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Aug. 15, 2019

# **OPG REPORTS 2019 SECOND QUARTER FINANCIAL RESULTS**

OPG signs acquisition agreements in Ontario and US; grows scale of operations

**Toronto:** – Ontario Power Generation Inc. (OPG or Company) today reported net income attributable to the Shareholder of \$351 million for the second quarter of 2019, compared to \$121 million for the same quarter of 2018.

"As Ontario's only publicly-owned electricity generator, OPG is pleased to report that our second quarter results once again provided a strong return for our shareholder, the Province of Ontario," said Ken Hartwick, OPG President and CEO. "Our strong generation performance is a testament to the quality and commitment of our employees, ensuring we deliver real value throughout our operations."

OPG also provided an update on the Darlington Refurbishment project. "Execution of the Darlington Refurbishment began in October 2016 and remains on budget, having completed the installation of fuel channel assemblies and upper and middle feeders on Unit 2 during the quarter," said Hartwick. "We expect that Unit 2 will return to service in the second quarter of 2020, rather than the first quarter as previously anticipated, as a result of slower than expected installation of lower feeders. This revised schedule also reflects our unwavering commitment to safety as the number one priority in everything we do. We continue to expect the project overall to be executed on time and on budget."

OPG experienced higher water levels in Ontario during the quarter. "In some parts of the province, high water levels represented an additional challenge to our operations," said Hartwick. "Our renewable generation team worked closely with municipalities and other stakeholders on mitigating impacts to communities, while managing the water in a safe and coordinated manner."

OPG recently announced that it has entered into purchase and sale agreements to grow its scale of operations through the acquisitions of a portfolio of combined-cycle natural gas-fired plants in Ontario and hydropower facilities in the eastern United States (US). "OPG is a clean energy leader and a trusted community partner with a strong track record of excellent, safe and sustainably-minded operations. Expanding our natural gas portfolio through these strategic acquisitions will help us to maintain scale with the upcoming end of Pickering nuclear station's commercial operations," said Hartwick. "Expanding our US hydroelectric portfolio is a natural fit and will support further growth in the electricity markets in which we operate. This is also an opportunity to grow our revenue base over the long term and provide increased returns to our shareholder," Hartwick added.

The Company's net income for the second quarter of 2019 was favourably impacted by a decrease in planned outage days at the Darlington and Pickering nuclear generating stations, compared to the same quarter in 2018. This resulted in higher electricity generation and higher revenue from the Regulated – Nuclear Generation segment, and lower associated operations, maintenance and administration expenses, compared to the same quarter in 2018.

OPG continues to provide electricity at a price that is approximately 40 per cent less than the average of other generators in Ontario. OPG is the only electricity generator in Ontario that has its prices set through a public hearing process by the Ontario Energy Board.

# **Acquisition of Natural Gas Assets in Ontario**

In July 2019, OPG, under a new subsidiary, entered into a purchase and sale agreement with affiliates of TC Energy (formerly TransCanada Corporation) to acquire a portfolio of combined-cycle natural gas-fired plants in Ontario for \$2.87 billion, subject to customary working capital and other adjustments. The acquired portfolio includes the 900 MW Napanee generating station (GS), the 683 MW Halton Hills GS, and the remaining 50 per cent interest in the 550 MW Portlands Energy Centre. The acquisition is subject to a number of closing conditions, including the receipt of various regulatory approvals and the commencement of commercial operations at the Napanee GS. Closing is expected to occur towards the end of 2019 or in the first quarter of 2020.

In June 2019, OPG entered into a purchase and sale agreement with ATCO Power Canada Ltd., an affiliate of Canadian Utilities Limited, to acquire the remaining 50 per cent interest in the combined-cycle natural gas-fired 560 MW Brighton Beach GS in Ontario. The acquisition is subject to receipt of standard regulatory approvals, with closing expected in the third quarter of 2019.

# **Acquisition of Cube Hydro**

In June 2019, OPG entered into purchase and sale agreements to acquire 100 per cent of the equity in Cube Hydro Partners, LLC and affiliate Helix Partners, LLC (collectively, Cube Hydro) for US\$1.12 billion, inclusive of assumed debt and subject to customary working capital and other adjustments. Cube Hydro is a hydropower platform with 385 MW of in-service generating capacity spread across 19 hydroelectric facilities throughout the northeastern and southeastern United States. The acquisition provides additional scale to OPG's existing US hydroelectric platform, following the acquisition of Eagle Creek in November 2018. Cube Hydro's facilities are

located in New York, Pennsylvania, Virginia, West Virginia and North Carolina, and operate in three regional power markets in the US. The acquisition is subject to receipt of regulatory approvals, with closing expected to occur prior to the end of 2019.

# **Generation and Operating Performance**

Electricity generated during the three months ended June 30, 2019 was 20.2 terawatt hours (TWh), compared to 17.2 TWh for the same quarter in 2018. Total electricity generated during the six months ended June 30, 2019 increased to 39.3 TWh from 36.0 TWh for the same period in 2018.

# Regulated – Nuclear Generation Segment

Higher nuclear electricity generation of 2.7 TWh and 2.1 TWh during the three and six month periods ended June 30, 2019, respectively, compared to the same periods in 2018, was primarily due to a lower number of planned outage days at both the Darlington GS and Pickering GS.

For the three months ended June 30, 2019, the unit capability factor for the operating units at the Darlington GS was 95.7 per cent, compared to 67.4 per cent for the same quarter in 2018. For the six months ended June 30, 2019, the unit capability factor for the operating units at the Darlington GS was 84.2 per cent, compared to 81.9 per cent for the same period in 2018. The increase during both periods was primarily due to fewer planned outages, in line with the station's cyclical maintenance schedule. For the three months ended June 30, 2019, planned outage days for the three units decreased to 11 days from 89 days for the same period in 2018. For the six months ended June 30, 2019, planned outage days decreased to 85 days from 94 days for the same period in 2018.

At the Pickering GS, the unit capability factor increased to 86.4 per cent and 86.5 per cent for the three and six month periods ended June 30, 2019, respectively, compared to 71.3 per cent and 72.9 per cent for the same periods in 2018. The increase during both periods was primarily due to fewer planned outages in the station's cyclical maintenance schedule. For the three months ended June 30, 2019, planned outage days for the six units decreased to 59 days from 132 days for the same period in 2018. For the six months ended June 30, 2019, planned outage days decreased to 123 days from 248 days for the same period in 2018.

# Regulated – Hydroelectric Segment

Higher electricity generation from the regulated hydroelectric stations of 0.5 TWh and 1.0 TWh during the three and six month periods ended June 30, 2019, respectively, compared to the same periods in 2018, was primarily due to higher water flows across most of the province.

The availability of 91.4 per cent at these stations in the second quarter of 2019 was higher than 88.6 per cent for the same quarter in 2018. For the six months ended June 30, 2019, the availability of the stations increased to 90.7 per cent, from 87.9 per cent for the same period in 2018. The increase in the availability was primarily due to fewer planned outage days at the eastern Ontario region's regulated hydroelectric stations.

# Contracted and Other Generation Segment

Lower electricity generation from the Contracted and Other Generation segment of 0.2 TWh during the three months ended June 30, 2019 compared to the same period in 2018, was primarily due to less demand for generation from contracted facilities in Ontario, and partially offset by electricity generation from the Eagle Creek facilities acquired in the fourth quarter of 2018.

Higher generation from the Contracted and Other Generation segment of 0.2 TWh during the six months ended June 30, 2019 compared to the same period in 2018, was primarily due to electricity generation from the Eagle Creek facilities, partially offset by lower demand for generation from contracted facilities in Ontario.

The availability of the Ontario-based hydroelectric stations of the Contracted and Other Generation segment for the three months ended June 30, 2019 was 78.3 per cent, compared to 86.5 per cent for the same period in 2018. The stations' availability for the six months ended June 30, 2019 was 82.4 per cent, compared to 83.3 per cent for the same period in 2018. The decrease was primarily due to a higher number of unplanned outage days at the contracted hydroelectric stations in the northeastern Ontario region.

# Total Generating Cost

The Enterprise Total Generating Cost per megawatt-hour (MWh) for the three months ended June 30, 2019 was \$44.78, compared to \$55.78 for the same period in 2018. The Enterprise Total Generating Cost per MWh for the six months ended June 30, 2019 was \$48.18, compared to \$52.71 for the same period in 2018. The decrease was primarily due to higher electricity generation across the fleet and lower outage-related OM&A expenses at the nuclear facilities, partially offset by higher sustaining capital expenditures.

# **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 2019 included the following:

# Darlington Refurbishment

The Darlington Refurbishment project is expected to extend the operating life of the four-unit Darlington GS by at least 30 years. During the quarter, OPG completed the installation of the Fuel Channel Assemblies and the Upper and Middle Feeders. The Lower Feeder installation series is in progress and is expected to be completed in the fourth quarter of 2019. Taking account of challenges identified in achieving planned installation rates for the Lower Feeder installation series, the new date expected for Unit 2's return to service is now in the second quarter of 2020 following safe completion of commissioning activities. The Darlington Refurbishment project, the execution of which began in 2016, continues to track on schedule overall and to the \$12.8 billion budget.

In addition to the execution of refurbishment activities on Unit 2, OPG continues to progress with the planning and prerequisite activities for the refurbishment of Unit 3, incorporating the experience learned to date on Unit 2's execution. The Unit 3 refurbishment is targeted to commence in the first quarter of 2020. As of June 30, 2019, \$369 million has been invested in planning and prerequisite activities related to the refurbishment of Unit 3.

Total life-to-date expenditures on the project were approximately \$6.1 billion as at June 30, 2019.

# Ranney Falls Hydroelectric GS

OPG continues construction work for a 10 MW single-unit powerhouse on the existing Ranney Falls GS site. The new unit will replace an existing unit that reached its end of life in 2014. During the quarter, spillway gate hydraulic systems were commissioned, automated and placed in-service. Testing and commissioning of the turbine and generator of the new unit is in progress. 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 on budget. The Ranney Falls GS is included in the Regulated – Hydroelectric segment.

# **Changes to the Board of Directors**

After five years, Bernard Lord decided to step down as Chair of the Board of Directors. Effective June 27, 2019, Wendy Kei was appointed as the new Chair of the Board, having joined the Board in March 2017 and most recently serving as the Chair of OPG's Compensation, Leadership and Governance Committee.

# FINANCIAL AND OPERATIONAL HIGHLIGHTS

		ths Ended e 30		ix Months Ended June 30	
(millions of dollars – except where noted)	2019	2018	2019	2018	
Revenue	1,566	1,282	2,992	2,689	
Fuel expense	175	166	323	321	
Operations, maintenance and administration	681	743	1,430	1,465	
Depreciation and amortization	264	198	530	384	
Other net expenses (gains) 1	13	31	33	(196)	
Income before interest and income taxes	433	144	676	715	
Net interest expense	12	18	30	37	
Income tax expense	65	-	73	13	
Net income	356	126	573	665	
Net income attributable to the Shareholder	351	121	564	656	
Net income attributable to non-controlling interest <sup>2</sup>	5	5	9	9	
Income before interest and income taxes					
Electricity generating business segments	444	172	715	496	
Regulated – Nuclear Waste Management	(29)	(32)	(61)	(65)	
Other	`18 <sup>′</sup>	` 4	22	284	
Total income before interest and income taxes	433	144	676	715	
Cash flow					
Cash flow provided by operating activities	610	413	1,185	639	
Electricity generation (TWh)					
Regulated – Nuclear Generation	11.3	8.6	21.1	19.0	
Regulated – Hydroelectric	8.1	7.6	16.3	15.3	
Contracted and Other Generation <sup>3</sup>	0.8	1.0	1.9	1.7	
Total electricity generation	20.2	17.2	39.3	36.0	
Nuclear unit capability factor (per cent) 4					
Darlington Nuclear GS	95.7	67.4	84.2	81.9	
Pickering Nuclear GS	86.4	71.3	86.5	72.9	
Availability (per cent)					
Regulated – Hydroelectric	91.4	88.6	90.7	87.9	
Contracted and Other Generation – hydroelectric stations <sup>5</sup>	78.3	86.5	82.4	83.3	
Equivalent forced outage rate 6					
Contracted and Other Generation – thermal stations	18.1	1.4	9.2	0.8	
Enterprise Total Generating Cost (TGC) per MWh for the three and six months ended June 30, 2019 and June 30, 2018 (\$/MWh) <sup>7</sup>	44.78	55.78	48.18	52.71	
Return on Equity Excluding Accumulated Other Comprehensive Income					
(ROE Excluding AOCI) for the twelve months ended June 30, 2019					
and December 31, 2018 (%) 7			8.3	9.5	

<sup>&</sup>lt;sup>1</sup> For the six months ended June 30, 2018, includes the pre-tax gain on the sale of the former Lakeview GS site.

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 Lower Mattagami Limited Partnership, the 33 per cent interest of Coral Rapids Power Corporation, a corporation wholly owned by the Taykwa Tagamou Nation, in PSS Generating Station Limited Partnership, and the 15 per cent and 5 per cent interest of corporations wholly owned by the Six Nations of Grand River Development Corporation and by the Mississaugas of the Credit First Nation, respectively, in Nanticoke Solar LP.

Includes OPG's share of generation from its 50 per cent ownership interests in the Portlands Energy Centre and Brighton Beach GS. For the three and six months ended June 30, 2019, also includes generation from Eagle Creek facilities, including Eagle Creek's proportionate share of generation from co-owned and minority shareholdings in hydroelectric and solar facilities.

<sup>&</sup>lt;sup>4</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.

<sup>&</sup>lt;sup>5</sup> Reflects the availability of contracted hydroelectric generating stations in Ontario.

<sup>&</sup>lt;sup>6</sup> For the three and six month periods ended June 30, 2018, includes unplanned outage days at the Thunder Bay GS prior to cessation of operations in July 2018.

<sup>&</sup>lt;sup>7</sup> Enterprise TGC per MWh and ROE Excluding AOCI 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 month periods ended June 30, 2019, in the sections Highlights – Return on Equity Excluding Accumulated Other Comprehensive Income, Highlights – Enterprise Total Generating Cost per MWh, and 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, 2019 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 2019 SECOND QUARTER REPORT

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# ONTARIO POWER GENERATION INC.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

This Management's Discussion and Analysis (MD&A) should be read in conjunction with the 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, 2019. 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, Annual Information Form, and MD&A as at and for the year ended December 31, 2018.

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. Since January 1, 2012, OPG has also received exemptive relief from the Ontario Securities Commission (OSC) that allows OPG to apply US GAAP instead of International Financial Reporting Standards. In April 2018, the OSC approved an exemption which allows the Company to continue to apply US GAAP up to January 1, 2024. The term of the exemption is subject to certain conditions, which may result in the expiry of the exemption prior to January 1, 2024. For details, refer to the section, *Critical Accounting Policies and Estimates* under the heading, *Exemptive Relief for Reporting under US GAAP* in OPG's 2018 annual MD&A. This MD&A is dated August 13, 2019.

# 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 (GS) 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, performance of newly acquired businesses, defined benefit pension and other post-employment benefit (OPEB) obligations and funds, income taxes, proposed new legislation, the ongoing evolution of electricity industries in Ontario and the United States (US), the continued application and renewal of power purchase agreements for non-regulated facilities, foreign currency exchange rates, environmental and other regulatory requirements, operating licence applications to the Canadian Nuclear Safety Commission (CNSC) and the Federal Energy Regulatory Commission (FERC), health, safety and environmental developments, business continuity events, the weather, financing and liquidity, applications to the Ontario Energy Board (OEB) for regulated prices, the impact of regulatory decisions by the OEB, the *Fixing the Hydro Mess Act, 2019* (Fixing the Hydro Mess Act), forecasts of earnings, cash flows, Return on Equity Excluding Accumulated Other Comprehensive Income (ROE Excluding AOCI), Total Generating Cost (TGC), Operations,

Maintenance and Administration (OM&A) expenditures and project expenditures, retention of critical talent, and supplier and third party performance. 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.

### **Use of Non-GAAP Financial Measures**

The Company uses the following non-GAAP financial performance measures in the MD&A:

- "Return on Equity Excluding Accumulated Other Comprehensive Income";
- "Enterprise Total Generating Cost per Megawatt-Hour";
- "Nuclear Total Generating Cost per Megawatt-Hour";
- "Hydroelectric Total Generating Cost per Megawatt-Hour"; and
- "Gross Margin".

For a detailed description of each of the non-GAAP measures used in this MD&A and a detailed reconciliation to the most directly comparable measure under US GAAP, refer to the section, *Key Operating Performance Indicators and Non-GAAP Financial Measures*. The non-GAAP financial performance measures set out in this MD&A are intended to provide additional information to investors and do not have any standardized meaning under US GAAP, and therefore may not be comparable to other issuers, and should not be considered in isolation or as a substitute for measures of performance prepared under US GAAP.

### THE COMPANY

OPG is an Ontario-based electricity generation company whose principal business is the generation and sale of electricity. OPG was established under the *Business Corporations Act* (Ontario) and is wholly owned by the Province of Ontario (Province or Shareholder). OPG's electricity generation portfolio had an in-service capacity of 16,345 megawatts (MW) as at June 30, 2019.

As at June 30, 2019, OPG owned and operated two nuclear generating stations, 66 hydroelectric generating stations, two thermal generating stations, and one solar facility in Ontario, Canada. The Company also has interests in 78 hydroelectric generating stations in the US, of which 64 are owned and operated, and minority shareholdings in two solar facilities through its Eagle Creek Renewable Energy LLC (Eagle Creek) subsidiary. In addition, OPG and TC Energy Ltd. (formerly TransCanada Energy Ltd.) co-own the 550 MW Portlands Energy Centre (PEC) gas-fired combined cycle GS, and OPG and ATCO Power Canada Ltd. co-own the 560 MW Brighton Beach gas-fired combined cycle GS (Brighton Beach), both located in Ontario. The income from the co-owned and minority-held facilities is accounted for using the equity method of accounting, and OPG's share of income is included within income from investments subject to significant influence in the Contracted and Other Generation segment.

OPG also owns two other nuclear generating stations in Ontario, the Bruce A GS and the Bruce B GS, which are leased on a long-term basis to Bruce Power L.P. Income from these leased stations is included in revenue under the Regulated – Nuclear Generation segment. The leased stations are not included in the generation and other operating statistics set out in this report. OPG does not operate PEC, Brighton Beach, the Bruce A GS, the Bruce B GS and co-owned and minority-held facilities in the US.

OPG's proportionate share of the in-service capacity and generation volume of the co-owned facilities and minority shareholdings is included in the generation portfolio statistics set out in this report.

# **In-Service Generating Capacity**

OPG's in-service generating capacity by business segment as of June 30, 2019 and December 31, 2018 was as follows:

	As at			
(MW)	June 30 2019	December 31 2018		
Regulated – Nuclear Generation <sup>1</sup>	5,728	5,728		
Regulated – Hydroelectric	6,421	6,426		
Contracted and Other Generation <sup>2</sup>	4,196	4,141		
Total	16,345	16,295		

<sup>&</sup>lt;sup>1</sup> The in-service generating capacity as of June 30, 2019 and December 31, 2018 excludes Unit 2 of the Darlington nuclear GS. The unit, which has a generating capacity of 878 MW, was taken offline in October 2016 and is currently undergoing refurbishment.

During the six months ended June 30, 2019, the total in-service capacity increased by 50 MW. The increase was primarily due to the completion of the Nanticoke solar facility which was placed in service in March 2019, and the acquisition of interests in hydroelectric facilities in the US by Eagle Creek during the first six months of 2019.

