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#### **OPG REPORTS 2017 SECOND QUARTER FINANCIAL RESULTS**

### Company Reports Strong Performance at Pickering Nuclear Plant While Continuing to Successfully Execute Darlington Refurbishment Project

**Toronto:** – Ontario Power Generation Inc. (OPG or Company) today reported net income attributable to the Shareholder of \$303 million for the second quarter of 2017, compared to \$132 million for the same period in 2016, inclusive of a one-time gain of \$283 million on the sale of OPG's head office building and parking facility.

"Our Pickering Nuclear plant continues to demonstrate strong performance this year," said Jeff Lyash, OPG President and CEO. "We're executing outages as planned and generating units continue to produce the clean electricity Ontario homes and businesses rely on in a safe and reliable manner. So far this year, our Pickering plant has produced 1.2 terawatt hours more than last year."

Lyash went on to say, "We're also having strong success with the Darlington Refurbishment Project, which continues to progress on schedule and on budget."

The second quarter's results were impacted by the expected year-over-year decline in generation revenue, reflecting lower nuclear electricity generation due to the refurbishment outage for Unit 2 at the Darlington Generating Station (GS) without the resetting of base regulated prices. The sale of OPG's head office building and parking facility, and the associated one-time gain, offset the earnings impact of the refurbishment outage and was the main driver of the increase in net income for the second guarter of 2017, compared to the same period in 2016.

OPG provides electricity at a price that is 40 per cent less than other generators and is the only electricity generator in Ontario that has its prices set through a public hearing process by the Ontario Energy Board (OEB). In April 2017, OPG completed the public hearing for its current application with the OEB that will set prices for the Company's nuclear and most of its hydroelectric generation for the next five years, with a proposed effective date of January 1, 2017. Final arguments on the application were completed in June 2017, and the OEB is expected to make a decision on the rate application later in the year. In the meantime, OPG is operating under base regulated prices that were set in 2014 and do not reflect reduced nuclear electricity generation, which is primarily due to the Darlington Refurbishment. The continuation of these prices has negatively affected revenue and net income in the second quarter of 2017. The outcome of the current rate application and the effective date of the new regulated prices are expected to affect OPG's revenue and net income for the second half of 2017.

#### **Generating and Operating Performance**

Electricity generated during the three months ended June 30, 2017 was 18.0 terawatt hours (TWh), compared to 19.4 TWh for the same quarter in 2016. Total electricity generated during the six months ended June 30, 2017 decreased to 36.6 TWh from 40.4 TWh for the same period in 2016. The decrease in electricity generation reflected lower nuclear generation and lower generation from the contracted plants, partially offset by higher hydroelectric generation from the regulated stations.

#### Regulated – Nuclear Generation Segment

Lower nuclear generation was primarily due to the removal from service of Unit 2 at the Darlington GS for the duration of the unit's refurbishment that began in October 2016 and is expected to continue until early 2020. Partially offsetting the reduction in generation from the Darlington GS was an increase in generation of 0.9 TWh and 1.2 TWh from the strong performance of the Pickering GS during the three and six month periods ended June 30, 2017, respectively.

For the three months ended June 30, 2017, the unit capability factor at the Darlington GS for operating units was 64.6 per cent, compared to 75.9 per cent for the same quarter in 2016. For the six months ended June 30, 2017, the unit capability factor at the Darlington GS was 74.9 per cent, compared to 86.6 per cent for the same period in 2016. The decrease was primarily a result of a higher number of planned and unplanned outage days at the station in the second quarter of 2017, and a higher number of planned outage days in the first half of 2017 largely driven by constraints related to the transition of the station toward refurbishment.

At the Pickering GS, the unit capability factor increased to 84.2 per cent and 81.4 per cent for the three and six month periods ended June 30, 2017, compared to 71.4 and 72.1 per cent for the same periods in 2016, respectively, primarily due to favourable unit conditions and execution of planned outage work resulting in a lower number of planned outage days at the station in 2017.

#### Regulated – Hydroelectric Segment

Higher generation from the regulated hydroelectric stations was due to higher water flows, primarily on the eastern Ontario river systems.

The availability of 90.1 per cent at these stations in the second quarter of 2017 was comparable to 90.4 per cent for the same quarter in 2016. For the six months ended June 30, 2017, the availability of the stations decreased to 89.8 per cent, from 92.6 per cent for the same period in 2016. The decrease in the availability was primarily due to a higher number of unplanned outage days.

#### Contracted Generation Portfolio Segment

Lower generation from the Contracted Generation Portfolio was mainly due to lower generation from the segment's hydroelectric plants.

The availability of these hydroelectric stations for the three months ended June 30, 2017 was 81.4 per cent, compared to 87.0 per cent for the same quarter in 2017. The stations' availability for the six months ended June 30, 2017 was 82.5 per cent,

compared to 85.5 per cent for the same period in 2016. The decrease in the availability was primarily due to an increase in the number of unplanned outage days.

#### Total Generating Cost

The Enterprise Total Generating Cost per megawatt hour (MWh) for the three months ended June 30, 2017 was \$48.72, compared to \$48.48 for the same quarter in 2016. The marginal increase was mainly due to the expected reduction in nuclear electricity generation due to the Unit 2 refurbishment outage at the Darlington GS and higher sustaining capital expenditures, largely offset by higher hydroelectric electricity generation, adjusted for surplus baseload generation, and lower operations, maintenance and administration (OM&A) expenses before the impact of regulatory variance and deferral accounts. The Enterprise Total Generating Cost per MWh for the six months ended June 30, 2017 was \$48.35, compared to \$45.01 for the same period in 2016. The increase was expected and mainly a result of lower electricity generation due to the Unit 2 refurbishment outage at the Darlington GS and higher sustaining capital expenditures, partially offset by lower OM&A expenses before the impact of regulatory variance and deferral accounts.

If Unit 2 at the Darlington GS was not currently undergoing refurbishment and had continued to operate in a manner consistent with the performance of the remaining units at the Darlington GS, adjusted for generation constraints on these units related to the transition of the station toward refurbishment, the Enterprise Total Generating Cost would have been approximately \$3 to \$4 per MWh lower for the three and six months ended June 30, 2017. This sensitivity was calculated using the estimated incremental electricity generation and associated fuel cost that are expected to have resulted in the absence of the refurbishment.

#### **Generation Development**

OPG is undertaking a number of generation development and life extension projects in support of Ontario's electricity planning initiatives. Significant developments during the second quarter of 2017 were as follows:

#### Darlington Refurbishment

The Darlington Refurbishment project is expected to extend the operating life of the station by approximately 30 years. In October 2016, OPG commenced the refurbishment of the first Darlington GS unit, Unit 2, as planned, as part of the Darlington Refurbishment project. The unit was taken offline safely on October 15, 2016 and de-fuelling of the reactor, the first critical refurbishment activity undertaken once the unit is removed from service, was safely completed in January 2017. Islanding of Unit 2, the physical separation of the unit under refurbishment from the three operating units, was completed in April 2017, signifying the completion of the first major segment of the project.

Preparatory work to support the removal of feeder tubes and fuel channel assemblies, including opening of the reactor air lock doors and installation of bulkhead shielding, was completed in the second quarter of 2017 as part of the second segment of the project. The setup of specialized tooling and equipment needed for the removal and replacement of the reactor components is in progress. The Re-tube Tooling Platform, which will host the tooling for the removal, inspection, and installation activities, was

completed in July 2017, and the disassembly of reactor components commenced in August 2017. The overall project continues to track on schedule and budget. Unit 2 is scheduled to be returned to service, after a 40-month refurbishment outage, in the first quarter of 2020, at which time capital expenditures of approximately \$4.8 billion are planned to be placed in service. This includes expenditures incurred during the definition and planning phase of the overall project. Life-to-date capital expenditures were approximately \$3.8 billion as at June 30, 2017, including expenditures for prerequisite projects that have been placed in service.

In addition to the execution of refurbishment activities for Unit 2, OPG is continuing planning activities for the refurbishment of the second unit, Unit 3, and is entering into associated commitments to procure major components that require long lead times. As of June 30, 2017, \$51 million has been invested in planning activities related to the refurbishment of the second unit. These planning activities are being undertaken in accordance with the refurbishment project schedule.

#### Ranney Falls Hydroelectric GS

In the second quarter of 2017, OPG continued construction work for a 10 MW single-unit powerhouse on the existing Ranney Falls GS site, as part of the Regulated – Hydroelectric segment. The new unit will replace an existing unit that reached its end of life in 2014. Civil engineering design work and site clearing and mobilization have been completed. Construction is progressing to expand the existing forebay and tailrace channels to accommodate the new powerhouse. The project's expected inservice date is in the fourth quarter of 2019, with a budget of \$77 million. The project is tracking on schedule and budget.

#### Nanticoke Solar Facility

The project to construct a 44 MW solar facility at OPG's Nanticoke GS site and adjacent lands through a partnership between OPG and a subsidiary of the Six Nations of Grand River Development Corporation is planned to commence as early as in the fourth quarter of 2017. During the second quarter of 2017, the partnership continued work to obtain approvals and permits required to enable the commencement of construction, and progressed procurement activities for equipment and for engineering and construction services. The facility is expected to be completed in the first quarter of 2019.

#### FINANCIAL AND OPERATIONAL HIGHLIGHTS

	Three Months Ended June 30			hs Ended e 30
(millions of dollars – except where noted)	2017	2016	2017	2016
Revenue	1,146	1,387	2,322	2,865
Fuel expense	178	182	333	354
Gross margin	968	1,205	1,989	2,511
Operations, maintenance and administration	711	709	1,419	1,395
Depreciation and amortization	172	316	339	628
Accretion on fixed asset removal and nuclear waste management liabilities	236	232	474	464
Earnings on Nuclear Segregated Funds - (a reduction to expenses)	(194)	(225)	(383)	(372)
Income from investments subject to significant influence	(8)	(9)	(18)	(17)
Other net (gains) expenses	(369)	10	(361)	(1)
Income before interest and income taxes	420	172	519	414
Net interest expense	16	31	35	64
Income tax expense	97	6	109	87
Net income	307	135	375	263
Net income attributable to the Shareholder	303	132	367	255
Net income attributable to non-controlling interest <sup>1</sup>	4	3	8	8
Income (loss) before interest and income taxes				
Electricity generation business segments	80	178	219	498
Regulated – Nuclear Waste Management	(40)	(5)	(87)	(88)
Services, Trading, and Other Non-Generation	380	(1)	387	4
Total income before interest and income taxes	420	172	519	414
Cash flow				
Cash flow provided by operating activities	143	348	261	714
Electricity generation (TWh)				
Regulated – Nuclear Generation	9.3	10.6	19.3	22.9
Regulated – Hydroelectric	8.2	8.0	16.2	15.9
Contracted Generation Portfolio <sup>2</sup>	0.5	0.8	1.1	1.6
Total electricity generation	18.0	19.4	36.6	40.4
Nuclear unit capability factor (per cent) 3				
Darlington Nuclear GS	64.6	75.9	74.9	86.6
Pickering Nuclear GS	84.2	71.4	81.4	72.1
Availability (per cent)				
Regulated – Hydroelectric	90.1	90.4	89.8	92.6
Contracted Generation Portfolio – hydroelectric stations	81.4	87.0	82.5	85.5
Equivalent forced outage rate				
Contracted Generation Portfolio – thermal stations	2.7	1.0	7.8	1.0
Enterprise Total Generating Cost per MWh (\$/MWh) 4	48.72	48.48	48.35	45.01
Return on Equity Excluding Accumulated Other Comprehensive Income				
(ROE Excluding AOCI) for the twelve months ended June 30, 2017				
and December 31, 2016 (%) <sup>4</sup>			5.0	4.2
Funds from Operations (FFO) Adjusted Interest Coverage for the twelve				
months ended June 30, 2017 and December 31, 2016 (times) 4			4.5	5.1

Relates to the 25 per cent interest of the Amisk-oo-Skow Finance Corporation, a corporation wholly owned by the Moose Cree First Nation, in the Lower Mattagami Limited Partnership, the 33 per cent interest of Coral Rapids Power Corporation, a corporation wholly owned by the Taykwa Tagamou Nation, in the PSS Generating Station Limited Partnership, and the 10 per cent interest of a corporation wholly owned by the Six Nations of Grand River Development Corporation in the Nanticoke Solar LP.

Includes OPG's share of generation volume from its 50 per cent ownership interests in the Portlands Energy Centre and Brighton Beach GS.

<sup>3</sup> Nuclear unit capability factor excludes unit(s) during the period in which they are undergoing refurbishment. Unit 2 of the Darlington GS is excluded from the measure effective October 15, 2016, when the unit was taken offline for refurbishment.

Enterprise Total Generating Cost per MWh, ROE Excluding AOCI, and FFO Adjusted Interest Coverage are non-GAAP financial measures and do not have any standardized meaning prescribed by US GAAP. Additional information about the non-GAAP measures is provided in OPG's Management's Discussion and Analysis for the three and six months ended June 30, 2017, in the sections Highlights – FFO Adjusted Interest Coverage, Highlights – Return on Common Equity Excluding Accumulated Other Comprehensive Income, and Highlights – Enterprise Total Generating Cost per MWh, as well as Supplementary Non-GAAP Financial Measures.

Ontario Power Generation Inc. is an Ontario-based electricity generation company whose principal business is the generation and sale of electricity in Ontario. Our mission is providing low cost power in a safe, clean, reliable and sustainable manner for the benefit of our customers and shareholder.

Ontario Power Generation Inc.'s unaudited interim consolidated financial statements and Management's Discussion and Analysis as at and for the three and six month periods ended June 30, 2017 can be accessed on OPG's web site (<a href="www.opg.com">www.opg.com</a>), the Canadian Securities Administrators' web site (<a href="www.sedar.com">www.sedar.com</a>), or can be requested from the Company.

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# ONTARIO POWER GENERATION INC. MANAGEMENT'S DISCUSSION AND ANALYSIS

#### **2017 SECOND QUARTER REPORT**

#### **TABLE OF CONTENTS**

Forward-Looking Statements	2
The Company	3
Highlights	4
Core Business, Strategy, and Outlook	12
Discussion of Operating Results by Business Segment	20
Regulated – Nuclear Generation Segment	20
Regulated – Nuclear Waste Management Segment	21
Regulated – Hydroelectric Segment	22
Contracted Generation Portfolio Segment	23
Services, Trading, and Other Non-Generation Segment	24
Liquidity and Capital Resources	24
Balance Sheet Highlights	26
Changes in Accounting Policies and Estimates	26
Risk Management	27
Related Party Transactions	29
Internal Controls over Financial Reporting and Disclosure Controls	31
Quarterly Financial Highlights	31
Supplementary Non-GAAP Financial Measures	33



## ONTARIO POWER GENERATION INC. MANAGEMENT'S DISCUSSION AND ANALYSIS

This Management's Discussion and Analysis (MD&A) should be read in conjunction with the unaudited interim consolidated financial statements and accompanying notes of Ontario Power Generation Inc. (OPG or Company) as at and for the three and six months ended June 30, 2017. OPG's unaudited interim consolidated financial statements are prepared in accordance with United States generally accepted accounting principles (US GAAP) and are presented in Canadian dollars.

For a complete description of OPG's corporate strategies, risk management, corporate governance, and the effect of critical accounting policies and estimates on OPG's results of operations and financial condition, this MD&A should also be read in conjunction with OPG's audited consolidated financial statements, accompanying notes, the Annual Information Form, and the MD&A as at and for the year ended December 31, 2016.

As required by *Ontario Regulation 395/11*, as amended, a regulation under the *Financial Administration Act* (Ontario), OPG adopted US GAAP for the presentation of its consolidated financial statements, effective January 1, 2012. In 2014, the Ontario Securities Commission 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 section, *Critical Accounting Policies and Estimates* under the heading, *Exemptive Relief for Reporting under US GAAP*, in OPG's 2016 annual MD&A. This MD&A is dated August 11, 2017.

#### 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 in the section, Risk Management, and forecasts discussed in the section, Core Business, Strategy, and Outlook. 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 generating station performance and availability, fuel costs, surplus baseload generation (SBG), cost of fixed asset removal and nuclear waste management, performance and earnings of investment funds, refurbishment of existing facilities, development and construction of new facilities, pension and other post-employment benefit (OPEB) obligations and funds, income taxes, proposed new legislation, the ongoing evolution of Ontario's electricity industry, environmental and other regulatory requirements, health, safety and environmental developments, business continuity events, the weather, financing and liquidity, applications to the Ontario Energy Board (OEB) for regulatory prices, the impact of regulatory decisions by the OEB, and forecasts of earnings, cash flows, Funds from Operations (FFO) Adjusted Interest Coverage, Return on Common Equity Excluding Accumulated Other Comprehensive Income (ROE Excluding AOCI), Total Generating Cost (TGC) and capital expenditures. 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 (Ontario) and is wholly owned by the Province of Ontario (Province or Shareholder).

As at June 30, 2017, OPG's electricity generation portfolio had an in-service capacity of 16,210 megawatts (MW). OPG operates two nuclear generating stations, 66 hydroelectric generating stations, three thermal generating stations, and one wind power turbine. 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 gas-fired combined cycle GS (Brighton Beach). OPG's 50 percent share of the inservice capacity and generation volume of these co-owned facilities is included in the generation portfolio statistics set out in this report. The income from the co-owned facilities is accounted for using the equity method of accounting, and OPG's share of income is presented as income from investments subject to significant influence in the Contracted Generation Portfolio segment.

OPG also owns two other nuclear generating stations, the Bruce A GS and the Bruce B GS, which are leased on a long-term basis to Bruce Power LP (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.

All of OPG's owned and co-owned generating facilities are located in Ontario. OPG does not operate PEC, Brighton Beach, the Bruce A GS and the Bruce B GS.

A description of OPG's segments is provided in OPG's 2016 annual MD&A in the section, *Business Segments*.

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

OPG's in-service generating capacity by business segment as at June 30, 2017 and December 31, 2016 was as follows:

	As at			
(MW)	June 30 2017	December 31 2016		
Regulated – Nuclear Generation <sup>1</sup>	5,728	5,728		
Regulated – Hydroelectric	6,426	6,421		
Contracted Generation Portfolio <sup>2</sup>	4,056	4,028		
Total	16.210	16,177		

The in-service generating capacity as of June 30, 2017 and December 31, 2016 excludes Unit 2 of the Darlington GS. The unit, which has a generating capacity of 878 MW, was taken offline in mid-October 2016 and is currently undergoing refurbishment.

<sup>2</sup> Includes OPG's share of in-service generating capacity of 275 MW for PEC and 280 MW for Brighton Beach.

During the six months ended June 30, 2017, the total in-service capacity increased by 33 MW. The increase was primarily due to the completion of the Peter Sutherland Sr. hydroelectric GS, which was placed in-service at the end of the first quarter of 2017, and the upgrade of Unit 10 of the Sir Adam Beck 1 hydroelectric GS, which was completed in June 2017.

