	n/a	n/a
Initial health care trend rate	n/a	n/a	6.09%	6.19%
Ultimate health care trend rate	n/a	n/a	4.33%	4.34%
Year ultimate health care trend rate reached	n/a	n/a	2030	2030
Rate of increase in disability benefits	n/a	n/a	2.00%	2.00%

	Registered and Supplementary Pension Plans		Other Post-Employme	
	2014	2013	2014	2013
Weighted Average Assumptions – Costs for the Year				
Expected return on plan assets, net of expenses	6.25%	6.25%	n/a	n/a
Rate used to discount future benefits	4.90%	4.30%	4.90%	4.32%
Salary schedule escalation rate	2.50%	2.50%	2.50%	2.50
Rate of cost of living increase to pensions	2.00%	2.00%	n/a	n/a
Initial health care trend rate	n/a	n/a	6.19%	6.38%
Ultimate health care trend rate	n/a	n/a	4.34%	4.38%
Year ultimate health care trend rate reached	n/a	n/a	2030	2030
Rate of increase in disability benefits	n/a	n/a	2.00%	2.00%
Expected average remaining service life for employees (years)	12	13	13	14

	Registered Pension Plans		Supplementary Pension Plans		Other Post- Employment Benefits	
(millions of dollars)	2014	2013	2014	2013	2014	2013
Components of Cost Recognized Current service costs Interest on projected benefit obligation Expected return on plan assets, net of expenses Amortization of past service costs   Amortization of net actuarial loss  Recognition of LTD net actuarial gain	238 658 (628) - 260	291 589 (648) - 244	8 14 - - 4	10 13 - - 6	64 135 - - 6 (3)	106 139 - 1 48 (32)
Costs recognized <sup>2</sup>	528	476	26	29	202	262

The amortization of past service costs and net actuarial loss was recognized as an increase to OCI. This increase was partially offset by the impact of the Pension and OPEB Regulatory Asset as discussed in Note 5.

<sup>&</sup>lt;sup>2</sup> Excludes the impact of regulatory variance and deferral accounts. These regulatory accounts are discussed in Note 5.

Total benefit costs, including the impact of the Pension and OPEB Cost Variance Account, the Pension & OPEB Cash Payment Variance Account, the Pension & OPEB Cash Versus Accrual Differential Deferral Account, for the years ended December 31 are as follows:

(millions of dollars)	2014	2013
Registered pension plans	528	476
Supplementary pension plans	26	29
Other post-employment benefits	202	262
Pension and OPEB Cost Variance Account (Note 5)	(254)	(312)
Pension & OPEB Cash Payment Variance Account (Note 5)	(6)	_
Pension & OPEB Cash Versus Accrual Differential Deferral Account (Note 5)	(36)	-
Denoise and ather next ample, ment benefit assts	460	455
Pension and other post-employment benefit costs	460	455

The pension and OPEB obligations and the pension fund assets measured as at December 31 are as follows:

	Registered Pension Plans		Suppler Pensior		Other Post- Employment Benefits	
(millions of dollars)	2014	2013	2014	2013	2014	2013
Change in Plan Assets	40.004	40.007				
Fair value of plan assets at beginning of year	10,961	10,337	-	-	-	-
Contributions by employer	364	306	16	14	93	87
Contributions by employees	70	74	-	-	-	-
Actual return on plan assets, net of	1,677	923	-	-	-	-
expenses Panafit payments	(665)	(679)	(16)	(1.1)	(93)	(07)
Benefit payments	(003)	(679)	(10)	(14)	(93)	(87)
Fair value of plan assets at end of year	12,407	10,961	-	-	-	-
Change in Projected Benefit Obligations						
Projected benefit obligations at beginning of year	13,422	13,669	289	297	2,719	3,174
Employer current service costs	238	291	8	10	64	106
Contributions by employees	70	74	-	-	-	-
Interest on projected benefit obligation	658	589	14	13	135	139
Benefit payments	(665)	(679)	(16)	(14)	(93)	(87)
Past service credits	•	-	` -	-	` _′	(2)
Net actuarial loss (gain)	1,946	(522)	22	(17)	318	(61 <sup>1</sup> 1)
		. /		, ,		, ,
Projected benefit obligations at end of year	15,669	13,422	317	289	3,143	2,719
Funded status – deficit at end of year	(3,262)	(2,461)	(317)	(289)	(3,143)	(2,719)

The following table provides the pension and OPEB liabilities and their classification on the consolidated balance sheets as at December 31:

	Registered Pension Plans		Suppler Pensior	•	Other Post- Employment Benefits	
(millions of dollars)	2014	2013	2014	2013	2014	2013
Current liabilities Non-current liabilities	- (3,262)	- (2,461)	(9) (308)	(9) (280)	(93) (3,050)	(91) (2,628)
Total liabilities	(3,262)	(2,461)	(317)	(289)	(3,143)	(2,719)

The accumulated benefit obligations for the registered pension plans and supplementary pension plans as at December 31, 2014 are \$14,333 million and \$274 million, respectively (2013 - \$12,242 million and \$237 million, respectively). The accumulated benefit obligation differs from the projected benefit obligation in that the accumulated benefit obligation includes no assumption about future compensation levels.

The following table provides the components of OPG's OCI related to pension and OPEB plans and the offsetting Pension and OPEB Regulatory Asset as discussed in Note 5 for the years ended December 31, on a pre-tax basis:

	Registered Pension Plans		Suppler Pension	•	Other Post- Employment Benefits	
(millions of dollars)	2014	2013	2014	2013	2014	2013
Changes in plan assets and benefit obligations recognized in OCI						
Current year net actuarial loss (gain)	897	(797)	22	(17)	321	(579)
Current year past service credits	-		-	` -	-	(2)
Amortization of net actuarial loss	(260)	(244)	(4)	(6)	(6)	(48)
Amortization of past service costs	-	-	-	-	-	(1)
Total decrease (increase) in OCI	637	(1,041)	18	(23)	315	(630)
Less: Increase (decrease) in Pension and OPEB Regulatory Asset, excluding	652	(814)	19	(18)	289	(504)
extraordinary gain (Note 5)						
Less: Recognition of initial Pension & OPEB regulatory asset related to facilities	219	-	5	-	21	-
prescribed for rate regulation						
beginning in 2014 (Note 3)						
Net (increase) decrease in OCI (pre-tax)	(234)	(227)	(6)	(5)	5	(126)

The following table provides the components of OPG's AOCL and the offsetting Pension and OPEB Regulatory Asset that have not yet been recognized as components of benefit costs as at December 31, on a pre-tax basis:

	Registered Pension Plans		Supplementary Pension Plans		Other Post- Employment Benefits	
(millions of dollars)	2014	2013	2014	2013	2014	2013
Unamortized amounts recognized in AOCL Past service costs	_	_	_	_	1	1
Net actuarial loss	4,133	3,496	97	79	638	323
Total recognized in AOCL Less: Pension and OPEB Regulatory Asset (Note 5)	4,133 3,702	3,496 2,831	97 88	79 64	639 573	324 263
Net recognized in AOCL (pre-tax)	431	665	9	15	66	61

The following table provides the components of OPG's AOCI and the offsetting Pension and OPEB Regulatory Asset as at December 31 (included in the table above) that are expected to be amortized as components of benefit costs and recognized as increases to OCI and reductions in the Pension and OPEB Regulatory Asset, related to the currently regulated facilities, in 2015, on a pre-tax basis:

(millions of dollars)	Registered Pension Plans	Supplementary Pension Plans	Other Post- Employment Benefits
Net actuarial loss	292	6	27
Total increase in AOCI	292	6	27
Less: Estimated decrease in Pension and OPEB Regulatory Asset	261	5	25
Net increase in AOCI (pre-tax)	31	1	2

Based on the most recently filed actuarial valuation, for funding purposes, of the OPG registered pension plan, as at January 1, 2014, there was an unfunded liability on a going-concern basis of \$1,143 million and a deficiency on a wind-up basis of \$7,034 million. In the previously filed actuarial valuation, as at January 1, 2011, there was an unfunded liability on a going-concern basis of \$555 million and a deficiency on a wind-up basis of \$5,663 million. The funded status to be determined in the next filed funding valuation, which must have an effective date no later than January 1, 2017, could be significantly different. For 2015, OPG's required contribution to its registered pension plan is expected to be \$364 million. The amount of OPG's additional voluntary contribution, if any, is revisited from time to time. OPG will continue to assess the requirements for contributions to the pension plan.

Based on the most recently filed actuarial valuation, for funding purposes, of the NWMO registered pension plan, as at January 1, 2014, there was a surplus on a going-concern basis of \$23 million and a deficiency on a wind-up basis of \$1 million. In the previously filed actuarial valuation, as at January 1, 2013, there was a surplus on a goingconcern basis of \$14 million and a deficiency on a wind-up basis of \$15 million. The next filed funding valuation must have an effective date no later than January 1, 2015.

The supplementary pension plans are not funded, but are secured by Letters of Credit totalling \$310 million as at December 31, 2014 (2013 - \$302 million).

Estimated future benefit payments to participants in the pension and OPEB plans based on the assumptions used to measure the benefit obligations as at December 31, 2014 are as follows:

(millions of dollars)	Registered Pension Plans	Supplementary Pension Plans	Other Post- Employment Benefits
2015	563	10	93
2016	590	11	97
2017	596	11	101
2018	634	12	107
2019	666	13	112
2020 through 2024	3,788	77	636

A one percent increase or decrease in the health care trend rate would result in an increase in the current service and interest components of the 2014 OPEB cost recognized of \$42 million (2013 - \$54 million) or a decrease in the service and interest components of the 2014 OPEB cost recognized of \$31 million (2013 - \$39 million). A one percent increase or decrease in the health care trend rate would result in an increase in the projected OPEB obligation at December 31, 2014 of \$567 million (2013 - \$472 million) or a decrease in the projected OPEB obligation at December 31, 2014 of \$432 million (2013 - \$360 million).

#### 12. RISK MANAGEMENT AND DERIVATIVES

OPG is exposed to risks related to changes in electricity prices associated with a wholesale spot market for electricity in Ontario, changes in market interest rates on debt expected to be issued in the future, and movements in foreign currency that affect its assets, liabilities, and forecasted transactions. Select derivative instruments are used to manage such risks. Derivatives are used as hedging instruments, as well as for trading purposes.

Interest rate risk is the risk that the value of assets and liabilities can change due to movements in related interest rates. Interest rate risk for OPG arises with the need to refinance existing debt and/or undertake new financing. The management of these risks is undertaken by using derivatives to hedge the exposure in accordance with corporate risk management policies. OPG periodically uses interest rate swap agreements to mitigate elements of interest rate risk exposure associated with anticipated financing.

The LME has entered into forward start interest rate swaps to hedge against the effect of future changes in interest rates for long-term debt for the Lower Mattagami River project. All forward interest rate swap contracts have been offset or settled since the second quarter of 2014.

Electricity price risk for the Company is the potential for adverse movements in the market price of electricity. Exposure to electricity price risk is reduced as a result of regulated prices and contractual arrangements for a significant portion of OPG's business. Effective November 1, 2014, virtually all of this exposure was mitigated with the implementation of a regulated price for OPG's 48 previously unregulated hydroelectric facilities, which were prescribed for regulation beginning in 2014.

The conditional reduction to revenue in the future, embedded in the terms of the Bruce Lease, is treated as a derivative. Assumptions related to future electricity prices impact the valuation of the derivative liability embedded in the Bruce Lease.

OPG's foreign exchange exposure is attributable to two primary factors: US dollar denominated transactions such as the purchase of fuels. OPG enters into foreign exchange derivatives and agreements with major financial institutions, when necessary, in order to manage the Company's exposure to foreign currency movements.

The majority of OPG's revenues are derived from sales through the IESO-administered spot market. Although the credit exposure to the IESO represents a significant portion of OPG's accounts receivable, the Company's management accepts this risk due to the IESO's primary role in the Ontario electricity market. The remaining receivables exposure is to a diverse group of generally high quality counterparties. OPG's allowance for doubtful accounts as at December 31, 2014 was less than \$1 million.

The following is a summary of OPG's derivative instruments:

	2014				
(millions of dollars except where noted)	Notional Quantity	Terms	Fair Value	Balance Sheet Line Item	
As at December 31, 2014					
Derivative embedded in the Bruce Lease	n/a	5 years	(302)	Long-term accounts payable and accrued charges	
Other derivative instruments	various	various	11	Various	
Total derivatives			(291)		

	-	13		
(millions of dollars except where noted)	Notional Quantity	Terms	Fair Value	Balance Sheet Line Item
Derivative embedded in the Bruce Lease	n/a	6 years	(346)	Long-term accounts payable and accrued charges
Other derivative instruments	various	various	(8)	Various
Total derivatives			(354)	

The following table shows the amount related to derivatives recorded in AOCL and income for the years ended December 31:

(millions of dollars)	2014	2013
Cash flow hedges (recorded in AOCL)		
(Loss) gain in OCI	(3)	17
Reclassification of losses to net interest expense	19	18
Reclassification of gains to fuel expense	(3)	(3)
Commodity derivatives (recorded in income)		,
Realized losses in revenue	(11)	(7)
Unrealized gains (losses) in revenue	9	(4)
Embedded derivative (recorded in income)		
Unrealized gains (losses) in revenue <sup>1</sup>	44	(33)

<sup>&</sup>lt;sup>1</sup> Excludes the impact of the Bruce Lease Net Revenues Variance Account.