The in-service generating capacity as at June 30, 2019 and December 31, 2018 includes OPG's share of in-service generating capacity of 275 MW for PEC and 280 MW for Brighton Beach, as well as the in-service generating capacity of the Eagle Creek facilities, including Eagle Creek's proportionate share of in-service generating capacity from co-owned and minority shareholdings in hydroelectric and solar facilities.

### **HIGHLIGHTS**

# **Overview of Results**

This section provides an overview of OPG's unaudited interim consolidated operating results and summarizes OPG's income before interest and income taxes by business segment. Significant factors which contributed to OPG's results during the three and six month periods ended June 30, 2019, compared to the same periods in 2018, are discussed below. A detailed discussion of OPG's performance by reportable segment is included in the section, Discussion of Operating Results by Business Segment.

		ths Ended e 30	Six Months Ended June 30	
(millions of dollars – except where noted)	2019	2018	2019	2018
Revenue	1,566	1,282	2,992	2,689
Fuel expense	175	166	323	321
Operations, maintenance and administration	681	743	1.430	1.465
Depreciation and amortization	264	198	530	384
Other net expenses (gains) <sup>1</sup>	13	31	33	(196)
Income before interest and income taxes	433	144	676	715
Net interest expense	12	18	30	37
Income tax expense	65	-	73	13
Net income	356	126	573	665
Note:	054	404	F0.4	050
Net income attributable to the Shareholder	351 5	121 5	564 9	656 9
Net income attributable to non-controlling interest <sup>2</sup>	9	ວ	9	9
Electricity production (TWh) <sup>3</sup>	20.2	17.2	39.3	36.0
Cash flow				
Cash flow provided by operating activities	610	413	1,185	639
Segment Results				
Regulated – Nuclear Generation	193	(84)	213	(9)
Regulated – Hydroelectric	179	178	359	349
Contracted and Other Generation	72	78	143	156
Total electricity generating business segments	444	172	715	496
Regulated – Nuclear Waste Management	(29)	(32)	(61)	(65)
Other	18	4	22	284
Income before interest and income taxes	433	144	676	715

For the six months ended June 30, 2018, includes the pre-tax gain on the sale of the former Lakeview GS site.

<sup>&</sup>lt;sup>2</sup> Relates to the 25 percent interest of Amisk-oo-Skow Finance Corporation, a corporation wholly owned by the Moose Cree First Nation, in Lower Mattagami Limited Partnership, the 33 percent interest of Coral Rapids Power Corporation, a corporation wholly owned by the Taykwa Tagamou Nation, in PSS Generating Station Limited Partnership, the 15 percent interest of a corporation wholly owned by Six Nations of Grand River Development Corporation in Nanticoke Solar LP and the 5 percent interest of a corporation wholly owned by Mississaugas of the Credit First Nation in Nanticoke Solar LP.

<sup>&</sup>lt;sup>3</sup> Includes OPG's share of generation from its 50 percent ownership interests in PEC and Brighton Beach. For the three and six month periods ended June 30, 2019, also includes generation from Eagle Creek's facilities, including Eagle Creek's proportionate share of generation from co-owned and minority shareholdings in hydroelectric and solar facilities.

### Second Quarter

Net income attributable to the Shareholder was \$351 million for the second quarter of 2019, representing an increase of \$230 million compared to the same quarter in 2018. Income before interest and income taxes for the second quarter of 2019 was \$433 million, an increase of \$289 million compared to the same quarter in 2018.

The increase in earnings was primarily due to a decrease in planned outage days at the Darlington nuclear GS (Darlington GS) and Pickering nuclear GS (Pickering GS) in the second quarter of 2019, compared to the same quarter in 2018, resulting in higher electricity generation of 2.7 terawatt hours (TWh) and higher revenue of \$215 million from the Regulated – Nuclear Generation segment. The increase in earnings was also due to lower OM&A expenses in the Regulated – Nuclear Generation segment of \$78 million, primarily as a result of a decrease in planned outage activity in the second guarter of 2019.

Net interest expense decreased by \$6 million during the second quarter of 2019, compared to the same quarter in 2018, largely due to higher interest income and a higher amount of interest costs capitalized related to the Darlington Refurbishment project, partially offset by a higher amount of interest costs on net debt issuances.

Income tax expense increased by \$65 million for the three months ended June 30, 2019, compared to the same period in 2018. The increase was primarily due to the impact of higher income before taxes and a lower amount of income tax expense deferred as regulatory assets compared to the same period in 2018.

# Year-To-Date

Net income attributable to the Shareholder was \$564 million for the first six months of 2019, a decrease of \$92 million compared to the same period in 2018. Income before interest and income taxes for the first six months of 2019 was \$676 million, a decrease of \$39 million compared to the same period in 2018.

The decrease in earnings was primarily due to a one-time pre-tax gain on the sale of the former Lakeview GS site of \$273 million recognized in net income upon completion of the transaction in the first quarter of 2018. The decrease in earnings was largely offset by a decrease in planned outage days at the Pickering GS and partially offset by a decrease in planned outage days at the Darlington GS in the six months ended June 30, 2019, compared to the same period in 2018, resulting in higher electricity generation of 2.1 TWh and higher revenue of \$172 million from the Regulated – Nuclear Generation segment. The decrease in earnings was also partially offset by lower OM&A expenses in the Regulated – Nuclear Generation segment of \$60 million, primarily as a result of a decrease in planned outage activity in the second quarter of 2019.

Net interest expense decreased by \$7 million for the six months ended June 30, 2019, compared to the same period in 2018, largely due to a higher amount of interest costs capitalized related to the Darlington Refurbishment project expenditures and higher interest income, partially offset by a higher amount of interest costs on net debt issuances.

Income tax expense increased by \$60 million for the six months ended June 30, 2019, compared to the same period in 2018. The increase was primarily due to a reduction in income taxes due to a refundable tax credit of \$86 million recognized in 2018, partially offset by a higher amount of deferred income tax expense recorded as a regulatory asset and the impact of lower income before taxes.

### **Electricity Generation**

Electricity generation for the three and six month periods ended June 30, 2019 and 2018 was as follows:

	Three Mon Jun		Six Mont Jun	
(TWh)	2019	2018	2019	2018
Regulated – Nuclear Generation	11.3	8.6	21.1	19.0
Regulated – Hydroelectric	8.1	7.6	16.3	15.3
Contracted and Other Generation <sup>1</sup>	8.0	1.0	1.9	1.7
Total OPG electricity generation	20.2	17.2	39.3	36.0
Total electricity generation by other generators in Ontario <sup>2</sup>	15.2	17.4	34.7	36.5

Includes OPG's share of generation from its 50 percent ownership interests in PEC and Brighton Beach. For the three and six month periods ended June 30, 2019, also includes generation from Eagle Creek's facilities of 0.2 TWh and 0.5 TWh, respectively.

Total OPG electricity generation increased by 3.0 TWh and 3.3 TWh for the three and six month periods ended June 30, 2019, respectively, compared to the same periods in 2018. This was mainly due to higher electricity generation from the Regulated - Nuclear Generation and Regulated - Hydroelectric segments.

The increase in electricity generation of 2.7 TWh from the Regulated - Nuclear Generation segment for the three months ended June 30, 2019, compared to the same period in 2018, was primarily due to a lower number of planned outage days at both the Darlington and Pickering generating stations. The increase of 2.1 TWh for the six months ended June 30, 2019, compared to the same period in 2018, was primarily due to a lower number of planned outage days at the Pickering GS and partially due to a lower number of planned outage days at the Darlington GS.

The increase in electricity generation of 0.5 TWh and 1.0 TWh from the Regulated - Hydroelectric segment for the three and six month periods ended June 30, 2019, respectively, compared to the same periods in 2018, was primarily due to higher water flows across most of the province.

The electricity generation from the Contracted and Other Generation segment for the three month period ended June 30, 2019, decreased 0.2 TWh, compared to the same period in 2018, primarily due to higher electricity generation forgone as a result of SBG conditions, partially offset by the electricity generation from the Eagle Creek facilities acquired in the fourth quarter of 2018. The increase of 0.2 TWh for the six month period ended June 30, 2019, compared to the same period in 2018, was primarily due to electricity generation from the Eagle Creek facilities, partially offset by higher electricity generation forgone 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. For the three and six month periods ended June 30, 2019, Ontario's electricity demand as reported by the Independent Electricity System Operator (IESO) was 30.9 TWh and 66.6 TWh, respectively, compared to 31.9 TWh and 66.9 TWh for the same periods in 2018, 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 and certain nuclear stations, and other grid-connected renewable resources. Baseload generation supply surplus in Ontario was higher in the three and six month periods ended June 30, 2019 compared to 2018, resulting in total OPG forgone hydroelectric electricity generation due to SBG conditions in Ontario of 1.9 TWh and 2.2 TWh, respectively, compared to 1.2 TWh and 2.0 TWh in the same periods in 2018. The gross margin impact of production forgone at OPG's regulated hydroelectric stations due to SBG conditions is offset by the impact of an OEB-authorized regulatory variance account. OPG did not forgo any electricity production at its nuclear stations due to SBG conditions.

Calculated as the Ontario electricity demand plus net exports, as published by the IESO, minus OPG electricity generation in Ontario

# **Regulated Average Sales Prices**

The majority of OPG's generation is from the Regulated – Nuclear Generation and Regulated – Hydroelectric segments. The regulated prices approved by the OEB for electricity generated from these segments are discussed in the section, *Core Business, Strategy and Outlook* under the heading, *Financial Strength – Increasing Revenue, Reducing Costs and Achieving Appropriate Return.* 

Average sales prices for the regulated generation business segments for the three and six month periods ended June 30, 2019 and 2018 were as follows:

	Three Months Ended June 30		Six Months Ended June 30		
cents per kilowatt hour (¢/kWh)	2019	2019 2018		2018	
Regulated – Nuclear Generation <sup>1</sup>	8.1	7.9	8.1	7.5	
Regulated – Hydroelectric	4.5	4.2	4.5	4.2	

<sup>1</sup> Amounts deferred in the Rate Smoothing Deferral Account are not included in the calculation of the average sales price until the period they are settled with ratepayers. The OEB is required by Ontario Regulation 53/05 to authorize recovery of the deferred amounts, together with interest at a long-term debt rate reflecting OPG's cost of long-term borrowing approved by the OEB, over a period not to exceed ten years following the end of the Darlington Refurbishment project.

For the Regulated – Nuclear Generation segment, the higher average sales price for the three and six month periods ended June 30, 2019 was primarily due to higher rate riders in effect during 2019 related to the recovery of OEB-authorized regulatory variance and deferral account (regulatory account) balances. The higher average sales price for the six months ended June 30, 2019 was also due to the partial reversal of a regulatory asset recorded for the June 1, 2017 to December 31, 2017 interim period revenue shortfall to reflect an estimate of the impact of the OEB's December 2017 decision on OPG's application for new regulated prices. The partial reversal was recorded in the first quarter of 2018 to reflect the issuance of the OEB's final payment amounts order in March 2018, which established the final regulated prices based on the findings in the December 2017 decision.

For the Regulated – Hydroelectric segment, the higher average sales price for the three and six month periods ended June 30, 2019 was due to a higher hydroelectric base regulated price in effect during 2019 approved by the OEB in 2018 based on an annual formulaic adjustment, and higher rate riders in effect during 2019 related to the recovery of regulatory account balances.

# **Cash Flow from Operations**

Cash flow provided by operating activities was \$610 million for the three month period ended June 30, 2019, compared to \$413 million for the same period in 2018. The increase in cash flow provided by operating activities was primarily due to higher cash receipts from generation revenue reflecting higher nuclear electricity production.

Cash flow provided by operating activities was \$1,185 million for the six months ended June 30, 2019, compared to \$639 million for the same period in 2018. The increase in cash flow provided by operating activities was primarily due to higher cash receipts from generation revenue reflecting higher nuclear electricity production, the impact of higher rate riders in effect during 2019 related to the recovery of regulatory accounts and the collection of the June 1, 2017 to February 28, 2018 interim period revenue shortfall.

### Return on 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 for the twelve months ended June 30, 2019 was 8.3 percent, compared to 9.5 percent for the twelve months ended December 31, 2018. The decrease in ROE Excluding AOCI was primarily due to the one-time gain recognized on the sale of the former Lakeview GS site and the reduction in income tax due to a refundable tax credit, both recorded in the first quarter of 2018, partially offset by higher revenues due to greater electricity generation from the Regulated – Nuclear Generation segment in 2019. The impact of the gain on the sale of the former Lakeview GS site and the refundable tax credit contributed approximately 2.2 percent to ROE Excluding AOCI for the twelve months ended December 31, 2018.

# **Enterprise Total Generating Cost per Megawatt-Hour**

The Enterprise TGC per megawatt-hour (MWh) was \$44.78 and \$48.18 for the three and six month periods ended June 30, 2019, respectively, compared to \$55.78 and \$52.71 for the same periods in 2018. The decrease in Enterprise TGC per MWh was primarily due to higher electricity generation and lower outage-related OM&A expenses at the nuclear facilities, partially offset by higher sustaining capital expenditures.

### **Nuclear Total Generating Cost per Megawatt-Hour**

The Nuclear TGC per MWh was \$60.06 and \$66.72 for the three and six month periods ended June 30, 2019. respectively, compared to \$86.03 and \$77.74 for the same periods in 2018. The decrease in Nuclear TGC per MWh for the three months ended June 30, 2019 was primarily due to the higher nuclear electricity generation as a result of a lower number of planned outage days at both the Darlington and Pickering generating stations. The decrease for the six months ended June 30, 2019 was primarily due to a lower number of planned outage days at the Pickering GS and partially due to a lower number of planned outage days at the Darlington GS. The decreases were also partially due to lower OM&A expenses associated with the decrease in outage activity, partly offset by higher sustaining capital expenditures.

# **Hydroelectric Total Generating Cost per Megawatt-Hour**

The Hydroelectric TGC per MWh was \$24.13 and \$23.60 for the three and six month periods ended June 30, 2019, respectively, compared to \$23.81 and \$22.16 for the same periods in 2018. The Hydroelectric TGC per MWh for the three months ended June 30, 2019 was comparable to the same period in 2018. The increase in the Hydroelectric TGC per MWh in the six months ended June 30, 2019 was primarily due to higher sustaining capital expenditures, largely offset by higher electricity generation from the hydroelectric facilities.

### **Recent Developments**

# Acquisition of Natural Gas Assets in Ontario

In July 2019, OPG, under a new subsidiary, entered into a purchase and sale agreement with affiliates of TC Energy Ltd. to acquire a portfolio of combined-cycle natural gas-fired plants in Ontario for \$2.87 billion, subject to customary working capital and other adjustments. The acquired portfolio includes the 900 MW Napanee GS, the 683 MW Halton Hills GS, and the remaining 50 percent interest in the 550 MW Portlands Energy Centre. The acquisition is subject to a number of closing conditions, including the receipt of various regulatory approvals and the commencement of commercial operations at the Napanee GS. Closing is expected to occur towards the end of 2019 or in the first quarter of 2020.

In June 2019, OPG entered into a purchase and sale agreement with ATCO Power Canada Ltd., an affiliate of Canadian Utilities Limited, to acquire the remaining 50 percent interest in the combined-cycle natural gas-fired 560 MW Brighton Beach GS in Ontario for \$200 million, inclusive of assumed debt and subject to customary working capital and other adjustments. The acquisition is subject to receipt of standard regulatory approvals, with closing expected in the third quarter of 2019.

All of the assets being acquired operate under Energy Supply Agreements with the IESO, with expiry dates ranging from 2024 to 2039. The natural gas electricity generation assets being added to OPG's fleet are an important component of maintaining Ontario's electricity system reliability, complementing the growth of intermittent sources of electricity generation in the province, such as wind and solar.

### Acquisition of Cube Hydro

In June 2019, OPG entered into purchase and sale agreements to acquire 100 percent of the equity in Cube Hydro Partners, LLC and affiliate Helix Partners, LLC (collectively, Cube Hydro) for US\$1.12 billion, inclusive of assumed debt and subject to customary working capital and other adjustments. Cube Hydro is a hydropower platform with 385 MW of in-service generating capacity spread across 19 hydroelectric facilities throughout the northeastern and southeastern US, and provides additional scale to OPG's existing hydroelectric operations in the US. Cube Hydro's facilities are located in New York, Pennsylvania, Virginia, West Virginia and North Carolina, and operate in three regional power markets in the US. The acquisition is subject to receipt of standard regulatory approvals, with closing expected to occur prior to the end of 2019.

### Society of United Professionals Collective Agreement

The Society of United Professionals (Society) represents approximately 3,100 regular employees at OPG or approximately 36 percent of OPG's regular workforce in Ontario as at June 30, 2019. The current governing collective agreement between OPG and the Society expires on December 31, 2019, and negotiations to renew the collective agreement took place during the second quarter of 2019. The parties were unable to reach an agreement during the negotiations and are scheduled to proceed to interest mediation/arbitration in November 2019. Results of the mediation/arbitration are expected to be known before the end of the year.

# Amendments to Ontario's Fair Hydro Plan Act

On May 9, 2019, the Fixing the Hydro Mess Act received Royal Assent and will come into force in November 2019. The new legislation amends various statutes related to energy in Ontario, including the Ontario Fair Hydro Plan Act, 2017 (Fair Hydro Act). Under this new legislation, the Province will be responsible for paying existing funding obligations administered by the Fair Hydro Trust (the Trust), while OPG will be responsible for paying the operating costs of the Trust. As there will be no new Global Adjustment refinancing, and the Province will be responsible for the existing funding obligations administered by the Trust, the Trust will be prohibited from issuing any new financing. On this basis, OPG deconsolidated the Trust from its consolidated financial results effective May 9, 2019.

### 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 expansion opportunities to the benefit of the Shareholder.

The following sections provide an update to OPG's disclosures in the 2018 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 2018 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

The status updates for OPG's electricity generation portfolio as of June 30, 2019 are summarized below:

- During the second quarter, OPG's hydroelectric operations experienced challenging conditions due to high water
  levels and flows as a result of spring freshet, due to high snow pack and substantial rain experienced across
  much of the province. OPG managed these conditions safely and effectively, by maintaining a strong focus on
  dam and public safety. This was accomplished through coordination with stakeholders, including industry
  partners and various levels of government, adhering to OPG's comprehensive Safety Emergency Preparedness
  and Response Plan (EPRP). The EPRP includes enhanced training programs and emphasizes the importance of
  learning from experience.
  - Following the spring freshet, the Province appointed a special advisor to assess current roles and responsibilities of governments, agencies and organizations involved in flood management, including any opportunities for improvement, review feedback received, identify focused recommendations and ensure all recommendations are consistent with the Province's ability to implement them. OPG has been asked to participate in this review. The report is expected to be issued by the end of the year.
- OPG signed a Memorandum of Understanding (MOU) in June 2019 with the Ontario Ministry of Natural
  Resources and Forestry related to the application of the Lakes and Rivers Improvement Act. The purpose of the
  MOU is to streamline future approvals for rehabilitation projects related to dam safety upgrades. The outcome
  will allow OPG to proceed with the tendering and contracting process with certainty in terms of schedule as well
  as apply more modern methods of analysis that are expected to lead to more cost effective designs for the
  upgrading work.
- In December 2017, the Province approved the updated Provincial Nuclear Emergency Response Plan (PNERP) Master Plan. The changes included a new 20-kilometre Contingency Planning Zone around the Pickering and Darlington generating stations, which will improve protective actions for the public. In July 2019, the Province published the Implementing Plan for the Darlington GS based on the updated PNERP Master Plan. OPG has updated its nuclear emergency preparedness plans to conform with the updated Implementing Plan for the Darlington GS.