#### **HIGHLIGHTS**

#### **Overview of Results**

This section provides an overview of OPG's unaudited interim consolidated operating results. Significant factors which contributed to OPG's results during the three and six month periods ended June 30, 2017, compared to the same periods in 2016, are discussed below.

		ths Ended e 30	Six Montl June	
(millions of dollars – except where noted) (unaudited)	2017	2016	2017	2016
Revenue Fuel expense	1,146 178	1,387 182	2,322 333	2,865 354
Gross margin	968	1,205	1,989	2,511
Operations, maintenance and administration Depreciation and amortization Accretion on fixed asset removal and nuclear waste management liabilities	711 172 236	709 316 232	1,419 339 474	1,395 628 464
Earnings on nuclear fixed asset removal and nuclear waste management funds	(194)	(225)	(383)	(372)
Income from investments subject to significant influence	(8) 11	(9)	(18) 22	(17)
Property taxes	928	1,034	1,853	23 2,121
Income before other gains, interest and income taxes Other gains	40 (380)	171 (1)	136 (383)	390 (24)
Income before interest and income taxes Net interest expense	420 16	172 31	519 35	414 64
Income before income taxes Income tax expense	404 97	141 6	484 109	350 87
Net income	307	135	375	263
Net income attributable to the Shareholder Net income attributable to non-controlling interest <sup>1</sup>	303 4	132 3	367 8	255 8
Electricity production (TWh) <sup>2</sup>	18.0	19.4	36.6	40.4
Cash flow provided by operating activities	143	348	261	714

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, the 33 percent interest of Coral Rapids Power Corporation (CRP), a corporation wholly owned by the Taykwa Tagamou Nation, in the PSS Generating Station Limited Partnership (PSS), and the 10 percent interest of a corporation wholly owned by the Six Nations of Grand River Development Corporation in the Nanticoke Solar LP.

#### Second Quarter

Net income attributable to the Shareholder was \$303 million for the second quarter of 2017, an increase of \$171 million compared to the same quarter in 2016. Income before interest and income taxes for the second quarter of 2017 was \$420 million, an increase of \$248 million compared to the same guarter in 2016.

Significant factor that increased income before interest and income taxes:

Higher earnings of \$381 million from the Services, Trading, and Other Non-Generation segment, primarily as
a result of the gain on sale of OPG's head office premises and associated parking facility, a non-core asset

<sup>&</sup>lt;sup>2</sup> Includes OPG's share of generation volume from its 50 percent ownership interests in PEC and Brighton Beach.

of the business. A gain on sale of \$283 million, which is net of tax effects of \$95 million, was recognized in net income upon completion of the transaction in the second quarter of 2017. The sale was undertaken pursuant to a Shareholder Declaration and a Shareholder Resolution. Further details can be found under the heading, Recent Developments – Shareholder Declarations and Shareholder Resolutions to Sell Certain Non-Core Real Estate Properties.

Significant factors that reduced income before interest and income taxes:

- Lower earnings from the nuclear base regulated price of approximately \$72 million, partially offset by a decrease in nuclear fuel expense of \$11 million, reflecting lower electricity generation of 1.3 terawatt hours (TWh) from the Regulated Nuclear Generation segment and the continuation of existing base regulated prices set by the OEB in 2014. The lower nuclear generation was primarily due to the ongoing refurbishment of Unit 2 at the Darlington GS since October 2016. The base regulated prices set in 2014 continue to be in effect pending the OEB's decision on OPG's current application for new regulated prices, expected later in 2017. The existing nuclear base regulated price was set to allow the Company to recover its approved nuclear costs over a higher nuclear production volume, based on the 2014 and 2015 outage profile that did not include a refurbishment outage. OPG has requested January 1, 2017 as the effective date of the new regulated prices.
- Lower earnings on the nuclear fixed asset removal and nuclear waste management funds (Nuclear Segregated Funds) of \$31 million, primarily due to lower earnings on the Used Fuel Segregated Fund.
- Higher depreciation and amortization expense of \$11 million, excluding amortization expense related to balances in OEB-authorized regulatory variance and deferral accounts (regulatory accounts), primarily due to new assets in service in the Regulated – Nuclear Generation segment.

The expiry of rate riders for the recovery of approved balances in OEB-authorized regulatory accounts on December 31, 2016 contributed to the decrease in revenue for the three months ended June 30, 2017, compared to the same period in 2016, but was largely offset by a decrease in the amortization expense related to these balances. OPG has requested new rate riders in its current application to the OEB for new regulated prices, with a proposed effective date of January 1, 2017.

Net interest expense decreased by \$15 million during the second quarter of 2017, compared to the same quarter in 2016, primarily due to a higher amount of interest costs deferred in OEB-authorized regulatory accounts and a higher amount of interest costs capitalized for the Darlington Refurbishment project expenditures.

Income tax expense for the three months ended June 30, 2017 was \$97 million, compared to \$6 million for the same period in 2016. The increase in income tax expense was primarily due to higher income before taxes, a lower change in reserves from the resolution of uncertainties, and a lower amount of tax expense deferred in regulatory assets.

#### Year-To-Date

Net income attributable to the Shareholder was \$367 million for the first six months of 2017, an increase of \$112 million compared to the same period in 2016. Income before interest and income taxes for the first six months of 2017 was \$519 million, an increase of \$105 million compared to the same period in 2016.

Significant factor that increased income before interest and income taxes:

Higher earnings of \$383 million from the Services, Trading, and Other Non-Generation segment, primarily as
a result of the gain on sale of OPG's head office premises and associated parking facility recognized in the
second quarter of 2017.

Significant factors that reduced income before interest and income taxes:

- Lower earnings from the nuclear base regulated price of approximately \$206 million, partially offset by a decrease in nuclear fuel expense of \$24 million, reflecting lower electricity generation of 3.6 TWh from the Regulated - Nuclear Generation segment and the continuation of existing base regulated prices set by the OEB in 2014. The lower nuclear generation was primarily due to the ongoing refurbishment of Unit 2 at the Darlington GS.
- Higher OM&A expenses of \$24 million, mainly in the Regulated Nuclear Generation segment, reflecting planned expenditures related to major maintenance expenditures occurring at the nuclear stations.
- A gain of \$22 million recorded in the first quarter of 2016 to reflect the OEB's decision on OPG's motion asking the OEB to review and vary parts of its November 2014 decision on OPG's regulated prices.
- Higher depreciation and amortization expense of \$20 million, excluding amortization expense related to regulatory account balances, primarily due to new assets in service in the Regulated - Nuclear Generation segment.

The expiry of rate riders for the recovery of approved balances in OEB-authorized regulatory accounts on December 31, 2016 contributed to the decrease in revenue in the first half of 2017, compared to the same period in 2016, but was primarily offset by a decrease in the amortization expense related to these balances.

Net interest expense decreased by \$29 million for the six months ended June 30, 2017, compared to the same period in 2016, primarily due to a higher amount of interest costs capitalized for the Darlington Refurbishment project expenditures and a higher amount of interest costs deferred in OEB-authorized regulatory accounts.

Income tax expense for the six months ended June 30, 2017 was \$109 million, compared to \$87 million for the same period in 2016. The increase in income tax expense was primarily due to higher income before income taxes and a lower change in reserves from the resolution of uncertainties, partially offset by a higher amount of tax expense deferred in regulatory assets.

#### **Segment Results**

The following table summarizes OPG's income before interest and income taxes by business segment. A detailed discussion of OPG's performance by reportable segment is included in the section, Discussion of Operating Results by Business Segment.

	Three Months Ende June 30		Six Montl June	
(millions of dollars)	2017 2016		2017	2016
(Loss) income before interest and income taxes Regulated – Nuclear Generation Regulated – Hydroelectric Contracted Generation Portfolio	(169) 172 77	(76) 187 67	(287) 352 154	(30) 383 145
Total electricity generation business segments	80	178	219	498
Regulated – Nuclear Waste Management Services, Trading, and Other Non-Generation	(40) 380	(5) (1)	(87) 387	(88) 4
	420	172	519	414

#### **Electricity Generation**

Electricity generation for the three and six month periods ended June 30, 2017 and 2016 was as follows:

	Three Mon Jun	ths Ended e 30	Six Months Ended June 30	
(TWh)	2017	2016	2017	2016
Regulated – Nuclear Generation	9.3	10.6	19.3	22.9
Regulated – Hydroelectric	8.2	8.0	16.2	15.9
Contracted Generation Portfolio <sup>1</sup>	0.5	0.8	1.1	1.6
Total OPG electricity generation	18.0	19.4	36.6	40.4
Total electricity generation by all other generators in Ontario <sup>2</sup>	16.5	15.5	35.1	34.4

Includes OPG's share of generation volume from its 50 percent ownership interests in PEC and Brighton Beach.

Total OPG electricity generation decreased by 1.4 TWh during the second quarter of 2017, compared to the same quarter in 2016, and by 3.8 TWh during the six months ended June 30, 2017, compared to the same period in 2016. As expected, the lower electricity generation from the Regulated – Nuclear Generation segment was primarily the result of the removal from service of Unit 2 at the Darlington GS for the duration of the unit's refurbishment, which began in October 2016. This decrease in electricity generation was partially offset by an increase in generation from the Pickering GS, primarily due to favourable unit conditions and execution of planned outage work resulting in a lower number of planned outage days at the station.

The higher electricity generation of 0.2 TWh and 0.3 TWh from the Regulated – Hydroelectric segment for the three and six month periods ended June 30, 2017, respectively, compared to the same periods in 2016, was largely due to higher water flows primarily on the eastern Ontario river systems, net of water spilled as a result of SBG conditions, discussed below.

The lower electricity generation of 0.3 TWh and 0.5 TWh from the Contracted Generation Portfolio segment for the three and six month periods ended June 30, 2017, respectively, compared to the same periods in 2016, was primarily due to a higher volume of water spilled as a result of SBG conditions.

OPG's operating results are affected by changes in grid-supplied electricity demand resulting from variations in seasonal weather conditions, changes in economic conditions, the impact of small scale generation embedded in distribution networks, and the impact of conservation efforts in the province. For the three and six month periods ended June 30, 2017, Ontario's electricity demand as reported by the IESO was 30.6 TWh and 64.9 TWh, respectively, compared to 31.9 TWh and 67.1 TWh for the same periods in 2016, respectively, excluding electricity exports out of the province.

Power that is surplus to the Ontario market is managed by the IESO, mainly through generation reductions at hydroelectric, other grid-connected renewable resources and nuclear stations. Reducing hydroelectric production, which often results in spilling of water, is the first measure used by the IESO to manage SBG conditions. Baseload generation supply surplus in Ontario continued to be prevalent in 2017, resulting in forgone hydroelectric generation for OPG of 2.6 TWh and 3.4 TWh due to SBG conditions in the three and six month periods ended June 30, 2017, respectively, compared to 1.7 TWh and 3.4 TWh during the same periods in 2016, respectively. The gross margin impact of production forgone at OPG's regulated hydroelectric stations due to SBG conditions during these periods was offset by the impact of a regulatory variance account authorized by the OEB. OPG did not forgo any electricity production at its nuclear stations due to SBG conditions.

Non-OPG generation is calculated as the Ontario electricity demand plus net exports, as published by the Independent Electricity System Operator (IESO), minus OPG electricity generation.

#### **Average Sales Prices**

The majority of OPG's generation is from the Regulated – Nuclear Generation and Regulated – Hydroelectric segments. The same base regulated prices for electricity generated by these segments, authorized by the OEB effective November 1, 2014, were in effect during the first six months of 2017 as in 2016. These prices will remain in effect until such time as the OEB approves new regulated prices based on OPG's current application. The base regulated prices established in 2014 are discussed in OPG's 2016 annual MD&A in the section, *Revenue Mechanisms for Regulated and Non-Regulated Generation*.

The average sales price for the Regulated – Nuclear Generation segment was 5.7 and 5.8 cents per kilowatt hour (¢/kWh) during the three and six month periods ended June 30, 2017 respectively, compared to 6.9 ¢/kWh during the same periods in 2016. The decrease in the average sales price was primarily due to the expiry, on December 31, 2016, of an OEB-authorized nuclear rate rider of \$10.84 per megawatt hour (MWh) for the recovery of variance and deferral account balances. The average sales price for the Regulated – Hydroelectric segment was 4.0 ¢/kWh and 4.1 ¢/kWh during the three and six month periods ended June 30, 2017, respectively, compared to 4.4 ¢/kWh during the same periods in 2016. The decrease in the average sales price was primarily due to the expiry, on December 31, 2016, of an OEB-authorized regulated hydroelectric rate rider of \$3.19/MWh for the recovery of variance and deferral account balances. The rate riders were established to recover approved balances recorded in the variance and deferral accounts in prior years. As such, the year-over-year changes in revenue from the rate riders were largely offset by changes in amortization expense related to these balances. There were no rate riders in effect during the first half of 2017 for either nuclear or regulated hydroelectric generation, pending the outcome of OPG's current application with the OEB for new regulated prices.

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

Cash flow provided by operating activities was \$143 million for the three months ended June 30, 2017 and \$261 million for the six months ended June 30, 2017, compared to \$348 million and \$714 million for the same periods in 2016, respectively. The decrease in cash flow provided by operating activities was expected and primarily due to lower generation revenue receipts reflecting lower generation from the Regulated – Nuclear Generation segment as a result of the ongoing refurbishment of Unit 2 at the Darlington GS and the expiry, on December 31, 2016, of the OEB-authorized rate riders for nuclear and regulated hydroelectric generation. The decrease in cash flow in the first half of 2017 was also due to higher income tax instalments, compared to the same period in 2016.

The decrease in cash flow provided by operating activities for the three and six month periods ended June 30, 2017 was partially offset by lower pension plan contributions in 2017 reflecting an updated actuarial valuation of the OPG registered pension plan filed with the Financial Services Commission of Ontario in September 2016, and lower contributions to the Used Fuel Segregated Fund and the Decommissioning Segregated Fund in 2017. Both the Used Fuel Segregated Fund and the Decommissioning Segregated Fund were determined to be fully funded based on an updated estimate of OPG's nuclear waste management and nuclear facilities decommissioning obligations pursuant to a reference plan approved by the Province, for years 2017 to 2021, under the Ontario Nuclear Funds Agreement (ONFA), effective January 1, 2017. Pursuant to the ONFA, the reference plan is required to be updated at least once every five years. Contributions to either or both of the Nuclear Segregated Funds may be required in the future should the funds be in an underfunded position at the time of the next ONFA reference plan update. The year-over-year decrease in cash flow also was partially offset by the payment of a supplemental rent rebate to Bruce Power in the first quarter of 2016 in relation to a period in 2015. The lease agreement for the Bruce nuclear generating stations was amended in late 2015 to eliminate this rebate provision going forward.

#### Return on Common Equity Excluding Accumulated Other Comprehensive Income

ROE Excluding AOCI is an indicator of OPG's performance consistent with the Company's strategy to provide value to the Shareholder. ROE Excluding AOCI is measured over a 12-month period.

ROE Excluding AOCI was 5.0 percent for the 12 months ended June 30, 2017, compared to 4.2 percent for the 12 months ended December 31, 2016. The increase was primarily due to higher net income attributable to the Shareholder for the 12 months ended June 30, 2017, which reflected the gain on sale of OPG's head office premises and associated parking facility recorded in the second quarter of 2017, partially offset by the lower earnings from the decrease in nuclear electricity generation reflecting the Unit 2 refurbishment outage at the Darlington GS without a corresponding increase in the nuclear base regulated price, as expected. The lower nuclear generation as a result of the refurbishment outage will continue to negatively affect OPG's ROE Excluding AOCI until such time as new regulated prices are approved by the OEB, anticipated later in 2017.

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

FFO Adjusted Interest Coverage is an indicator of OPG's ability to meet interest obligations from operating cash flows. The indicator is measured over a 12-month period. FFO Adjusted Interest Coverage for the 12 months ended June 30, 2017 was 4.5 times, compared to 5.1 times for the 12 months ended December 31, 2016. FFO Adjusted Interest Coverage in 2017 reflected a year-over-year decrease in FFO before interest due to lower cash flow provided by operating activities, partially offset by the impact of a lower adjusted interest expense due to a decrease in the excess of interest on pension and OPEB projected benefit obligations over expected return on pension plan assets.

The decrease in the excess of interest on pension and OPEB benefit obligations over expected return on pension plan assets in the first half of 2017 was primarily due to the change in the method used to estimate the interest cost and service cost components of pension and OPEB costs. Effective January 1, 2017, OPG adopted a full yield curve approach to the estimation of these cost components, by applying the specific spot rates along the yield curve used in the determination of the projected benefit obligations to the relevant projected cash flows. Under the previous method, these components of pension and OPEB costs were calculated using the same single weighted-average discount rates as reflected in the calculation of the benefit obligations. This change in the method was accounted for prospectively, as a change in estimate. The resulting reduction in pension and OPEB costs for the three and six month periods ended June 30, 2017 did not have a material impact on net income as it was largely offset by the impact of OEB-authorized variance and deferral accounts in the regulated business segments. Further details on the full yield curve approach can be found in the 2016 annual MD&A in the section, *Critical Accounting Policies and Estimates* under the heading, *Pension and Other Post-Employment Benefits*.

#### **Enterprise Total Generating Cost per MWh**

The Enterprise TGC per MWh increased to \$48.72 for the three months ended June 30, 2017, compared to \$48.48 for the same quarter in 2016. The marginal increase was mainly due to the expected reduction in nuclear electricity generation due to the Unit 2 refurbishment outage at the Darlington GS and higher sustaining capital expenditures, largely offset by higher SBG-adjusted hydroelectric electricity generation reflecting higher water flows, and lower OM&A expenses before the impact of regulatory accounts.

The Enterprise TGC per MWh was \$48.35 for the six months ended June 30, 2017, an increase compared to \$45.01 for the same period in 2016. The increase was expected and mainly a result of lower electricity generation due to the Unit 2 refurbishment outage at the Darlington GS and higher sustaining capital expenditures, partially offset by lower OM&A expenses before the impact of regulatory accounts.

If Unit 2 at the Darlington GS was not currently undergoing refurbishment and had continued to operate in a manner consistent with the performance of the remaining units at the Darlington GS, adjusting for generation constraints on these units related to the transition of the station toward refurbishment, the Enterprise TGC would have been approximately \$3 to \$4 per MWh lower for the three and six months ended June 30, 2017. This sensitivity was calculated using the estimated incremental electricity and associated fuel cost that are expected to have resulted in the absence of the refurbishment.

#### **Nuclear Total Generating Cost per MWh**

The Nuclear TGC per MWh was \$76.87 for the three months ended June 30, 2017, compared to \$69.25 for the same quarter in 2016. The Nuclear TGC per MWh was \$73.24 for the six months ended June 30, 2017, compared to \$62.44 for the same period in 2016. The increase in the Nuclear TGC per MWh for these periods was expected and primarily due to the decrease in nuclear electricity generation reflecting the Unit 2 refurbishment outage at the Darlington GS.

#### **Hydroelectric Total Generating Cost per MWh**

The Hydroelectric TGC per MWh was \$19.83 for the three months ended June 30, 2017, compared to \$22.14 for the same guarter in 2016. The decrease was primarily due to higher SBG-adjusted hydroelectric electricity production reflecting higher water flows and lower sustaining capital expenditures. The Hydroelectric TGC per MWh was \$19.81 for the six months ended June 30, 2017, compared to \$21.08 for the same period in 2016. The decrease was primarily due to lower sustaining capital expenditures.