Existing net losses of \$20 million deferred in AOCL as at December 31, 2014 are expected to be reclassified to net income within the next 12 months.

#### 13. FAIR VALUE MEASUREMENTS

OPG is required to classify fair value measurements using a fair value hierarchy. This hierarchy groups financial assets and liabilities into three levels, based on the significance of inputs used in measuring the fair value of the financial assets and liabilities. The level within which the financial asset or liability is classified is determined based on the attribute of significance to the inputs to the fair value measurement. The fair value hierarchy has the following levels:

- Level 1: Valuation of inputs is based on unadjusted quoted market prices observed in active markets for identical assets or liabilities.
- Level 2: Valuation is based on inputs other than quoted prices under Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3: Valuation is based on inputs for the asset or liability that are not based on observable market data.

The fair value of financial instruments traded in active markets is based on quoted market prices at the consolidated balance sheet dates. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by OPG is the current bid price. These instruments are included in Level 1 and are comprised primarily of equity investments and fund investments.

For financial instruments for which quoted market prices are not directly available, fair values are estimated using forward price curves developed from observable market prices or rates. The estimation of fair value may include the use of valuation techniques or models, based wherever possible on assumptions supported by observable market

prices or rates prevailing at the consolidated balance sheet dates. This is the case for over-the-counter derivatives and securities, which include energy commodity derivatives, foreign exchange derivatives, interest rate swap derivatives, and fund investments. Pooled fund investments are valued at the unit values supplied by the pooled fund administrators. The unit values represent the underlying net assets at fair values, determined using closing market prices. Valuation models use general assumptions and market data and therefore do not reflect the specific risks and other factors that would affect a particular instrument's fair value. The methodologies used for calculating the fair value adjustments are reviewed on an ongoing basis to ensure that they remain appropriate. If all significant inputs required to fair value an instrument are observable, the instrument is included in Level 2.

If one or more of the significant inputs is not based on observable market data, the instrument is included in Level 3. Specific valuation techniques are used to value these instruments. Significant Level 3 inputs include: recent comparable transactions, comparable benchmark information, bid/ask spread of similar transactions, and other relevant factors.

Transfers into, out of, or between levels are deemed to have occurred on the date of the event or change in circumstances that caused the transfer to occur.

The Company is required to determine the fair value of all its financial instruments. The following is a summary of OPG's financial instruments as at December 31:

	Fa Val	<del></del>	Carrying Value <sup>¹</sup>		
(millions of dollars)	2014	2013	2014	2013	Balance Sheet Line Item
Nuclear fixed asset removal and nuclear waste management funds (includes current portion)	14,379	13,496	14,379	13,496	Nuclear fixed asset removal and nuclear waste management funds
Payable related to cash flow hedges	(63)	(56)	(63)	(56)	Long-term accounts payable and accrued charges
Derivative embedded in the Bruce Lease	(302)	(346)	(302)	(346)	Long-term accounts payable and accrued charges
Long-term debt (includes current portion)	(6,326)	(5,955)	(5,730)	(5,625)	Long-term debt
Other financial instruments	19	1	19	1	Various

The carrying values of other financial instruments included in cash and cash equivalents, receivables from related parties, other accounts receivable and prepaid expenses, and accounts payable and accrued charges approximate their fair values due to the immediate or short-term maturity of these financial instruments.

The fair value of long-term debt instruments is determined based on a conventional pricing model, which is a function of future cash flows, the current market yield curve and term to maturity. These inputs are considered Level 2 inputs. The following tables present assets and liabilities measured at fair value in accordance with the fair value hierarchy:

		December	r 31, 2014	
(millions of dollars)	Level 1	Level 2	Level 3	Total
A 1 -				
Assets				
Decommissioning Fund	3,069	2,787	390	6,246
Used Fuel Fund	617	7,444	72	8,133
Other financial instruments	4	5	16	25
Total	3,690	10,236	478	14,404
Liabilities				
Derivative embedded in the Bruce Lease	-	-	(302)	(302)
Other financial instruments	(3)	(3)	•	` (6 <b>)</b>
Total	(3)	(3)	(302)	(308)
Net assets	3,687	10,233	176	14,096

	December 31, 2013						
(millions of dollars)	Level 1	Level 2	Level 3	Total			
Assets							
Decommissioning Fund	3,005	2,715	247	5,967			
Used Fuel Fund	526	6,961	42	7,529			
Other financial instruments	5	3	12	20			
Total	3,536	9,679	301	13,516			
Liabilities							
Derivative embedded in the Bruce Lease	-	-	(346)	(346)			
Other financial instruments	(8)	(11)	· -	`(19)			
Total	(8)	(11)	(346)	(365)			
Net assets (liabilities)	3,528	9,668	(45)	13,151			

During the year ended December 31, 2014, there were no transfers between Level 1 and Level 2. In addition, there were no transfers into and out of Level 3.

The following tables present the changes in OPG's assets and liabilities measured at fair value based on Level 3:

(millions of dollars)	Decom- missioning Fund	Used Fuel Fund	Derivative Embedded in the Bruce Lease <sup>1</sup>	Other financial instruments
Opening balance, January 1, 2013	163	13	(392)	13
Unrealized gains included in earnings on nuclear fixed asset removal and nuclear waste management funds <sup>1</sup>	18	3	-	-
Unrealized losses included in revenue	-	-	(33)	(1)
Realized losses included in revenue	(1)	-	` -	(2)
Purchases	83	14	-	2
Sales	(3)	-	-	-
Settlements	(13)	12	79	-
Closing balance, December 31, 2013	247	42	(346)	12
Unrealized gains included in earnings on nuclear fixed asset removal and nuclear waste management funds <sup>1</sup>	20	4	· -	-
Unrealized gains included in revenue	-	-	44	2
Realized gains (losses) included in revenue	1	-	-	(11)
Purchases	148	28	-	13
Sales	(12)	(2)	-	-
Settlements	(14)	-	-	-
Closing balance, December 31, 2014	390	72	(302)	16

<sup>&</sup>lt;sup>1</sup> Total gains (losses) exclude the impact of the Bruce Lease Net Revenues Variance Account.

#### **Derivative Embedded in the Bruce Lease**

The revenue from the Bruce Lease is reduced in each calendar year where the expected future annual arithmetic average hourly Ontario electricity price falls below \$30/MWh and certain other conditions are met. The conditional reduction to revenue in the future, embedded in the terms of the Bruce Lease, is treated as a derivative.

Due to an unobservable input used in the pricing model of the Bruce Lease embedded derivative, the measurement of the liability is classified within Level 3.