# Clarington Campus Plan

On June 10, 2019, the Company announced plans to establish a new corporate campus in Clarington, Ontario. The new campus will be a high-tech energy hub that will bring together all non-station based employees in Toronto, Niagara and Durham region to promote innovation and collaboration across the organization. The campus will include the existing Darlington Energy Complex and a new building, which is expected to be constructed by 2024.

# **Project Excellence**

OPG is pursuing a number of generation development and other projects in line with Ontario's electricity planning initiatives and expected to provide incremental value in the future. The status update for OPG's major projects as at June 30, 2019 are outlined below.

Project	Capital expenditures	s	Approved budget	Expected in-service	Current status
(millions of dollars)	Year-to-date Life-t			date	
Darlington Refurbishment	613	6,126	12,800 1	First unit - 2020 Last unit - 2026	The reassembly of Unit 2 reactor components is in progress. Fuel Channels along with Upper and Middle Feeders were successfully installed in the second quarter of 2019. The project is currently executing the Lower Feeder installation series and preparations are underway for Fuel Loading to begin in the fourth quarter of 2019. Taking into account challenges experienced in achieving the planned Lower Feeder installation rates, the new date expected for Unit 2's return to service is in the second quarter of 2020. Planning activities for the refurbishment of Unit 3 are continuing. The overall project is tracking on schedule and to the \$12.8 billion budget.
Ranney Falls Hydroelectric GS	10	67	77	2019	In the second quarter of 2019, spillway gate hydraulic systems were commissioned, automated and placed in-service. Testing and commissioning of the turbine and generator of the new unit has commenced. The project's expected in-service date is in the fourth quarter of 2019. The project is tracking on schedule and on budget.
Deep Geologic Repository for Low and Intermediate Level Radioactive Waste	3 <sup>2</sup>	216 2			In August 2017, the federal Minister of Environment and Climate Change requested OPG to update its analysis of potential cumulative effects of the project on the Saugeen Ojibway Nation's (SON) physical and cultural heritage. OPG continues its engagement with the SON, working towards securing support for the project and to formulate a response to the information request. This includes the launch of a series of provincial-wide SON community engagement sessions scheduled throughout 2019.

The total project budget of \$12.8 billion is for the refurbishment of all four units at the Darlington GS.
 Expenditures are charged against the Nuclear Liabilities.

# **Darlington Refurbishment**

The Darlington generating units are approaching their originally designed end-of-life. Refurbishment of the four generating units is expected to extend the operating life of the station by at least 30 years. The approved budget for the four-unit refurbishment is \$12.8 billion, which includes the costs of the pre-requisite projects in support of the execution phase of the refurbishment. The first refurbished unit is now expected to be returned to service in the second quarter of 2020 and the last unit is scheduled to be completed by 2026.

The Unit 2 refurbishment is currently in the third major segment, the installation and reassembly of reactor components, including new feeder tubes and fuel channel assemblies. Fuel Channel Assemblies, along with the Upper and Middle Feeder installation series, were successfully completed in the second guarter of 2019. The project is currently executing the Lower Feeder installation series. Challenges have been experienced in achieving the planned installation rates for the Lower Feeder installation series, and it is expected that the series installation timeframe will extend to the fourth quarter of 2019. Given these challenges, together with the expected time required for the start up schedule, it is now expected that Unit 2 will return to service in the second quarter of 2020, rather than the first quarter as previously anticipated, following the safe completion of commissioning activities.

The remainder of the Unit 2 refurbishment program that is not on the critical path is progressing well and poses no risk to the schedule. Preparations are now underway for fuel loading to take place in the fourth quarter of 2019. The work committed to for 2019 to support the requirements set out in the CNSC-approved Integrated Implementation Plan for the station is also progressing as planned.

The Heavy Water Storage and Drum Handling Facility is tracking to be completed by the end of 2019, ahead of the commencement of Unit 3 refurbishment activities. All other pre-requisite projects, including construction of facilities, infrastructure upgrades and installation of safety enhancements, have been completed and placed in service.

The planning and prerequisite activities for the refurbishment of the second unit, Unit 3, continue to progress in accordance with the overall project schedule, incorporating experience learned to date from the Unit 2 refurbishment. Commissioning on the Full Scale Maintenance Simulator for the turbine generator, procurement for major components that require long lead times, and receipt of long lead materials for the Re-tube and Feeder Replacement of Unit 3 are continuing. The execution of the Unit 3 refurbishment is targeted to begin in the first quarter of 2020. As of June 30, 2019, \$369 million has been invested in planning and prerequisite activities related to the Unit 3 refurbishment.

# Upgrade and Rehabilitation of Hydroelectric Generating Stations

OPG continues to make investments in its existing hydroelectric generating fleet. During the second quarter of 2019, OPG continued to execute a number of major projects, including:

- Completed the overhaul and rehabilitation of Unit 6 of the Sir Adam Beck Pump GS;
- Completed the overhaul and upgrade of Unit 2 of the DeCew Falls GS; and
- · Continued definition phase work for the frequency conversion of the previously decommissioned Unit 1 and Unit 2 of the Sir Adam Beck 1 GS.

# **Financial Strength**

As a commercial enterprise, OPG's financial priority is to ensure a consistent level of strong financial performance that delivers an appropriate level of return on the Shareholder's investment and supports expansion of the business.

# Increasing Revenue, Reducing Costs and Achieving Appropriate Return

In line with its commercial mandate, OPG is focused on increasing revenue and net income and achieving an appropriate rate of return on the Shareholder's investment, while taking into account the impact on electricity customers by seeking further efficiencies in the Company's cost structure.

For regulated operations, achievement of the above objectives is largely dependent on outcomes of applications for regulated prices to the OEB and growth of the asset base earning a return. OPG's revenues from regulated operations include recovery of amounts deferred in regulatory accounts.

The following table presents the OEB-authorized regulated prices in effect for electricity generated from regulated facilities for the period from January 1, 2018 to December 31, 2021:

(\$/MWh)	2018	2019	2020	2021
Regulated – Nuclear Generation				
Base regulated price <sup>1</sup>	78.64	77.00	85.00	89.70
Interim period shortfall rider <sup>2</sup>	2.88	7.71	5.64	-
Deferral and variance account rate riders <sup>3</sup>	1.05	4.99	4.32	6.13
	82.57	89.70	94.96	95.83
Regulated – Hydroelectric				
Base regulated price <sup>4</sup>	42.05	42.51	n/a	n/a
Interim period shortfall rider <sup>2</sup>	0.13	0.35	0.24	-
Deferral and variance account rate riders <sup>3</sup>	0.52	2.60	2.26	2.05
	42.70	45.46	n/a	n/a

Base regulated prices for nuclear facilities presented do not include amounts deferred in the Rate Smoothing Deferral Account. These prices were established by the payment amounts order issued by the OEB in March 2018 using a rate smoothing approach that defers a portion of each year's approved nuclear revenue requirement for future collection in the Rate Smoothing Deferral Account. Amounts deferred in the Rate Smoothing Deferral Account for future collection are recorded as revenue in the period to which the underlying approved revenue requirement relates. Pursuant to the payment amounts order in March 2018, no amounts were recorded in the Rate Smoothing Deferral Account for 2017 or 2018, with \$102 million to be deferred for future collection in 2019 and \$391 million in 2020. During the three and six month periods ended June 30, 2019, \$25 million and \$51 million, respectively, was deferred for future collection in the Rate Smoothing Deferral Account and recorded as revenue in the Regulated – Nuclear Generation segment.

In its payment amounts order issued in March 2018, the OEB authorized separate rate riders to allow for the recovery of the revenue shortfall between the new base regulated prices approved with an effective date of June 1, 2017 and the previously approved base regulated prices that OPG continued to receive during the interim period between June 1, 2017 and February 28, 2018. The interim period revenue shortfall amount approved for recovery was recognized as a regulatory asset and is being drawn down from March 1, 2018 to December 31, 2020 through rate riders approved by the OEB.

Beginning in 2018, deferral and variance account riders reflect the OEB's March 2018 payment amounts order that authorized recovery of balances recorded in deferral and variance accounts as at December 31, 2015. Beginning in 2019, these riders also reflect the OEB's February 21, 2019 decision and order that authorized recovery of balances recorded in deferral and variance accounts as at December 31, 2017.

<sup>&</sup>lt;sup>4</sup> Base regulated prices for regulated hydroelectric facilities for 2020 and 2021 will be determined annually through a formulaic adjustment using the OEB-approved incentive regulation formula and OEB-published inflation indices.

# Ensuring Availability of Cost Effective Funding

In April 2019, 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)'. In July 2019, subsequent to OPG's acquisition announcements, S&P Global Ratings (S&P) re-affirmed both OPG's long-term credit rating at 'BBB+', with a revised outlook from stable to negative, and commercial paper rating for OPG is 'A-1 (low)'. DBRS re-affirmed OPG's long-term credit rating at 'A (low)'. All ratings from DBRS have a stable outlook.

### **Social Licence**

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's Social Licence initiatives and activities are discussed in the section, *Environmental, Social, Governance and Sustainability*.

### **Outlook**

The financial performance of OPG's regulated operations is driven, in large part, by the outcome of the Company's applications for regulated prices to the OEB and the generation performance of the nuclear and hydroelectric fleet.

Based on the OEB-approved regulated prices and anticipated generation performance and outage plans for the generation fleet, OPG expects its existing operations to provide a continuing strong level of net income and ROE Excluding AOCI in 2019. The increase in the regulated prices in 2019, as set out under the heading above, *Financial Strength – Increasing Revenue, Reducing Costs and Achieving Appropriate Return*, is expected to contribute to an improvement in cash flow from operating activities during 2019, compared to 2018.

Several regulatory accounts will continue to reduce the relative variability of the regulated operations' contribution to the Company's net income, particularly for the Regulated – Hydroelectric Generation segment. Among others, these 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 such, earnings from the Regulated – Hydroelectric segment are expected to continue to be generally stable on a year-over-year basis.

There are no regulatory accounts in place related to the impact of variability in the nuclear stations' generation performance on revenue from base regulated prices. OPG continues to operate and maintain its nuclear facilities with a view to optimize their performance and availability, building on recent initiatives to improve the overall reliability and predictability of the fleet. Taking into account outage activity planned at the nuclear generating stations in the second half of the year, OPG expects a year-over-year increase in earnings from the Regulated – Nuclear Generation segment.

Energy and capacity provided by most of OPG's non-regulated assets is subject to Energy Supply Agreements with the IESO or other long-term power purchase agreements. Based on these agreements, OPG expects existing operations of the Contracted and Other Generation segment to contribute a generally stable level of earnings and cash flow from operating activities in 2019.

Lower nuclear generation due to the Darlington Refurbishment outages will continue, as planned, to negatively impact the Enterprise TGC and Nuclear TGC measures for the duration of the refurbishment project. Lower hydroelectric generation due to outages related to various refurbishment and operational projects may negatively impact Enterprise TGC and Hydroelectric TGC for the duration of these projects. Variability in sustaining capital investment expenditures, nuclear outage profile and water flows may also impact TGC measures in future periods.

OPG's total forecast capital expenditures for the 2019 year are approximately \$2.2 billion. This includes amounts for the Darlington Refurbishment project, hydroelectric and other development projects, and sustaining capital

investments across the generating fleet, excluding the impact of acquisition-related activity. OPG's major projects are discussed in the section, *Core Business, Strategy and Outlook* under the heading, *Project Excellence*.

In addition to the operating and financial performance of the electricity generation business, OPG's results are affected by earnings on the nuclear fixed asset removal and nuclear waste management segregated funds (Nuclear Segregated Funds) established under the Ontario Nuclear Funds Agreement (ONFA) between OPG and the Province, 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 specified in the ONFA, the rates of return earned in a given period can be subject to volatility due to financial market conditions, including changes in the Ontario consumer price index (CPI) that affect earnings on the portion of the Used Fuel Segregated Fund guaranteed by the Province, and can cause fluctuations in the Company's income in the short term. This volatility is partially reduced by the impact of the OEB-authorized Bruce Lease Net Revenues Variance Account and during periods when the funds are in a fully funded or overfunded position.

As at June 30, 2019, the Decommissioning Segregated Fund was overfunded by approximately 28 percent and the Used Fuel Segregated Fund was overfunded by approximately 2 percent based on the current 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. No overall contributions to the Nuclear Segregated Funds are currently expected until the end of 2021 when the next update of the ONFA reference plan is scheduled. At that time, the value of the funds will be compared to the respective underlying funding liabilities to determine any required future contributions.

# **ENVIRONMENTAL, SOCIAL, GOVERNANCE AND SUSTAINABILITY**

### **Environmental and Sustainability**

In the second quarter of 2019, legislation to amend the *Fisheries Act* (Bill C-68) and to replace the *Canadian Environmental Assessment Act*, 2012 with a more comprehensive *Impact Assessment Act* (Bill C-69) received Royal Assent and became law. This legislation introduces regulatory requirements to further protect fish and fish habitat, and for assessing designated projects. OPG is monitoring the development of the regulations, standards and codes that will support the new laws and exploring opportunities to mitigate any associated risk.

Under the federal *Greenhouse Gas Pollution Pricing Act* (GGPPA), an Output-Based Pricing System (OBPS) for industrial facilities took effect on January 1, 2019 and a fuel charge came into effect on April 1, 2019 in Ontario. OPG has implemented processes to comply with the federal requirements and recover associated carbon costs to the extent possible. On July 10, 2019, final OBPS Regulations were published which include fuel-specific performance standards for electricity generation that apply retroactively beginning January 1, 2019. The federal pricing system is not expected to have a material financial impact on the Company.

In 2018, the Government of Ontario launched a legal challenge over the constitutionality of the federal GGPPA. On June 28, 2019, the Ontario Court of Appeal decided that the federal GGPPA is constitutional. The Government of Ontario has announced it is appealing the decision to the Supreme Court of Canada. On July 4, 2019, the Government of Ontario published its final Greenhouse Gas Emissions Performance Standards (EPS) to provide Ontario with an alternative to the OBPS portion of the federal GGPPA. Only the registration provisions of the EPS currently apply. Other key provisions (e.g. performance standards, sales of compliance units, compliance obligations) will not apply while Ontario is subject to the federal OBPS requirements.

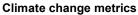
### **Climate Change**

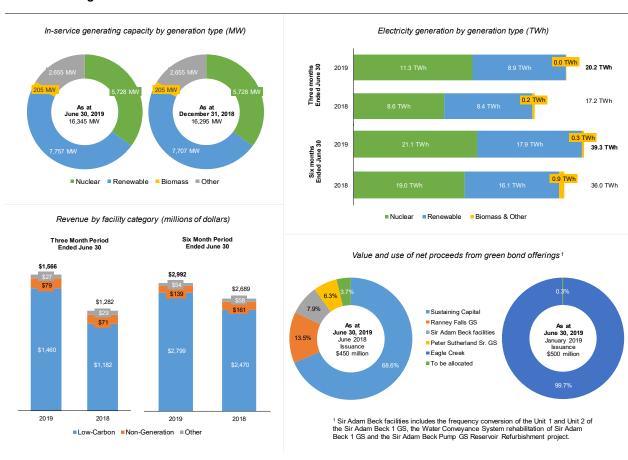
During the six months ended June 30, 2019, OPG undertook the following actions to advance its strategy of investing in the generation of clean and sustainable energy:

- OPG is pursuing new nuclear development as part of its strategy to expand the business and support the evolution of the energy industry. As part of executing on this strategy, OPG is supporting a small modular nuclear reactor (SMR) project proposed at the Chalk River Labs site owned by Atomic Energy Canada Limited and managed by Canadian Nuclear Laboratories. The proposal has been submitted by Global First Power (GFP), a Canadian company, using the MicroModular Reactor™ technology of Ultra Safe Nuclear Corporation based in the US. In addition, GFP has submitted a site preparation licence application to the CNSC related to this project. A project Notice of Commencement for this application was issued by the Canadian Environmental Assessment Agency on July 15, 2019. OPG is leading the Indigenous and stakeholder engagement and Environmental Assessment aspects of the project, and is expected to be the SMR operator, if the project is approved and licensed.
- OPG maintains a site preparation licence granted by the CNSC in 2012 in relation to the potential construction of four new nuclear units at the Darlington site. The licence expires in 2022. OPG has informed the CNSC of the Company's intent to renew the licence and, in June 2019, submitted a relicensing plan to the CNSC. OPG intends to submit a licence renewal application in mid-2020.
- In June 2019, the Company entered into a purchase and sale agreement to acquire Cube Hydro, a hydropower platform with 385 MW of in-service generating capacity operated in the US. The acquisition is subject to receipt of standard regulatory approvals.

# Performance and Key Climate-Related Metrics

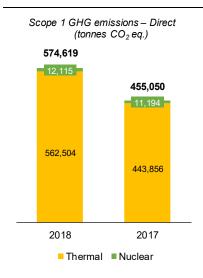
Pending development of longer-term metrics and targets for climate change adaptation, OPG has identified certain initial current metrics that it considers relevant to stakeholders. These are outlined below.





In-service generating capacity <sup>2</sup> by generation type	In-service generating capacity from renewable sources increased during the six months ended June 30, 2019 with the commencement of commercial operations of the Nanticoke solar facility and the addition of assets acquired in the US by Eagle Creek during the first six months of 2019.
Electricity generation by generation type	During the three and six month periods ended June 30, 2019, over 99 percent of OPG's electricity generation was supplied by low-carbon sources, comprised of Nuclear, Renewable and Biomass generation.
Revenue by facility category	Approximately 98 percent of OPG's revenue from electricity generation operations continues to be derived from low-carbon facilities. Revenue from low-carbon generation increased during three and six month periods ended June 30, 2019, compared to the same periods in 2018, primarily from the Regulated – Nuclear Generation segment.
Value and use of net proceeds from green bond offerings	OPG issued its second green bond offering in January 2019. The net proceeds from this \$500 million issuance have been allocated toward the Eagle Creek acquisition.  During the second quarter of 2019, the Company issued its first annual Green Bond Impact Report. The report outlines OPG's Green Bond Framework and provides detail regarding the use of proceeds from the June 2018 and January 2019 green bond issuances. The report is available on the Company's website at <a href="www.opg.com">www.opg.com</a> .

# Climate change metrics



The Scope 1 Greenhouse Gas (GHG) emissions metric identifies carbon dioxide equivalent (CO2 eq.) emissions from OPG's thermal and nuclear operations. For the year ended December 31, 2018, 562,504 tonnes of  $CO_2$  eq. (December 31, 2017 – 443,856 tonnes of  $CO_2$  eq.) were emitted by thermal operations, representing approximately 98 percent of OPG's total CO<sub>2</sub> eq. emissions, with the remainder emitted by nuclear operations. The increase in CO<sub>2</sub> eq. emissions in 2018 is primarily due to higher generation from the Company's co-owned Brighton Beach and PEC natural gas-fired facilities. In comparison, OPG's CO2 emissions peaked at 39 million tonnes before the phase-out of coal-fired generation. Since the elimination of coalfired generation in 2014, annual CO2 emissions have averaged approximately 545,000 tonnes per year, fluctuating mainly due to variability in electricity generation from thermal operations.

As virtually all of OPG's electricity is generated from low-carbon sources, the Company's CO<sub>2</sub> Atmospheric Emission Rate remains comparatively

low. For the year ended December 31, 2018, OPG emitted CO<sub>2</sub> at an average rate of 7.8 tonnes per gigawatt hour (GWh) of total electricity generation (December 31, 2017 – 6.1 tonnes per GWh).

Updated Scope 1 GHG emissions and Atmospheric Emission Rate information is published annually and data for 2019 will be available in June 2020.