ROE Excluding AOCI, FFO Adjusted Interest Coverage, Enterprise TGC per MWh, Nuclear TGC per MWh and Hydroelectric TGC per MWh are not measurements in accordance with US GAAP and should not be considered alternative measures to net income, cash flow provided by operating activities, or any other performance measure under US GAAP. OPG believes that these non-GAAP financial measures are effective indicators of its performance and are consistent with the Company's strategic imperatives and related objectives. The definition and calculation of ROE Excluding AOCI, FFO Adjusted Interest Coverage, Enterprise TGC per MWh, Nuclear TGC per MWh and Hydroelectric TGC per MWh are found in the section, Supplementary Non-GAAP Financial Measures.

#### **Recent Developments**

#### OEB's Report on Regulatory Treatment of Pension and OPEB Costs

On May 18, 2017, the OEB issued a report on the regulatory treatment of pension and OPEB costs based on a consultation process aimed at developing standard principles to guide the OEB's future review of pension and OPEB costs of rate regulated utilities in the electricity and natural gas sectors, including OPG, that began in May 2015. The report establishes the accrual basis of accounting as the method of determining pension and OPEB amounts for ratesetting purposes, unless the OEB finds that this method does not result in just and reasonable rates in the circumstances of a particular utility. The report also provides for the establishment of a generic variance account to record asymmetric carrying charges in favour of ratepayers on the differences between the forecast pension and OPEB accrual costs recovered by a utility through regulated rates and the actual cash payments made by it for pension and OPEB plans. Carrying charges on this differential are to be assessed at the OEB's prescribed interest rate, on a prospective basis from the effective date of the new variance account. The prescribed interest rate is set quarterly by the OEB based on the quarterly return of a mid-term corporate bond index yield. Certain implementation matters related to the report's requirements remain to be finalized by the OEB. This includes the effective date of the new variance account, the application of carrying charges, and the timing of disposition of both the new and previously established variance and deferral accounts related to pension and OPEB costs.

The report requires utilities, such as OPG, that have been previously directed by the OEB to record differences between pension and OPEB accrual costs and cash payments in a separate variance or deferral account to continue to defer such differences in that account, until such time as the OEB approves the utility to resume the accrual basis of recovery. The future recovery of amounts recorded in the account will be subject to this approval. In setting OPG's existing regulated prices effective November 1, 2014, the OEB limited the recovery of pension and OPEB costs to the regulated portion of the Company's cash expenditures for the pension and OPEB plans. It also required OPG to defer, effective November 1, 2014, the difference between its actual pension and OPEB costs for the regulated business determined on an accrual basis in accordance with US GAAP and the Company's actual cash payments for these plans in the Pension & OPEB Cash Versus Accrual Differential Deferral Account, pending the outcome of an OEB generic proceeding on the regulatory treatment of pension and OPEB costs. Similarly, in its current application for new regulated prices filed with the OEB in May 2016, OPG has proposed to continue recording the difference between actual pension and OPEB accrual costs and actual cash payments for these plans in the Pension & OPEB Cash Versus Accrual Differential Deferral Account, pending the outcome of the OEB's consultation process. The Company recognizes the amount set aside in the Pension & OPEB Cash Versus Accrual Differential Deferral Account as a regulatory asset. As at June 30, 2017, the regulatory asset had a balance of \$533 million.

As currently outlined in the report, OPG does not expect that it would be subject to carrying charges on the difference between pension and OPEB accrual costs and cash payments until either it begins to recover, through future rate riders, amounts deferred in the Pension & OPEB Cash Versus Accrual Differential Deferral Account, or the OEB establishes OPG's base regulated prices to reflect pension and OPEB amounts on an accrual basis. As such, the OEB's report did not impact OPG's financial results for the three and six month periods ended June 30, 2017.

#### Ontario's Fair Hydro Plan

On March 2, 2017, the Province announced Ontario's Fair Hydro Plan (the Fair Hydro Plan) aimed at reducing electricity bills for all residential consumers in the province on average by 25 percent. As part of the Fair Hydro Plan, a portion of the Global Adjustment costs will be refinanced over a longer time period for Regulated Price Plan (e.g., residential, farm, small businesses) and other eligible consumers. On June 1, 2017, the Province enacted *Bill 132 – An Act to enact the Ontario Fair Hydro Plan Act, 2017, and to make amendments to the Electricity Act, 1998 and the Ontario Energy Board Act, 1998* (Bill 132). Bill 132 establishes a framework under which the costs and benefits associated with the Government of Ontario's clean energy initiative are to be allocated among present and future consumers of electricity, appoints OPG as the Financial Services Manager of the Fair Hydro Plan, unless OPG is not in a position to do so, and provides for a financing entity to be established by the Financial Services Manager for the purpose of funding a portion of the Global Adjustment. Bill 132 also made certain amendments to other legislation, which enables the IESO and OPG to work together to implement this financing.

OPG's Board of Directors, which had established a Special Committee to provide oversight on behalf of the Board of Directors, has conditionally approved OPG's involvement with the Fair Hydro Plan on commercial terms. The form of the financing entity to be established by OPG is being determined, and the specific operating protocol between the IESO, OPG and the financing entity and the requirements for financing the Fair Hydro Plan are being negotiated. OPG continues to prepare for financing activities of the financing entity that are expected to commence later in 2017.

#### Shareholder Declarations and Shareholder Resolutions to Sell Certain Non-Core Real Estate Properties

In December 2015, OPG received a Shareholder Declaration and a Shareholder Resolution requiring the Company to sell its head office premises and associated parking facility located at 700 University Avenue and 40 Murray Street in Toronto, Ontario. A purchase and sale agreement was executed in December 2016, and the sale was completed in April 2017. A gain on sale of \$283 million, which is net of tax effects of \$95 million, was recognized in net income upon completion of the transaction in the second quarter of 2017. The pre-tax gain on sale was recorded as an item of Other gains in the interim consolidated statement of income in the Services, Trading and Other Non-Generation segment. Pursuant to the Shareholder Declaration and Shareholder Resolution, and as prescribed in the *Trillium Trust Act*, 2014, OPG is required to transfer the proceeds from this disposition, net of prescribed deductions under

the Act, into the Province's Consolidated Revenue Fund. OPG expects that the amount of designated proceeds to be transferred into the Consolidated Revenue Fund will be largely consistent with the after-tax gain on sale, and is working with the Ontario Ministry of Finance to finalize the amount. The transfer is expected to take place later in 2017.

In June 2016, OPG received a Shareholder Declaration and a Shareholder Resolution that requires the Company to sell its former Lakeview GS site located in Mississauga, Ontario. An active program to locate a buyer for the property was initiated in June 2017. Pursuant to the Shareholder Declaration and Shareholder Resolution, and as prescribed in the Trillium Trust Act, 2014, OPG is required to transfer the proceeds from this disposition, net of prescribed deductions under the Act, into the Province's Consolidated Revenue Fund. In accordance with the Shareholder Resolution, approximately one-third of the site is to be transferred to the City of Mississauga, by the purchaser, for parkland, institutional, and cultural uses.

#### CORE BUSINESS, STRATEGY, AND OUTLOOK

The discussion in this section is qualified in its entirety by the cautionary statements included in the section, Forward-Looking Statements, at the beginning of the MD&A.

OPG's mission is to provide low cost power in a safe, clean, reliable and sustainable manner for the benefit of its customers and its Shareholder. OPG also seeks to pursue, on a commercial basis, generation development projects and other business growth opportunities to the benefit of the Shareholder.

The following sections provide an update to OPG's disclosures in the 2016 annual MD&A related to its four key strategic imperatives – operational excellence, project excellence, financial strength, and social licence. A detailed discussion of these strategic imperatives is included in the 2016 annual MD&A in the section, Core Business, Strategy, and Outlook.

#### **Operational Excellence**

Operational excellence at OPG is accomplished by the safe and environmentally responsible generation of reliable and cost-effective electricity from the Company's generating assets through a highly trained and engaged workforce.

#### **Electricity Generation Production and Reliability**

- · As part of the plan to extend Pickering operations, OPG is continuing to undertake the required technical work to confirm that the station's pressure tubes, a key life-limiting component of the station, will remain fit for service for operation to 2024. OPG is also nearing completion of component condition assessments to identify the work required to support the continued operation of the station. The accounting end of life assumptions for the Pickering GS, currently set at the end of 2020, will be reassessed based on the fuel channel analysis and safety case consistent with submissions for the Canadian Nuclear Safety Commission's (CNSC) approval, discussed below. OPG's current application with the OEB for new base regulated prices, currently pending the OEB's decision, reflects OPG's plans to extend Pickering operations to 2024 and requests inclusion of the corresponding cost and generation impacts in the determination of the nuclear regulated price.
- OPG's current five-year operating licence for the Pickering GS was approved by the CNSC in 2013 and expires on August 31, 2018. This licence was issued assuming that the station would shut down in 2020. On June 28, 2017, OPG confirmed to the CNSC that it intends to cease commercial operation of all Pickering units on December 31, 2024. Work on the Pickering licence renewal application is proceeding and the application is expected to be filed by August 31, 2017 for the CNSC's approval in 2018. The requested licence renewal will span the planned extended operations period, through to the end of the planned period

to de-fuel, de-water, and place the station in a safe storage state in 2028. Through an extensive Periodic Safety Review, OPG will submit a Global Assessment Report and Integrated Implementation Plan (IIP) for the station to the CNSC as part of the licence renewal.

- In 2016, OPG submitted applications with the CNSC seeking a ten-year licence renewal for the Western Waste Management Facility (WWMF), located at the Bruce generating stations' site, to May 31, 2027, and a ten-year licence renewal for the Pickering Waste Management Facility (PWMF) to August 31, 2028. The licence renewal applications were presented to the CNSC at public hearings in April 2017. On May 30, 2017, the CNSC announced that the WWMF licence was renewed for a period of ten years and is now valid from June 1, 2017 to May 31, 2027. A renewal decision on the PWMF licence is expected to be issued prior to the expiry of the current licence on March 31, 2018.
- During the second quarter of 2017, OPG completed the upgrade of Unit 10 of the Sir Adam Beck 1 hydroelectric GS, increasing the capacity of the station by 6 MW.
- Work continues on the rehabilitation of Unit 1 of the Sir Adam Beck Pump hydroelectric GS and the overhaul and upgrade of Unit 1 of the Harmon hydroelectric GS and Unit 2 of the DeCew Falls hydroelectric GS.
   OPG also has commenced the rehabilitation and overhaul of Unit 2 of the Lower Notch hydroelectric GS.
- OPG has commenced definition phase activities for the Water Conveyance System project to rehabilitate the Sir Adam Beck 1 GS canal and associated structures, ensuring their continued safe and reliable operations for approximately the next 50 years.
- As part of the process to decommission the Nanticoke and Lambton generating stations, OPG is continuing to develop a demolition plan that will ensure that the stations are closed safely, securely and in an environmentally responsible manner. Project milestones in 2017 include the elimination of coal yard equipment and structures, removal of ash silos, and the selection of a contractor to remove the stacks, powerhouse, interior equipment and supporting site structures for the Nanticoke GS. An update of the associated asset retirement obligations related to the Nanticoke and Lambton stations is expected to be finalized later in 2017. A demolition contract for the removal of the Nanticoke powerhouse was awarded in July 2017. A demolition contract for the removal of the Lambton powerhouse is expected to be awarded in 2018.

#### **Environmental Performance**

There were no significant changes to environmental legislation affecting the Company during the second quarter of 2017. Disclosures related to the Company's environmental policy and environmental risks can be found in OPG's 2016 annual MD&A.

#### **Project Excellence**

OPG is pursuing a number of generation development and other major projects in support of Ontario's electricity planning initiatives. OPG remains focused on delivering projects safely, on time, on budget and with high quality. The status updates for OPG's major projects as at June 30, 2017 are outlined in the following table, with further details below.

Project	Cap expend		Approved budget	Expected in-service	Current status
(millions of dollars)				date	
Darlington Refurbishment	608	3,793	12,8001	First unit - 2020 Last unit - 2026	Islanding of Unit 2 was completed in April 2017. Preparatory work to support the removal of feeder tubes and fuel channel assemblies, including opening of the reactor air lock doors and installation of bulkhead shielding, was completed in the second quarter of 2017. The setup of specialized tooling and equipment needed for the removal and replacement of the reactor components is in progress. The project is tracking on schedule and budget.
Peter Sutherland Sr. Hydroelectric GS	32	268	300	2017	The station was placed in-service on March 31, 2017, ahead of the originally planned schedule, and is expected to close below the approved budget. Project close-out activities are in progress. In April 2017, CRP exercised its right under the partnership agreement to increase its interest in PSS to 33 percent.
Ranney Falls Hydroelectric GS	9	12	77	2019	Civil engineering design work and site clearing and mobilization have been completed. Work is progressing to expand forebay and tailrace channels. The project is tracking on schedule and budget.
Nanticoke Solar Facility	1	2		2019	Project definition work is continuing, with construction planned to commence as early as in the fourth quarter of 2017.
Deep Geologic Repository for low and intermediate level radioactive waste (L&ILW)	52	200°2			On June 26, 2017, the Canadian Environmental Assessment Agency (CEAA) advised that it was satisfied with the additional information submitted by OPG on May 26, 2017, and that a draft report was being prepared for public review. The Environmental Assessment (EA) Decision Statement by the federal Minister of Environment and Climate Change is expected in the fourth quarter of 2017.

<sup>&</sup>lt;sup>1</sup> The total project budget of \$12.8 billion is for the refurbishment of all four units at the Darlington GS.

<sup>&</sup>lt;sup>2</sup> Expenditures are charged against the nuclear fixed asset removal and nuclear waste management liabilities (Nuclear Liabilities).

#### **Darlington Refurbishment**

The Darlington generating units are forecast to be approaching their originally designed end-of-life. Refurbishment of the four generating units is expected to extend the operating life of the station by approximately 30 years.

In 2016, the Darlington Refurbishment project transitioned from the planning phase to the execution phase, as OPG commenced the refurbishment of the first unit, Unit 2, in October 2016, as planned. The unit was taken offline on October 15, 2016. De-fuelling of the reactor, the first critical refurbishment activity undertaken once the unit is removed from service, was safely completed in January 2017, with a total of 480 fuel channels de-fuelled. Islanding of Unit 2, the physical separation of the unit under refurbishment from the three operating units, was completed in April 2017, signifying the completion of the first major segment of the project. The second major segment, which includes preparatory work and the removal of reactor components, commenced immediately following the islanding of Unit 2. Preparatory work to support the removal of feeder tubes and fuel channel assemblies, including opening of the reactor air lock doors and installation of bulkhead shielding, was completed in the second quarter of 2017. The setup of specialized tooling and equipment needed for the removal and replacement of the reactor components is in progress. The Re-tube Tooling Platform, which will host the tooling for the removal, inspection, and installation activities, was completed in July 2017, and the disassembly of reactor components commenced in August 2017. Other key project activities completed during the second segment include the drain and vacuum dry of the primary heat transport system, commencement of the major turbine generator overhaul and continuation of the major electrical scope. Once refurbished, Unit 2 is scheduled to be returned to service in the first quarter of 2020, at which time capital expenditures of approximately \$4.8 billion are planned to be placed in service. This includes expenditures incurred during the definition and planning phase of the overall project. The project is tracking on schedule and budget.

A number of pre-requisite projects in support of the execution phase of the project, including construction of facilities, infrastructure upgrades and installation of safety enhancements, have been completed and placed in service. Completion of the Heavy Water Storage and Drum Handling Facility has been delayed due to challenges with construction. OPG suspended the project in the second quarter of 2017 to evaluate the best approach to optimize cost and schedule and complete the project. Remediation measures are in progress. This delay will not impact the overall Darlington Refurbishment project schedule, as the Heavy Water Storage and Drum Handling Facility is not on the project's critical path. The remaining pre-requisite projects are tracking for completion in line with the refurbishment execution schedule.

In addition to the refurbishment activities on Unit 2 completed to date, other key project activities in 2017 are as follows:

- Completion of preparation activities to support Retube and Feeder Replacement work.
- Continued refurbishment task rehearsals for the specialized tooling to be used for removal and replacement of feeder tubes and fuel channel assemblies at OPG's reactor training and mock-up facility.
- Removal of Unit 2 feeder tubes and commencement of the fuel channel removal series.
- Completion of the Re-tube Waste Processing Building.
- Commencement of the fuel handling power track replacement.
- Continued execution of work to support the requirements set out in the CNSC-approved IIP for the Darlington GS.

In addition to the execution of refurbishment activities on Unit 2, OPG is continuing planning activities for the refurbishment of the second unit, Unit 3, and is entering into associated commitments to procure major components that require long lead times. As of June 30, 2017, \$51 million has been invested in planning activities related to the refurbishment of the second unit. These planning activities are being undertaken in accordance with the refurbishment project schedule.

#### Ranney Falls Hydroelectric GS

During the second quarter of 2017, OPG continued construction work for a 10 MW single-unit powerhouse on the existing Ranney Falls GS site, as part of the Regulated - Hydroelectric segment. The new unit will replace an existing unit that reached its end of life in 2014. Civil engineering design work and site clearing and mobilization have been completed. Construction is progressing to expand the existing forebay and tailrace channels to accommodate the new powerhouse. The project's expected in-service date is in the fourth quarter of 2019, with a budget of \$77 million. The project is tracking on schedule and budget.

#### Nanticoke Solar Facility

The project to construct a 44 MW solar facility at OPG's Nanticoke GS site and adjacent lands under a Large Renewable Procurement contract with the IESO, through Nanticoke Solar LP, a partnership between OPG and a subsidiary of the Six Nations of Grand River Development Corporation, is planned to commence as early as in the fourth quarter of 2017. During the second quarter of 2017, the partnership continued work to obtain approvals and permits required to enable the commencement of construction, and progressed procurement activities for equipment and for engineering and construction services. The facility is expected to be completed in the first quarter of 2019.

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

OPG has proposed a deep geologic repository as the preferred solution for the safe long-term management of the L&ILW produced from the continued operation of OPG-owned nuclear generating stations. Agreement has been reached with local municipalities for OPG to develop the L&ILW Deep Geologic Repository (DGR) on lands adjacent to the WWMF in Kincardine, Ontario.

In 2012, the CNSC and the CEAA appointed a three-member Joint Review Panel (JRP) for OPG's proposed L&ILW DGR. The JRP examined the environmental effects of the proposed L&ILW DGR to meet the requirements of the Canadian Environmental Assessment Act. In May 2015, the JRP submitted its report and recommendations on the EA to the federal Minister of Environment. The report concluded that, given mitigation, there is unlikely to be significant environmental impact from the project and recommended that the Minister approve the EA. The report suggested that the project should be implemented expeditiously.