The following table presents the quantitative information about the Level 3 fair value measurement of the Bruce Lease embedded derivative as at December 31, 2014:

(millions of dollars except where noted)	Fair Value	Valuation Technique	Unobservable Input	Range
Derivative embedded in the Bruce Lease	(302)	Option model	Risk Premium <sup>1</sup>	0% - 30%

Represents the range of premiums used in the valuation analysis that OPG has determined market participants would use when pricing the derivative.

The term related to the derivative embedded in the Bruce Lease is based on the remaining service lives, for accounting purposes, for certain units of the Bruce generating stations. As at December 31, 2014, the estimated service life, for accounting purposes, of these Bruce units is to 2019. OPG's exposure to changes in the fair value of the Bruce Lease embedded derivative is mitigated as part of the OEB regulatory process, since the revenue from the lease of the Bruce generating stations is included in the determination of regulated prices and is subject to the Bruce Lease Net Revenues Variance Account. As such, the income statement impact of changes in the derivative liability is offset by the income statement impact of the Bruce Lease Net Revenues Variance Account.

## **Decommissioning Fund and Used Fuel Fund**

Nuclear Funds investments classified as Level 3 consist of real estate and infrastructure investments within the alternative investment portfolio. The fair value of the investments within the Nuclear Funds' alternative investment portfolio is determined using appropriate valuation techniques, such as recent arm's length market transactions, reference to current fair values of other instruments that are substantially the same, discounted cash flow analyses, third-party independent appraisals, valuation multiples, or other valuation methods. Any control, size, liquidity or other discounts or premiums on the investments are considered in the determination of fair value.

The process of valuing investments for which no published market price exists is based on inherent uncertainties and the resulting values may differ from values that would have been used had a ready market existed for the investments. The values may also differ from the prices at which the investments may be sold.

The following are the classes of investments within the Nuclear Funds that are reported on the basis of net asset value as at December 31, 2014:

(millions of dollars except where noted)	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice
Infrastructure	496	262	n/a	n/a
Real Estate	507	256	n/a	n/a
Pooled Funds	507	250	II/a	II/a
Short-term Investments	18	n/a	Daily	1 - 5 Days
Fixed Income	585	n/a	Daily	1 - 5 Days
Equity	690	n/a	Daily	1 - 5 Days
Total	2,296	518		

The fair value of the above investments is classified as either Level 2 or Level 3.

#### Infrastructure

This class includes investments in funds whose investment objective is to generate a combination of long-term capital appreciation and current income generally through investments such as energy, transportation and utilities.

The fair values of investments in this class have been estimated using the Nuclear Funds' ownership interest in partners' capital and/or underlying investments held by subsidiaries of an infrastructure fund.

The investments in the respective infrastructure funds are not redeemable. However, the Nuclear Funds may transfer any of its partnership interests/shares to another party, as stipulated in the partnership agreements and/or shareholders' agreements. Distributions from each infrastructure fund will be received based on the operations of the underlying investments and/or as the underlying investments of the infrastructure funds are liquidated. It is not possible to estimate when the underlying assets of the infrastructure funds will be liquidated. However, the infrastructure funds have a maturity end period ranging from 2019 to 2025.

#### Real Estate

This class includes investment in institutional-grade real estate property located in Canada. The investment objective is to provide a stable level of income with the opportunity for long-term capital appreciation.

The fair values of the investments in this class have been estimated using the net asset value of the Nuclear Funds' ownership interest in these investments.

The partnership investments are not redeemable. However, the Nuclear Funds may transfer any of their partnership interests to another party, as stipulated in the partnership agreement, with prior written consent of the other limited partners. For investments in private real estate corporations, shares may be redeemed through a pre-established redemption process. It is not possible to estimate when the underlying assets in this class will be liquidated.

#### Pooled Funds

This class represents investments in pooled funds, which primarily include a diversified portfolio of fixed income securities, issued mainly by Canadian corporations and diversified portfolios of Emerging Market listed equity. The investment objective of the pooled funds is to achieve capital appreciation and income through professionally managed portfolios.

The fair value of the investments in this class has been estimated using the net asset value per share of the investments.

There are no significant restrictions on the ability to sell investments in this class.

#### 14. COMMON SHARES

As at December 31, 2014 and 2013, OPG had 256,300,010 common shares issued and outstanding at a stated value of \$5,126 million. OPG is authorized to issue an unlimited number of common shares without nominal or par value. Any issue of new shares is subject to the consent of OPG's shareholder.

#### 15. COMMITMENTS AND CONTINGENCIES

### Litigation

Various legal proceedings are pending against OPG or its subsidiaries covering a wide range of matters that arise in the ordinary course of its business activities.

On August 9, 2006, a Notice of Action and Statement of Claim filed with the Ontario Superior Court of Justice in the amount of \$500 million was served against OPG and Bruce Power L.P. by British Energy Limited and British Energy International Holdings Limited (together British Energy). The action is for contribution and indemnity of any amounts British Energy was liable for in an arbitration against it by some of the owners of Bruce Power L.P. regarding an alleged breach of British Energy's representations and warranties to the claimants when they purchased British Energy's interest in Bruce Power L.P. (the Arbitration). Both the action and the Arbitration relate to corrosion to a steam generator unit discovered after OPG leased the Bruce nuclear generating stations to Bruce Power L.P.

In 2012, the arbitrator found that British Energy was liable to the claimants for some of the damages they claimed. The final settlement amount was valued by British Energy at \$71 million. In September 2014, British Energy amended its Statement of Claim (Amended Claim) to reduce the claim amount to \$100 million to reflect that the purchasers of British Energy's interest in Bruce Power L.P. did not receive the full damages they originally claimed in the Arbitration. British Energy also added an allegation to its Amended Claim that OPG breached a covenant to maintain the steam generator between the time of the initial agreement to lease and the effective date of the lease in accordance with "Good Utility Practices".

Certain First Nations have commenced actions against OPG for interference with their respective reserve and traditional land rights. As well, OPG has been brought into certain actions by the First Nations against other parties as a third party defendant.

Each of these matters is subject to various uncertainties. Some of these matters may be resolved unfavourably. While it is not possible to determine the ultimate outcome of the various pending actions, it is the Company's belief that their resolution is not likely to have a material adverse impact on its financial position.

#### **Environmental**

Current operations are subject to regulation with respect to emissions to air, water, and land as well as other environmental matters by federal, provincial, and local authorities. The cost of obligations associated with current operations is provided for on an ongoing basis. Management believes it has made adequate provision in the consolidated financial statements to meet certain other environmental obligations. As at December 31, 2014, OPG's environmental liabilities were \$15 million (2013 - \$15 million).