### **Indigenous Relations**

OPG believes in 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 Indigenous communities. OPG seeks to establish these relationships based on a foundation of respect, transparency and mutual responsibility. OPG's commitment in this area includes pursuing generation-related development partnerships on the basis of long-term commercial arrangements and other joint projects.

As at June 30, 2019, OPG's in-service generation capacity of facilities constructed in partnership with Indigenous communities was 522 MW (December 31, 2018 - 478 MW). For the three and six months ended June 30, 2019, revenues earned from facilities in partnership with Indigenous communities were \$60 million and \$120 million, respectively (three and six months ended June 30, 2018 – \$56 million and \$117 million, respectively).

OPG's Indigenous Opportunities in Nuclear (ION) program has entered its second year. The program, which is a collaboration between OPG, Electrical Power Systems Construction Association (EPSCA) and Kagita Mikam Aboriginal Employment and Training, partners unions and vendors utilizing the Darlington Refurbishment as a catalyst, continues to place Indigenous candidates in the building trades, such as carpenters, boilermakers and millwrights.

In June 2019, OPG held several events to celebrate the National Indigenous Peoples Day, including at the Company's Darlington site, Toronto-based offices and the St. Lawrence Power Development Visitor Centre in Cornwall, Ontario. The celebration at the St. Lawrence Power Development Visitor Centre was with OPG's partner, the Mohawk Council of Akwesasne, and included an unveiling of a plaque to acknowledge the impact of the construction of the Moses-Saunders Power Dam on the community of Akwesasne.

<sup>&</sup>lt;sup>2</sup> The in-service generating capacity at June 30, 2019 and December 31, 2018 includes OPG's share of in-service generating capacity of 275 MW for PEC and 280 MW for Brighton Beach, within Other.

### **DISCUSSION OF OPERATING RESULTS BY BUSINESS SEGMENT**

**Regulated – Nuclear Generation Segment** 

	Three Mont June		Six Months Ended June 30	
(millions of dollars)	2019	2018	2019	2018
Revenue	983	734	1,868	1,614
Fuel expense	73	62	143	135
Gross margin	910	672	1,725	1,479
Operations, maintenance and administration	542	620	1,164	1,224
Depreciation and amortization	168	130	335	251
Property taxes	7	6	13	13
Income (loss) before interest and income taxes	193	(84)	213	(9)

Income before interest and income taxes from the segment increased by \$277 million and \$222 million for the three and six month periods ended June 30, 2019, respectively, compared to the same periods in 2018.

Higher nuclear electricity generation increased segment revenue by approximately \$215 million and \$172 million for the three and six month periods ended June 30, 2019, respectively, compared to the same periods in 2018, primarily due to a decrease in planned outage days in the second quarter of 2019. The decrease in OM&A expenses of \$78 million and \$60 million for the three and six month periods ended June 30, 2019, respectively, compared to the same periods in 2018, was also primarily due to a decrease in planned outage days in the second quarter of 2019.

Higher rate riders for the recovery of regulatory accounts in effect during the three and six month periods ended June 30, 2019 also contributed to an increase in segment revenue, compared to the same periods in 2018. This increase in revenue was largely offset by a corresponding increase in the amortization expense related to these balances.

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

		Three Months Ended June 30		ns Ended e 30
	2019	2019 2018		2018
Unit Capability Factor (%) <sup>1</sup>				
Darlington GS	95.7	67.4	84.2	81.9
Pickering GS	86.4	71.3	86.5	72.9

The Unit Capability Factor at the Pickering and Darlington generating stations increased during the three and six month periods ended June 30, 2019, compared to the same periods in 2018. For the three months ended June 30, 2019, the increase was primarily due to a lower number of planned outage days at both the Darlington and Pickering generating stations. The increase for the six months ended June 30, 2019 was primarily due to fewer planned outage days at the Pickering GS and partially due to a lower number of planned outage days at the Darlington GS.

The planned and unplanned outage days for the Darlington GS and Pickering GS were as follows:

		Three Months Ended June 30		hs Ended e 30
	2019	2018	2019	2018
Planned Outage Days Darlington GS Pickering GS	11.4 59.4	89.0 131.8	85.4 122.7	93.8 247.9
Unplanned Outage Days Darlington GS Pickering GS	0.3 15.1	0.5 25.2	0.3 24.0	5.2 47.1

# Regulated - Nuclear Waste Management Segment

	Three Months Ended June 30		Six Months Ended June 30	
(millions of dollars)	2019	2018	2019	2018
Revenue Operations, maintenance and administration Accretion on nuclear fixed asset removal and nuclear waste management liabilities Earnings on nuclear fixed asset removal and nuclear waste management funds	32 32 252 (223)	32 32 244 (212)	63 63 504 (443)	65 65 487 (422)
Loss before interest and income taxes	(29)	(32)	(61)	(65)

The increase in segment earnings of \$3 million and \$4 million for the three and six month periods ended June 30, 2019, respectively, compared to the same periods in 2018, was primarily due to higher earnings from the Nuclear Segregated Funds, largely offset by an increase in accretion expense on the nuclear fixed asset removal and nuclear waste management liabilities (Nuclear Liabilities).

The higher earnings from the Nuclear Segregated Funds was primarily due to the growth in the present value of the underlying funding liabilities per the current approved ONFA reference plan in effect since January 1, 2017. As both the Decommissioning Segregated Fund and the Used Fuel Segregated Fund were in an overfunded position during the three and six month periods ended June 30, 2019, they were not impacted by market returns and the rate of return guaranteed by the Province for a portion of the Used Fuel Segregated Fund. When both funds are in an overfunded position, OPG limits the amount of Nuclear Segregated Funds assets reported on the balance sheet to the present value of the underlying life cycle funding liabilities per the most recently approved ONFA reference plan. Further details on the accounting for the Nuclear Segregated Funds can be found in OPG's 2018 annual MD&A in the section, Critical Accounting Policies and Estimates under the heading, Nuclear Fixed Asset Removal and Nuclear Waste Management Funds.

The higher accretion expense on the Nuclear Liabilities was due to the increase in the present value of the underlying obligation to reflect the passage of time.

# Regulated - Hydroelectric Segment

(millions of dollars)		Three Months Ended June 30		Six Months Ended June 30	
	2019	2018	2019	2018	
Revenue <sup>1</sup>	411	390	792	746	
Fuel expense	92	90	158	155	
Gross margin	319	300	634	591	
Operations, maintenance and administration	85	82	162	162	
Depreciation and amortization	55	40	112	76	
Other losses	-	-	1	4	
Income before interest and income taxes	179	178	359	349	

During the three and six month periods ended June 30, 2019, the segment revenue included incentive payment reductions of \$3 million and incentive payments of \$2 million, respectively, related to the OEB-approved hydroelectric incentive mechanism (three and six month periods ended June 30, 2018 – incentive payment reductions of \$1 million and nil, 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.

Income before interest and income taxes from the segment was \$179 million for the three months ended June 30, 2019, which is comparable to the same period in 2018. The \$1 million increase in earnings was mainly due to increased revenue reflecting the impact of new base regulated prices approved by the OEB in December 2018 pursuant to an annual formulaic adjustment, effective from January 1, 2019 to December 31, 2019, largely offset by higher incentive payment reductions and higher OM&A expenses.

During the six months ended June 30, 2019, income before interest and income taxes from the segment increased by \$10 million, compared to the same period in 2018. The increase in earnings was primarily due to increased revenue reflecting the impact of the new base regulated prices approved by the OEB in December 2018.

Higher rate riders for the recovery of regulatory accounts in effect during the three and six month periods ended June 30, 2019 contributed to an increase in segment revenue, compared to the same period in 2018. This increase in revenue was largely offset by a corresponding increase in amortization expense related to these balances.

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

	Three Months Ended June 30		Six Months Ended June 30	
	2019	2018	2019	2018
Hydroelectric Availability (%)	91.4	88.6	90.7	87.9

The Hydroelectric Availability increased for the three and six month periods ended June 30, 2019, compared to the same periods in 2018, primarily due to fewer planned outage days at regulated hydroelectric stations, mainly in the eastern Ontario region.

# **Contracted and Other Generation Segment**

		Three Months Ended June 30		ns Ended e 30
(millions of dollars)	2019	2018	2019	2018
Revenue Fuel expense	155 10	149 14	310 22	298 31
Gross margin	145	135	288	267
Operations, maintenance and administration	49	43	99	84
Depreciation and amortization	30	19	60	39
Accretion on fixed asset removal liabilities	2	2	4	4
Property taxes	3	3	6	4
Income from investments subject to significant influence	(10)	(10)	(23)	(20)
Other gains	(1)	` <b>-</b>	`(1)	` -
Income before interest and income taxes	72	78	143	156

Income before interest and income taxes from the segment decreased by \$6 million for the second guarter of 2019. compared to the same period in 2018. The decrease in earnings was mainly due to the closure of the Thunder Bay GS in July 2018 and higher OM&A expenses at Lower Mattagami and Lennox generating stations. These factors were partially offset by earnings from the Nanticoke solar facility which commenced commercial operations in March 2019.

Income before interest and income taxes from the segment decreased by \$13 million for the six months ended June 30, 2019, compared to the same period in 2018. The decrease in earnings was primarily due to higher OM&A expenses at the Lower Mattagami and Lennox generating stations and the closure of the Thunder Bay GS in July 2018, partially offset by earnings from the Nanticoke solar facility.

The Hydroelectric Availability and the Thermal Equivalent Forced Outage Rate (EFOR) for the assets operated by OPG within the Contracted and Other Generation segment in Ontario were as follows:

	Three Months Ended June 30		Six Months Ended June 30	
	2019	2018	2019	2018
Hydroelectric Availability (%) Thermal EFOR (%)	78.3 18.1	86.5 1.4	82.4 9.2	83.3 0.8

The Hydroelectric Availability decreased during the three and six month periods ended June 30, 2019, compared to the same periods in 2018. The decrease was primarily due to a higher number of unplanned outage days at the contracted hydroelectric stations in the northeastern Ontario region.

The Thermal EFOR increased during the three and six month periods ended June 30, 2019, compared to the same periods in 2018, primarily due to a higher number of unplanned outage days at the Lennox GS for maintenance and repair activities.

### 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, including public debt offerings and notes payable to the OEFC, private placement project financing, and equity issuances. These sources are used for multiple purposes including: to invest in plants and technologies, undertake major projects and business acquisitions, fund long-term obligations such as contributions to the pension fund and the Nuclear Segregated Funds, make payments under the OPEB plans, fund expenditures on Nuclear Liabilities not eligible for reimbursement from the Nuclear Segregated Funds, service and repay long-term debt, and provide general working capital.

Changes in cash and cash equivalents for the three and six month periods ended June 30, 2019 and 2018 were as follows:

	Three Months Ended June 30		Six Months Ended June 30	
(millions of dollars)	2019	2018	2019	2018
Cash, cash equivalents and restricted cash, beginning of period	511	328	313	234
Cash flow provided by operating activities Cash flow used in investing activities Cash flow (used in) provided by financing activities	610 (476) (82)	413 (539) 383	1,185 (1,029) 95	639 (1,143) 855
Effect of exchange rate changes on cash, cash equivalents and restricted cash	-	-	(1)	-
Net increase in cash, cash equivalents and restricted cash	52	257	250	351
Cash, cash equivalents and restricted cash, end of period	563	585	563	585

For a discussion of cash flow provided by operating activities, refer to the details in the section, *Highlights* under the heading, *Cash Flow from Operations*.

# **Investing Activities**

Cash flow used in investing activities during the three month period ended June 30, 2019 decreased \$63 million, compared to the same period in 2018, primarily due to the purchases of Investment Interests from the IESO by the Fair Hydro Trust in 2018, partially offset by higher investment in fixed assets in 2019.

Cash flow used in investing activities during the six month period ended June 30, 2019 decreased \$114 million, compared to the same period in 2018. The decrease was primarily due to the purchases of Investment Interests from the IESO by the Fair Hydro Trust in 2018, partially offset by the one-time receipt of proceeds from the sale of the former Lakeview GS site in March 2018 and higher investment in fixed assets in 2019.

### **Financing Activities**

Cash flow provided by financing activities for the three month period ended June 30, 2019 decreased by \$465 million, compared to the same period in 2018. The decrease is mainly due to the issuance of a \$450 million green bond offering under the Company's Medium Term Note Program in June 2018, the issuance of debt under the Fair Hydro Trust credit facility to finance the acquisition of Investment Interest from the IESO in April 2018, and the receipt of proceeds from the issuance of Class A shares to the Province in April 2018. The decrease was also partially due to the repayment of \$75 million of long-term debt during the second quarter of 2019.

Cash flow provided by financing activities for the six months ended June 30, 2019 decreased by \$760 million, compared to the same period in 2018. The decrease was primarily due to the issuance of \$600 million of senior notes payable to the OEFC during the first quarter of 2018, net issuances of OPG long-term debt and the Fair Hydro Trust long-term debt during the first six months of 2018, and proceeds received from the March and April 2018 issuances of Class A shares to the Province. These factors were partially offset by the issuance of \$500 million of senior notes under the Company's Medium Term Note Program as a green bond offering in January 2019 and the special dividend paid to the Shareholder in March 2018.

On July 17, 2019, OPG established a new \$800 million general corporate credit facility agreement with the OEFC expiring on December 31, 2021. The coupon rate will be set at the time OPG draws funds from the credit facility, based on the prevailing market rate at that time.

### Share Capital

As at June 30, 2019 and December 31, 2018, OPG had 256,300,010 common shares issued and outstanding at a stated value of \$5,126 million. OPG is authorized to issue an unlimited number of common shares without nominal or par value. Any issue of new shares is subject to the consent of OPG's shareholder, the Province.

As at June 30, 2019 and December 31, 2018, OPG had 18,343,815 Class A shares issued and outstanding at a stated value of \$787 million.

### **BALANCE SHEET HIGHLIGHTS**

Highlights of OPG's interim consolidated financial position are noted below:

	A	As At		
(millions of dollars)	June 30 2019	December 31 2018		
Property, plant and equipment – net	23,643	22,987		
The increase was primarily due to capital expenditures on the Darlington Refurbishment and other projects, partially offset by depreciation expense.				
Nuclear fixed asset removal and nuclear waste management funds (current and non-current portions)	17,886	17,483		
The increase was primarily due to earnings on the Nuclear Segregated Funds, partially offset by reimbursement of eligible expenditures on nuclear fixed asset removal and nuclear waste management activities.				
Long-term debt (current and non-current portions)	6,932	7,556		
The decrease was primarily due to the derecognition of long-term debt issued by the Fair Hydro Trust upon deconsolidation of the Trust effective May 9, 2019, partially offset by the issuance of senior notes payable under the Company's Medium Term Note Program.				
Fixed asset removal and nuclear waste management liabilities	21,652	21,225		
The increase was primarily a result of accretion expense, partially offset by expenditures on nuclear fixed asset removal and nuclear 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 consolidated financial statements or are recorded in the Company's consolidated financial statements using amounts that differ from the full contract amounts. Principal off-balance sheet activities for OPG include guarantees and long-term contracts.

# **CHANGES IN ACCOUNTING POLICIES AND ESTIMATES**

OPG's significant accounting policies are outlined in Note 3 to OPG's audited consolidated financial statements as at and for the year ended December 31, 2018. A discussion of recent accounting pronouncements and changes in accounting estimate is 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, 2019. OPG's critical accounting policies are consistent with those noted in OPG's 2018 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 2018 annual MD&A.

### **Risks to Achieving Operational Excellence**

### Labour Relations

In December 2018, the Government of Ontario directed that the renewal of the collective agreement between OPG and the Power Workers' Union (PWU) be submitted to binding arbitration. In April 2019, an arbitrator issued an award for a three-year collective agreement with the PWU, thereby eliminating the risk of a PWU legal strike until April 2021.

Negotiations between OPG and the Society for the renewal of the collective agreement took place during the second quarter of 2019. The parties were unable to reach an agreement during negotiations and are scheduled to proceed to interest mediation/arbitration in November 2019. There is a risk that renewal of the collective agreement with the Society may include terms that will unfavourably impact OPG's costs. The current collective bargaining agreement precludes strike by or lock-out of the Society-represented employees.

# **Risks to Maintaining Financial Strength**

# Government Legislation and Regulation Changes

As discussed in the section, Environmental, Social, Governance and Sustainability, amendments to Bill C-68 and Bill C-69 received Royal Assent in June 2019. The list of designated projects to which Bill C-69 will apply is still under development. There is a risk that the new criteria for designating projects may impact OPG's development of projects. OPG is supportive overall of the new impact assessment process and has advocated that the project list focus on major projects with the greatest potential for adverse effects. The application of the amended Bill C-68 may introduce new requirements to protect fish and fish habitat at OPG's hydroelectric facilities. OPG has initiated a process to assess and prioritize potential impacts on water flows and generation losses at these facilities.

### Commodity Markets

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

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

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

	2019 <sup>1</sup>	2020	2021
Estimated fuel requirements hedged <sup>2</sup>	73%	77%	78%

Based on actual fuel requirements hedged for the six months ended June 30, 2019 and forecast for the remainder of the year.

Represents the approximate portion of megawatt-hours of expected electricity generation (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 rate regulation. In the case of hydroelectric electricity generation in Ontario, 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.

# Foreign Exchange

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 primarily denominated in or tied to US dollars. To manage this risk, OPG periodically employs various financial instruments such as forwards and other derivative contracts, in accordance with approved risk management policies. As at June 30, 2019, OPG had no foreign exchange contracts outstanding. In addition, volatility in the Canadian/US foreign exchange rate also impacts OPG's financial results from its Eagle Creek subsidiary, whose operations are based exclusively in the US.

# Credit

The Company's credit risk exposure is a function of its electricity sales, trading and hedging activities, and treasury activities including investing and commercial transactions with various suppliers of goods and services. OPG's credit exposure relating to energy markets transactions as at June 30, 2019 was \$547 million, including \$529 million with the IESO. OPG's credit risk exposure relating to electricity sales is considered low as the majority of sales are through the IESO-administered spot market in Ontario. 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.

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

### **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 Limited (Hydro One), the IESO, and the OEFC. 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.

Related party transactions are summarized below:

		Three Mon		
	20	19	20	18
(millions of dollars)	Income	Expense	Income	Expense
Hydro One				
Electricity sales	2	_	2	_
Services	_	4	_ -	2
Dividends	1	-	2	-
Province of Ontario				
Change in Decommissioning Segregated Fund amount due to Province <sup>1</sup>	-	138	-	104
Change in Used Fuel Segregated Fund amount due to Province <sup>1</sup>	-	163	-	141
Hydroelectric gross revenue charge	-	29	-	28
OEFC				
Hydroelectric gross revenue charge	-	57	-	57
Interest expense on long-term notes	-	34	_	37
Income taxes	-	108	-	41
IESO				
Electricity related revenue	1,437	-	1,162	_
Earnings from Fair Hydro Trust <sup>2</sup>	7	-	<sup>′</sup> 17	-
Fair Hydro Trust				
Interest income <sup>2</sup>	4	-	_	_
	1,451	533	1,183	410

The Nuclear Segregated Funds are reported on the consolidated balance sheets net of amounts recognized as due to the Province in respect of any excess funding and, for the Used Fuel Segregated Fund, the Province's rate of return guarantee. As at June 30, 2019 and December 31, 2018, the Nuclear Segregated Funds were reported net of amounts due to the Province of \$4,984 million and \$3,496 million, respectively.