In February 2016, the federal Minister of Environment and Climate Change requested additional information on certain aspects of the EA, including information related to alternate locations for the project. OPG completed the requested studies and submitted the requested information in December 2016, as planned. Following the CEAA's review of OPG's submission and a period of public comment, the CEAA requested additional information from OPG. OPG provided the additional information on May 26, 2017 and, on June 26, 2017, the CEAA notified OPG that it had sufficient and adequate information to proceed with the next step of the environmental assessment process and advised that a draft report and updated terms and conditions will be prepared for public review. An EA Decision Statement by the Minister is expected in the fourth guarter of 2017. Based on the additional information submitted, the L&ILW DGR at the WWMF site remains OPG's preferred solution for the safe long-term management of the L&ILW. Alternative locations reviewed in the Canadian Shield and southwestern Ontario, while technically feasible, would result in greater negative environmental impacts and higher costs, as well as a project delay of 15 years or more, while offering no additional benefits in safety.

If the EA Decision Statement supports licensing, a number of conditions will need to be met before construction begins. In addition, OPG continues its engagement with the Saugeen Ojibway Nations toward securing community support for the L&ILW DGR. The in-service date of the L&ILW DGR is expected to be approximately six to seven vears from the start of construction.

#### **Financial Strength**

As a commercial enterprise, OPG's financial priority is to achieve a consistent level of strong financial performance that delivers an appropriate level of return on the Shareholder's investment and positions the Company for future growth.

#### Increase Revenue, Reduce Costs and Achieve Appropriate Return

In May 2016, OPG filed a 5-year application with the OEB for new regulated prices for production from its regulated hydroelectric and nuclear facilities, with a proposed effective date of January 1, 2017. Consistent with the requirements of *Ontario Regulation 53/05*, the application incorporates a rate smoothing proposal that would defer, for future collection, a portion of the approved annual nuclear revenue requirement for the period from January 1, 2017 to the end of the Darlington Refurbishment project, with a view to making more stable year-over-year changes in OPG's regulated prices. The application seeks to ensure that nuclear regulated prices under the rate smoothing approach allow for sufficient cash flow to meet the Company's liquidity needs, support cost effective funding for the Darlington Refurbishment project and other expenditures, and maintain the Company's investment grade credit rating, while taking into account both near-term and future impacts on customers. OPG expects to recognize amounts deferred under rate smoothing as income in the periods to which the underlying approved revenue requirements relate.

The application will further challenge and incentivize OPG to find additional cost reductions and efficiencies within its operations, as a result of greater de-coupling of nuclear and hydroelectric regulated prices from costs and a longer rate-setting period under the OEB's incentive ratemaking framework, which forms the basis for the ratemaking methodologies reflected in the application.

The application seeks an increase in the nuclear rate base, effective in early 2020, to reflect the planned placement in service of approximately \$4.8 billion of capital expenditures upon the scheduled return to service of Unit 2 at the Darlington GS as part of the Darlington Refurbishment project and, effective in 2017, an increase in the deemed capital structure applied to the total regulated rate base to 49 percent equity and 51 percent debt, from 45 percent equity and 55 percent debt reflected in the existing regulated prices. The application also requests new rate riders, effective January 1, 2017, to recover or repay the December 31, 2015 balances in all of the Company's OEB-authorized variance and deferral accounts, with the exception of the Pension & OPEB Cash Versus Accrual Differential Deferral Account and the portion of these balances previously approved for recovery or repayment through rate riders that were in effect during 2016.

A public oral hearing on the application took place between February 2017 and April 2017, with the final arguments completed on June 19, 2017. The OEB's decision on the application, including the effective date of approved new regulated prices, is expected later in 2017.

For generation assets that do not form part of the assets regulated by the OEB, OPG's strategy has been to secure appropriate long-term revenue arrangements. In line with this strategy, virtually all of OPG's non-regulated operating facilities and assets under construction are subject to long-term Energy Supply Agreements (ESAs) or other long-term contracts with the IESO. This includes the Peter Sutherland Sr. GS, which began receiving contracted revenue under a hydroelectric ESA following IESO's confirmation, in June 2017, of the station's commercial operation effective as of March 31, 2017. The ESA expires in 2067.

#### Ensure Availability of Cost Effective Funding

In April 2017, DBRS Limited (DBRS) re-affirmed the long-term credit rating on OPG's debt at 'A (low)' and OPG's commercial paper rating at 'R-1 (low)'. All ratings from DBRS have a stable outlook. In July 2017, S&P Global Ratings (S&P) re-affirmed OPG's long-term credit rating at 'BBB+' with a stable outlook. S&P's commercial paper rating for OPG is 'A-1 (low)'.

#### **Social Licence**

As the largest electricity generator in Ontario with diverse operations across the province, OPG holds itself accountable to the public and its employees, and continues to focus on maintaining public trust. OPG is committed to maintaining high standards of public safety and corporate citizenship, including environmental stewardship, transparency, community engagement, and Indigenous relations.

OPG is focused on building long-term, mutually beneficial working relationships with Indigenous communities, businesses and organizations across Ontario, and continues to support procurement, employment and educational opportunities with its Indigenous community partners. The Company seeks to establish these relationships based on a foundation of respect for the languages, customs, and political, social and cultural organizations of the Indigenous communities.

In June 2017, OPG launched an Indigenous Business Engagement (IBE) Initiative. The purpose of this initiative is to increase access to procurement opportunities for Indigenous businesses interested in supplying materials and services to OPG. The IBE Initiative is based on a strategy that will identify opportunities in contracts, scopes of work and business plans for potential Indigenous business engagement; include criteria related to suppliers' ability to engage or partner with Indigenous people or businesses in assessing procurement proposals; and invest in relationships with Indigenous communities by increasing outreach efforts to enhance understanding of how to do business with OPG.

As part of its commitment to help de-carbonize Ontario's transportation sector, OPG is a founding sponsor of Plug'n Drive, a non-profit organization working to accelerate the adoption of electric vehicles and to maximize their environmental and economic benefits. In May 2017, Plug'n Drive announced the opening of the world's first experiential learning facility dedicated to electric vehicle education and awareness, with OPG sponsoring the Centre's training facility. Ontario's climate change plan aims for electric and hydrogen passenger vehicles to represent five percent of new vehicle sales in the province by 2020.

#### **Outlook**

The financial performance of OPG's regulated operations is driven, in large part, by the outcome of applications for regulated prices to the OEB. The existing base regulated prices were established by the OEB effective November 1, 2014 based on a forecast of costs and production for the regulated facilities for the 2014 to 2015 period. The future outcome of OPG's current application for new regulated prices, currently pending the OEB's decision, is expected to provide substantial price certainty for the regulated business for the 2017 to 2021 period.

In its application, OPG has requested January 1, 2017 as the effective date for the new regulated prices. In December 2016, the OEB issued an order declaring the existing base regulated prices interim, which preserves the OEB's ability to make the new regulated prices effective as early as January 1, 2017. Considering the timing of OPG's application and OPG's procedural adherence throughout the proceeding, the Company believes that the OEB could make the new regulated prices effective January 1, 2017. This would allow OPG to recover the difference between the approved new regulated prices and the existing regulated prices for the period between January 1, 2017 and the implementation date of the new prices based on the OEB's order. The OEB's decision on the application, including the effective date of the new regulated prices, is expected later in 2017. The continuation of existing regulated prices until the issuance of the OEB's decision is expected to continue to contribute to lower income, particularly from the Regulated – Nuclear Generation segment, and, excluding the gain on sale of the Company's head office premises and associated parking facility recorded in the second quarter of 2017, lower ROE Excluding AOCI during 2017, compared to 2016. In large part, this is due to the year-over-year reduction in nuclear electricity generation resulting from the Unit 2 refurbishment outage at the Darlington GS, given that the existing nuclear regulated prices were determined in 2014 based on a higher production forecast that reflected the operation of all four units at the station. As such, the OEB's decision on the effective date of the new regulated prices, as well as the timing of the decision issuance, could have a significant impact on OPG's financial results during 2017.

Nuclear base regulated prices resulting from OPG's current application will be subject to a rate smoothing mechanism that defers collection of a portion of OEB-approved revenues to future periods. As expected, combined with the expiry of rate riders in effect to the end of 2016, a year-over-year reduction in nuclear generation due to the Unit 2 refurbishment outage at the Darlington GS and the continuation of existing regulated prices until such time as new prices are implemented by the OEB, this will result in lower cash flow from operating activities in 2017, compared to 2016. OPG expects to continue to have the necessary financial capacity and sufficient access to cost effective financing sources to continue to fund its capital requirements and other disbursements.

Lower nuclear generation due to the Darlington Refurbishment outages will continue, as planned, to negatively impact the Enterprise TGC metric for the duration of the refurbishment project. Variability in sustaining capital investment expenditures, including major sustaining projects for the hydroelectric operations, also will impact the Enterprise TGC in future periods.

Several OEB-authorized regulatory variance and deferral accounts currently in place contribute to reducing the relative variability of the Company's income and ROE Excluding AOCI. Among others, the regulatory accounts include those related to the revenue impact of variability in water flows and forgone production due to SBG conditions at the regulated hydroelectric stations. As there are no variance or deferral accounts in place related to the impact of generation performance of the nuclear stations on revenue from base regulated prices, the Regulated – Hydroelectric segment generally is expected to produce overall more predictable earnings. OPG continues to operate and maintain its nuclear facilities with a view to optimize their performance and availability, while focusing on improving the overall reliability and predictability of the fleet.

Electricity generated from most of OPG's non-regulated assets is subject to ESAs with the IESO. Based on these agreements, OPG expects the Contracted Generation Portfolio segment to continue to contribute a generally stable level of earnings and cash flow from operations going forward.

OPG's total forecast capital expenditures for the 2017 year are approximately \$1.9 billion. This includes amounts for the Darlington Refurbishment project, hydroelectric and other development projects including the completion of the Peter Sutherland Sr. GS and the expansion of the Ranney Falls GS, and sustaining capital investments across the generating fleet. OPG's major projects are discussed in the section, *Project Excellence*.

In addition to the operating and financial performance of the electricity generation business, OPG's results are affected by the earnings on the Nuclear Segregated Funds, which are reported in the Regulated – Nuclear Waste Management segment. While the Nuclear Segregated Funds are managed to achieve, in the long term, the target rate of return based on the discount rate specified in the ONFA, the rates of return earned in a given period can be subject to various external factors including financial market conditions and, for the portion of the Used Fuel Segregated Fund guaranteed by the Province under the ONFA, changes in the Ontario consumer price index (CPI). In the near term, these factors can be volatile and cause fluctuations in the Company's income. This volatility is partially mitigated by the impact of the OEB-authorized Bruce Lease Net Revenues Variance Account and, as discussed below, the funded status of the two segregated funds.

As OPG does not have the right to withdraw surplus amounts from the Nuclear Segregated Funds when the segregated funds are overfunded relative to the life cycle funding liability per the most recently approved ONFA Reference Plan, OPG limits the amount of Nuclear Segregated Funds assets reported on the balance sheet to the present value of such life cycle funding liability. This reduces the volatility of earnings on the Nuclear Segregated Funds reflected in net income when the funds are in a fully funded or overfunded position. As at June 30, 2017, the Decommissioning Segregated Fund was overfunded by approximately 24 percent, and the Used Fuel Segregated Fund was marginally overfunded, by less than one percent, based on the 2017 ONFA Reference Plan. Variability in asset performance due to volatility inherent in financial markets and changes in Ontario CPI, or changes in funding liability estimates, may result in either or both funds becoming underfunded in the future.

#### DISCUSSION OF OPERATING RESULTS BY BUSINESS SEGMENT

**Regulated – Nuclear Generation Segment** 

	Three Mont		Six Montl Jun	
(millions of dollars) (unaudited)	2017	2016	2017	2016
Revenue Fuel expense	609 68	820 79	1,261 136	1,746 160
Gross margin Operations, maintenance and administration Depreciation and amortization	541 593 110	741 581 231	1,125 1,182 217	1,586 1,144 461
Property taxes	7	6	13	13
Loss before other gains, interest, and income taxes Other gains	(169)	(77) (1)	(287)	(32) (2)
Loss before interest and income taxes	(169)	(76)	(287)	(30)

For the three and six month periods ended June 30, 2017, the segment loss before interest and income taxes increased by \$93 million and \$257 million, respectively, compared to the same periods in 2016. The decrease in earnings was expected and primarily due to reduced revenue from the nuclear base regulated price of approximately \$72 million and \$206 million, partially offset by a decrease in fuel expense of \$11 million and \$24 million, respectively. The decrease in revenue during the three and six month periods ended June 30, 2017, compared to the same periods in 2016, reflected lower electricity generation of 1.3 TWh and 3.6 TWh, respectively, primarily due to the ongoing Unit 2 refurbishment outage at the Darlington GS that began in October 2016, without a corresponding increase in the base regulated price. The existing nuclear base regulated price set by the OEB in 2014 continues to be in effect pending the OEB's decision on OPG's application for new regulated prices, proposed to be effective on January 1, 2017. The existing price does not reflect the lower generation as a result of the Darlington Refurbishment project, as it was set to allow the Company to recover its approved nuclear costs over a higher nuclear production volume, based on the 2014 and 2015 outage profile that did not include a refurbishment outage. The reduction in nuclear electricity generation for the three and six month periods ended June 30, 2017 was partially offset by the higher electricity generation from the Pickering GS.

The increases in OM&A expenses of \$12 million and \$38 million during the three and six month periods ended June 30, 2017, respectively, compared to the same periods in 2016, also contributed to a year-over-year reduction in segment earnings. The higher OM&A expenses reflected planned expenditures related to major maintenance expenditures occurring at the nuclear stations.

Depreciation and amortization expense, excluding amortization expense related to regulatory account balances, increased by \$11 million and \$20 million during the three and six month periods ended June 30, 2017, respectively, compared to the same periods in 2016, primarily due to new assets in service.

The expiry of an OEB-authorized nuclear rate rider on December 31, 2016 contributed to the decrease in segment revenue for the three and six month periods ended June 30, 2017, compared to the same periods in 2016. As rate riders allow for recovery of approved balances in OEB-authorized regulatory accounts, this decrease in revenue was largely offset by a decrease in amortization expense related to these balances. There was no rate rider in effect during the first half of 2017 pending the outcome of OPG's current application to the OEB for new regulated prices.

The Unit Capability Factors for the Darlington and Pickering generating stations were as follows:

			onths Ended June 30	
	2017	2016	2017	2016
Unit Capability Factor (%) 1				
Darlington GS	64.6	75.9	74.9	86.6
Pickering GS	84.2	71.4	81.4	72.1

The nuclear Unit Capability Factor excludes unit(s) during the period in which they are undergoing refurbishment. Accordingly, Unit 2 of the Darlington GS was excluded from the measure effective October 15, 2016, when the unit was taken offline for refurbishment.

The Unit Capability Factor at the Darlington GS decreased in the second quarter of 2017, compared to the same quarter in 2016, primarily due to the higher number of planned and unplanned outage days during the second quarter of 2017. The lower Unit Capability Factor at the Darlington GS for the six months ended June 30, 2017, compared to the same period in 2016, reflected the higher number of planned outage days, largely driven by constraints related to the transition of the station toward refurbishment.

The increase in Unit Capability Factor at the Pickering GS for the three and six month periods ended June 30, 2017 was primarily due to favourable unit conditions and execution of planned outage work resulting in a lower number of planned outage days at the station compared to 2016.

Regulated - Nuclear Waste Management Segment

	Three Months Ended June 30		Six Months Ended June 30		
(millions of dollars) (unaudited)	2017	2016	2017	2016	
Revenue Operations, maintenance and administration Accretion on nuclear fixed asset removal and nuclear waste management liabilities	30 32 232	32 34 228	57 61 466	66 70 456	
Earnings on nuclear fixed asset removal and nuclear waste management funds	(194)	(225)	(383)	(372)	
Loss before interest and income taxes	(40)	(5)	(87)	(88)	

The segment loss before interest and income taxes increased by \$35 million in the second quarter of 2017 compared to the same quarter in 2016. The decline in earnings was primarily due to lower earnings from the Nuclear Segregated Funds. The segment loss before interest and income taxes for the six months ended June 30, 2017 was comparable to the same period in 2016.

Lower earnings on the Used Fuel Segregated Fund, net of the impact of the Bruce Lease Net Revenue Variance Account, were the primary reason for the lower Nuclear Segregated Funds earnings during the second quarter of 2017. As the Used Fuel Segregated Fund was overfunded as at March 31, 2017 and June 30, 2017, the earnings on the fund recorded in income during the second quarter of 2017 reflected the growth in the present value of the used fuel life cycle funding liability per the 2017 ONFA Reference Plan. During the second quarter of 2016, the Used Fuel Segregated Fund was underfunded based on the ONFA reference plan then in effect, and therefore earnings on the fund reflected the CPI-adjusted rate of return guaranteed by the Province under the ONFA for funding related to the initial 2.23 million used fuel bundles and market returns for the portion of the fund not guaranteed by the Province.

As of December 31, 2016, OPG recorded a decrease of approximately \$1,570 million to the Nuclear Liabilities and associated asset retirement costs capitalized as part of the carrying value of the nuclear generating stations. The resulting year-over-year decreases in accretion on fixed asset removal and nuclear waste management liabilities recorded in the Regulated – Nuclear Waste Management segment and depreciation and fuel expenses recorded in

the Regulated – Nuclear Generation segment during the three and six month periods ended June 30, 2017. compared to the same periods in 2016, were offset by the impact of the Bruce Lease Net Revenues Variance Account and the Nuclear Liability Deferral Account authorized by the OEB.

Under the current OEB-approved cost recovery methodology, these changes in expenses also are not expected to materially affect OPG's income during the rest of 2017, as they are expected to continue to be largely offset by the impact of the regulatory accounts until such time as the OEB implements corresponding changes to OPG's nuclear regulated prices, and subsequently by the impact of such new regulated prices. Further details on the change in the estimate of the Nuclear Liabilities as of December 31, 2016 are described in OPG's 2016 annual MD&A in the section, Critical Accounting Policies and Estimates under the heading, Asset Retirement Obligation.

#### Regulated - Hydroelectric Segment

	Three Mon Jun	ths Ended e 30	Six Months Ended June 30	
(millions of dollars) (unaudited)	2017	2016	2017	2016
Revenue 1	379	413	742	798
Fuel expense	97	92	170	171
Gross margin	282	321	572	627
Operations, maintenance and administration	75	75	151	151
Depreciation and amortization	35	57	69	113
Income before other losses (gains), interest and income taxes	172	189	352	363
Other losses (gains)	-	2	-	(20)
<u> </u>				
Income before interest and income taxes	172	187	352	383

During the three and six month periods ended June 30, 2017, the Regulated - Hydroelectric segment revenue reflected incentive payment reductions of \$3 million and incentive payments of \$5 million, respectively, related to the OEB-approved hydroelectric incentive mechanism (three and six month periods ended June 30, 2016 – incentive payments of \$1 million and \$2 million, respectively). 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 customers. The incentive payments are reduced to remove incentive revenues arising in connection with SBG conditions.

The decrease in segment income before interest and income taxes of \$15 million during the second quarter of 2017, compared to the same guarter in 2016, was primarily the result of the income impact of OEB-approved variance accounts and lower hydroelectric incentive mechanism payments.