#### **Guarantees**

The Company and its joint venture partners have jointly guaranteed the financial performance of jointly owned entities related primarily to the payment of liabilities. As at December 31, 2014, the total amount of guarantees OPG provided to these entities was \$78 million. OPG may terminate some of these guarantees within a short time frame by providing written notice to the counterparties at any time. Other guarantees have terms ending between 2019 and 2029. As at December 31, 2014, the potential impact of the fair value of these guarantees to income has been estimated to be negligible and OPG does not expect to make any payments associated with these guarantees.

#### **Contractual and Commercial Commitments**

OPG's contractual obligations and other significant commercial commitments as at December 31, 2014, are as follows:

(millions of dollars)	2015	2016	2017	2018	2019	Thereafter	Total
Contractual obligations:							
Fuel supply agreements	193	172	154	134	51	109	813
Contributions under the Ontario Nuclear Funds Agreement <sup>1</sup>	143	150	163	193	288	2,418	3,355
Pension contributions to the OPG registered pension plan <sup>2</sup>	364	370	-	-	-	-	734
Long-term debt repayment	503	273	1,103	398	368	3,085	5,730
Interest on long-term debt	261	249	230	174	155	1,986	3,055
Unconditional purchase obligations	97	8	-	-	-	-	105
Operating lease obligations	16	15	15	13	12	65	136
Commitments related to Darlington Refurbishment <sup>3</sup>	150	-	-	-	-	-	150
Operating licence	22	23	23	18	19	-	105
Accounts payable	295	-	-	-	-	-	295
Other	125	19	14	5	60	9	232
	2,169	1,279	1,702	935	953	7,672	14,710
Significant commercial commitments: Lower Mattagami River project	95	-	-	-	-	<u> </u>	95
Total	2,264	1,279	1,702	935	953	7,672	14,805

Contributions under the Ontario Nuclear Funds Agreement (ONFA) are based on the 2012 ONFA Reference Plan contribution schedule approved in 2012.

The pension contributions include ongoing funding requirements and additional funding requirements towards the deficit, in accordance with the actuarial valuation of the OPG registered pension plan as at January 1, 2014. The next actuarial valuation of the OPG registered pension plan must have an effective date no later than January 1, 2017. The pension contributions are affected by various factors including market performance, changes in actuarial assumptions, plan experience, changes in the pension regulatory environment, and the timing of funding valuations. Funding requirements after 2017 for the OPG registered pension plan are excluded due to significant variability in the assumptions required to project the timing of future cash flows. The amount of OPG's additional voluntary contribution, if any, is revisited from time to time.

Estimated currently committed costs to close the project, including demobilization of project staff and cancellation of existing contracts and material orders.

## Lower Mattagami

The Lower Mattagami River project increased the capacity of the four generating stations on the Lower Mattagami River by 438 MW. As of December 31, 2014, all six new units were placed in-service. The capital project expenditures for the year ended December 31, 2014 were \$387 million and the life-to-date expenditures were \$2.4 billion. The project budget of \$2.6 billion includes the design-build contract, as well as contingencies, interest, and other OPG costs, including project management, contract management, impact agreements with First Nations, and transmission connection costs. The remaining contractual commitments for the project relate to project completion activities.

## **Darlington Refurbishment**

As of December 31, 2014, OPG has issued contracts valued at over \$2 billion related to the refurbishment of the Darlington nuclear station. Some of these contracts relate to work to be completed in the current planning phase, scheduled to end in 2015, while others are for work that will be performed in the execution phase of the project. These contracts contain suspension and termination provisions. The most significant contracts include the Retube and Feeder Replacement (RFR) contract, and the Turbine Generator contract. Significant contracts awarded to-date are as follows:

- In February 2014, OPG awarded the Turbine Generator contract for engineering integration and field installation, valued at approximately \$200 million.
- In March 2013, OPG awarded the Turbine Generator contract for equipment supply and technical services. valued at approximately \$350 million.
- In March 2012, OPG awarded a RFR contract, with an estimated value at over \$600 million.

Capital project expenditures for 2014 were \$696 million and the life-to-date capital expenditures as at December 31, 2014 were \$1,462 million. A budget and schedule for the refurbishment of the four units are expected to be completed in 2015.

## Lease Commitments

The Company is party to various leases for real estate and equipment under operating lease arrangements. Real estate and transport equipment base rent expense for the year ended December 31, 2014 was \$11 million (2013 -\$15 million).

The Company leases Bruce A and B nuclear generating stations to Bruce Power L.P. until 2018, with Bruce Power L.P. having an option to renew for up to 25 years thereafter.

As per Ontario Regulation 53/05 pursuant to the Ontario Energy Board Act, 1998, the difference between OPG's revenues, including lease revenues, and costs, including depreciation expense, associated with its ownership of the Bruce A and B nuclear generating stations is included in the determination of OPG's nuclear regulated prices established by the OEB. These revenues and costs are determined on the basis of the manner in which they are recognized in OPG's consolidated financial statements. As the assets on lease to Bruce Power L.P. are not prescribed facilities under Ontario Regulation 53/05, the net book value of the assets is not included in the regulated rate base.

During 2014, OPG recorded lease revenue related to the Bruce generating stations of \$258 million (2013 -\$176 million), which included supplemental rent from Bruce Power L.P. of \$207 million (2013 - \$125 million). The amount of supplemental rent shown in 2013 was net of a contractually required rebate of \$79 million. The net book value of property, plant and equipment on lease to Bruce Power L.P. as at December 31, 2014 was \$1,755 million (2013 - \$1,859 million).

#### Other Commitments

The Company maintains labour agreements with the Power Workers' Union (PWU) and the Society of Energy Professionals (The Society). As at December 31, 2014, OPG had approximately 9,700 regular employees and about 89 percent of its regular labour force was covered by the collective bargaining agreements. The current collective agreement between OPG and the PWU has a three-year term, which expires on March 31, 2015. The Company's current collective agreement with The Society was established through an arbitration award issued on April 8, 2013. This agreement has a three-year term, which expires on December 31, 2015. The Society filed a Judicial Review Application in the second quarter of 2013 to the Superior Court of Ontario in the matter of the arbitration award. The case was heard at Divisional Court on October 30, 2014 and a ruling was issued November 27, 2014 dismissing the Society's application. On December 11, 2014, the Society filed a motion for leave to appeal the Divisional Court ruling. The motion has been heard and a decision is expected in the next few months.

Contractual and commercial commitments as noted exclude certain purchase orders, as they represent purchase authorizations rather than legally binding contracts, and are subject to change without significant penalties.