<sup>&</sup>lt;sup>2</sup> The Fair Hydro Trust was deconsolidated from OPG's consolidated results effective May 9, 2019. As a result, certain transactions that were previously eliminated on consolidation, such as interest income earned by OPG from its investment in the Trust's subordinated debt, are now treated as transactions with entities outside of OPG, and are disclosed as related party transactions. Earnings from the Trust are for the period prior to the deconsolidation of the Trust and primarily comprise interest income earned by the Trust from the IESO on financing receivables which were consolidated within OPG's financial results up to May 9, 2019. For additional discussion, refer to the details in the section, Recent Developments under the heading, Amendments to the Fair Hydro Plan Act.

		Six Month June				
	20	19	20	18		
(millions of dollars)	Income	Expense	Income	Expense		
Hydro One						
Electricity sales	5	_	6	_		
Services	•	6	-	7		
Dividends	3	-	4	-		
Province of Ontario						
Change in Decommissioning Segregated Fund amount due to Province 1	-	668	2	104		
Change in Used Fuel Segregated Fund amount due to Province 1	-	820	21	141		
Hydroelectric gross revenue charge	-	58	-	56		
OEFC						
Hydroelectric gross revenue charge	-	98	-	95		
Interest expense on long-term notes	-	70	-	74		
Income taxes	-	165	-	94		
IESO						
Electricity related revenue	2,760	-	2,394	-		
Fair Hydro Trust <sup>2</sup>	24	-	28	-		
Fair Hydro Trust						
Interest income <sup>2</sup>	4	-	-	-		
	2,796	1,885	2,455	571		

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, 2019 and December 31, 2018, the Nuclear Segregated Funds were reported net of amounts due to the Province of \$4,984 million and \$3,496 million, respectively.

The Fair Hydro Trust was deconsolidated from OPG's consolidated results effective May 9, 2019. As a result, certain transactions that were previously eliminated on consolidation, such as interest income earned by OPG from its investment in the Trust's subordinated debt, are now treated as transactions with entities outside of OPG, and are disclosed as related party transactions. Earnings from the Trust are for the period prior to the deconsolidation of the Trust and primarily comprise interest income earned by the Trust from the IESO on financing receivables which were consolidated within OPG's financial results up to May 9, 2019. For additional discussion, refer to the details in the section, *Recent Developments* under the heading, *Amendments to the Fair Hydro Plan Act*.

(millions of dollars)	June 30 2019	December 31 2018
Receivables from related parties		
Hydro One	-	1
IESO - Electricity related receivables	529	478
Fair Hydro Trust <sup>1</sup>	4	2
IESO - Fair Hydro Trust <sup>2</sup> OEFC	-	2
PEC	5 1	2
Province of Ontario	3	2
Province of Official	3	-
Loan receivables		
Fair Hydro Trust <sup>2</sup>	928	_
ran riyare riaet	520	
Financing receivables		
IESO - Fair Hydro Trust <sup>2</sup>	-	1,788
Equity securities		
Hydro One shares	154	153
Accounts payable and accrued charges		
Hydro One	4	4
OEFC	54	50
Province of Ontario	4	8
IESO - Electricity related payables	4	8
IESO - Fair Hydro Trust <sup>2</sup>	-	13
Long torm dobt (including ourrent nextion)		
Long-term debt (including current portion)	2 105	2 400
Notes payable to OEFC	3,185	3,400

Represents the receivable balance from the interest income earned by OPG from its investment in the Trust's subordinated debt.

OPG may hold Province of Ontario bonds and treasury bills in the Nuclear Segregated Funds and the OPG registered pension fund. As at June 30, 2019, the Nuclear Segregated Funds held \$1,534 million of Province of Ontario bonds (December 31, 2018 - \$1,399 million) and \$14 million of Province of Ontario treasury bills (December 31, 2018 - \$2 million). As of June 30, 2019, the registered pension fund held \$73 million of Province of Ontario bonds (December 31, 2018 - \$41 million) and no Province of Ontario treasury bills (December 31, 2018 - nil). These Province of Ontario bonds and treasury bills are publicly traded securities and are measured at fair value. OPG jointly oversees the investment management of the Nuclear Segregated Funds with the Province.

On May 9, 2019, the Fixing the Hydro Mess Act, which includes amendments to the Fair Hydro Act, received Royal Assent and will come into force in November 2019. The Fixing the Hydro Mess Act is discussed further in the section, Highlights under the heading, Recent Developments - Amendments to Ontario's Fair Hydro Plan Act.

The Fair Hydro Trust was deconsolidated from OPG's consolidated results effective May 9, 2019. As a result, certain balances are no longer recognized in OPG's consolidated balance sheet. Loan receivables represent OPG's investment in the subordinated debt issued by the Fair Hydro Trust with a face value of \$876 million and are reported on the consolidated balance sheet subsequent to the deconsolidation date. For additional discussion, refer to the details in the section, Recent Developments under the heading, Amendments to the Fair Hydro Plan Act.

### INTERNAL CONTROL OVER FINANCIAL REPORTING AND DISCLOSURE CONTROLS

The Company maintains a comprehensive system of policies, procedures, and processes that represents its framework for internal control 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 financial statements.

### **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)	June 30 2019	March 31 2019	December 31 2018	September 30 2018
Revenue	1,566	1,426	1,475	1,373
Net income	356	217	265	283
Less: Net income attributable to non-controlling interest	5	4	5	4
Net income attributable to the Shareholder	351	213	260	279
Earnings per share, attributable to the Shareholder <i>(dollars)</i>	\$1.28	\$0.78	\$0.95	\$1.02

(millions of dollars – except where noted)	June 30 2018	March 31 2018	December 31 2017	September 30 2017
Revenue	1,282	1,407	1,619	1,217
Net income	126	539	366	140
Less: Net income attribute to the non-controlling interest	5	4	4	9
Net income attributable to the Shareholder	121	535	362	131
Earnings per share, attributable to the Shareholder (dollars)	\$0.44	\$1.99	\$1.41	\$0.51

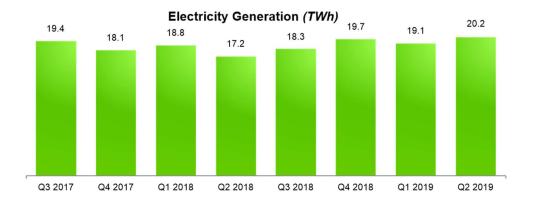
### **Trends**

OPG's quarterly electricity generation from the Regulated – Hydroelectric and Contracted and Other Generation segments is affected by changes in grid-supplied electricity demand. Changes in grid-supplied electricity demand are primarily caused by variations in seasonal weather conditions, changes in economic conditions, the impact of smallscale generation embedded in distribution networks, and the impact of conservation efforts. Historically, there has been greater electricity demand during the winter and summer months due to heating and air conditioning demands.

OPG's quarterly electricity generation from hydroelectric facilities is also impacted by weather conditions that affect water flows. Historically, there have been higher water flows in the springtime as a result of snow and ice melt entering the river systems. The financial impact of variability in water flows for the Regulated - Hydroelectric segment is mitigated by OEB-authorized regulatory variance accounts. The financial impact of variability in electricity generation from the Contracted and Other Generation segment is mitigated by the terms of the applicable Energy Supply Agreements.

Electricity generation and financial results of OPG's Regulated - Nuclear Generation segment are impacted by outage activities at the nuclear generating stations. The frequency and timing of planned outages under the outage cycle may result in period-over-period variability in OPG's financial results, including the impact on revenue and OM&A expenses. The outage cycle at each of OPG's nuclear generating stations determines the number and frequency of planned outages in a particular year. The outage cycle is designed to ensure the continued safe and reliable long-term operations of the plants and compliance with CNSC regulatory requirements.

The Darlington and Pickering generating stations have been designed to operate at full power as baseload facilities and therefore electricity production is not adjusted in response to changes in grid-supplied electricity demand.



### KEY OPERATING PERFORMANCE INDICATORS AND NON-GAAP FINANCIAL MEASURES

### **Key Operating Performance Measures**

OPG evaluates the performance of its generating stations using a number of key indicators. Key operating performance indicators aligned with corporate strategic imperatives are measures of production reliability, cost effectiveness, environmental performance and safety performance. Certain of the measures used vary depending on the generating technology.

### Nuclear Unit Capability Factor

OPG's nuclear stations are baseload facilities that are not designed for fluctuating production levels to meet peaking demand. The nuclear Unit Capability Factor is a key measure of nuclear station performance. It measures the amount of energy that the unit(s) generated over a period of time, adjusted for externally imposed constraints such as transmission or demand limitations, as a percentage of the amount of energy that would have been produced over the same period had the unit(s) produced maximum generation. Capability factors are primarily affected by planned and unplanned outages. An outage day represents a single unit being offline or derated for an amount of time equivalent to one day. By industry definition, capability factors exclude production losses beyond plant management's control, such as grid-related unavailability. The nuclear Unit Capability Factor also excludes unit(s) during the period in which they are undergoing refurbishment. Accordingly, Unit 2 of the Darlington GS has been excluded from the measure since October 2016, when the unit was taken offline as part of the Darlington Refurbishment project. As at June 30, 2019, the Darlington GS had three units in service and the Pickering GS had six units in service.

### Hydroelectric Availability

OPG's hydroelectric stations operate as baseload, intermediate or peaking stations. Hydroelectric Availability represents the percentage of time the generating unit is capable of providing service, whether or not it is actually generating electricity, compared to the total time for the respective period, weighted by unit capacity.

### Thermal Equivalent Forced Outage Rate

EFOR is an index of the reliability of a generating unit at OPG's thermal stations. It is measured by the ratio of time a generating unit is forced out of service by unplanned events, including any forced deratings, compared to the amount of time the generating unit was available to operate.

### Other Key Indicators

In addition to production reliability, cost effectiveness and financial performance indicators, OPG has identified certain environmental and safety performance measures. These measures are discussed in the section, *Environmental, Social, Governance and Sustainability*.

### **Non-GAAP Financial Performance 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 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 an indicator of OPG's financial performance consistent with its objective to deliver value to the Shareholder. It 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	lonths Ended
(millions of dollars – except where noted)	June 30 2019	December 31 2018
ROE Excluding AOCI		
Net income attributable to the Shareholder	1,103	1.195
Divided by: Average equity attributable to the Shareholder, excluding AOCI	13,237	12,623
ROE Excluding AOCI (percent)	8.3	9.5

(2) Enterprise Total Generating Cost per MWh is used to measure the overall cost performance of OPG's generating operations in Ontario. Enterprise TGC per MWh is defined as OM&A expenses (excluding the Darlington Refurbishment project, other generation development project and business development costs, Eagle Creek, the impact of regulatory accounts, the Fair Hydro Trust, 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 accounts) and capital expenditures (excluding the Darlington Refurbishment project, other generation development projects and Eagle Creek) incurred during the period, divided by total electricity generation from OPG-operated generating stations in Ontario plus electricity generation forgone due to SBG conditions in Ontario during the period.

Enterprise TGC per MWh is calculated as follows for the three and six month periods ended June 30, 2019:

	Three Months Ended June 30		Six Montl June	
(millions of dollars – except where noted)	2019	2018	2019	2018
Enterprise TGC				
Total OM&A expenses	681	743	1,430	1,465
Total fuel expense	175	166	323	321
Total capital expenditures	510	396	984	755
Less: Darlington Refurbishment capital and OM&A costs	(318)	(258)	(613)	(517)
Less: Other generation development project and business	(22)	(28)	(47)	(45)
development capital and OM&A costs	(==)	(20)	(41)	(40)
(Less) Add: OM&A and fuel expenses (refundable through)	(24)	2	(39)	28
deferred in regulatory accounts	(= .,	_	(00)	20
Less: Nuclear fuel expense for non OPG-operated stations	(14)	(17)	(29)	(32)
Add: Hydroelectric gross revenue charge and water rental	18	15	21	21
payments for electricity generation forgone due to				
SBG conditions				
Less: OM&A expenses ancillary to electricity generation	(7)	(3)	(12)	(7)
business		` ,		. ,
Less: OM&A expenses and capital expenditures related to	(14)	-	(46)	-
Eagle Creek				
Other adjustments	(6)	(1)	(11)	(1)
	979	1,015	1,961	1,988
Adjusted electricity generation (TWh)				
Total OPG electricity generation	20.2	17.2	39.3	36.0
Adjust for electricity generation forgone due to SBG				
conditions, OPG's share of electricity generation from	1.7	1.0	1.4	1.7
co-owned facilities and Eagle Creek's electricity generation				
	21.9	18.2	40.7	37.7
F ( TOO NAME (O. M. M. M. ) (	44 70	55.70	40.46	50.74
Enterprise TGC per MWh (\$/MWh) 1	44.78	55.78	48.18	52.71

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

(3) Nuclear Total Generating Cost per MWh is used to measure the cost performance of OPG's nuclear generating assets in Ontario. 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 accounts and expenses ancillary to the nuclear electricity generation business), nuclear fuel expense for OPG-operated stations (excluding the impact of regulatory 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.

Nuclear TGC per MWh is calculated as follows for the three and six month periods ended June 30, 2019:

	Three Months Ended June 30		Six Months Ended June 30	
(millions of dollars – except where noted)	2019	2018	2019	2018
Nuclear TGC	540	000	4.464	4.004
Regulated – Nuclear Generation OM&A expenses	542 73	620 62	1,164 143	1,224 135
Regulated – Nuclear Generation fuel expense Regulated – Nuclear Generation capital expenditures	419	319	789	632
Less: Darlington Refurbishment capital and OM&A costs	(318)	(258)	(613)	(517)
(Less) Add: Regulated – Nuclear Generation OM&A and	(16)	11	(35)	35
fuel expenses (refundable through) deferred in regulatory accounts	(,		(,	
Less: Nuclear fuel expense for non OPG-operated stations	(14)	(17)	(29)	(32)
Less: Regulated – Nuclear Generation OM&A expenses	(2)	`(1)	(3)	(3)
ancillary to electricity generation business				
Other adjustments	(4)	(1)	(6)	(2)
	680	735	1,410	1,472
Nuclear electricity generation (TWh)	11.3	8.6	21.1	19.0
Nuclear TGC per MWh (\$/MWh) 1	60.06	86.03	66.72	77.74

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

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

Hydroelectric TGC per MWh is calculated as follows for the three and six month periods ended June 30, 2019:

	Three Months Ended June 30			Six Months Ended June 30	
(millions of dollars – except where noted)	2019	2018	2019	2018	
Hydroelectric TGC					
Regulated – Hydroelectric OM&A expenses	85	82	162	162	
Regulated – Hydroelectric fuel expense	92	90	158	155	
Contracted and Other Generation OM&A expenses	49	43	99	84	
Contracted and Other Generation fuel expense	10	14	22	31	
Regulated – Hydroelectric and Contracted and Other	72	64	158	100	
Generation capital expenditures					
Less: Regulated – Hydroelectric and Contracted and Other	(17)	(28)	(41)	(46)	
Generation development project capital and OM&A					
costs (excluding Eagle Creek)					
Less: Thermal OM&A and fuel expenses and capital	(34)	(42)	(68)	(86)	
expenditures in the Contracted and Other Generation					
segment					
Less: Regulated – Hydroelectric OM&A and fuel expenses	(8)	(9)	(4)	(7)	
refundable through regulatory accounts					
Add: Hydroelectric gross revenue charge and water rental	18	15	21	21	
payments for electricity generation forgone due to					
SBG conditions					
Less: OM&A expenses and capital expenditures related	(14)	-	(46)	-	
to Eagle Creek	(4)				
Other adjustments	(1)	-	(1)	-	
	252	229	460	414	
Adjusted hydroelectric electricity generation (TWh)					
Regulated – Hydroelectric electricity generation	8.1	7.6	16.3	15.3	
Contracted and Other Generation electricity generation	0.8	1.0	1.9	1.7	
Adjust for hydroelectric electricity generation forgone due	1.7	1.0	1.4	1.7	
to SBG conditions, Eagle Creek's electricity generation,	•••	1.0		1.7	
and non-hydroelectric electricity generation of the					
Contracted and Other Generation segment, including					
OPG's share of generation from co-owned facilities					
and an analysis and analysis and an ana	10.6	9.6	19.6	18.7	
Hydroelectric TGC per MWh (\$/MWh) 1	24.13	23.81	23.60	22.16	

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

<sup>(5)</sup> **Gross margin** is defined as revenue less fuel expense.

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

**JUNE 30, 2019** 



### INTERIM CONSOLIDATED STATEMENTS OF INCOME (UNAUDITED)

		nths Ended e 30	Six Months Ended June 30	
(millions of dollars except where noted)	2019	2018	2019	2018
Revenue	1,566	1.282	2,992	2.689
Fuel expense	175	166	323	321
Gross margin	1,391	1,116	2,669	2,368
Operations, maintenance and administration	681	743	1,430	1,465
Depreciation and amortization	264	198	530	384
Accretion on fixed asset removal and nuclear waste management liabilities	255	247	510	494
Earnings on nuclear fixed asset removal and nuclear waste management funds	(223)	(212)	(443)	(422)
Property taxes	11	9	21	18
Income from investments subject to significant influence	(10)	(10)	(23)	(20)
, v	978	975	2,025	1,919
Income before other gains, interest and income taxes	413	141	644	449
Other gains (Note 20)	(20)	(3)	(32)	(266)
Income before interest and income taxes	433	144	676	715
Net interest expense (Note 8)	12	18	30	37
Income before income taxes	421	126	646	678
Income tax expense	65	-	73	13
Net income	356	126	573	665
Net income attributable to the Shareholder	351	121	564	656
	351 5	5	9	9
Net income attributable to non-controlling interest	3	,	3	9
Basic and diluted earnings per share (dollars) (Note 16)	1.28	0.44	2.05	2.41

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

Three Months E June 30				Nonths Ended June 30		
(millions of dollars)	2019	2018	2019	2018		
Net income	356	126	573	665		
Other comprehensive (loss) income, net of income taxes (Note 11)						
Reclassification to income of amounts related to pension and other post-employment benefits <sup>1</sup>	2	2	5	5		
Reclassification to income of losses on derivatives designated as cash flow hedges <sup>2</sup>	3	5	7	9		
Currency translation adjustment <sup>3</sup>	(10)	_	(20)	-		
Other comprehensive (loss) income for the period	(5)	7	(8)	14		
Comprehensive income	351	133	565	679		
Comprehensive income attributable to the Shareholder Comprehensive income attributable to non-controlling interest	346 5	128 5	556 9	670 9		

Net of income tax expenses of \$1 million for the three months ended June 30, 2019 and 2018. Net of income tax expenses of \$2 million for the six months ended June 30, 2019 and 2018.

Net of income tax expense of nil for the three months ended June 30, 2019 and 2018. Net of income tax expenses of \$1 million for the six months ended June 30, 2019 and 2018.

<sup>&</sup>lt;sup>3</sup> Net of income tax recovery of nil for the three months and six months ended June 30, 2019 and 2018, respectively.