The decrease in segment income before interest and income taxes of \$31 million during the six months ended June 30, 2017, compared to the same period in 2016, was primarily due to a gain of \$22 million recognized during the first quarter of 2016 to reflect the OEB's January 2016 decision to reverse a portion of an earlier capital cost disallowance related to the Niagara Tunnel project expenditures, in response to a motion by OPG. The income impact of OEB-approved variance accounts also contributed to the year-over-year decrease in income for the period.

The decrease in revenue from the segment for the three and six month periods ended June 30, 2017, compared to the same periods in 2016, was largely due to the expiry of an OEB-authorized rate rider on December 31, 2016. As the rider allowed for the recovery of approved balances in OEB-authorized regulatory accounts, the resulting reduction in revenue was largely offset by lower amortization expense related to these balances. There was no rate rider in effect during the first half of 2017 pending the outcome of OPG's current application to the OEB for new regulated prices.

The Hydroelectric Availability for the stations included in the Regulated – Hydroelectric segment was as follows:

			Six Mont Jun	hs Ended e 30
	2017	2016	2017	2016
Hydroelectric Availability (%)	90.1	90.4	89.8	92.6

The Hydroelectric Availability in the second quarter of 2017 was comparable to the same period in 2016. The decrease in Hydroelectric Availability during the six months ended June 30, 2017, compared to the same period in 2016, was primarily due to a higher number of unplanned outage days at the regulated hydroelectric stations.

#### **Contracted Generation Portfolio Segment**

	Three Months Ended June 30		Six Months Ended June 30	
(millions of dollars) (unaudited)	2017	2016	2017	2016
Revenue Fuel expense	147 13	137 11	290 27	282 23
Gross margin Operations, maintenance and administration Depreciation and amortization Accretion on fixed asset removal liabilities Property taxes	134 40 20 2	126 45 18 2 3	263 79 39 4 5	259 85 37 4 5
Income from investments subject to significant influence	(8)	(9)	(18)	(17)
Income before interest and income taxes	77	67	154	145

Income before interest and income taxes from the segment increased by \$10 million and \$9 million during the three and six month periods June 30, 2017, respectively, compared to the same periods in 2016. The increase in earnings for the three months ended June 30, 2017 mainly resulted from revenues from the Peter Sutherland Sr. GS that was placed in-service at the end of the first quarter of 2017, higher revenues from the Lennox GS primarily due to increased production to support electricity system requirements, and lower OM&A expenses. For the six months ended June 30, 2017, the increase in earnings was primarily due to higher revenues from Lennox GS primarily due to increased production to support electricity system requirements, and lower OM&A expenses, partially offset by lower revenues from the Lower Mattagami River hydroelectric generating stations.

The Hydroelectric Availability and the Thermal Equivalent Forced Outage Rate (EFOR) for the Contracted Generation Portfolio segment were as follows:

	Three Months Ended June 30		Six Months Ended June 30	
	2017	2016	2017	2016
Hydroelectric Availability (%) Thermal EFOR (%)	81.4 2.7	87.0 1.0	82.5 7.8	85.5 1.0

Lower Hydroelectric Availability during the three and six month periods ended June 30, 2017, compared to the same periods in 2016, was primarily due to an increase in the number of unplanned outage days at the Lower Mattagami River hydroelectric generating stations.

The higher Thermal EFOR during the three and six month periods ended June 30, 2017, compared to the same periods in 2016, was primarily due to a higher number of unplanned outage days at a Lennox GS unit as a result of a transmission outage in 2017.

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

	Three Months Ended June 30		Six Months Ended June 30	
(millions of dollars) (unaudited)	2017	2017 2016		2016
Revenue	10	16	27	37
Gross margin	10	16	27	37
Operations, maintenance and administration	-	5	1	9
Depreciation and amortization	7	10	14	17
Accretion on fixed asset removal liabilities	2	2	4	4
Property taxes	1	2	4	5
Income (loss) before other gains, interest, and income taxes	-	(3)	4	2
Other gains	(380)	(2)	(383)	(2)
Income (loss) before interest and income taxes	380	(1)	387	4

Segment income before interest and income taxes increased by \$381 million and \$383 million for the three and six month periods ended June 30, 2017, compared to the same periods in 2016, respectively. The increase in earnings mainly reflected the gain on the sale of OPG's head office premises and associated parking facility recorded during the second quarter of 2017, as further discussed in the section, Highlights under the heading, Recent Developments - Shareholder Declarations and Shareholder Resolutions to Sell Certain Non-Core Real Estate Properties.

#### LIQUIDITY AND CAPITAL RESOURCES

OPG's primary sources of liquidity and capital are funds generated from operations, bank financing, credit facilities provided by the Ontario Electricity Financial Corporation (OEFC), long-term corporate debt, and capital market financing. These sources are used for multiple purposes including: to invest in plants and technologies, to undertake major projects, to fund long-term obligations such as contributions to the pension fund and the Nuclear Segregated Funds, to make payments under the OPEB plans, to fund expenditures on Nuclear Liabilities not reimbursable from the Nuclear Segregated Funds, and to service and repay long-term debt.

Changes in cash and cash equivalents for the three and six month periods ended June 30 are as follows:

		Three Months Ended June 30		s Ended 30
(millions of dollars) (unaudited)	2017	2017 2016		2016
Cash and cash equivalents, beginning of period	220	540	186	464
Cash flow provided by operating activities Cash flow provided by (used in) investing activities Cash flow (used in) provided by financing activities	143 58 (179)	348 (586) (7)	261 (305) 100	714 (896) 13
Net increase (decrease)	22	(245)	56	(169)
Cash and cash equivalents, end of period	242	295	242	295

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

#### **Investing Activities**

Electricity generation is a capital-intensive business. It requires continued investment in plants and technologies to maintain and improve operating performance including asset reliability, safety and environmental performance, to

increase the generating capacity of existing stations, and to invest in the development of new generating stations, emerging technologies and other business growth opportunities.

Cash flow provided by investing activities during the second quarter of 2017 was \$58 million, compared to cash flow used of \$586 million for the same period in 2016. Cash flow used in investing activities decreased by \$591 million for the six months ended June 30, 2017, compared to the same period in 2016. The decrease in cash flow used in investing activities was primarily due to the receipt of proceeds from the sale of OPG's head office premises and associated parking facility in the second quarter of 2017 and the acquisition of nine million common shares of Hydro One Limited (Hydro One) in the second quarter of 2016, partially offset by higher expenditures on the Darlington Refurbishment project in 2017. OPG acquired the Hydro One shares for investment purposes, to mitigate the risk of future price volatility related to the Company's future share delivery obligations under the collective agreements with the Power Workers' Union and The Society of Energy Professionals.

#### **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 2017, OPG renewed and extended the expiry date of both tranches from May 2021 to May 2022. There were no amounts outstanding under the bank credit facility as at June 30, 2017.

There was no commercial paper outstanding under OPG's commercial paper program as at June 30, 2017.

As at June 30, 2017, OPG also maintained \$25 million of short-term, uncommitted overdraft facilities, and a further \$462 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 June 30, 2017, a total of \$387 million of Letters of Credit had been issued under these facilities. This included \$349 million for the supplementary pension plans, \$37 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, expiring on November 30, 2018. The maximum amount of co-ownership interest that can be sold under this agreement is \$150 million. As at June 30, 2017, no borrowings were issued under this agreement and there were Letters of Credit outstanding under this agreement of \$150 million, which were issued in support of OPG's supplementary pension plans.

As at June 30, 2017, Lower Mattagami Energy Limited Partnership (LME) maintained a \$500 million bank credit facility to support the funding requirements for the Lower Mattagami River project including support for LME's commercial paper program. The facility consists of a \$300 million tranche maturing in August 2021 and a \$200 million tranche maturing in August 2017. In the third quarter of 2017, OPG expects to extend the maturity of the \$300 million tranche to August 2022, and to reduce the \$200 million tranche to \$100 million while extending its maturity date to August 2018. As at June 30, 2017, there was no external commercial paper outstanding under LME's commercial paper program. There were also no amounts outstanding under LME's bank credit facility as at June 30, 2017.

In June 2016, OPG entered into a \$700 million general corporate credit facility agreement with the OEFC, which expires on December 31, 2017. As at June 30, 2017, there were outstanding long-term borrowings of \$300 million under this credit facility. An amendment to the credit facility agreement with the OEFC to increase the credit facility to \$2,350 million and to extend the expiry to December 2018 is anticipated to be completed in the third quarter of 2017.

In February 2017, OPG issued senior notes payable to the OEFC totalling \$200 million and maturing in February 2047. The effective interest rate and coupon interest rate of these notes was 4.12 percent. In June 2017, OPG issued senior notes payable to the OEFC totalling \$100 million and maturing in June 2047. The effective interest rate and coupon interest rate of these notes was 3.65 percent.

As at June 30, 2017, OPG's long-term debt outstanding was \$5,622 million, including \$1,218 million due within one year.

OPG continues to evaluate arrangements that would appropriately support the Company's financing needs and capital expenditure programs.

#### **BALANCE SHEET HIGHLIGHTS**

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

	As At		
(millions of dollars) (unaudited)	June 30 2017	December 31 2016	
Property, plant and equipment - net	20,510	19,998	
The increase was primarily due to capital expenditures on the Darlington Refurbishment project, partially offset by depreciation expense.			
Nuclear fixed asset removal and nuclear waste management funds (current and non-current portions)	16,343	15,984	
The increase was primarily due to earnings on the Nuclear Segregated Funds, partially offset by reimbursements of eligible expenditures on nuclear fixed asset removal and nuclear waste management activities.			
Fixed asset removal and nuclear waste management liabilities	19,876	19,484	
The increase was primarily a result of accretion expense representing the increase in the liabilities due to the passage of time, partially offset by expenditures on nuclear fixed asset removal and waste management activities.			

#### **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 interim consolidated financial statements or are recorded in the Company's interim 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.

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

OPG's significant accounting policies are outlined in Note 3 to the audited consolidated financial statements as at and for the year ended December 31, 2016. A discussion of recent accounting pronouncements and change in accounting estimate are included in Note 2 to OPG's unaudited interim consolidated financial statements as at and for the three and six month periods ended June 30, 2017 under the heading, Significant Accounting Policies and Estimates. Disclosure regarding OPG's critical accounting policies is included in OPG's 2016 annual MD&A.

#### **RISK MANAGEMENT**

The following provides an update to the discussion of the Company's risks and risk management activities included in OPG's 2016 annual MD&A. As such, the disclosure in this section should be read in conjunction with the *Risk Management* section included in the annual MD&A.

#### **Risks to Achieving Project Excellence**

#### **Darlington Refurbishment**

During the second quarter of 2017, OPG continued to mitigate and manage risks related to the Darlington Refurbishment project portfolio. Further risk treatment and remediation measures are being developed or implemented for the projects and their upcoming work windows. Several initiatives and plans are also being developed to manage risks associated with reintegration of the refurbished Unit 2 with the other units, which involves coordination between vendors, project teams and station operations.

#### **Risks to Maintaining Financial Strength**

#### 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 fixed price and indexed contracts.

The percentages hedged of OPG's fuel 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.

	2017 <sup>1</sup>	2018	2019
Estimated fuel requirements hedged <sup>2</sup>	75%	74%	70%

Based on actual fuel requirements hedged for the six months ended June 30, 2017 and forecast for the remainder of the year.

#### Foreign Exchange

OPG's earnings and cash flow can be affected by movements in the United States dollar (USD) relative to the Canadian dollar.

OPG's financial results are exposed to volatility in the Canadian/US foreign exchange rate as fuels and certain supplies and services purchased for generating stations and major development projects are denominated in, or tied to, US dollars. To manage this risk, OPG employs various financial instruments such as forwards and other derivative contracts, in accordance with approved risk management policies. As at June 30, 2017, OPG had one foreign exchange contract outstanding, with a notional value of USD \$5 million.

#### **Trading**

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

OPG's electricity trading operations are closely monitored, with total exposures measured and reported to senior management on a daily basis. The main metric used to measure the financial risk of trading activity is Value at Risk (VaR). VaR is defined as a probabilistic maximum potential future loss expressed in monetary terms for a portfolio

Represents the approximate portion of megawatt-hours of expected generation production (and year-end inventory targets) from each type of OPG-operated facility (nuclear, hydroelectric and thermal) for which the Company has entered into contractual arrangements or obligations in order to secure the price of fuel, or which is subject to regulation. In the case of hydroelectric generation, this represents the gross revenue charge and water rental charges. Excess fuel inventories (nuclear and thermal) in a given year are attributed to the next year for the purpose of measuring hedge ratios.

based on normal market conditions over a set period of time. For the second quarter of 2017, the VaR utilization ranged between \$0.1 million and \$0.3 million.

#### Credit

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

OPG manages its exposure to suppliers or counterparties by evaluating their financial condition and negotiating appropriate collateral or other forms of security. OPG's credit exposure relating to energy markets transactions as at June 30, 2017 was \$362 million, including \$347 million with the IESO. Management considers the Company's risk exposure relating to electricity sales through the IESO-administered spot market to be low as the IESO oversees the credit worthiness of all market participants. In accordance with the IESO's prudential support requirements, market participants are required to provide collateral to cover funds that they might owe to the market. Of the \$15 million remaining exposure as at June 30, 2017, over 95 percent was related to investment grade counterparties.

#### Ontario's Fair Hydro Plan

OPG's role in connection with Ontario's Fair Hydro Plan could have significant financial and reputational impacts on the Company.

The Ontario Fair Hydro Plan Act, 2017 received Royal Assent on June 1, 2017 and regulations under this Act came into force in June and early July. The regulations clarify aspects of the structure and programs that would be required for OPG, as the Financial Services Manager of the Fair Hydro Plan, to refinance a portion of the Global Adjustment through a financing entity. OPG's credit rating and reputation could potentially be adversely impacted by the Fair Hydro Plan, through financial implications to the Company from its involvement with the Fair Hydro Plan and through stakeholder opinions related to this involvement.

#### Recovery of Pension and OPEB Costs

On May 18, 2017, the OEB issued its report on the guiding principles and the policy for recovery mechanisms of pension and OPEB costs. This report established accrual basis as the default rate-setting method. This outcome reduces OPG's risk related to the recovery of actual pension and OPEB accrual costs and the recovery of the balance in the Pension & OPEB Cash Versus Accrual Differential Deferral Account. Further details can be found in the section, Highlights under the heading, Recent Developments - OEB's Report on Regulatory Treatment of Pension and OPEB Costs.

#### **RELATED PARTY TRANSACTIONS**

Given that the Province owns all of the shares of OPG, related parties include the Province and other entities controlled by the Province.

The related party transactions summarized below include transactions with the Province and the principal successors to the former Ontario Hydro's integrated electricity business, including Hydro One, the IESO and the OEFC. 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. As one of several wholly owned government business enterprises of the Province, OPG also has transactions in the normal course of business with various government ministries and organizations in Ontario that fall under the purview of the Province.

The related party transactions are summarized below:

	Three Months Ended June 30			
	20	2017		16
(millions of dollars) (unaudited)	Revenue	Expense	Revenue	Expense
Hydro One				
Electricity sales	1	_	1	_
Services	_	_	-	4
Dividends	2	-	2	-
Province of Ontario				
Decommissioning Fund excess funding <sup>1</sup>	_	45	_	113
Used Fuel Fund rate of return guarantee and excess funding <sup>1</sup>	-	39	-	54
Gross revenue charges	_	29	_	32
ONFA guarantee fee	_	2	_	2
Other	-	1	-	-
OEFC				
Gross revenue charges	_	56	_	53
Interest expense on long-term notes	_	41	_	43
Income taxes, net of investment tax credits	-	97	-	52
IESO				
Electricity related revenue	1,029	1	1,239	5
	1,032	311	1,242	358

	Six Months Ended June 30			
	2017		2016	
(millions of dollars) (unaudited)	Revenue	Expense	Revenue	Expense
Hydro One Electricity sales	5	-	3	-
Services	1	5	1	9
Dividends	4	-	2	-
Province of Ontario Decommissioning Fund excess funding <sup>1</sup> Used Fuel Fund rate of return guarantee and excess funding <sup>1</sup> Gross revenue charges ONFA guarantee fee Other	:	208 256 57 4 1	- - - - -	(64) (105) 63 4
OEFC Gross revenue charges Interest expense on long-term notes Income taxes, net of investment tax credits	:	94 82 109	- - -	90 85 84
IESO				
Electricity related revenue	2,102	7	2,601	15
	2,112	823	2,607	181

The Nuclear Segregated Funds are reported on the consolidated balance sheets net of amounts recognized as due to the Province in respect of excess funding and, for the Used Fuel Segregated Fund, the Province's rate of return guarantee. As at June 30, 2017 and December 31, 2016, the Nuclear Segregated Funds were reported net of amounts due to the Province of \$3,879 million and \$3,415 million, respectively. The details of accounting for the Nuclear Segregated Funds are described in OPG's 2016 annual MD&A in the section, Critical Accounting Policies and Estimates under the heading, Nuclear Fixed Asset Removal and Nuclear Waste Management Funds.

The receivable, available-for-sale securities, payable and long-term debt balances between OPG and its related parties are summarized below:

(millions of dollars) (unaudited)	June 30 2017	December 31 2016
Receivables from related parties Hydro One IESO OEFC PEC Province of Ontario	347 8 4	1 421 1 4 2
Available-for-sale securities Hydro One shares	195	212
Accounts payable and accrued charges OEFC Province of Ontario IESO	66 7 2	61 2 2
Long-term debt (including current portion) Notes payable to OEFC	3,385	3,295

OPG holds interest-bearing Province of Ontario bonds in the Nuclear Segregated Funds and the OPG registered pension fund. As at June 30, 2017, the Nuclear Segregated Funds held \$1,663 million of interest-bearing Province of Ontario bonds, while the registered pension fund had no such holdings. As at December 31, 2016, the Nuclear Segregated Funds and the registered pension fund held \$1,652 million and \$284 million of interest-bearing Province of Ontario bonds, respectively. These bonds are publicly traded securities and are measured at fair value. OPG jointly oversees the investment management of the Nuclear Segregated Funds with the Province.

There have been no related party transactions related to the Fair Hydro Plan and associated financing activities.

### INTERNAL CONTROLS OVER FINANCIAL REPORTING AND DISCLOSURE CONTROLS

The Company maintains a comprehensive system of policies, procedures, and processes that represents its framework for internal controls over financial reporting and for its disclosure controls and procedures (together, ICOFR). There were no changes in the Company's internal control system during the current interim period that has or is reasonably likely to have a material impact to the ICOFR.

### **QUARTERLY FINANCIAL HIGHLIGHTS**

The following tables set out selected financial information from OPG's unaudited interim consolidated financial statements for each of the eight most recently completed quarters.