#### 16. BUSINESS SEGMENTS

Effective January 1, 2014, OPG revised the composition of its reportable business segments to reflect changes in its generation portfolio and internal reporting. These changes primarily reflect 48 of OPG's hydroelectric generating facilities which were prescribed for rate regulation beginning in 2014, and ending the use of coal at the Nanticoke and Lambton generating stations in 2013. OPG's reportable business segments, effective January 1, 2014, are as follows:

- Regulated Nuclear Generation
- Regulated Nuclear Waste Management
- Regulated Hydroelectric
- Contracted Generation Portfolio
- Services, Trading, and Other Non-Generation.

OPG's Regulated - Nuclear Generation and Regulated - Nuclear Waste Management segments are unchanged.

## **Regulated - Nuclear Generation Segment**

OPG's Regulated - Nuclear Generation business segment operates in Ontario, generating and selling electricity from the nuclear generating stations that it owns and operates. The business segment includes electricity generated by the Pickering and Darlington Nuclear generating stations. This business segment also includes revenue under the terms of a lease arrangement and related agreements with Bruce Power L.P. related to the Bruce Nuclear generating stations. This revenue includes lease revenue and revenue from heavy water sales and services such as detritiation. Revenue is also earned from isotope sales and ancillary services. Ancillary revenues are earned through voltage control and reactive support. Revenues under the agreements with Bruce Power and from isotope sales and ancillary services are included by the OEB in the determining of the regulated prices for OPG's nuclear facilities, which has the effect of reducing OPG's nuclear regulated prices.

## Regulated - Nuclear Waste Management Segment

OPG's Regulated - Nuclear Waste Management segment engages in the management of nuclear used fuel and L&ILW, the decommissioning of OPG's nuclear generating stations (including the stations on lease to Bruce Power L.P.), the management of the Nuclear Funds, and related activities including the inspection and maintenance of the waste storage facilities. Accordingly, accretion expense on the Nuclear Liabilities and earnings from the Nuclear Funds are reported under this seament.

As the nuclear generating stations operate over time, OPG incurs variable costs related to used nuclear fuel bundles and L&ILW which increase the Nuclear Liabilities. OPG charges these variable costs to current operations in the Regulated – Nuclear Generation segment to reflect the cost of producing energy and earning revenue under the Bruce Power lease arrangement and related agreements. Since variable costs increase the Nuclear Liabilities in the Regulated – Nuclear Waste Management segment, OPG records an inter-segment charge between the Regulated – Nuclear Generation and the Regulated – Nuclear Waste Management segments. The impact of the inter-segment charge is eliminated on OPG's consolidated statements of income and balance sheets.

The Regulated – Nuclear Waste Management segment is considered regulated because the costs associated with the Nuclear Liabilities are included by the OEB in determining regulated prices for production from OPG's regulated nuclear facilities.

## Regulated - Hydroelectric Segment

OPG's Regulated – Hydroelectric business segment operates in Ontario, generating and selling electricity from most of the Company's hydroelectric generating stations. The business segment includes the results of the Sir Adam Beck 1, 2 and Pump generating station (GS), DeCew Falls 1 and 2, and the R.H. Saunders hydroelectric facilities. This segment also includes the results of the 48 newly regulated hydroelectric stations. The OEB's order, issued in December 2014, established regulated prices for these assets effective November 1, 2014. The comparative information for these 48 hydroelectric stations, previously reported under the Unregulated – Hydroelectric segment in OPG's 2013 annual MD&A and consolidated financial statements, has been reclassified to conform to this new presentation.

## **Contracted Generation Portfolio Segment**

The Contracted Generation Portfolio business segment operates in Ontario, generating and selling electricity from the Company's generating stations that are not prescribed for rate regulation. The segment primarily includes generating facilities that are under an ESA with the IESO or other long-term contracts.

Activities of generating stations that are not currently subject to a contract or rate regulation, but are available to generate electricity for sale, if required, are also included in the Contracted Generation Portfolio segment. Since the Lambton GS and Nanticoke GS were generating electricity up to the end of 2013, the activities related to these stations for the comparative period are reported in the Contracted Generation Portfolio segment. These stations ended coal-fired operations as a result of a Shareholder declaration issued in March 2013 mandating that OPG end the use of coal at these stations by the end of 2013. Therefore, effective January 1, 2014, the activities related to the Lambton GS and Nanticoke GS are reported under the Services, Trading, and Other Non-Generation business segment. The comparative information for the unregulated generating stations, previously reported under the Unregulated – Hydroelectric and Unregulated – Thermal segments in OPG's 2013 annual MD&A and consolidated financial statements, has been reclassified to conform to this new presentation.

The Contracted Generation Portfolio segment also includes OPG's share of equity income from its 50 percent ownership interests in the PEC and Brighton Beach stations. OPG's share of the in-service generating capacity and generation volume from its interests in the PEC and Brighton Beach stations are also included in this segment.

## Services, Trading, and Other Non-Generation Segment

The Services, Trading, and Other Non-Generation segment is a non-generation segment that is not subject to rate regulation. It includes the revenue and expenses related to OPG's trading and other non-hedging activities. As part of these activities, OPG transacts with counterparties in Ontario and neighbouring energy markets in predominantly short-term trading activities of typically one year or less in duration. These activities relate to electricity that is purchased and sold at the Ontario border, financial energy trades, sales of financial risk management products, and sales of energy-related products. In addition, OPG has a wholly owned trading subsidiary that transacts solely in the United States market. All contracts that are not designated as hedges are recorded as assets or liabilities at fair

value, with changes in fair value recorded in the revenue of this segment. In addition, this segment includes revenue from real estate rentals and other unregulated service revenues. The above activities were previously reported in the Other category.

OM&A expenses of the generation business segments include an inter-segment service fee for the use of certain property, plant and equipment, and intangible assets held within the Services, Trading and Other Non-Generation segment. The total service fee is recorded as a reduction to the segment's OM&A expenses.

The service fee included in OM&A expenses by segment in 2014 and 2013 was as follows:

(millions of dollars)	2014	<b>2013</b> (adjusted)
Regulated – Nuclear Generation Regulated – Hydroelectric	23 6	23 4
Contracted Generation Portfolio Services, Trading, and Other Non-Generation	3 (32)	6 (33)

Information for the comparative period has been adjusted to reflect the changes to OPG's reportable business segments and is labeled "adjusted".