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

Six Months Ended June 30		
(millions of dollars)	2019	2018
On another markinistics		
Operating activities Net income	573	665
Adjust for non-cash items:	5/3	000
Depreciation and amortization	530	384
Accretion on fixed asset removal and nuclear waste management liabilities	510	494
Earnings on nuclear fixed asset removal and nuclear waste management	(443)	(422)
funds	(443)	(722)
Pension and other post-employment benefit costs	219	198
Deferred income taxes	(63)	(14)
Regulatory assets and regulatory liabilities	163	(142)
Other gains	(19)	(250)
Other	(14)	(17)
Expenditures on fixed asset removal and nuclear waste management	(158)	(1 <del>4</del> 4)
Reimbursement of eligible expenditures on nuclear fixed asset removal and	` 40	` 44
nuclear waste management		
Contributions to pension funds and expenditures on other post-employment	(160)	(163)
benefits and supplementary pension plans	` ,	,
Distributions received from investments subject to significant influence	30	25
Net changes to other long-term assets and long-term liabilities	24	86
Net changes to non-cash working capital balances (Note 19)	(47)	(105)
Cash flow provided by operating activities	1,185	639
Investing activities		
Investment in property, plant and equipment and intangible assets	(1,029)	(807)
Net proceeds from sale of property, plant and equipment	-	273
Acquisition of Fair Hydro Trust financing receivables		(609)
Cash flow used in investing activities	(1,029)	(1,143)
Financing activities		
Financing activities Issuance of short-term debt	1,622	2,549
Repayment of short-term debt	(1,804)	(2,695)
Net proceeds from issuance of OPG long-term debt (Note 8)	497	1,047
Repayment of OPG long-term debt	(216)	(327)
Net proceeds from issuance of Fair Hydro Trust long-term debt	(210)	1,206
Repayment of Fair Hydro Trust revolving warehouse debt	_	(900)
Issuance of Class A shares	_	268
Distribution to non-controlling interest	(9)	(10)
Contribution from non-controlling interest	5	-
Dividend to the Province's Consolidated Revenue Fund		(283)
Cash flow provided by financing activities	95	855
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(1)	-
Net increase in cash, cash equivalents and restricted cash	250	351
Cash, cash equivalents and restricted cash, beginning of period	313	234
Cash, cash equivalents and restricted cash, end of period	563	585
Cash, cash equivalents and restricted cash, end of period	303	303

### INTERIM CONSOLIDATED BALANCE SHEETS (UNAUDITED)

As at (millions of dollars)	June 30 2019	December 31 2018
Assets		
Current assets		
Cash, cash equivalents and restricted cash (Note 5)	563	313
Equity securities	154	153
Receivables from related parties	542	483
Nuclear fixed asset removal and nuclear waste management funds	29	19
Inventory	413	397
Regulatory assets (Note 7)	582	490
Prepaid expenses	114	116
Other current assets	131	167
	2,528	2,138
Property, plant and equipment	33,152	32,209
Less: accumulated depreciation	9,509	9,222
Less. accumulated depreciation	23,643	22,987
	20,040	22,001
Intangible assets	474	467
Less: accumulated amortization	230	211
	244	256
Goodwill	102	107
Other non-current assets		
Nuclear fixed asset removal and nuclear waste management funds	17,857	17,464
Loan receivables (Note 4)	928	-
Financing receivables (Note 4)	-	1,788
Inventory	375	347
Regulatory assets (Note 7)	6,531	6,769
Investments subject to significant influence	333	339
Other long-term assets	66	57
	26,090	26,764
	50.007	50.050
	52,607	52,252

### INTERIM CONSOLIDATED BALANCE SHEETS (UNAUDITED)

As at (millions of dollars)	June 30 2019	December 31 2018
Liabilities		
Current liabilities		
Accounts payable, accrued charges and other payables	1,112	1,207
Short-term debt (Note 9)	128	322
Long-term debt due within one year (Note 8)	498	368
Regulatory liabilities (Note 7)	107	36
	1,845	1,933
Long-term debt (Note 8)	6,434	7,188
zong torm door (rioto o)	0, 10 1	1,100
Other non-current liabilities		
Fixed asset removal and nuclear waste management liabilities (Note 10)	21,652	21,225
Pension liabilities	3,587	3,642
Other post-employment benefit liabilities	2,736	2,697
Long-term accounts payable and accrued charges	305	250
Deferred revenue	405	410
Deferred income taxes	1,067	1,018
Regulatory liabilities (Note 7)	849	762
	30,601	30,004
Equity	<b>5</b> 400	5 400
Common shares (Note 15)	5,126	5,126
Class A shares (Note 15)	787	787
Contributed surplus (Note 4)	39	7 000
Retained earnings	7,856	7,292
Accumulated other comprehensive loss (Note 11)	(251)	(243)
Equity attributable to the Shareholder	13,557	12,962
Equity attributable to non-controlling interest	170	165
Total equity	13,727	13,127
	52,607	52,252

Commitments and Contingencies (Notes 8 and 17)

## INTERIM CONSOLIDATED STATEMENTS OF SHAREHOLDER'S EQUITY (UNAUDITED)

Six Months Ended June 30		
(millions of dollars)	2019	2018
Common shares (Note 15)	5,126	5,126
Common shares (Note 15)	5,120	3,120
Class A shares (Note 15)		
Balance at beginning of period	787	519
Issuance of Class A shares	-	268
Balance at end of period	787	787
Contributed comples		
Contributed surplus		
Balance at beginning of period	-	
Gain on deconsolidation of Fair Hydro Trust (Note 4)	39	-
Balance at end of period	39	-
Retained earnings		
Balance at beginning of period	7,292	6,396
Reclassification of cumulative unrealized losses on equity securities	- ,	5,000
to opening retained earnings	_	(9)
Adjustment to recognize income tax effects of intercompany transfer of		(-)
assets to opening retained earnings	-	(7)
	7,292	6,380
Net income attributable to the Shareholder	564	656
Dividend to the Province's Consolidated Revenue Fund	-	(283)
Balance at end of period	7,856	6,753
Accumulated other comprehensive loss, net of income taxes	<b>(2.42)</b>	(00-)
Balance at beginning of period	(243)	(295)
Reclassification of cumulative unrealized losses on equity securities	-	9
to opening retained earnings	(2.12)	(0.0.0)
	(243)	(286)
Other comprehensive (loss) income	(8)	14
Balance at end of period	(251)	(272)
Equity attributable to the Shareholder	13,557	12,394
Equity attributable to the orial errorder	10,007	12,004
Equity attributable to non-controlling interest		
Balance at beginning of period	165	165
Income attributable to non-controlling interest	9	9
Distribution to non-controlling interest	(9)	(10)
Equity contribution from non-controlling interest	5	<u> </u>
Balance at end of period	170	164
	40	10.550
Total equity	13,727	12,558

### NOTES TO THE INTERIM CONSOLIDATED FINANCIAL **STATEMENTS (UNAUDITED)**For the three and six months ended June 30, 2019 and 2018

### 1. BASIS OF PRESENTATION

These interim consolidated financial statements for the three and six months ended June 30, 2019 and 2018 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 (the Province or the Shareholder). 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, 2018.

As required by Ontario Regulation 395/11, as amended, under the Financial Administration Act (Ontario), OPG adopted US GAAP for the presentation of its consolidated financial statements, effective January 1, 2012. Since January 1, 2012, OPG also has received exemptive relief from the Ontario Securities Commission (OSC) from the requirements of section 3.2 of National Instrument 52-107, Acceptable Accounting Policies and Auditing Standards. The exemption allows OPG to file consolidated financial statements based on US GAAP, rather than International Financial Reporting Standards (IFRS), without becoming a US Securities and Exchange Commission registrant.

In April 2018, OPG received an extension to its previous exemptive relief from the OSC. The exemptive relief will now terminate on the earliest of the following:

- January 1, 2024;
- The financial year that commences after OPG ceases to have activities subject to rate regulation; or
- The effective date prescribed by the International Accounting Standards Board for the mandatory application of a standard within IFRS specific to entities with rate-regulated activities.

All dollar amounts are presented in Canadian dollars, unless otherwise noted. Certain 2018 comparative amounts have been reclassified from financial statements previously presented to conform to the 2019 interim consolidated financial statement presentation.

### **Seasonal Variations**

OPG's quarterly electricity generation from the Regulated – Hydroelectric and Contracted and Other Generation segments is affected by changes in grid-supplied electricity demand. Changes in grid-supplied energy demand are primarily caused by variations in seasonal weather conditions, changes in economic conditions, the impact of smallscale generation embedded in distribution networks, and the impact of conservation efforts. OPG's quarterly electricity generation from hydroelectric facilities is also impacted by weather conditions that affect water flows. The financial impact of variability in water flows for the Regulated – Hydroelectric segment is mitigated by Ontario Energy Board (OEB)-authorized regulatory variance and deferral accounts (regulatory accounts). The financial impact of variability in electricity generation from the Contracted and Other Generation segment is mitigated by the terms of the applicable Energy Supply Agreements. Electricity generation and financial results of OPG's Regulated - Nuclear Generation segment are primarily impacted by outage activities at the nuclear generating stations. The frequency and timing of planned outages under the outage cycle may result in period-over-period variability in OPG's financial results, including the impact on revenue and OM&A expenses.

### 2. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES

The accounting policies followed in the presentation of these interim consolidated financial statements are consistent with those of the previous financial year, with the exception of the adoption of the new lease accounting standard, a new policy for loan receivables, changes in OPG's variable interest entities and future accounting pronouncements noted below:

### **New Accounting Standards Effective in 2019**

### Lease Accounting

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-02, *Leases* (Topic 842) to replace existing lease accounting guidance under *Leases* (Topic 840). The update included comprehensive changes to existing guidance, particularly for lessees, with the aim of increasing transparency and comparability among organizations by requiring the recognition of right-of-use assets and lease liabilities on the balance sheet.

Effective January 1, 2019, OPG adopted Topic 842, utilizing the optional transition method wherein any cumulative impact from adopting the new standard is recognized as an adjustment to opening balances in the initial period of adoption, with comparative periods continuing to be presented in accordance with Topic 840, including disclosures. In transitioning to Topic 842, the Company elected to adopt the package of practical expedients, which permitted OPG to continue the established classification of leases under Topic 840, and did not require a reassessment of the existence of leases within existing or expired contracts nor the treatment of related indirect costs for previously established leases. OPG also adopted the practical expedient within ASU No. 2018-01, *Land Easement Practical Expedient for Transition to Topic 842*, permitting the Company to not undertake an evaluation of existing or expired land easements under this accounting standard prior to its adoption. Any new land easements entered into following adoption of the new standard, along with modification of existing land easements, will be assessed under Topic 842.

A contract is determined to contain a lease if it consists of an identified asset, and the customer in the arrangement has the right to control the use of said asset for a period of time in exchange for consideration. Property, plant or equipment that is physically distinct or whose capacity is substantially received by the customer is representative of an identified asset. The customer's right to control the use of an identified asset is signified by its rights to obtain substantially all of the economic benefits from the use of the asset and to direct the use of the asset, throughout the period of use. A customer is able to direct the use of the asset if they have the decision-making rights that will most impact the economic benefits derived. Unless explicitly stated, it is presumed an arrangement does not contain substantive substitution rights, wherein it is impractical for the supplier to substitute alternative assets throughout the period of use or obtain any economic benefits from substituting.

As a practical expedient for leasing arrangements in which OPG is the lessee, the lease and non-lease components, if any, are combined and accounted for as a single lease cost. Similarly, as a practical expedient for leasing arrangements in which OPG is the lessor, the Company combines the lease and any non-lease components, and accounts for it as a single lease component. OPG does not account for any non-lease components separately from the combined component.

For arrangements in which OPG is the lessor, the Company has excluded all taxes assessed by a governmental authority on the lease revenue producing transaction, from the consideration in the contract and from variable payments not included in the consideration in the contract.

As permitted by the short-term lease exemption in the standard, OPG has elected not to apply the recognition requirements prescribed by Topic 842 for its short-term leases. Such arrangements include leases that have a term of 12 months or less at the commencement date and do not contain an option to purchase the underlying asset that the entity is reasonably certain to exercise.

When determinable, the rate implicit in the lease is used as the discount rate to calculate the present value of the lease payments related to arrangements in which the Company is the lessee. Otherwise, the incremental borrowing rate is used, which represents the rate of interest OPG would have to pay to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment. The incremental borrowing rate for each lease is determined on inception of the leasing arrangement by obtaining an appropriate reference rate, to which any financing spread and lease specific adjustments are applied. The discount rate is reassessed if the respective lease liability is required to be re-measured because of changes in key assumptions or modifications in the underlying contract.

As at January 1, 2019, on implementation of Topic 842, the Company recognized:

(millions of dollars)	January 1, 2019	Balance Sheet Line Item
Right-of-use asset Current Non-current	15 59 74	Other current assets Property, plant and equipment
Operating lease liabilities Current Non-current	15 63 78	Accounts payable, accrued charges and other payables Long-term accounts payable and accrued charges

### **New Accounting Policy**

### Loan Receivable

Loan receivables are financial assets with fixed or determined payments that are not quoted in an active market. Loan receivables are initially recorded at fair value, and subsequently recorded at amortized cost using the effective interest method. The loan receivable relates to subordinated notes issued by the Fair Hydro Trust (the Trust) to OPG.

### Variable Interest Entities

In March 2019, the Government of Ontario tabled Bill 87, *Fixing the Hydro Mess Act*, 2019 (Fixing the Hydro Mess Act), proposed legislation to amend various statutes related to energy, including the *Ontario Fair Hydro Plan Act*, 2017 (Fair Hydro Act). The Fixing the Hydro Mess Act received Royal Assent on May 9, 2019, resulting in OPG no longer having a variable interest in the Trust as defined in ASC 810 *Consolidation*, resulting in the deconsolidation of the Trust effective May 9, 2019. Refer to Note 4 for further discussion.

OPG continues to consolidate one variable interest entity, the Nuclear Waste Management Organization.

### **Use of Management Estimates**

The preparation of interim 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 estimate 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 (PP&E), income taxes (including deferred income taxes), contingencies, regulatory assets and regulatory liabilities, goodwill and intangible assets, valuation of investments in segregated funds, depreciation and amortization expenses and inventories. Actual results may differ significantly from these estimates.

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

### i) Changes to Disclosure Requirements for Defined Benefit Plans

In August 2018, the FASB issued ASU No. 2018-14, Compensation – Retirement Benefits – Defined Benefit Plans – General (Subtopic 715-20): Disclosure Framework – Changes to the Disclosure Requirements for Defined Benefit Plans as part of its ongoing efforts to improve the effectiveness of disclosures in notes to financial statements for stakeholders. As part of this update, entities will be required to include additional disclosures such as narrative descriptions of the reasons for significant gains and losses related to changes in the benefit obligations for the period. The update also removed guidance that currently requires disclosures on the amounts in accumulated other comprehensive loss (AOCL) expected to be recognized as components of net periodic benefit cost over the next fiscal year, and for public entities, the effects of a one percent change in assumed health care trend rates on the net periodic benefit costs and benefit obligation for OPEB. Changes instituted by this update are effective retrospectively for all periods presented for fiscal years ending after December 15, 2020 with early adoption permitted. OPG is in the process of evaluating the impact from this update on the Company's disclosures for its post-employment benefit programs.

### ii) Changes to Disclosure Requirements for Fair Value Measurement

In August 2018, the FASB issued ASU No. 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework – Changes to Disclosure Requirements for Fair Value Measurement to continue to improve the effectiveness of disclosures in financial statements for users. Under the new guidance prescribed in this update, entities must disclose additional information regarding Level 3 fair value measurements held at the end of the reporting period. This amendment also clarified existing guidance around measurement uncertainty and investments in entities that calculate net asset value (NAV). This update is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019 with early adoption permitted. Additional disclosures stemming from this update will be applied prospectively. OPG is assessing its current fair value measurements to determine the impact from the changes in this update.

### 3. ACQUISITIONS

### Acquisition of Eagle Creek Renewable Energy, LLC

On November 27, 2018, OPG acquired 100 percent ownership interest of Eagle Creek Renewable Energy, LLC (Eagle Creek) for a total cash purchase price of approximately US\$298 million (C\$386 million), subject to customary working capital and other adjustments. Transaction costs related to the acquisition were expensed in the consolidated statement of income in 2018.

Eagle Creek is a hydropower platform with interests in 76 hydroelectric facilities and two solar facilities throughout the United States (US) on the date of acquisition. The majority of facilities within Eagle Creek's fleet operate in the New England, Midwest and New York power market areas. Eagle Creek generates revenue from supplying electricity under long-term energy and capacity supply contracts and by offering energy and capacity into wholesale spot electricity markets.

The preliminary purchase price allocation of the Eagle Creek acquisition is estimated as follows, using the exchange rate on the acquisition date of \$1.00 USD = \$1.3289 CAD:

(millions of Canadian dollars)	
Current assets	39
Property, plant and equipment	500
Intangible assets	109
Goodwill	103
	36
Other long-term assets Total assets	
Total assets	788
Current liabilities	92
Long-term debt	284
Deferred income tax liability	23
Other long-term liabilities	3
Total liabilities	402
Total liabilities	402
Total purchase price	386
Cash acquired	(28)
	(23)
Total purchase price, net of cash acquired	358

The determination of the fair value of assets acquired and liabilities assumed is based upon management's preliminary estimates and assumptions and reflects the fair value of consideration paid, including customary working capital and other adjustments. The Company continues to review information and perform further analysis prior to finalizing the fair value of the assets acquired and the liabilities assumed within the permitted period of 12 months from the date of acquisition in accordance with US GAAP, including finalizing the componentization of fair value measurements to the individual assets acquired within PP&E.

Goodwill represents the excess of the purchase price over the aggregate fair value of net assets acquired. Contributing factors to the amount recorded as goodwill include synergies to be realized from a complementary hydroelectric generation fleet, the potential of using Eagle Creek as a vehicle for future growth of the business in the US, geographic diversification of operations and access to an experienced senior management team. Goodwill recognized as a result of the acquisition is reported within the Contracted and Other Generation segment.

### **Acquisition of Cube Hydro**

In June 2019, OPG entered into purchase and sale agreements to acquire 100 percent of the equity in Cube Hydro Partners, LLC and affiliate Helix Partners, LLC (collectively, Cube Hydro) for US\$1.12 billion, inclusive of assumed debt and subject to customary working capital and other adjustments. Cube Hydro is a hydropower platform with 385 megawatt (MW) of in-service generating capacity across 19 hydroelectric facilities throughout the northeastern and southeastern United States. The acquisition is subject to receipt of standard regulatory approvals, with closing expected to occur prior to the end of 2019.

### **Acquisitions of Natural Gas Assets in Ontario**

In July 2019, OPG, under a new subsidiary, entered into a purchase agreement with affiliates of TC Energy (formerly TransCanada Corporation) to acquire a portfolio of combined-cycle natural gas-fired plants in Ontario for \$2.87 billion, subject to customary working capital and other adjustments. The acquired portfolio includes the 900 MW Napanee GS, the 683 MW Halton Hills GS, and the remaining 50 percent interest in the 550 MW Portlands Energy Centre. The acquisition is subject to a number of closing conditions, including the receipt of various regulatory approvals and the commencement of commercial operations at the Napanee GS. Closing is expected to occur towards the end of 2019 or in the first quarter of 2020.

In June 2019, OPG entered into a purchase and sale agreement with affiliates of Canadian Utilities Limited to acquire the remaining 50 percent interest in the combined-cycle natural gas-fired 560 MW Brighton Beach GS in Ontario for \$200 million, inclusive of assumed debt, and subject to customary working capital and other adjustments. The acquisition is subject to standard regulatory approvals, with closing expected in the third quarter of 2019.

### 4. DECONSOLIDATION OF THE FAIR HYDRO TRUST

In March 2019, the Government of Ontario tabled Bill 87, Fixing the Hydro Mess Act, proposed legislation to amend various statutes related to energy, including the Fair Hydro Act. On May 9, 2019, the Fixing the Hydro Mess Act received Royal Assent and will come into force in November 2019. Under the legislation, the Province will be responsible for paying existing funding obligations administered by the Trust, while OPG will be responsible for paying the operating costs of the Trust. As there will be no new Global Adjustment refinancing, and the Province will be responsible for the existing funding obligations, including principal payments, administered by the Trust, the Trust will be prohibited from issuing any new funding obligations.