(millions of dollars - except where noted) (unaudited)	June 30 2017	March 31 2017	December 31 2016	September 30 2016
Revenue	1,146	1,176	1,388	1,400
Net income (loss)	307	68	(8)	198
Less: Net income attributable to non-controlling interest	4	4	5	4
Net income (loss) attributable to the Shareholder	303	64	(13)	194
Per common share, attributable to the Shareholder <i>(dollars)</i>	\$1.18	\$0.25	(\$0.05)	\$0.76

(millions of dollars - except where noted) (unaudited)	June 30 2016	March 31 2016	December 31 2015	September 30 2015
Revenue	1,387	1,478	1,312	1,426
Net income (loss)	135	128	(100)	85
Less: Net income attribute to the non-controlling interest	3	5	1	5
Net income (loss) attributable to the Shareholder	132	123	(101)	80
Per common share, attributable to the Shareholder (dollars)	\$0.51	\$0.48	(\$0.39)	\$0.31

### **Trends**

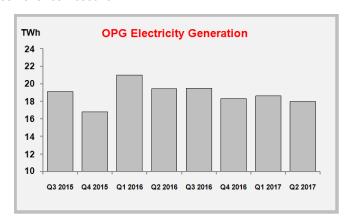
OPG's quarterly results are affected by changes in grid-supplied electricity demand, primarily resulting from variations in seasonal weather conditions, changes in economic conditions, the impact of small scale generation embedded in distribution networks, and the impact of conservation efforts in the province. Weather conditions affect water flows, electricity demand, and prevalence of SBG conditions. Historically, OPG's revenues have been 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

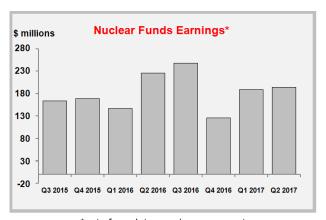
cooling demands. The financial impact of forgone production due to SBG conditions at the regulated hydroelectric stations and the financial impact of differences between forecast water flows reflected in OEB-approved regulated prices and the actual water flows are mitigated by regulatory variance accounts authorized by the OEB.

The timing of planned outages at a nuclear generating station during the year can cause variability in year-over-year operating results for partial periods of a fiscal year, including the impact on revenue and OM&A expenses, but is not a significant driver of variability for full fiscal year results.

During the fourth quarter of 2016 and the first half of 2017, OPG's electricity generation was reduced as a result of the Unit 2 refurbishment outage at the Darlington GS, which began in October 2016 and is expected to continue until early 2020.

OPG's financial results are also affected by the earnings on the Nuclear Segregated Funds, net of the impact of the Bruce Lease Net Revenues Variance Account.





\*net of regulatory variance account

Additional items that affected net income in certain quarters above are described in OPG's 2016 annual MD&A under the section, Quarterly Financial Highlights.

### SUPPLEMENTARY NON-GAAP FINANCIAL MEASURES

In addition to providing net income and other financial information in accordance with US GAAP, certain non-GAAP financial measures are also presented in OPG's MD&A. 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 would 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 measures consistent with the Company's strategies to provide value to the Shareholder, improve cost performance, and ensure availability of cost effective funding. These non-GAAP financial measures have not been presented as an alternative to net income, cash flow provided by operating activities, or any other measure in accordance with US GAAP, but as indicators of operating performance.

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

(1) **ROE Excluding AOCI** is defined as net income attributable to the Shareholder divided by average equity attributable to the Shareholder excluding AOCI, for the period. ROE Excluding AOCI is measured over a 12-month period and is calculated as follows:

	Twelve M	onths Ended
(millions of dollars – except where noted) (unaudited)	June 30 2017	December 31 2016
ROE Excluding AOCI  Net income attributable to the Shareholder	548	436
Divided by: Average equity attributable to the Shareholder, excluding AOCI	10,894	10,442
ROE Excluding AOCI (percent)	5.0	4.2

(2) FFO Adjusted 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 is calculated as net interest expense plus interest income, interest capitalized to fixed and intangible assets, interest related to regulatory assets and liabilities, and the excess of interest on pension and OPEB projected benefit obligations over expected return on pension plan assets, for the period.

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

	Twelve Mo	nths Ended
(millions of dollars – except where noted) (unaudited)	June 30 2017	December 31 2016
FFO before interest Cash flow provided by operating activities	1,252	1,705
Add: Interest paid	267	269
Less: Interest capitalized to fixed and intangible assets Less: Changes to non-cash working capital balances	(158) (36)	(141) (68)
FFO before interest	1,325	1,765
Adjusted interest expense		
Net interest expense	91	120
Add: Interest income	5	7
Add: Interest capitalized to fixed and intangible assets	158	141
Add: Interest related to regulatory assets and liabilities	41	30
Add: Excess of interest on pension and OPEB projected benefit	-	45
obligations over expected return on pension plan assets <sup>1</sup>		
Adjusted interest expense	295	343
FFO Adjusted Interest Coverage (times)	4.5	5.1

<sup>1</sup> A value of nil is used in the calculation when interest on pension and OPEB projected benefit obligations is equal to, or lower than, expected return on pension plan assets.

(3) Enterprise Total Generating Cost per MWh is used to measure OPG's overall organizational cost performance. Enterprise TGC per MWh is defined as OM&A expenses (excluding the Darlington Refurbishment project and other generation development project costs, the impact of regulatory variance and deferral accounts, and expenses ancillary to OPG's electricity generation business), fuel expense for OPG-operated stations including hydroelectric gross revenue charge and water rental payments (excluding the impact of regulatory variance and deferral accounts), and capital expenditures (excluding the Darlington Refurbishment project and other generation development projects) incurred during the period, divided by total electricity generation from OPG-operated generating stations plus electricity generation forgone due to SBG conditions during the period.

	Three Months Ended June 30		Six Months Ended June 30	
(millions of dollars – except where noted) (unaudited)	2017	2016	2017	2016
Enterprise TGC				
Total OM&A expenses	711	709	1,419	1,395
Total fuel expense	178	182	333	354
Total capital expenditures	451	398	859	718
Less: Darlington Refurbishment capital and OM&A costs	(306)	(243)	(615)	(448)
Less: Other generation development project capital and OM&A costs	(19)	(41)	(36)	(79)
(Less) Add: OM&A and fuel expenses (refundable through) deferred in regulatory variance and deferral accounts	(12)	23	(23)	41
Less: Nuclear fuel expense for non OPG-operated stations Add: Hydroelectric gross revenue charge and water rental payments for electricity generation forgone due to SBG conditions	(16) 23	(15) 15	(29) 34	(32) 33
Less: OM&A expenses ancillary to electricity generation business	(4)	(7)	(9)	(12)
Other adjustments	(2)	2	(4)	(3)
	1,004	1,023	1,929	1,967
Adjusted electricity generation (TWh)				
Total OPG electricity generation	18.0	19.4	36.6	40.4
Adjust for electricity generation forgone due to SBG	2.6	1.7	3.3	3.3
conditions and OPG's share of electricity generation from co-owned facilities				0.0
	20.6	21.1	39.9	43.7
Enterprise TGC per MWh (\$/MWh) 1	48.72	48.48	48.35	45.01

<sup>&</sup>lt;sup>1</sup> Amounts may not calculate due to rounding.

(4) Nuclear Total Generating Cost per MWh is used to measure the cost performance of OPG's nuclear generating assets. Nuclear TGC per MWh is defined as OM&A expenses of the Regulated - Nuclear Generation segment (excluding the Darlington Refurbishment project costs, the impact of regulatory variance and deferral accounts, and expenses ancillary to the nuclear electricity generation business), nuclear fuel expense for OPG-operated stations (excluding the impact of regulatory variance and deferral accounts), and capital expenditures of the Regulated -Nuclear Generation segment (excluding the Darlington Refurbishment project costs) incurred during the period, divided by nuclear electricity generation for the period.

	Three Months Ended June 30		Six Months Ended June 30	
(millions of dollars – except where noted) (unaudited)	2017	2016	2017	2016
Nuclear TGC Regulated – Nuclear Generation OM&A expenses Regulated – Nuclear Generation fuel expense Regulated – Nuclear Generation capital expenditures Less: Darlington Refurbishment capital and OM&A costs Add: Regulated – Nuclear Generation OM&A and fuel expenses deferred in regulatory variance and deferral accounts	593 68 375 (306) 3	581 79 308 (243) 29	1,182 136 741 (615) 1	1,144 160 557 (448) 53
Less: Nuclear fuel expense for non OPG-operated stations Less: Regulated - Nuclear Generation OM&A expenses ancillary to nuclear electricity generation business	(16) (1)	(15) (2)	(29) (2)	(32) (3)
Other adjustments	(2)	(3)	(2)	(4)
	714	734	1,412	1,427
Nuclear electricity generation (TWh)	9.3	10.6	19.3	22.9
Nuclear TGC per MWh (\$/MWh) 1	76.87	69.25	73.24	62.44

<sup>&</sup>lt;sup>1</sup> Amounts may not calculate due to rounding.

(5) **Hydroelectric Total Generating Cost per MWh** is used to measure the cost performance of OPG's hydroelectric generating assets. Hydroelectric TGC per MWh is defined as OM&A expenses of the Regulated – Hydroelectric segment and the hydroelectric facilities included in the Contracted Generation Portfolio segment (excluding generation development project costs, the impact of regulatory variance and deferral accounts, and expenses ancillary to the hydroelectric electricity generation business), hydroelectric gross revenue charge and water rental payments (excluding the impact of regulatory variance and deferral accounts), and capital expenditures of the Regulated – Hydroelectric segment and the hydroelectric facilities included in the Contracted Generation Portfolio segment (excluding expenditures related to the Peter Sutherland Sr. GS and other hydroelectric generation development projects) incurred during the period, divided by total hydroelectric electricity generation plus hydroelectric electricity generation forgone due to SBG conditions during the period. OPG reports hydroelectric gross revenue charge and water rental payments as fuel expense.

	Three Months Ended June 30		Six Months Ended June 30	
(millions of dollars – except where noted) (unaudited)	2017	2016	2017	2016
Hydroelectric TGC				
Regulated – Hydroelectric OM&A expenses	75	75	151	151
Regulated – Hydroelectric fuel expense	97	92	170	171
Contracted Generation Portfolio OM&A expenses	40	45	79	85
Contracted Generation Portfolio fuel expense	13	11	27	23
Regulated – Hydroelectric and Contracted Generation Portfolio capital expenditures	48	80	85	139
Less: Regulated – Hydroelectric and Contracted Generation Portfolio generation development project capital and OM&A costs	(19)	(39)	(35)	(76)
Less: Thermal OM&A and fuel expenses and capital expenditures in the Contracted Generation Portfolio	(41)	(38)	(80)	(75)
Less: Regulated – Hydroelectric OM&A and fuel expenses refundable through regulatory variance and deferral accounts	(15)	(5)	(24)	(12)
Add: Hydroelectric gross revenue charge and water rental payments for electricity generation forgone due to SBG conditions	23	15	34	33
Other adjustments	2	(2)	1	-
	223	234	408	439
Adjusted hydroelectric electricity generation (TWh)				
Regulated – Hydroelectric electricity generation	8.2	8.0	16.2	15.9
Contracted Generation Portfolio electricity generation	0.5	0.8	1.1	1.6
Adjust for hydroelectric electricity generation forgone due to	2.6	1.7	3.3	3.3
SBG conditions and non-hydroelectric electricity				
generation of the Contracted Generation Portfolio, including OPG's share of electricity generation from co-owned facilities				
	11.3	10.5	20.6	20.8
Hydroelectric TGC per MWh (\$/MWh) 1	19.83	22.14	19.81	21.08

<sup>&</sup>lt;sup>1</sup> Amounts may not calculate due to rounding.

(6) **Gross margin** is defined as revenue less fuel expense.

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# ONTARIO POWER GENERATION INC. INTERIM CONSOLIDATED FINANCIAL STATEMENTS (unaudited)

**JUNE 30, 2017** 



## INTERIM CONSOLIDATED STATEMENTS OF INCOME (UNAUDITED)

	Jun	nths Ended e 30	Six Months Ended June 30	
(millions of dollars except where noted)	2017	2016	2017	2016
Revenue (Note 12)	1,146	1,387	2,322	2,865
Fuel expense (Note 12)	178	182	333	354
Gross margin	968	1,205	1,989	2,511
Expenses (Note 12)				
Operations, maintenance and administration	711	709	1,419	1,395
Depreciation and amortization	172	316	339	628
Accretion on fixed asset removal and nuclear waste	236	232	474	464
management liabilities		202		
Earnings on nuclear fixed asset removal and nuclear	(194)	(225)	(383)	(372)
waste management funds	(101)	(==0)	(555)	(0.2)
Property taxes	11	11	22	23
Income from investments subject to significant influence	(8)	(9)	(18)	(17)
	928	1,034	1,853	2,121
		·	•	,
Income before other gains, interest and income taxes	40	171	136	390
Other gains (Note 12)	(380)	(1)	(383)	(24)
Income before interest and income taxes	420	172	519	414
Net interest expense (Note 5)	16	31	35	64
Income before income taxes	404	141	484	350
	404 97	6	109	87
Income tax expense	31	0	109	07
Net income	307	135	375	263
Net income attributable to the Shareholder	303	132	367	255
	303 4	3	367 8	200
Net income attributable to non-controlling interest	4	3	•	O
Basic and diluted net income per common				
share (dollars)	1.18	0.51	1.43	0.99
Common shares outstanding (millions)	256.3	256.3	256.3	256.3

### INTERIM CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)

	Three Months Ended June 30		Six Months Ended June 30	
(millions of dollars)	2017	2016	2017	2016
Net income	307	135	375	263
Other comprehensive income, net of income taxes (Note 7)				
Reclassification to income of amounts related to pension and other post-employment benefits <sup>1</sup>	2	3	5	6
Reclassification to income of losses on derivatives designated as cash flow hedges <sup>2</sup>	5	6	9	10
Unrealized (loss) gain on available-for-sale securities <sup>3</sup>	(7)	15	(2)	15
Other comprehensive income for the period	-	24	12	31
Comprehensive income	307	159	387	294
Comprehensive income attributable to the Shareholder Comprehensive income attributable to non-controlling interest	303 4	156 3	379 8	286 8

Net of income tax expenses of \$1 million for the three months ended June 30, 2017 and 2016. Net of income tax expenses of \$2 million for the six months ended June 30, 2017 and 2016.

Net of income tax expense of nil for the three months ended June 30, 2017 and 2016. Net of income tax expenses of \$1 million for the six months ended June 30, 2017 and 2016.

<sup>&</sup>lt;sup>3</sup> Net of income tax recovery of \$2 million and income tax expense of \$5 million for the three months ended June 30, 2017 and 2016, respectively. Net of income tax recovery of \$1 million and income tax expense of \$5 million for the six months ended June 30, 2017 and 2016, respectively.

### INTERIM CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

Six Months Ended June 30 (millions of dollars)	2017	2016
Inimons of dollars)	2017	2010
Operating activities		
Net income	375	263
Adjust for non-cash items:	0.0	
Depreciation and amortization	339	628
Accretion on fixed asset removal and nuclear waste management liabilities	474	464
Earnings on nuclear fixed asset removal and nuclear waste management	(383)	(372)
funds	, ,	, ,
Pension and other post-employment benefit costs (Note 8)	226	233
Deferred income taxes	16	(11)
Mark-to-market on derivative instruments	(3)	2
Provision for used nuclear fuel and low and intermediate level nuclear waste	53	62
Regulatory assets and liabilities	(73)	(68)
Provision for materials and supplies	9	9
Other gains	(379)	(24)
Other	(9)	(16)
	645	1,170
Contributions to nuclear fixed asset removal and nuclear waste management	_	(74)
funds		()
Expenditures on fixed asset removal and nuclear waste management	(157)	(125)
Reimbursement of expenditures on nuclear fixed asset removal and	` <b>4</b> 1′	` 30
nuclear waste management		
Contributions to pension funds and expenditures on other post-employment	(180)	(237)
benefits and supplementary pension plans	, ,	,
Expenditures on restructuring	(2)	(3)
Distributions received from investments subject to significant influence	23	30
Net changes to other long-term assets and liabilities	16	16
Net changes in non-cash working capital balances (Note 13)	(125)	(93)
Cash flow provided by operating activities	261	714
1		
Investing activities	40.4	
Net proceeds from sale of property, plant and equipment	484	(040)
Purchase of available-for-sale securities	- 70	(213)
Proceeds from deposit note (Note 4)	70 (850)	35 (718)
Investment in property, plant and equipment and intangible assets  Cash flow used in investing activities	(859) (305)	(718) (896)
Cash now used in investing activities	(305)	(090)
Financing activities		
Issuance of long-term debt (Note 4)	300	_
Repayment of long-term debt	(212)	(2)
Contribution from non-controlling interest	19	( <del>-</del> /
Distribution to non-controlling interest	(7)	(7)
Issuance of short-term notes	864	1,985
Repayment of short-term notes	(864)	(1,963)
Cash flow provided by financing activities	100	13
Net increase (decrease) in cash and cash equivalents	56	(169)
Cash and cash equivalents, beginning of period	186	464
Cash and cash equivalents, end of period	242	295

# INTERIM CONSOLIDATED BALANCE SHEETS (UNAUDITED)

As at (millions of dollars)	June 30 2017	December 31 2016
Assets		
Current assets		
Cash and cash equivalents	242	186
Available-for-sale securities	195	212
Receivables from related parties	367	429
Nuclear fixed asset removal and nuclear waste management funds	18	24
Fuel inventory	306	310
Materials and supplies	94	100
Prepaid expenses	218	198
Other current assets	102	298
	1,542	1,757
Property, plant and equipment	30,049	29,315
Less: accumulated depreciation	9,539	9,317
	20,510	19,998
Internal has accepte	F0.4	500
Intangible assets	534	503
Less: accumulated amortization	418 116	404 99
	110	99
Other assets		
Nuclear fixed asset removal and nuclear waste management funds	16,325	15,960
Long-term materials and supplies	353	345
Regulatory assets (Note 3)	5,961	5,855
Investments subject to significant influence (Note 14)	316	321
Other long-term assets	32	37
	22,987	22,518
	45,155	44,372

### INTERIM CONSOLIDATED BALANCE SHEETS (UNAUDITED)

As at (millions of dollars)	June 30 2017	December 31 2016
Liabilities		
Current liabilities		
Accounts payable and accrued charges	1,021	1,164
Deferred revenue due within one year	12	12
Short-term debt	-	2
Long-term debt due within one year (Note 4)	1,218	1,103
Income taxes payable	-	123
	2,251	2,404
Long-term debt (Note 4)	4,390	4,417
Other liabilities		
Fixed asset removal and nuclear waste management liabilities (Note 6)	19,876	19,484
Pension liabilities	2,914	3,012
Other post-employment benefit liabilities	2,939	2,897
Long-term accounts payable and accrued charges Deferred revenue	260 325	213 298
Deferred income taxes	325 845	829
Regulatory liabilities (Note 3)	446	310
regulatory habilities (Note 3)	27,605	27,043
<b>-</b>		
Equity Common shares 1	E 400	F 400
Retained earnings	5,126 5,903	5,126 5.534
Accumulated other comprehensive loss (Note 7)	(280)	(295)
Equity attributable to the Shareholder	10,749	10,365
Equity attributable to non-controlling interest	160	143
Total equity	10,909	10,508
	10,000	10,000
	45,155	44,372

<sup>&</sup>lt;sup>1</sup> 256,300,010 common shares outstanding at a stated value of \$5,126 million as at June 30, 2017 and December 31, 2016.