Segment Income	Regulated Unregulated							
(Loss) for the		Nuclear						
Year Ended		Waste		Contracted	Trading, and			
December 31, 2014	Nuclear	Manage-	Hydro-	Generation	Other Non-			
(millions of dollars)	Generation	ment	electric	Portfolio	Generation	Elimination	Total	
Revenue	3,015	121	1,417	329	197	(116)	4,963	
Fuel expense	258	121	343	37	3	(110)	641	
Gross margin	2,757	121	1,074	292	194	(116)	4,322	
Operations,	1,983	129	325	175	119	(116)	2,615	
maintenance and	1,500	123	323	170	113	(110)	2,010	
administration								
Depreciation and	529	_	167	38	20	_	754	
amortization	023		107	30	20		754	
Accretion on fixed	_	782	_	8	7	_	797	
asset removal and		702		•	•			
nuclear waste								
management								
liabilities								
Earnings on nuclear	_	(714)	_	_	_	_	(714)	
fixed asset removal		( /					(,	
and nuclear waste								
management funds								
Regulatory	_	_	77	_	_	_	77	
disallowance related								
to the Niagara Tunnel								
project								
Income from	_	_	_	(41)	_	_	(41)	
investments subject				` ,			, ,	
to significant influence								
Property taxes	28	_	1	(1)	4	_	32	
Restructuring	-	-	-	`8	10	-	18	
Other loss (income)	-	-	2	(6)	1	-	(3)	
Income (loss) before				• •				
interest, income								
taxes, and								
extraordinary item	217	(76)	502	111	33	-	787	

Segment (Loss)	F	Regulated Unregulated						
Year Ended December 31, 2013 (millions of dollars) (adjusted)	Nuclear Generation	Nuclear Waste Manage- ment	Hydro- electric	Contracted Generation Portfolio	Services, Trading, and Other Non- Generation	Elimination	Total	
Revenue	2,889	113	1,236	657	77	(109)	4,863	
Fuel expense	237	-	344	127	-	<u> </u>	708	
Gross margin Operations, maintenance and administration	2,652 2,022	113 121	892 298	530 408	77 7	(109) (109)	4,155 2,747	
Depreciation and amortization	626	-	186	132	19	-	963	
Accretion on fixed asset removal and nuclear waste management liabilities	-	742	-	14	-	-	756	
Earnings on nuclear fixed asset removal and nuclear waste management funds	-	(628)	-	-	-	-	(628)	
Income from investments subject to significant influence	-	-	-	(35)	-	-	(35)	
Property taxes	29	-	(1)	14	11	-	53	
Restructuring	-	-	-	50	-	-	50	
Other loss (income)	(1)	-	4	(4)	(2)	-	(3)	
(Loss) income before interest, income taxes, and								
extraordinary items	(24)	(122)	405	(49)	42	-	252	

-						
Selected Consolidated		Regulated		Unreç	gulated	
Balance Sheet Information as at December 31, 2014		Nuclear Waste		Contracted	Services, Trading, and	
as at December 31, 2014	Nuclear	Manage-	Hydro-	Generation	Other Non-	
(millions of dollars)	Generation	ment	electric	Portfolio	Generation	Total
1						
Segment property, plant and equipment in-service, net	4,679	-	7,483	3,267	338	15,767
Segment construction in progress	1,655	-	86	35	50	1,826
Segment property, plant and equipment, net	6,334	-	7,569	3,302	388	17,593
Segment intangible assets in-service, net	11	-	1	4	14	30
Segment development in progress	2	-	1	-	43	46
Segment intangible assets, net	13	-	2	4	57	76
Segment fuel inventory	298	-	-	36	-	334
Segment materials and supplies inventory, net:						
Current	93	-	-	1	-	94
Long-term	332	-	1	5	-	338
Nuclear fixed asset removal and nuclear waste management funds (current and non-current portions)	-	14,379	-	-		14,379
Fixed asset removal and nuclear waste management liabilities	-	(16,663)	-	(333)	(32)	(17,028)

Selected Consolidated Balance Sheet Information					Unregulated Services,					
as at December 31, 2013		Waste		Contracted	Trading, and					
(millions of dollars)	Nuclear Generation	Manage- ment	Hydro- electric	Generation Portfolio	Other Non- Generation	Total				
(adjusted)	Generation	mem	electric	Portiono	Generation	IOIAI				
Segment property, plant and equipment in-service, net	4,864	-	7,624	921	189	13,598				
Segment construction in progress	866	-	81	2,150	43	3,140				
Segment property, plant and equipment, net	5,730	-	7,705	3,071	232	16,738				
Segment intangible assets in-service, net	15	-	1	4	17	37				
Segment development in progress	2	-	-	-	20	22				
Segment intangible assets, net	17	-	1	4	37	59				
Segment fuel inventory	334	-	-	56	-	390				
Segment materials and supplies inventory, net:										
Current	94	-	-	1	-	95				
Long-term	322	-	1	7	-	330				
Nuclear fixed asset removal and nuclear waste management funds (current and non-current portions)	-	13,496	-	-	-	13,496				
Fixed asset removal and nuclear waste management liabilities	-	(15,903)	-	(322)	(32)	(16,257)				

Selected Consolidated Cash Flow Information		Regulated			gulated Services,		
(millions of dollars)	Nuclear Generation	Nuclear Waste Management	Hydro- electric	Contracted Generation Portfolio	Trading, and Other Non- Generation	Total	
Year ended December 31, 2014 Investment in property, plant and equipment, and intangible assets	991		84	423	47	1,545	
Year ended December 31, 2013 (adjusted) Investment in property, plant and equipment, and intangible assets	633	_	172	724	39	1,568	

## 17. NET CHANGES IN NON-CASH WORKING CAPITAL BALANCES

(millions of dollars)	2014	2013
Receivables from related parties	(80)	40
Other accounts receivable and prepaid expenses	15	(21)
Fuel inventory	56	115
Income taxes payable/recoverable	75	12
Materials and supplies	1	(5)
Accounts payable and accrued charges	145	98
	212	239

## 18. RELATED PARTY TRANSACTIONS

Given that the Province owns all of the shares of OPG, related parties include the Province and successor entities of Ontario Hydro, including Hydro One Inc. (Hydro One), the IESO, and the OEFC, and jointly controlled entities. The transactions between OPG and related parties are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

These transactions for the years ended December 31 are summarized below:

		2014		2013	
(millions of dollars)	Revenue	Expenses	Revenue	Expenses	
Hydro One					
Electricity sales	23	_	15	-	
Services	1	13	-	14	
Province of Ontario					
Decommissioning Fund excess funding	-	476		560	
Used Fuel Fund rate of return guarantee	-	439	-	755	
Gross revenue charges	-	123	-	124	
ONFA guarantee fee	-	8	-	8	
Pension benefits guarantee fee	-	2	-	1	
OEFC					
Gross revenue charges	-	209	-	208	
Interest expense on long-term notes	-	187	-	187	
Income taxes, net of investment tax credits	-	136	-	28	
Contingency support agreement	83	-	360	-	
Capital tax	-	-	-	1	
IESO					
Electricity related revenue	4,305	75	4,015	62	
	4,412	1,668	4,390	1,948	

The receivable and payable balances, as at December 31, between OPG and its related parties are summarized below:

(millions of dollars)	2014	2013
Receivables from related parties Hydro One IESO OEFC PEC	1 468 10 3	2 331 67 2
Accounts payable and accrued charges Hydro One OEFC Province of Ontario	8 63 3	3 65 2

## 19. INVESTMENTS SUBJECT TO SIGNIFICANT INFLUENCE

Investments subject to significant influence consist of OPG's 50 percent ownership interest in the jointly controlled entities of PEC and Brighton Beach, which are accounted for using the equity method as described in Note 3. Details of the balance included in the consolidated balance sheets as at December 31 are as follows:

(millions of dollars)	2014	2013
PEC		
Current assets	15	19
Long-term assets	287	303
Current liabilities	(5)	(15)
Long-term liabilities	(4)	`(4)
Brighton Beach		
Current assets	6	5
Long-term assets	186	196
Current liabilities	(13)	(11)
Long-term liabilities	(6)	(5)
Long-term debt	(118)	(129)
Investments subject to significant influence	348	359

# 20. RESEARCH AND DEVELOPMENT

For the year ended December 31, 2014, research and development expenses of \$84 million (2013 - \$104 million) were charged to operations.

#### 21. RESTRUCTURING

In response to the Ministry of Energy's Long-Term Energy Plan, Supply Mix Directive and various other directives, OPG has been undertaking restructuring activities since 2011 pertaining to the closure of its coal-fired generating units at the Lambton GS, Nanticoke GS, Atikokan GS and Thunder Bay GS. These activities have an impact on staff requirements and require OPG to record the corresponding restructuring costs.

In December 2013, the Minister of Energy issued a Directive to the former OPA to negotiate and enter into a contract for electricity from one unit at the Thunder Bay GS using advanced biomass fuel. The resulting impact on staff requirements has been finalized during 2014. The total severance costs related to the Thunder Bay GS are estimated to be \$8 million and were recorded during the second and third quarters of 2014. Additional severance costs of \$4 million related to the Lambton and Nanticoke generating stations were also recorded during 2014. Relocation costs of \$6 million were recorded as incurred during 2014.

OPG conducted discussions with key stakeholders, including The Society and the PWU, in accordance with their respective collective bargaining agreements, at all plants impacted to date by the regulation requiring the cessation of coal-fired electricity generation. Given collective agreement provisions allowing deferral of severance payout to future periods, the restructuring liability is expected to be fully drawn down by 2017.

The change in the restructuring liability during 2014 and 2013 is as follows:

(millions of dollars)	
Liability, beginning of year	3
Restructuring charges during the year	50
Payments during the year	(13)
Liability, December 31, 2013	40
Restructuring charges during the year	18
Payments during the year	(41)
Liability, end of year	17

#### 22. NON-CONTROLLING INTEREST

Lower Mattagami Limited Partnership (LMLP) is an Ontario limited partnership between OPG, Amisk-oo-Skow Finance Corporation (AFC), a corporation wholly owned by the Moose Cree First Nation, and LM Extension Inc., a wholly owned subsidiary of OPG. The principal business of LMLP is the development, construction, ownership, operation and maintenance of hydroelectric generating facilities located on the Lower Mattagami River. As incremental units are placed in-service, the AFC may acquire up to a 25 percent interest in the assets through its investment in LMLP.

During 2014, all six new units constructed as part of the Lower Mattagami River project were declared in-service. Subsequent to the units' in-service dates, the AFC made contributions of \$141 million to acquire their equity interest in LMLP, through the settlement of existing liabilities, including long-term debt. As of December 31, 2014, the AFC had a 25 percent interest in LMLP. OPG consolidates the results of LMLP in its consolidated financial statements and the non-controlling interest represents the AFC's equity interest in LMLP.

# **OPG OFFICERS**



BERNARD LORD **Board Chair** 



TOM MITCHELL President and Chief Executive Officer



**BRUCE BOLAND** Senior Vice President, Commercial Operations and Environment



CARLO CROZZOLI Senior Vice President, Corporate Business Development and Chief Risk Officer



**CHRIS GINTHER** Senior Vice President, Law, General Counsel and Chief Ethics Officer



**GLENN JAGER** President, OPG Nuclear and Chief Nuclear Officer



**BARB KEENAN** Senior Vice President, People and Culture



MIKE MARTELLI Senior Vice President, Hydro - Thermal Operations



SCOTT MARTIN Senior Vice President, Business and Administrative Services



**DIETMAR REINER** Senior Vice President, **Nuclear Projects** 



**BETH SUMMERS** Senior Vice President, Chief Financial Officer



DAVID KAPOSI Vice President, Chief Investment Officer

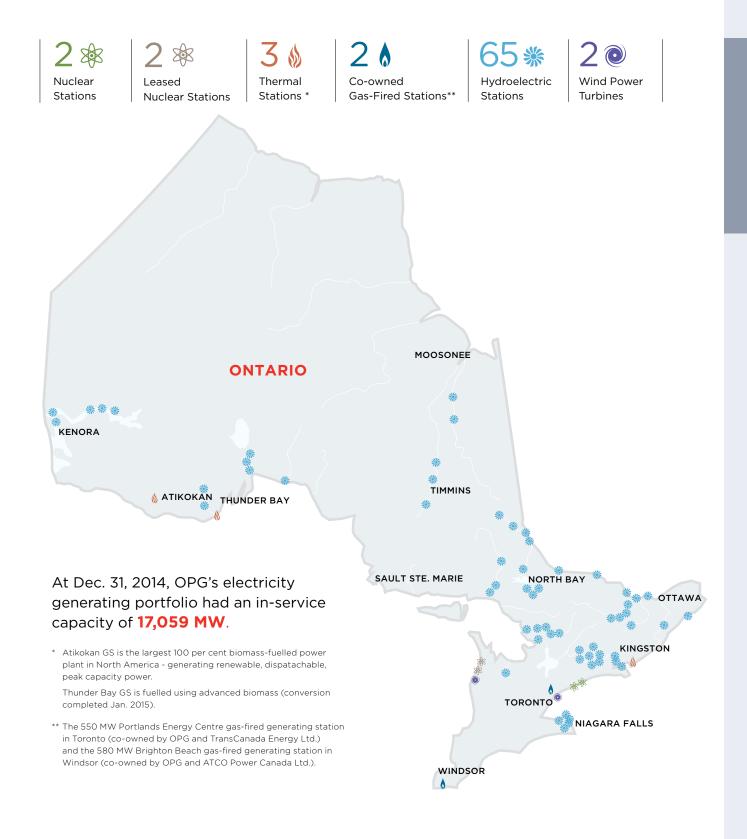


**CATRIONA KING** Vice President, Corporate Secretary and **Executive Operations** 



JOHN LEE Vice President, Treasurer

# **OPG GENERATION FACILITIES**





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