The new legislation removes certain elements of control of the Trust from the Company. As a result, OPG has determined that it no longer has a variable interest in the Trust, and deconsolidated the Trust as of the date Royal Assent was received. As of May 9, 2019, OPG accounts for its continuing equity investment in the Trust as an equity security held at fair value.

Following the deconsolidation, the carrying value of assets and liabilities of the Trust was derecognized from OPG's consolidated balance sheet, and OPG's continuing investment in the Trust was recorded at fair value at the date of deconsolidation. The amounts deconsolidated from OPG's balance sheet were as follows:

	As of May 9, 2019
Assets	
Financing receivables	1,788
Restricted cash	39
Total assets derecognized	1,827
Liabilities	
Long-term debt	912
Other net liabilities	39
Total liabilities derecognized	951
Net assets derecognized	876
Recognition of OPG's investment in subordinated debt issued by the Trust at fair value on May 9, 2019	928
Gain on deconsolidation	52
Deferred taxes	(13)
After tax gain on deconsolidation	39

The fair value of OPG's continuing investment in the subordinated debt issued by the Trust of \$928 million is reflective of the fair value its retained creditor interest OPG has from the Trust. The fair value of this receivable is based on indicative pricing from the market and is considered a Level 2 input. As the deconsolidation of the Trust was triggered by legislation introduced by the Province, the after-tax fair value gain of \$39 million has been recognized directly within equity, representing a transaction involving entities under common control.

OPG's continuing involvement with the Trust as Financial Services Manager is limited to paying the operating costs incurred by the Trust. Up to the date Royal Assent was received for the new legislation, these transactions were eliminated on consolidation and had no impact on OPG's consolidated statement of income. Following the deconsolidation of the Trust, these transactions represent expenses in OPG's consolidated financial statements.

### 5. CASH, CASH EQUIVALENTS AND RESTRICTED CASH

Cash and cash equivalents include cash on deposit and money market securities with a maturity of less than 90 days on the date of purchase. Restricted cash primarily includes amounts set aside pursuant to requirements of various debt and financing agreements. All other money market securities with a maturity on the date of purchase that is greater than 90 days, but less than one year, are recorded as short-term investments and classified as current assets. These securities are valued at the lower of cost and market value.

Cash, cash equivalents and restricted cash consist of the following:

As at (millions of dollars)	June 30 2019	December 31 2018
Cash and cash equivalents Restricted cash	522 41	196 117
Total cash, cash equivalents and restricted cash	563	313

Proceeds from OPG's green bond issuances are restricted in purpose and are to be used solely to finance eligible investments that offer tangible environmental benefits, as defined in OPG's Green Bond Framework. The net proceeds of \$447 million from the first green bond issuance of \$450 million in June 2018 are to be used to finance eligible hydroelectric projects and are held in a segregated account. As at June 30, 2019, the restricted cash balance related to the June 2018 green bond issuance is \$17 million (December 31, 2018 – \$84 million).

The net proceeds of \$498 million from the second green bond issuance of \$500 million in January 2019 are to be used to finance eligible projects as defined in OPG's Green Bond Framework, including the acquisition of Eagle Creek, and are held in a segregated account. As at June 30, 2019, the restricted cash balance related to the January 2019 green bond issuance is \$1 million (December 31, 2018 – nil).

Certain cash accounts held within Eagle Creek are restricted for prescribed purposes, including debt service, insurance and general collateral purposes in accordance with applicable contractual arrangements. As at June 30, 2019, the restricted cash balance held within Eagle Creek is \$23 million (December 31, 2018 – \$17 million).

Prior to deconsolidation of the Trust in the second quarter of 2019, cash on deposit held by the Trust was subject to contractual restrictions of the Trust's Master Trust Indenture. As a result of the deconsolidation of the Trust, there are no cash or restricted cash amounts related to the Trust as of June 30, 2019 (December 31, 2018 - \$16 million).

### 6. RIGHT-OF-USE ASSETS AND LEASE LIABILITIES

The Company has entered into operating lease arrangements for office space throughout Ontario to house key operational activities and personnel. OPG is also party to water power leases and Parks Canada licences that provide the Company with a right-of-use to the underlying lands on which most of its hydroelectric generating stations in Ontario are constructed. In addition, the Company leases vehicles and rail cars for use at its generating stations. OPG does not have any sales-type or direct financing lease arrangements.

While the Company's office leases are subject to fixed base rental charges, the arrangements also contain variable payments to reimburse lessors for provision of common area maintenance services during each year of the lease term. Payments in connection with OPG's water power leases and Parks Canada licences are entirely variable, based on the amount of electricity produced by its hydroelectric generating stations during each year of the lease term. These variable amounts are not included in the measurement of OPG's lease liabilities, but are recognized as a variable lease expense when incurred. Lease payments related to the Company's leased vehicles qualify for the short-term lease recognition exemption given the nature of the arrangement and therefore no right-of-use asset or liability has been recognized.

In leasing arrangements where OPG has the option to extend the lease term, payments associated with renewing the leases are not included in the measurement of their associated lease liabilities or right-of-use assets as they are not reasonably certain of being exercised. Similarly, in leasing arrangements where OPG has the option to terminate the lease prior to the end of the term, payments associated with terminating these leases are not included in the measurement of the lease liabilities or right-of-use assets as they are not reasonably certain of being exercised. OPG has not provided residual value guarantees within its leases, nor is the Company subject to any restrictions or covenants as a result of entering into these leasing arrangements.

During the three and six months ended June 30, 2019 the Company incurred:

(millions of dollars)	Three Months Ended June 30, 2019	Six Months Ended June 30, 2019
Variable lease costs	20	40
Fixed lease costs	5	9
Short-term lease costs	1	3
Total operating lease expenses	26	52
Cash outflows related to operating lease liabilities	4	8

OPG did not enter into any new operating lease arrangements during the three months ended June 30, 2019. During the three months ended March 31, 2019, OPG entered into new operating lease arrangements resulting in the recognition of \$5 million of right-of-use assets and related operating lease liabilities. The Company had a weighted-average remaining lease term of 6.9 years and a weighted-average discount rate in its leasing arrangements of 3.06 percent as at June 30, 2019.

A maturity analysis of the leasing arrangements in which the Company is the lessee has been summarized below, along with a reconciliation to OPG's operating lease liabilities:

(millions of dollars)	1 Year	2 Years	3 Years	4 Years	5 Years	Thereafter	Total
Operating lease payments Impact of discounting	15	12	11	9	11	11	69 (2)
Present value							67

OPG held corresponding current and long-term operating lease liabilities of \$15 million and \$52 million, respectively, as at June 30, 2019. In addition, the Company held corresponding current and long-term right-of-use assets under operating lease arrangements of \$14 million and \$49 million, respectively, as at June 30, 2019.

In addition to its lease arrangement with Bruce Power L.P. (Bruce Power) related to the Bruce nuclear generating stations, OPG leases various real estate assets to various third-party customers under operating lease arrangements in which the Company is the lessor, providing customers with the right-of-use to assets including land and office space. The Company receives mostly fixed rental payments in connection with these agreements. However, some arrangements contain variable lease payments that are indexed to the applicable Consumer Price Index, with rents being subject to changes in the index over the course of the lease term. The arrangements do not contain any options to purchase the underlying asset from the Company that the lessee is reasonably certain to exercise. As the underlying asset in many of these arrangements is land, the Company expects to derive, at a minimum, the current fair value from these assets at the end of the lease term. OPG undertakes preventative and ongoing maintenance programs, combined with periodic major upgrades, to maintain the residual values of the underlying assets at the end of the lease term. Given the durability of such assets and their ability to hold or even appreciate their value, OPG considers the residual value risk from these leasing arrangements to be nominal.

An analysis of the leasing arrangements in which the Company is the lessor has been summarized below:

(millions of dollars)	1 Year	2 Years	3 Years	4 Years	5 Years	Thereafter	Total
Undiscounted operating lease receipts	41	9	39	5	35	656	785

### 7. REGULATORY ASSETS AND REGULATORY LIABILITIES

The regulatory assets and liabilities recorded as at June 30, 2019 and December 31, 2018 are as follows:

(millions of dollars)	June 30 2019	December 31 2018
Regulatory assets		
Variance and deferral accounts authorized by the OEB		
Pension & OPEB Cash Versus Accrual Differential Deferral Account	817	783
Pension and OPEB Cost Variance Account	582	673
Hydroelectric Surplus Baseload Generation Variance Account	459	449
Bruce Lease Net Revenue Variance Account	162	141
Other variance and deferral accounts <sup>1</sup>	137	118
Calci Talianos ana asistra associate	2,157	2,164
	_,	_,
Interim Period Revenue Shortfall	347	519
Pension and OPEB Regulatory Asset (Note 12)	3,440	3.514
Deferred Income Taxes	1,169	1,062
	.,	.,
Total regulatory assets	7,113	7,259
Less: current portion	582	490
Non-current regulatory assets	6,531	6,769
Regulatory liabilities		
Variance and deferral accounts authorized by the OEB		
Pension & OPEB Cash Payment Variance Account	273	220
Hydroelectric Water Conditions Variance Account	224	191
Impact Resulting from Changes to Pickering Station End-of-Life Dates	187	124
(December 31, 2017) Deferral Account		
Changes in Station End-of-Life Dates (December 31, 2015) Deferral Account	97	103
Other variance and deferral accounts <sup>2</sup>	175	160
<b>-</b>		
Total regulatory liabilities	956	798
Less: current portion	107	36
Non-current regulatory liabilities	849	762

Represents amounts for the Rate Smoothing Deferral Account, the Nuclear Liability Deferral Account, the Nuclear Deferral and Variance Over/Under Recovery Variance Account, the Hydroelectric Deferral and Variance Over/Under Recovery Variance Account, the Nuclear Development Variance Account, the Fitness for Duty Deferral Account and the Niagara Tunnel Project Pre-December 2008 Disallowance Variance Account.

On February 21, 2019, the OEB issued a decision and order that approved a full settlement agreement reached by OPG and intervenors on OPG's requested disposition of regulatory accounts, which resulted in the approval to recover a total of \$1,322 million recorded in the Pension & OPEB Cash to Accrual Differential Deferral Account and other balances accumulated in regulatory accounts between January 1, 2016 and December 31, 2017 and \$204 million in associated income tax impacts, without adjustments. These income tax impacts were previously recorded as part of the regulatory asset for deferred income taxes. The OEB's decision and order authorized OPG to collect \$535 million of the approved balances through incremental nuclear and regulated hydroelectric rate riders for the period from January 1, 2019 to December 31, 2021. The remaining approved balances will be collected after 2021.

Any shortfall or over-recovery of the approved balances in the variance and deferral accounts due to differences between actual and forecast production is recorded in the Nuclear Deferral and Variance Over/Under Recovery Variance Account and the Hydroelectric Deferral and Variance Over/Under Recovery Variance Account authorized by the OEB.

<sup>&</sup>lt;sup>2</sup> Represents amounts for the Ancillary Services Net Revenue Variance Account, the Income and Other Taxes Variance Account, the Hydroelectric Incentive Mechanism Variance Account, the SR&ED ITC Variance Account and the Capacity Refurbishment Variance Account.

### 8. LONG-TERM DEBT AND NET INTEREST EXPENSE

Long-term debt consists of the following:

(millions of dollars)	June 30 2019	December 31 2018
Senior notes payable to the Ontario Electricity Financial Corporation	3,185	3,400
Medium Term Notes	1,450	950
Lower Mattagami Energy Limited Partnership project debt	1,595	1,595
PSS Generating Station Limited Partnership project debt	245	245
UMH Energy Partnership project debt	177	178
Eagle Creek senior notes	310	323
Fair Hydro Trust senior debt <sup>1</sup>	-	900
Other	21	21
	6,983	7,612
Less: fair value discount	(28)	(31)
Less: unamortized bond issuance fees	(23)	(25)
Less: amounts due within one year	( <del>4</del> 98)	(368)
Long-term debt	6,434	7,188

Senior debt owed by the Fair Hydro Trust to external third parties ceased to be recognized in OPG's consolidated financial statements following deconsolidation of the Trust in May 2019.

The following table summarizes the net interest expense:

	Three Mon June		Six Months Ended June 30		
(millions of dollars)	2019	2018	2019	2018	
Interest on long-term debt <sup>1</sup> Interest on short-term debt Interest income Interest capitalized to property, plant and equipment and intangible assets	79 2 (7) (57)	72 2 (2) (47)	159 4 (10) (112)	140 4 (3) (91)	
Interest related to regulatory assets and liabilities <sup>2</sup>	(5)	(7)	(11)	(13)	
Net interest expense	12	18	30	37	

Excludes interest on Fair Hydro Trust senior debt. As of May 9, 2019, OPG has deconsolidated the Fair Hydro Trust. For additional discussion, refer to Note 4.

In the first quarter of 2019, OPG issued a green bond offering of \$500 million under its Medium Term Note Program maturing in 2049. The coupon interest rates on these bonds are 4.25 percent. OPG repaid to the Ontario Electricity Financial Corporation long-term debt of \$140 million and \$75 million during the first and second quarter of 2019, respectively.

On July 17, 2019, OPG established a new \$800 million general corporate credit facility agreement with the Ontario Electricity Financial Corporation expiring on December 31, 2021. The coupon rate will be set at the time OPG draws funds from the credit facility, based on the prevailing market rate at that time.

Includes interest to recognize the cost of financing related to variance and deferral accounts, as authorized by the OEB, and interest costs deferred in certain variance and deferral accounts.

### 9. SHORT-TERM DEBT

OPG maintains a \$1 billion revolving committed bank credit facility, which is divided into two \$500 million multi-year term tranches expiring in May 2023. In the second quarter of 2019, OPG renewed and extended \$950 million of the credit facility to May 2024. There were no amounts outstanding under the bank credit facility as at June 30, 2019 (December 31, 2018 – nil). There was no commercial paper outstanding under OPG's commercial paper program as at June 30, 2019 (December 31, 2018 – \$170 million).

As at June 30, 2019, Lower Mattagami Energy Limited Partnership (LME) maintained a \$400 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 2023 and a \$100 million tranche maturing in August 2019. As at June 30, 2019, there was \$128 million of external commercial paper outstanding under LME's commercial paper program (December 31, 2018 – \$140 million). A letter of credit of \$55 million was issued in July 2017 and remains outstanding as at June 30, 2019 under the \$300 million tranche of LME's credit facility (December 31, 2018 – \$55 million).

As at June 30, 2019, OPG maintained \$25 million of short-term, uncommitted overdraft facilities (December 31, 2018 – \$25 million) and \$473 million of short-term, uncommitted credit facilities (December 31, 2018 – \$476 million), 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, 2019, a total of \$402 million of Letters of Credit had been issued under these facilities (December 31, 2018 – \$404 million). This included \$364 million for the supplementary pension plans, \$37 million for general corporate purposes and \$1 million related to the operation of the Portlands Energy Centre.

The Company's short-term, uncommitted credit facilities include 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, 2020. As at June 30, 2019, there were Letters of Credit outstanding under this agreement of \$150 million, which were issued in support of OPG's supplementary pension plans (December 31, 2018 – \$150 million).

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, 2019, total Letters of Credit of \$15 million had been issued under these facilities (December 31, 2018 – \$15 million).

### 10. 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, 2019 and December 31, 2018 consist of the following:

As at	June 30	December 31
(millions of dollars)	2019	2018
Liability for nuclear used fuel management Liability for nuclear decommissioning and nuclear low and intermediate level waste management	12,802 8,557	12,523 8,399
Liability for non-nuclear fixed asset removal	293	303
Fixed asset removal and nuclear waste management liabilities	21,652	21,225

### 11. ACCUMULATED OTHER COMPREHENSIVE LOSS

The changes in the balance of each component of accumulated other comprehensive loss, net of income taxes, are as follows:

	Si	Six Months Ended June 30, 2019				
(millions of dollars)	Unrealized Gains and Losses on Cash Flow Hedges	Pension and OPEB	Currency Translation Adjustment	Total		
AOCL, beginning of period	(48)	(208)	13	(243)		
Amounts reclassified from AOCL	7	5	_	12		
Translation of foreign operations	-	-	(20)	(20)		
Other comprehensive income (loss)	_	_	··			
for the period	7	5	(20)	(8)		
AOCL, end of period	(41)	(203)	(7)	(251)		

	Six Mor	ths Ended	June 30, 2018	3	
(millions of dollars)	Unrealized Gains and Losses on Cash Flow Hedges	Pension and OPEB	Equity Securities	Currency Translation Adjustment	Total
AOCL, beginning of period	(66)	(220)	(9)	-	(295)
Reclassification of cumulative unrealized losses on equity securities to opening retained earnings	<u>-</u>	_	9	-	9
	(66)	(220)	-	-	(286)
Amounts reclassified from AOCL	9	5	-	-	14
Other comprehensive income for the period	9	5	-	-	14
AOCL, end of period	(57)	(215)	-	-	(272)

The significant amounts reclassified out of each component of AOCL, net of income taxes, during the three and six months ended June 30, 2019 are as follows:

	Amount Reclassified from AOCL					
	Three Months	Six Months				
	Ended	Ended				
(millions of dollars)	June 30	, 2019	Statement of Income Line Item			
Amortization of losses from cash flow hedges						
Losses	3	8	Net interest expense			
Income tax recovery	-	(1)	Income tax expense			
,	3	7				
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	5	12				

These AOCL components are included in the computation of pension and OPEB costs (see Note 12 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, 2018 are as follows:

Amount Reclassified from AOCL					
	Three Months	Six Months			
	Ended	Ended			
(millions of dollars)	June 30	, 2018	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		
	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 12 for additional details).

Existing pre-tax net losses for derivatives of \$16 million deferred in AOCL as at June 30, 2019 are expected to be reclassified to net income within the next 12 months.

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

OPG's pension and OPEB costs for the three months ended June 30, 2019 and 2018 are as follows:

	_	d Pension	Suppler Pension	•	Emplo	Post- yment efits
(millions of dollars)	2019	2018	2019	2018	2019	2018
Components of cost recognized for the period						
Current service costs	77	82	2	2	17	20
Interest on projected benefit obligation	153	141	3	3	26	28
Expected return on plan assets, net of expenses	(206)	(205)	-	_	-	-
Amortization of net actuarial loss 1	39	50	1	1	-	11
0 1 12	00	00	•	0	40	40
Costs recognized <sup>2</sup>	63	68	6	6	43	49

The amortization of net actuarial loss is recognized as an increase to other comprehensive income. This increase for the three months ended June 30, 2019 was partially offset by a decrease in the Pension and OPEB Regulatory Asset of \$37 million (three months ended June 30, 2018 – \$49 million).

Pension and OPEB costs for the three months ended June 30, 2019 exclude the net reduction of costs of \$3 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, 2018 – net reduction of costs of \$24 million).

OPG's pension and OPEB costs for the six months ended June 30, 2019 and 2018 are as follows:

	Registere Pla	d Pension		mentary n Plans	Emplo	Post- yment efits
(millions of dollars)	2019	2018	2019	2018	2019	2018
Components of cost recognized for the period Current service costs Interest on projected benefit obligation	155 305	165 283	4 6	4 6	35 51	40 54
Expected return on plan assets, net of expenses Amortization of net actuarial loss <sup>1</sup>	(412) 78	(410) 99	- 3	- 3	-	- 3
Costs recognized <sup>2</sup>	126	137	13	13	86	97

The amortization of net actuarial loss is recognized as an increase to other comprehensive income. This increase for the six months ended June 30, 2019 was partially offset by a decrease in the Pension and OPEB Regulatory Asset of \$74 million (six months ended June 30, 2018 – \$98 million).