Commitments and Contingencies (Notes 4, 10 and 11)

### INTERIM CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (UNAUDITED)

Six Months Ended June 30		
(millions of dollars)	2017	2016
Common shares	5,126	5,126
Retained earnings		
Balance at beginning of period	5,534	5,098
Net income attributable to the Shareholder	367	255
Reclassification of non-controlling interest on change in ownership	2	-
interest (Note 15)		
Balance at end of period	5,903	5,353
Accumulated other comprehensive loss, net of income taxes	·	
Balance at beginning of period	(295)	(319)
Other comprehensive income	12	31
Reclassification of non-controlling interest on change in ownership interest (Note 15)	3	-
Balance at end of period	(280)	(288)
Equity attributable to the Shareholder	10,749	10,191
Equity attributable to non-controlling interest		
Balance at beginning of period	143	140
Equity contribution from non-controlling interest (Note 15)	21	-
Reclassification of non-controlling interest on change in ownership	(5)	-
interest (Note 15)		
Distribution to non-controlling interest	(7)	(7)
Income attributable to non-controlling interest	8	8
Balance at end of period	160	141
Total equity	10,909	10,332

### NOTES TO THE INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

For the three and six months ended June 30, 2017 and 2016

### 1. BASIS OF PRESENTATION

These interim consolidated financial statements for the three and six months ended June 30, 2017 and 2016 include the accounts of Ontario Power Generation Inc. (OPG or the Company) and its subsidiaries. The Company consolidates its interest in entities over which it is able to exercise control and attributes the results to its sole shareholder, the Province of Ontario (Province). Interests owned by other parties are reflected as non-controlling interest. These interim consolidated financial statements have been prepared and presented in accordance with United States generally accepted accounting principles (US GAAP). These interim consolidated financial statements do not contain all of the disclosures required by US GAAP for annual financial statements. Accordingly, they should be read in conjunction with the annual consolidated financial statements of the Company as at and for the year ended December 31, 2016. All dollar amounts are presented in Canadian dollars.

Certain of the 2016 comparative amounts have been reclassified from financial statements previously presented to conform to the 2017 interim consolidated financial statement presentation.

### **Use of Management Estimates**

The preparation of consolidated 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 interim consolidated financial statements, and the reported amounts of revenues and expenses for the reporting periods. Management evaluates these 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 benefit (OPEB) balances, asset retirement obligations and associated asset retirement costs capitalized as part of property, plant and equipment, income taxes (including deferred income taxes), contingencies, regulatory assets and liabilities, valuation of derivative instruments and investments in segregated funds, depreciation and amortization expenses, and inventories. Actual results may differ significantly from these estimates.

### 2. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES

### **Change in Accounting Estimate**

### Pension and Other Post-Employment Benefits

Effective January 1, 2017, OPG changed the method used to estimate the service and interest cost components of pension and OPEB costs. OPG adopted a full yield curve approach to the estimation of these cost components, by applying the specific spot rates along the yield curve used in the determination of the projected benefit obligations to the relevant projected cash flows. Under the previous method, these components of pension and OPEB costs were calculated using the same single weighted-average discount rates as reflected in the calculation of the benefit obligations. This change in the method was accounted for prospectively, as a change in estimate. The resulting reduction in pension and OPEB costs is estimated at approximately \$35 million and \$70 million for the three and six months ended June 30, 2017, respectively. Approximately 90 percent of this reduction in pension and OPEB costs was attributed to the Company's regulated business segments and therefore was offset by the impact of regulatory variance and deferral accounts authorized by the Ontario Energy Board (OEB).

### **Recent Accounting Pronouncements Not Yet Adopted**

### Revenue from Contracts with Customers

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2014-09, *Revenue from Contracts with Customers* (Topic 606), which supersedes nearly all existing revenue recognition guidance, including industry-specific guidance, under US GAAP. The core principle of Topic 606 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. Either a full retrospective application or a modified retrospective application is required for annual periods beginning on or after January 1, 2018, including interim periods within that year. Early adoption is permitted.

As part of the project to implement the new revenue standard, OPG is continuing to assess the impact of the standard on accounting for the Company's revenue streams and consolidated financial statements. OPG's major revenue streams include regulated generation revenue from base regulated prices and rate riders established by the OEB, as well as revenue from generation assets under long-term contractual arrangements with the Independent Electricity System Operator (IESO). In March 2017, the American Institute of Certified Public Accountants (AICPA) issued Revenue Recognition Implementation Issue #13-1, Scope Clarification Regarding Tariff Sales to Regulated Customers. The draft implementation guidance was developed by the AICPA Power & Utilities task force. This draft guidance concludes that tariff-based revenue from the provision of regulated utility service to a utility's customers is within the scope of Topic 606. OPG has completed its analysis of the impact of Topic 606 on its accounting for generation revenue from base regulated prices and has not identified any material differences. The Company continues to work on its assessment of the impact of Topic 606 on its other revenue streams.

The Company currently expects to apply the new revenue standard in its 2018 first quarter interim financial statements and is in the process of concluding on the method of adoption.

### Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost

In March 2017, the FASB issued ASU No. 2017-07, Compensation – Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost. Under the new guidance, employers that sponsor defined benefit plans for pensions and/or other postretirement benefits are required to present the service cost component of net periodic benefit cost in the same statement of income line item as other employee compensation costs arising from services rendered during the period. The other components of the net periodic benefit cost are to be presented separately from the line item that includes the service cost and outside of any subtotal of income from operations, if such a subtotal is presented. In addition, the new guidance requires that only the service cost component of net benefit cost be eligible for capitalization.

This guidance is effective for fiscal years beginning after December 15, 2017, including interim periods of those years. The guidance is not expected to have a material impact on OPG's consolidated financial statements, as OPG currently capitalizes only the service cost component of post-retirement benefits costs. Additionally, OPG already includes the service cost component of post-retirement benefit costs with other compensation costs, within the operations, maintenance and administration expenses line item in the consolidated statements of income, and does not show a subtotal of income from operations. As such, the new guidance is not expected to affect the presentation of OPG's consolidated financial statements.

### 3. REGULATORY ASSETS AND LIABILITIES

The regulatory assets and liabilities recorded as at June 30, 2017 and December 31, 2016 are as follows:

(millions of dollars)	June 30 2017	December 31 2016
Danielatani assata		
Regulatory assets		
Variance and deferral accounts authorized by the OEB		
Pension and OPEB Cost Variance Account	716	716
Pension & OPEB Cash Versus Accrual Differential Deferral Account (Note 8)	533	497
Hydroelectric Surplus Baseload Generation Variance Account	299	210
Bruce Lease Net Revenues Variance Account	123	95
Other variance and deferral accounts	128	107
	1,799	1,625
	•	ŕ
Pension and OPEB Regulatory Asset (Note 8)	3,304	3,392
Deferred Income Taxes	858	838
<del>-</del>		= 0==
Total regulatory assets	5,961	5,855
Regulatory liabilities		
o ,		
Variance and deferral accounts authorized by the OEB	440	F4
Hydroelectric Water Conditions Variance Account	119	51
Impact Resulting from Changes in Station End-of-Life Dates Deferral Account	106	71
Other variance and deferral accounts	221	188
<b>-</b>		212
Total regulatory liabilities	446	310

OPG's May 2016 application with the OEB for new regulated prices included a request for new rate riders to recover or repay the December 31, 2015 balances in all of the Company's OEB-authorized variance and deferral accounts, with the exception of the Pension & OPEB Cash Versus Accrual Differential Deferral Account and the portion of these balances previously approved for recovery or repayment through rate riders in effect during 2016. The application also requested the continuation of all applicable existing variance and deferral accounts. In March 2017, the OEB approved a settlement agreement reached by OPG and intervenors on a limited set of issues in the application (Settlement Agreement). Among the settled issues, the agreement provided for the continuation of all applicable existing variance and deferral accounts and accepted a number of variance and deferral account balances for recovery, as requested in OPG's application. The periods of recovery or repayment for the accepted variance and deferral account balances are excluded from the scope of the Settlement Agreement. The Settlement Agreement did not impact OPG's financial results for the three and six months ended June 30, 2017. The OEB's decision on OPG's application will be issued following final arguments, which were completed in the second quarter of 2017.

As at June 30, 2017 and December 31, 2016, regulatory assets for other variance and deferral accounts included amounts for the Nuclear Deferral and Variance Over/Under Recovery Variance Account, the Hydroelectric Deferral and Variance Over/Under Recovery Variance Account, the Nuclear Liability Deferral Account, the Niagara Tunnel Project Pre-December 2008 Disallowance Variance Account, and the Nuclear Development Variance Account. As at June 30, 2017 and December 31, 2016, regulatory liabilities for other variance and deferral accounts included the amounts for the Pension & OPEB Cash Payment Variance Account, the Capacity Refurbishment Variance Account, the Ancillary Services Net Revenue Variance Account, the Income and Other Taxes Variance Account and the Hydroelectric Incentive Mechanism Variance Account.

### 4. LONG-TERM DEBT

Long-term debt consists of the following:

(millions of dollars)	June 30 2017	December 31 2016
Notes payable to the Ontario Electricity Financial Corporation	3,385	3,295
UMH Energy Partnership	182	184
PSS Generating Station Limited Partnership	245	245
Lower Mattagami Energy Limited Partnership	1,795	1,795
Other	15	15
	5,622	5,534
Less: bond issuance fees	(14)	(14)
Less: due within one year	(1,218)	(1,103)
Long-term debt	4,390	4,417

In the fourth quarter of 2015, PSS Generating Station Limited Partnership (PSS), a subsidiary of OPG, issued long-term debt totalling \$245 million in support of the Peter Sutherland Sr. Generating Station (GS) project. The majority of the debt proceeds, totalling \$180 million, were invested in a structured deposit note with staggered maturity dates ranging from January 2016 to April 2017. As at June 30, 2017, the deposit note has matured.

In June 2016, OPG entered into a \$700 million general corporate credit facility agreement with the Ontario Electricity Financial Corporation (OEFC), which expires on December 31, 2017.

In February 2017, OPG issued senior notes payable to the OEFC totalling \$200 million and maturing in February 2047. The effective interest rate and coupon interest rate of these notes was 4.12 percent. In June 2017, OPG issued senior notes payable to the OEFC totalling \$100 million and maturing in June 2047. The effective interest rate and coupon interest rate of these notes was 3.65 percent.

### 5. 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 the second quarter of 2017, OPG renewed and extended the expiry date of both tranches from May 2021 to May 2022. As at June 30, 2017, there were no amounts outstanding under the bank credit facility. There was no commercial paper outstanding under OPG's commercial paper program as at June 30, 2017.

As at June 30, 2017, the Lower Mattagami Energy Limited Partnership (LME) maintained a \$500 million bank credit facility to support the funding requirements for the Lower Mattagami River project including support for LME's commercial paper program. The facility consists of a \$300 million tranche maturing in August 2021 and a \$200 million tranche maturing in August 2017. As at June 30, 2017, there was no external commercial paper outstanding under LME's commercial paper program. There were also no amounts outstanding under LME's bank credit facility as at June 30, 2017.

As at June 30, 2017, OPG maintained \$25 million of short-term, uncommitted overdraft facilities and \$462 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 June 30, 2017, a total of \$387 million of Letters of Credit had been issued under these facilities. This included \$349 million for the supplementary pension plans, \$37 million for general corporate purposes, and \$1 million related to the operation of the Portlands Energy Centre (PEC), a jointly controlled entity in which OPG holds a 50 percent interest.

The Company has an agreement to sell an undivided co-ownership interest in its current and future accounts receivable to an independent trust. The maximum amount of co-ownership interest that can be sold under this agreement is \$150 million, expiring on November 30, 2018. As at June 30, 2017, there were Letters of Credit outstanding under this agreement of \$150 million, which were issued in support of OPG's supplementary pension plans.

UMH Energy Partnership has entered into an \$8 million short-term, uncommitted overdraft facility and \$16 million of irrevocable, standby Letters of Credit facilities in support of its operations. As at June 30, 2017, total Letters of Credit of \$14 million had been issued under these facilities.

The following table summarizes the net interest expense:

	Three Months Ended June 30		Six Months Ended June 30		
(millions of dollars)	2017	2016	2017	2016	
Interest on long-term debt Interest on short-term debt Interest income Interest capitalized to property, plant and equipment and	71 2 (2) (40)	72 1 (2) (34)	141 2 (2) (82)	144 2 (4) (65)	
intangible assets Interest related to regulatory assets and liabilities <sup>1</sup>	(15)	(6)	(24)	(13)	
Net interest expense	16	31	35	64	

Includes interest to recognize the cost of financing related to regulatory variance and deferral accounts, as authorized by the OEB, and interest deferred in the Bruce Lease Net Revenues Variance Account, the Capacity Refurbishment Variance Account, and the Niagara Tunnel Project Pre-December 2008 Disallowance Variance Account.

### 6. FIXED ASSET REMOVAL AND NUCLEAR WASTE MANAGEMENT LIABILITIES

The liabilities for fixed asset removal and nuclear waste management on a present value basis as at June 30, 2017 and December 31, 2016 consist of the following:

(millions of dollars)	June 30 2017	December 31 2016
Liability for nuclear used fuel management	11,554	11,292
Liability for nuclear decommissioning and nuclear low and intermediate level waste management	7,944	7,811
Liability for non-nuclear fixed asset removal	378	381
Fixed asset removal and nuclear waste management liabilities	19,876	19,484

### 7. ACCUMULATED OTHER COMPREHENSIVE LOSS

The changes in the balance of each component of accumulated other comprehensive loss (AOCL), are as follows:

	Six Months Ended June 30, 2017 Unrealized						
(millions of dollars)	• · · · • • · · · · · · · · · · · · · ·	Pension and OPEB <sup>1</sup>	Available-for-sale Securities <sup>1</sup>	Total <sup>1</sup>			
AOCL, beginning of period	(87)	(207)	(1)	(295)			
Unrealized loss on available-for-sale securities	•	-	(2)	(2)			
Amounts reclassified from AOCL	9	5	-	14			
Other comprehensive income for the period	9	5	(2)	12			
Reclassification of non-controlling interest on change in ownership interest (Note 15)	3	-	-	3			
AOCL, end of period	(75)	(202)	(3)	(280)			

<sup>&</sup>lt;sup>1</sup> All amounts are net of income taxes.

	Six Months Ended June 30, 2016 Unrealized						
(millions of dollars)		Pension and OPEB <sup>1</sup>	Available-for-sale Securities <sup>1</sup>	Total <sup>1</sup>			
AOCL, beginning of period	(106)	(213)	-	(319)			
Unrealized gain on available-for-sale securities	-	-	15	15			
Amounts reclassified from AOCL	10	6	-	16			
Other comprehensive income for the period	10	6	15	31			
AOCL, end of period	(96)	(207)	15	(288)			

<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 three and six months ended June 30, 2017 are as follows:

Amount Reclassified from AOCL Three Months Six Months					
(millions of dollars)	Ended June 30	Ended , 2017	Statement of Income Line Item		
Amortization of losses from cash flow hedges					
Losses	5	10	Net interest expense		
Income tax recovery	-	(1)	_Income tax expense		
	5	9			
Amortization of amounts related to pension and OPEB					
Actuarial losses	3	7	See (1) below		
Income tax recovery	(1)	(2)	Income tax expense		
<u>-</u>	2	5	•		
Total reclassifications for the period	7	14			

<sup>&</sup>lt;sup>1</sup> These AOCL components are included in the computation of pension and OPEB costs (see Note 8 for additional details).

The significant amounts reclassified out of each component of AOCL, net of income taxes, during the three and six months ended June 30, 2016 are as follows:

	Amount Reclas	sified from	AOCL
	Three Months	Six Months	i
	Ended	Ended	
(millions of dollars)	June 30,	2016	Statement of Income Line Item
Amortization of losses from cash flow hedges			
Losses	6	11	Net interest expense
Income tax recovery	-	(1)	Income tax expense
	6	10	
Amortization of amounts related to pension and OPEB			
Actuarial losses	4	8	See (1) below
Income tax recovery	(1)	(2)	Income tax expense
· 	3	6	
Total reclassifications for the period	9	16	

<sup>&</sup>lt;sup>1</sup> These AOCL components are included in the computation of pension and OPEB costs (see Note 8 for additional details).

### 8. PENSION AND OTHER POST-EMPLOYMENT BENEFITS

OPG's pension and OPEB costs for the three months ended June 30, 2017 and 2016 are as follows:

	Registered Pension				_	
	Pla	ıns	Pensior	n Plans	OP	EB
(millions of dollars)	2017	2016	2017	2016	2017	2016
Components of Cost Recognized for the period						
Current service costs	69	69	2	1	17	17
Interest on projected benefit obligation	136	159	3	3	27	33
Expected return on plan assets, net of expenses	(192)	(184)	_	_	_	-
Amortization of net actuarial loss <sup>1</sup>	46	` 48	1	1	-	5
Cost recognized <sup>2</sup>	59	92	6	5	44	55

The amortization of net actuarial loss is recognized as an increase to other comprehensive income. This increase for the three months ended June 30, 2017 was partially offset by a decrease in the Pension and OPEB Regulatory Asset of \$44 million (three months ended June 30, 2016 – \$50 million).

These pension and OPEB costs for the three months ended June 30, 2017 exclude the net addition of costs of \$4 million from the recognition of changes in the regulatory assets for the Pension & OPEB Cash Versus Accrual Differential Deferral Account and the Pension & OPEB Cash Payment Variance Account (three months ended June 30, 2016 – net reduction of costs of \$36 million).

OPG's pension and OPEB costs for the six months ended June 30, 2017 and 2016 are as follows:

	Registered Pension Plans		Supplementary Pension Plans		OPEB	
(millions of dollars)	2017	2016	2017	2016	2017	2016
Components of Cost Recognized						
Current service costs	137	138	3	3	34	34
Interest on projected benefit obligation	273	317	6	6	54	66
Expected return on plan assets, net of expenses	(383)	(367)	-	-	-	-
Amortization of net actuarial loss <sup>1</sup>	92	96	3	2	-	10
Cost recognized <sup>2</sup>	119	184	12	11	88	110

The amortization of net actuarial loss is recognized as an increase to other comprehensive income. This increase for the six months ended June 30, 2017 was partially offset by a decrease in the Pension and OPEB Regulatory Asset of \$88 million (six months ended June 30, 2016 – \$100 million).

### 9. RISK MANAGEMENT AND DERIVATIVES

OPG is exposed to risks related to changes in market interest rates on debt expected to be issued in the future and movements in foreign currency that affect the Company's 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 includes 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.

OPG's financial results are exposed to volatility in the Canadian/United States (US) foreign exchange rate as fuels and certain supplies and services purchased for generating stations and major development projects are denominated in, or tied to, US dollars. OPG enters into foreign exchange derivatives and agreements with major financial institutions, when appropriate, 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. Market participants in the IESO spot market provide collateral in accordance with the IESO prudential support requirements to cover funds that they might owe to the 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 June 30, 2017 was less than \$1 million. OPG's fair value derivatives totalled a net liability of \$13 million as at June 30, 2017 (December 31, 2016 – \$24 million).

Existing pre-tax net losses of \$20 million deferred in AOCL as at June 30, 2017 are expected to be reclassified to net income within the next 12 months.

These pension and OPEB costs for the six months ended June 30, 2017 exclude the net addition of costs of \$7 million from the recognition of changes in the regulatory assets for the Pension & OPEB Cash Versus Accrual Differential Deferral Account and the Pension & OPEB Cash Payment Variance Account (six months ended June 30, 2016 – net reduction of costs of \$72 million).

### 10. FAIR VALUE MEASUREMENTS

The fair value of financial instruments traded in active markets is based on quoted market prices at the interim 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. The fair value hierarchy groups financial instruments into three levels, based on the significance of inputs used in measuring the fair value of the assets and liabilities.

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 interim 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.

Certain alternative investments are measured at fair value by their investment managers using net asset value (NAV). Investments measured at NAV as a practical expedient for determining their fair value are excluded from the fair value hierarchy.

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 following is a summary of OPG's financial instruments and their fair value as at June 30, 2017 and December 31, 2016:

	= =	air lue	Carr Val	rying ue <sup>1</sup>	
(millions of dollars)	2017	2016	2017	2016	Balance Sheet Line Item
Nuclear Segregated Funds (includes current portion) <sup>2</sup>	16,343	15,984	16,343	15,984	Nuclear fixed asset removal and nuclear waste management funds
Investment in Hydro One shares	195	212	195	212	Available-for-sale securities
Payable related to cash flow hedges	(44)	(48)	(44)	(48)	Long-term accounts payable and accrued charges
Long-term debt (includes current portion)	(6,194)	(6,033)	(5,608)	(5,520)	Long-term debt
Other financial instruments	(8)	(18)	(8)	(18)	Various

The carrying values of other financial instruments included in cash and cash equivalents, receivables from related parties, other current assets, short-term debt, 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.

<sup>&</sup>lt;sup>2</sup> The Nuclear Segregated Funds are comprised of the Decommissioning Segregated Fund and the Used Fuel Segregated Fund.

The following tables present financial assets and financial liabilities measured at fair value in accordance with the fair value hierarchy as at June 30, 2017 and December 31, 2016:

(millions of dollars)	Level 1	Level 2	0, 2017 Level 3	Total
Assets				
Used Fuel Segregated Fund				
Investments measured at fair value, excluding investments measured at NAV	5,704	4,612	-	10,316
Investments measured at NAV				1,223
investments measured at NAV				11,539
Due to Province				(2,194)
Used Fuel Segregated Fund, net				9,345
Osed Fuel Segregated Fund, het				3,343
Decommissioning Segregated Fund				
Investments measured at fair value, excluding	4,264	3,407	-	7,671
investments measured at NAV				
Investments measured at NAV <sup>1</sup>				1,012
				8,683
Due to Province				(1,685)
Decommissioning Segregated Fund, net				6,998
Investment in available-for-sale securities <sup>2</sup>	405			405
	195	-	-	195
Other financial assets	6	6	9	21
Liabilities				
Other financial liabilities	(21)	(8)	-	(29)

Represents investments measured at fair value using NAV as a practical expedient, which have not been classified in the fair value hierarchy. The fair value amounts for these investments presented in this table are intended to permit the reconciliation of the fair value hierarchy to amounts presented on the interim consolidated balance sheets.

In the second quarter of 2017, approximately 622,000 of Hydro One Inc. shares held as available-for-sale securities were distributed to eligible OPG employees represented by the Power Workers' Union under the terms of the collective bargaining agreement reached in 2015. On the day of transfer, the closing price of the shares was \$24.25 per share.

(millions of dollars)	Level 1	Level 2	Level 3	Total
Assets				
Used Fuel Segregated Fund				
Investments measured at fair value, excluding	5,602	4,394	-	9,996
investments measured at NAV				
Investments measured at NAV <sup>1</sup>				1,086
				11,082
Due to Province				(1,938)
Used Fuel Segregated Fund, net				9,144
Decommissioning Segregated Fund				
Investments measured at fair value, excluding	4,171	3,243	-	7,414
investments measured at NAV				
Investments measured at NAV <sup>1</sup>				903
				8,317
Due to Province				(1,477)
Decommissioning Segregated Fund, net				6,840
Investment in available-for-sale securities	212	_	-	212
Other financial assets	6	2	9	17
Liabilities				
Other financial liabilities	(29)	(6)	-	(35)

Represents investments measured at fair value using NAV as a practical expedient, which have not been classified in the fair value hierarchy. The fair value amounts for these investments presented in this table are intended to permit the reconciliation of the fair value hierarchy to amounts presented on the interim consolidated balance sheets.

During the six months ended June 30, 2017, there were no transfers between Level 1 and Level 2. In addition, there were no transfers into or out of Level 3.

The following table presents the changes in OPG's net assets measured at fair value that are classified as Level 3 for the three months ended June 30, 2017:

(millions of dollars)	instruments
Opening balance, April 1, 2017	7
Realized losses included in revenue Purchases	(2)

The following table presents the changes in OPG's net assets measured at fair value that are classified as Level 3 for the six months ended June 30, 2017:

(millions of dollars)	Other financial instruments
Opening balance, January 1, 2017 Unrealized losses included in revenue	9 (2)
Realized losses included in revenue Purchases	(3) 5
Closing balance, June 30, 2017	9

### **Nuclear Segregated Funds**

The fair value of the investments within the Nuclear Segregated Funds' alternative investment portfolio is determined using appropriate valuation techniques, such as recent arm's length market transactions, references 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 discount premiums on the investments are considered in the determination of fair value. Alternative investments are measured at fair value using NAV as a practical expedient.

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 these 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 Segregated Funds that are reported on the basis of NAV as at June 30, 2017:

(millions of dollars except where noted)	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice
Alternative Investments				
Infrastructure	1,275	806	n/a	n/a
Real Estate	882	478	n/a	n/a
Agriculture	78	115	n/a	n/a
Pooled Funds				
Short-term Investments	17	n/a	Daily	1 - 5 Days
Fixed Income	540	n/a	Daily	1 - 5 Days
Equity	850	n/a	Daily	1 - 5 Days
Total	3642	1399		

The fair value of the pooled funds is classified as Level 2. Infrastructure, real estate and agriculture investments are measured using NAV as a practical expedient for determining their fair value.

### <u>Infrastructure</u>

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 NAV of the Nuclear Segregated 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 Segregated Funds may transfer any of their 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 investments in institutional-grade real estate property. 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 NAV of the Nuclear Segregated Funds' ownership interest in these investments. The partnership investments are not redeemable. However, the Nuclear Segregated Funds may transfer any of their partnership interests to another party, as stipulated in the partnership agreement. 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.

### Agriculture

This class includes a diversified portfolio of global farmland and timberland investments. The investment objective is to provide a differentiated return source, income yield, and inflation protection. The fair values of the investments in this class have been estimated using NAV of the Nuclear Segregated Funds' ownership interest in these investments. The investments are not redeemable. However, the Nuclear Segregated Funds may transfer any of their partnership interests/shares to another party, as stipulated in the partnership agreements and/or shareholders' agreements.

### 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 NAV per share of the investments. There are no significant restrictions on the ability to sell the investments in this class.

### 11. COMMITMENTS AND CONTINGENCIES

### Litigation

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. (Bruce Power) 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 regarding an alleged breach of British Energy's representations and warranties to the claimants when they purchased British Energy's interest in Bruce Power (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.

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 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".

In November 2016, British Energy obtained consent to a timetable for the remaining steps in the litigation, pursuant to which the matter must be set down for trial by December 31, 2018. OPG has delivered a statement of defence in accordance with an extension of the original June 30, 2017 delivery deadline set out in the timetable.

Various other legal proceedings are pending against OPG or its subsidiaries covering a wide range of matters that arise in the ordinary course of business activities.

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.

### **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 June 30, 2017, the total amount of guarantees OPG provided to these entities was \$83 million (December 31, 2016 – \$83 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 June 30, 2017, 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 commercial commitments as at June 30, 2017 are as follows:

(millions of dollars)	2017 ¹	2018	2019	2020	2021	Thereafter	Total
Fuel supply agreements	99	169	96	76	62	103	605
Contributions to the OPG registered pension plan <sup>2</sup>	122	251	-	-	-	-	373
Long-term debt repayment	891	398	368	663	413	2,889	5,622
Interest on long-term debt	124	207	189	167	138	2,545	3,370
Commitments related to Darlington Refurbishment <sup>3</sup>	506	-	-	-	-	-	506
Commitments related to Peter Sutherland Sr. GS project	29	-	-	-	-	-	29
Commitments related to Ranney Falls GS project	14	21	4	-	-	-	39
Operating licences	20	40	41	24	28	115	268
Operating lease obligations	14	27	25	25	23	93	207
Unconditional purchase obligations	31	59	58	56	5	_	209
Accounts payable and accrued charges	730	8	8	-	-	17	763
Other	44	38	26	2	1	65	176
Total	2,624	1,218	815	1,013	670	5,827	12,167

<sup>&</sup>lt;sup>1</sup> Represents amounts for the remainder of the year.

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.

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, 2016. The next actuarial valuation of the OPG registered pension plan must have an effective date no later than January 1, 2019. 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 2018 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.

Represents estimated currently committed costs to close the project, including accruals for completed work, demobilization of project staff and cancellation of existing contracts and material orders.

### 12. BUSINESS SEGMENTS

Segment (Loss)	F	Regulated		Unreç	gulated		
Income for the Three		Nuclear			_ Services,		
Months Ended		Waste		Contracted	Trading, and		
June 30, 2017	Nuclear	Manage-	Hydro-	Generation	Other Non-		
(millions of dollars)	Generation	ment	electric	Portfolio	Generation	Elimination	Total
Revenue	609	30	379	147	10	(29)	1,146
Fuel expense	68	-	97	13	-	(20)	178
Gross margin	541	30	282	134	10	(29)	968
Operations,	593	32	75	40	-	(29)	711
maintenance and	000	<b></b>				(20)	
administration							
Depreciation and	110	_	35	20	7	_	172
amortization					•		
Accretion on fixed	_	232	_	2	2	_	236
asset removal and				_	_		
nuclear waste							
management							
liabilities							
Earnings on nuclear	-	(194)	-	-	-	-	(194)
fixed asset removal		, ,					, ,
and nuclear waste							
management funds							
Property taxes	7	-	-	3	1	-	11
Income from	-	-	-	(8)	-	-	(8)
investments subject							
to significant influence							
Other gains	-	-	-	-	(380)	-	(380)
(Loss) Income before							
interest and income							
taxes	(169)	(40)	172	77	380	-	420

Segment (Loss)	F	Regulated Nuclear		Unreç	gulated Services,		
Three Months Ended June 30, 2016	Nuclear	Waste Manage-	Hydro-	Contracted Generation	Trading, and Other Non-	<b>-</b> 1	<b>T</b> . (.)
(millions of dollars)	Generation	ment	electric	Portfolio	Generation	Elimination	Total
Revenue	820	32	413	137	16	(31)	1,387
Fuel expense	79	-	92	11	-	-	182
Gross margin	741	32	321	126	16	(31)	1,205
Operations,	581	34	75	45	5	(31)	709
maintenance and							
administration							
Depreciation and	231	-	57	18	10	-	316
amortization		000		0	0		000
Accretion on fixed asset removal and	-	228	-	2	2	-	232
nuclear waste							
management							
liabilities							
Earnings on nuclear	_	(225)	_	_	-	-	(225)
fixed asset removal		, ,					, ,
and nuclear waste							
management funds							
Property taxes	6	-	-	3	2	-	11
Income from	-	-	-	(9)	-	-	(9)
investments subject							
to significant influence			0		(0)		(4)
Other (gains) losses	(1)		2	-	(2)	-	(1)
(Loss) Income before interest and income							
taxes	(76)	(5)	187	67	(1)	_	172
	(, 0)	(3)	101	<b>U</b> 1	(1)		

Segment (Loss)	F	Regulated		Unreg	gulated		
Income for the Six Months Ended		Nuclear Waste		Contracted	Services, Trading, and		
June 30, 2017	Nuclear	Manage-	Hydro-	Generation	Other Non-		
(millions of dollars)	Generation	ment	electric	Portfolio	Generation	Elimination	Total
(ITIIIIIOTIS OF GOILAIS)	Generation	mem	electric	Portiono	Generation	Ellillillation	Total
Revenue	1,261	57	742	290	27	(55)	2,322
Fuel expense	136	-	170	27	-	` -	333
Gross margin	1,125	57	572	263	27	(55)	1,989
Operations,	1,182	61	151	79	1	(55)	1,419
maintenance and							
administration							
Depreciation and	217	-	69	39	14	-	339
amortization							
Accretion on fixed	-	466	-	4	4	-	474
asset removal and							
nuclear waste							
management							
liabilities							
Earnings on nuclear	-	(383)	-	-	-	-	(383)
fixed asset removal							
and nuclear waste							
management funds							
Property taxes	13	-	-	5	4	-	22
Income from	-	-	-	(18)	-	-	(18)
investments subject							
to significant influence							
Other gains	-	-	-	-	(383)	-	(383)
(Loss) Income before							
interest and income							
taxes	(287)	(87)	352	154	387	-	519

Segment (Loss)	F	Regulated Nuclear		Unreç	gulated		
Months Ended June 30, 2016	Nuclear	Waste Manage-	Hydro-	Contracted Generation	Services, Trading, and Other Non-		
(millions of dollars)	Generation	ment	electric	Portfolio	Generation	Elimination	Total
Revenue	1,746	66	798	282	37	(64)	2,865
Fuel expense	160	-	171	23	-	· -	354
Gross margin	1,586	66	627	259	37	(64)	2,511
Operations,	1,144	70	151	85	9	(64)	1,395
maintenance and							
administration							
Depreciation and	461	-	113	37	17	-	628
amortization							
Accretion on fixed	-	456	-	4	4	-	464
asset removal and nuclear waste							
management liabilities							
Earnings on nuclear	_	(372)	_	_	_	_	(372)
fixed asset removal		(012)					(012)
and nuclear waste							
management funds							
Property taxes	13	_	-	5	5	_	23
Income from	-	-	-	(17)	-	_	(17)
investments subject				, ,			, ,
to significant influence							
Other gains	(2)	<u>-</u>	(20)	-	(2)		(24)
(Loss) Income before	•	•				•	
interest and income							
taxes	(30)	(88)	383	145	4	-	414

### Shareholder Declarations and Shareholder Resolutions to Sell Certain Non-Core Real Estate Properties

In December 2015, OPG received a Shareholder Declaration and a Shareholder Resolution that required the Company to sell its head office premises and associated parking facility located at 700 University Avenue and 40 Murray Street in Toronto, Ontario. In December 2016, a purchase and sale agreement was executed, and the sale was completed in April 2017. A gain on sale of \$283 million, which is net of tax effects of \$95 million, was recognized in net income upon completion of the transaction in the second quarter of 2017. The pre-tax gain on sale was recorded as an item of Other gains in the interim consolidated statement of income in the Services, Trading and Other Non-Generation segment. Pursuant to the Shareholder Declaration and Shareholder Resolution, and as prescribed in the *Trillium Trust Act*, 2014, OPG is required to transfer the proceeds from this disposition, net of prescribed deductions under the Act, into the Province's Consolidated Revenue Fund. OPG is working with the Ontario Ministry of Finance to finalize the amount of designated proceeds to be transferred into the Province's Consolidated Revenue Fund.

In June 2016, OPG received a Shareholder Declaration and a Shareholder Resolution that requires the Company to sell its former Lakeview GS site located in Mississauga, Ontario. An active program to locate a buyer for the property was initiated in June 2017. The Lakeview GS site assets were fully depreciated prior to June 2017. Pursuant to the Shareholder Declaration and Shareholder Resolution, and as prescribed in the *Trillium Trust Act*, *2014*, OPG is required to transfer the proceeds, net of prescribed deductions under the Act, from this disposition into the Province's Consolidated Revenue Fund.

### 13. NET CHANGES IN NON-CASH WORKING CAPITAL BALANCES

	Six Months Ended June 30			
(millions of dollars)	2017	2016		
Receivables from related parties	62	52		
Prepaid expenses	(20)	(22)		
Other current assets	22	14		
Fuel inventory	4	11		
Income taxes payable	(74)	(1)		
Materials and supplies	6	1		
Accounts payable and accrued charges	(125)	(148)		
	(125)	(93)		

### 14. INVESTMENTS SUBJECT TO SIGNIFICANT INFLUENCE

Investments subject to significant influence consist of OPG's 50 percent ownership interest in the jointly controlled entities of the PEC gas-fired combined cycle generating station and the Brighton Beach gas-fired combined cycle generating station (Brighton Beach), which are accounted for using the equity method. Details of the balances as at June 30, 2017 and December 31, 2016 are as follows:

(millions of dollars)	June 30 2017	December 31 2016
PEC Current assets Long-term assets	15 248	18 256
Current liabilities Long-term liabilities	(6) (5)	(8) (5)
Brighton Beach Current assets Long-term assets	6 164	5 168
Current liabilities Long-term liabilities Long-term debt	(16) (8) (82)	(16) (7) (90)
Investments subject to significant influence	316	321

### 15. NON-CONTROLLING INTEREST

### Nanticoke Solar LP

In March 2016, Nanticoke Solar LP (NSLP), then a partnership between OPG, SunEdison Canadian Construction LP (SECCLP) and a subsidiary of the Six Nations of the Grand River Development Corporation, was selected through IESO's Large Renewal Procurement program to construct a 44 megawatt (MW) solar facility at OPG's Nanticoke GS site and adjacent lands. In the first quarter of 2017, OPG acquired all of SECCLP's interests in NSLP, which represented 25 percent of the equity interest in NSLP. Subsequent to the acquisition, OPG owns 90 percent of the equity interest in NSLP, with an approximate value of \$2 million. OPG consolidates the results of the NSLP in its consolidated financial statements and reports the equity interest of the other partner as non-controlling interest.

### PSS Generating Station LP

PSS is a limited partnership between OPG, Coral Rapids Power Corporation (CRP), and PSS Generating Station Inc. (PSS GS Inc.). The principal business of the partnership is the development, construction, ownership, operation and maintenance of the 28 MW Peter Sutherland Sr. hydroelectric GS on the New Post Creek. OPG and PSS GS Inc. are general partners and CRP is a limited partner in the partnership. CRP is a wholly owned subsidiary of the Taykwa Tagamou Nation.

The Peter Sutherland Sr. GS was placed in-service in March 2017 and, in April 2017, CRP increased its interest in the PSS to 33 percent under the partnership agreement, by making contributions of \$21 million, reducing OPG's interest to 67 percent. As a result of the contributions made by OPG and CRP, PSS has met the criteria of having sufficient equity at risk to finance its activities, and ceased being classified as a variable interest entity during the second quarter of 2017. OPG continues to consolidate the results of the PSS in its consolidated financial statements. CRP's 33 percent interest in the PSS is reported as non-controlling interest. As a result of CRP increasing its interest in the partnership, PSS' AOCL and partner's deficit were proportionately allocated to CRP as a reduction to its non-controlling interest during the second quarter of 2017.