### 13. RISK MANAGEMENT AND DERIVATIVES

The management of interest rate, foreign exchange and commodity risks includes using derivatives to hedge the exposure in accordance with corporate risk management policies. The fair value of the derivatives totalled a net liability of \$2 million as at June 30, 2019 (December 31, 2018 – net liability of \$5 million).

### Interest Rates

OPG is exposed to risks related to changes in market interest rates. 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. OPG periodically uses interest rate swap agreements to mitigate elements of interest rate risk exposure associated with anticipated financing.

### Foreign Exchange

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, the Company periodically employs various financial instruments such as forwards and other derivative contracts. In addition, volatility in the Canadian/US foreign exchange rate also impacts OPG's financial results from its Eagle Creek subsidiary, whose operations are based exclusively in the US.

### **Commodity Prices**

OPG is also exposed to fluctuations in commodity prices. Changes in the market prices of nuclear fuels, oil, gas and biomass used to produce electricity can adversely impact OPG's earnings and cash flow from operations. To manage the risk of unpredictable increases in the price of fuels, the Company has fuel hedging programs, which include using fixed price and indexed contracts.

Pension and OPEB costs for the six months ended June 30, 2019 exclude the net reduction of costs of \$6 million from the recognition of changes in the regulatory assets and regulatory liabilities for the Pension & OPEB Cash Versus Accrual Differential Deferral Account and the Pension & OPEB Cash Payment Variance Account (six months ended June 30, 2018 – net reduction of costs of \$49 million).

### Credit

The majority of OPG's revenues are derived from sales through the Independent Electricity System Operator (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, 2019 was \$1 million (December 31, 2018 – less than \$1 million).

### 14. FAIR VALUE MEASUREMENTS

The fair value of financial instruments traded in active markets is based on quoted market prices as 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 primarily consist of equity investments and fund investments.

For financial instruments for which quoted market prices are not directly available, fair values are estimated using forward price curves developed from observable market prices or rates. The estimation of fair value may include the use of valuation techniques or models, based wherever possible on assumptions supported by observable market prices or rates prevailing as 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.

The fair value of the investments within the Used Fuel Segregated Fund and Decommissioning Segregated Fund's (together the Nuclear Segregated Funds) real assets portfolios are 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.

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 is a summary of OPG's financial instruments and their fair value as at June 30, 2019 and December 31, 2018:

		Fair ′alue		rrying alue <sup>1</sup>	
(millions of dollars)	June 30 2019	December 31 2018	June 30 2019	December 3 2018	1 Balance Sheet Line Item
Nuclear Segregated Funds (includes current portion) <sup>2</sup>	17,886	17,483	17,886	17,483	Nuclear fixed asset removal and nuclear waste management funds
Loan receivable - from Fair Hydro Trust	960	-	928	-	Loan receivable
Financing receivables	-	1,868	-	1,788	Financing receivables
Investment in Hydro One shares	154	153	154	153	Equity securities
Payable related to cash flow hedges	(28)	(32)	(28)	(32)	Long-term accounts payable and accrued charges
Long-term debt – OPG (includes current portion)	(7,831)	(6,924)	(6,932)	(6,656)	Long-term debt
Long-term debt – Fair Hydro Trust ³	-	(913)	-	(900)	Long-term debt
Other financial instruments	32	28	32	28	Various

<sup>1</sup> The carrying values of other financial instruments included in cash, cash equivalents and restricted cash, receivables from related parties, other current assets, short-term debt and accounts payable, accrued charges and other payables approximate their fair values due to the immediate or short-term maturity of these financial instruments.

The fair value of the Trust's long-term senior debt including the warehouse credit facility and OPG's long-term debt issued under the Medium Term Note Program is based on indicative pricing from the market. The fair value of these debt instruments is based on Level 2 inputs. The fair value of all other 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.

For the financing receivables related to Investment Interests acquired from the IESO, the fair value reflects the projected cash flows and expected returns on the asset to be collected from the Province. Therefore, the fair value of the financing receivables are based on Level 3 inputs.

As a result of the deconsolidation of the Trust following receipt of Royal Assent for the Fixing the Hydro Mess Act, OPG has recognized its subordinated debt investment in the Trust as a loan receivable effective May 9, 2019. The loan receivable is valued using indicative pricing from the market for senior debt, adjusted for the incremental risks associated with the subordinated debt. These inputs are considered Level 2 inputs.

The Nuclear Segregated Funds are comprised of the Decommissioning Segregated Fund and the Used Fuel Segregated Fund. OPG's fair value of the Nuclear Segregated Funds is set not to exceed an amount equal to the funding liability pursuant to the Ontario Nuclear Funds Agreement when the Nuclear Segregated Funds are in a surplus position.

<sup>3</sup> Long-term debt owed by the Fair Hydro Trust to external third parties ceased to be recognized in OPG's consolidated financial statements following deconsolidation of the Trust in May 2019. Refer to Note 4 for further discussion.

The following tables present financial assets and financial liabilities measured at fair value in accordance with the fair value hierarchy as at June 30, 2019 and December 31, 2018:

		June 3	0, 2019	
(millions of dollars)	Level 1	Level 2	Level 3	Total
Assets				
Used Fuel Segregated Fund				
Investments measured at fair value, excluding investments measured at NAV	5,750	5,331	-	11,081
Investments measured at NAV 1				1,923
Due to Province				13,004 (2,802)
Used Fuel Segregated Fund, net				10,202
Decommissioning Segregated Fund Investments measured at fair value, excluding investments measured at NAV Investments measured at NAV 1	4,364	3,948	-	8,312 1,554
				9,866
Due to Province				(2,182)
Decommissioning Segregated Fund, net				7,684
Investment in equity securities	154	-	-	154
Other financial assets	2	2	38	42
Liabilities				
Other financial liabilities	(8)	(1)	-	(9)

	December 31, 2018				
(millions of dollars)	Level 1	Level 2	Level 3	Total	
Assets					
Used Fuel Segregated Fund					
Investments measured at fair value, excluding investments measured at NAV	5,245	4,926	-	10,171	
Investments measured at NAV 1				1,775	
Due to Province				11,946 (1,982)	
Used Fuel Segregated Fund, net				9,964	
Decommissioning Segregated Fund					
Investments measured at fair value, excluding investments measured at NAV	3,962	3,635	-	7,597	
Investments measured at NAV <sup>1</sup>				1,436	
Due to Province				9,033 (1,514)	
Decommissioning Segregated Fund, net				7,519	
Investment in equity securities	153	_	-	153	
Other financial assets	5	3	43	51	
Liabilities					
Other financial liabilities	(19)	(4)	-	(23)	

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 period ended June 30, 2019, there were no transfers between Level 1 and Level 2 and 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, 2019:

(millions of dollars)	Other financial instruments
Opening balance, April 1, 2019	36
Unrealized losses included in revenue	1
Realized losses included in revenue	(4)
Purchases	5
Closing balance, June 30, 2019	38

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, 2019:

(millions of dollars)	Other financial instruments
Opening balance, January 1, 2019 Unrealized losses included in revenue	43 (2)
Realized losses included in revenue Purchases	(2) (9) 6
Closing balance, June 30, 2019	38

### **Investments Measured at Net Asset Value**

### Decommissioning Segregated Fund and Used Fuel Segregated Fund

Nuclear Fund investments classified as Level 3 consist of real estate and infrastructure investments within its alternative investment portfolio. The fair value of the investments within the Nuclear Funds' alternative investment portfolio is determined using appropriate valuation techniques, such as recent arm's length market transactions, 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.

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, 2019:

(millions of dollars except where noted)	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice
Real Assets				
Infrastructure	2,048	894	n/a	n/a
Real Estate	1,273	766	n/a	n/a
Agriculture and Timberland	156	35	n/a	n/a
Pooled Funds				
Short-term Investments	19	n/a	Daily	1-5 days
Fixed Income	1,954	n/a	Daily	1-5 days
Equity	895	n/a	Daily	1-5 days
Total	6,345	1,695		

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

### Infrastructure

This class includes investments in funds whose investment objective is to generate a combination of long-term capital appreciation and current income, generally through investments such as energy, transportation and utilities. The fair values of investments in this class have been estimated using 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.

### 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 and Timberland

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.

### 15. SHARE CAPITAL

### Common Shares

As at June 30, 2019 and December 31, 2018, OPG had 256,300,010 common shares issued and outstanding at a stated value of \$5,126 million. OPG is authorized to issue an unlimited number of common shares without nominal or par value. Any issue of new shares is subject to the consent of OPG's shareholder, the Province.

### Class A Shares

The Company's Articles of Amalgamation were amended effective December 1, 2017 to allow for the creation and issuance of non-voting Class A shares to the Province in exchange for equity injections in OPG. All of the outstanding shares are owned directly by the Province and OPG is authorized to issue an unlimited number of Class A shares without nominal or par value. The Class A and common shares rank equally as to entitlement to dividends, and all dividends declared by OPG must be declared in equal amounts per share on all outstanding shares without preference or distinction. Upon the liquidation, dissolution or wind-up of OPG, whether voluntary or involuntary, the holders of Class A shares and common shares are entitled to share equally, on a share for share basis, in all distributions of property and assets without preference or distinction. Any issue of new class of shares is subject to the consent of the Province. OPG is entitled to redeem outstanding Class A shares as may be approved by OPG's Board of Directors.

As at June 30, 2019 and December 31, 2018, OPG had 18,343,815 Class A shares issued and outstanding at a stated value of \$787 million.

### 16. EARNINGS PER SHARE

Basic and diluted earnings per share are calculated by dividing net income attributable to the Shareholder by the weighted average number of shares outstanding during the period.

Class A shares are included in the weighted average number of shares outstanding. The weighted average number of shares outstanding for three months ended June 30, 2019 was 274.6 million (three months ended June 30, 2018 – 274.3 million) and for the six months ended June 30, 2019 was 274.6 million (six months ended June 30, 2018 – 271.7 million). There were no dilutive securities as at June 30, 2019 and June 30, 2018.

### 17. 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 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 from Ontario Superior Court of Justice to a timetable for the remaining steps in the litigation, pursuant to which the matter was to be set down for trial by December 31, 2018. OPG delivered a statement of defence in accordance with an extension of the original June 30, 2017 delivery deadline set up in the timetable. British Energy served a reply on November 14, 2018 and served its Affidavit of

Documents on November 23, 2018. British Energy obtained an extension to the time required to set the matter down for trial. British Energy has set the matter down for trial, although no date for trial has been scheduled. As a next step, OPG expects that the parties will exchange documentary productions in 2019.

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 are 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 consolidated 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, 2019, the total amount of guarantees OPG provided to these entities was \$80 million (December 31, 2018 – \$81 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, 2019, 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 Obligations**

OPG's contractual obligations as at June 30, 2019 are as follows:

(millions of dollars)	2019 ¹	2020	2021	2022	2023	Thereafter	Total
	00	4.40	407	00	0.7	00	-7-
Fuel supply agreements	82	140	137	90	87	39	575
Contributions to the OPG registered pension plan <sup>2</sup>	97	203	-	-	-	-	300
Long-term debt repayment	152	663	416	177	46	5,529	6,983
Interest on long-term debt	148	279	250	237	232	4,451	5,597
Short-term debt repayment	128	-	-	-	-	-	128
Commitments related to Darlington Refurbishment project <sup>3</sup>	347	-	-	-	-	-	347
Operating licences	21	44	45	46	47	97	300
Operating lease obligations	8	13	12	10	7	19	69
Unconditional purchase obligations	30	59	5	-	-	-	94
Accounts payable and accrued charges	929	14	-	-	-	16	959
Other	55	33	10	10	8	74	190
Total	1,997	1,448	875	570	427	10,225	15,542

<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, 2018. The next actuarial valuation of the OPG registered pension plan must have an effective date no later than January 1, 2021. 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 2020 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.

### 18. BUSINESS SEGMENTS

	Regulated		Unregula	itea		
	Nuclear		Contracted			
Nuclear	Waste	Hydro-	and Other			
Generation	Management	electric	Generation	Other	Elimination	Total
976	_	411	155	1	_	1,543
7	-	-	-	4	-	11
-	32	-	-	27	(47)	12
983	32	411	155	32	(47)	1,566
73	_	92	10	_	_	175
910	32	319	145	32	(47)	1,391
542	32	85	49	20	(47)	681
					-	264
-	252	-	2	1	-	255
-	(223)	-	-	-	-	(223)
-	-	-	(10)	-	-	(10)
7	-	-	` 3	1	-	`11 <sup>′</sup>
-	-	-	(1)	(19)	-	(20)
193	(29)	179	72	18	-	433
						12
						421
						65
						356
	976 7 983 73 910 542 168 7	Nuclear Generation         Waste Management           976         -           7         -           -         32           983         32           73         -           910         32           542         32           168         -           -         252           -         (223)           -         -           7         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -	Nuclear Generation         Waste Management         Hydroelectric           976         -         411           7         -         -           -         32         -           983         32         411           73         -         92           910         32         319           542         32         85           168         -         55           -         252         -           -         (223)         -           -         -         -           7         -         -           -         -         -	Nuclear Generation         Waste Management         Hydroelectric         and Other Generation           976         -         411         155           7         -         -         -           -         32         -         -           -         983         32         411         155           73         -         92         10           910         32         319         145           542         32         85         49           168         -         55         30           -         252         -         2           -         (223)         -         -           -         -         (10)         -           7         -         -         (10)           7         -         -         (11)	Nuclear Generation         Waste Management         Hydrolelectric         and Other Generation         Other           976         -         411         155         1           7         -         -         -         4           -         32         -         -         27           983         32         411         155         32           73         -         92         10         -           910         32         319         145         32           542         32         85         49         20           168         -         55         30         11           -         252         -         2         1           -         (223)         -         -         -           -         -         3         1         -           -         -         3         1         -           -         -         -         -         -         -	Nuclear Generation         Waste Management         Hydroelectric electric         and Other Generation         Other Elimination           976         -         411         155         1         -           7         -         -         -         4         -           -         32         -         -         27         (47)           983         32         411         155         32         (47)           73         -         92         10         -         -         -           910         32         319         145         32         (47)           542         32         85         49         20         (47)           168         -         55         30         11         -           -         252         -         2         1         -           -         (223)         -         -         -         -           -         -         -         3         1         -           -         -         -         3         1         -           -         -         -         3         1         -           - <t< td=""></t<>

Segment (Loss) Income for the		Regulated		Unregula	ated		
Three Months Ended June 30, 2018	Nuclear	Nuclear Waste	Hydro-	Contracted and Other			
(millions of dollars)	Generation	Management	electric	Generation	Other	Elimination	Total
Revenue from contracts with customers	725	_	390	149	3	_	1,267
Leasing revenue	9	-	-	-	4	-	13
Other revenue	-	32	-	-	11	(41)	2
Total revenue	734	32	390	149	18	(41)	1,282
Fuel expense	62	-	90	14	_	_	166
Gross margin	672	32	300	135	18	(41)	1,116
Operations, maintenance and administration	620	32	82	43	7	(41)	743
Depreciation and amortization	130	-	40	19	9	-	198
Accretion on fixed asset removal and nuclear waste management liabilities	-	244	-	2	1	-	247
Earnings on nuclear fixed asset removal and nuclear waste management funds	-	(212)	-	-	-	-	(212)
Income from investments subject to significant influence	-	-	-	(10)	-	-	(10)
Property taxes	6	-	-	3	-	-	9
Other gains	-	-			(3)	- <u>-</u>	(3)
(Loss) income before interest and income taxes	(84)	(32)	178	78	4	<u>-</u>	144
Net interest expense							18
Income before income taxes							126
Income tax expense							-
Net income							126

Segment Income (Loss) for the		Regulated		Unregula	ated		
Six Months Ended June 30, 2019		Nuclear		Contracted			
	Nuclear	Waste	Hydro-	and Other			
(millions of dollars)	Generation	Management	electric	Generation	Other	Elimination	Total
Revenue from contracts with customers	1,855	-	792	310	5	_	2,962
Leasing revenue	13	-	-	-	7	-	20
Other revenue	-	63	-	-	39	(92)	10
Total revenue	1,868	63	792	310	51	(92)	2,992
Fuel expense	143	-	158	22	-	-	323
Gross margin	1,725	63	634	288	51	(92)	2,669
Operations, maintenance and administration	1,164	63	162	99	34	(92)	1,430
Depreciation and amortization	335	-	112	60	23	-	530
Accretion on fixed asset removal and nuclear waste management liabilities	-	504	-	4	2	-	510
Earnings on nuclear fixed asset removal and nuclear waste management funds	-	(443)	-	-	-	-	(443)
Income from investments subject to significant influence	-	-	-	(23)	-	-	(23)
Property taxes	13	-	-	6	2	-	21
Other losses (gains)	-	-	1	(1)	(32)	-	(32)
Income (loss) before interest and income taxes	213	(61)	359	143	22	-	676
Net interest expense							30
Income before income taxes							646
Income tax expense							73
Not be a sure							F70
Net income							573

Segment (Loss) Income for the		Regulated		Unregula	ted		
Six Months Ended June 30, 2018		Nuclear		Contracted			
	Nuclear	Waste	Hydro-	and Other			
(millions of dollars)	Generation	Management	electric	Generation	Other	Elimination	Total
Revenue from contracts with customers	1,596	_	746	298	10	-	2,650
Leasing revenue	18	-	-	-	8	-	26
Other revenue	-	65	-	-	33	(85)	13
Total revenue	1,614	65	746	298	51	(85)	2,689
Fuel expense	135	_	155	31	_	-	321
Gross margin	1,479	65	591	267	51	(85)	2,368
Operations, maintenance and administration	1,224	65	162	84	15	(85)	1,465
Depreciation and amortization	251	-	76	39	18	-	384
Accretion on fixed asset removal and nuclear waste management liabilities	-	487	-	4	3	-	494
Earnings on nuclear fixed asset removal and nuclear waste management funds	-	(422)	-	-	-	-	(422)
Income from investments subject to significant influence	-	-	-	(20)	-	-	(20)
Property taxes	13	-	-	` 4	1	-	`18 <sup>´</sup>
Other losses (gains)	_	<u>-</u>	4		(270)		(266)
(Loss) income before interest and income taxes	(9)	(65)	349	156	284		715
Net interest expense							37
Income before income taxes							678
Income tax expense							13
Net income							665

### Change in Reportable Segments

Since the first quarter of 2019, OPG's financial results related to its role as the Financial Services Manager under the Fair Hydro Act, which primarily comprise the financial results of the Trust, ceased being reported as a separate business segment in the Company's consolidated financial statements as a result of the proposed and subsequently enacted legislative change by the Government of Ontario which resulted in the Trust's deconsolidation. These financial results are now reported within the Other category. The 2018 comparative amounts have been reclassified from consolidated financial statements previously presented to conform to the 2019 interim consolidated financial statement presentation. For further discussion regarding deconsolidation of the Trust, refer to Note 4.

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

	Six Months Ended June 30			
(millions of dollars)	2019	2018		
Receivables from related parties	(59)	(37)		
Inventory	(6)	` 7		
Prepaid expenses	4	9		
Other current assets	59	48		
Accounts payable, accrued charges and other payables	(45)	(132)		
	(47)	(105)		

### 20. SALE OF NON-CORE ASSETS

### Sale of Lakeview Site

In March 2018, OPG completed the sale of its former Lakeview generating station site property located in Mississauga, Ontario, with a gain on sale of \$205 million, net of tax effects of \$68 million, recognized in net income in the first quarter of 2018. The sale was undertaken pursuant to a Shareholder Declaration and a Shareholder Resolution received by OPG in June 2016.