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August 9, 2022

OPG REPORTS 2022 SECOND QUARTER FINANCIAL RESULTS

Darlington's Unit 3 refurbishment progresses ahead of schedule; OPG advances climate change goals through projects and partnerships

Toronto – Ontario Power Generation Inc. (OPG or Company) today reported its financial and operating results for the second quarter of 2022, with net income attributable to the Shareholder of \$446 million, compared to \$518 million for the same period last year.

Second quarter highlights include:

Darlington's Unit 3 Refurbishment progressing ahead of schedule

Refurbishment of Darlington nuclear generating station's (Darlington GS) Unit 3, the second of four units to undergo a mid-life overhaul, is progressing ahead of schedule, with an expected return to service by late 2023. The earlier return to service date reflects OPG's commitment to incorporating lessons learned from the successful Unit 2 refurbishment into the planning and execution of the refurbishment of Unit 3 to date, despite the challenges posed by the COVID-19 pandemic.

"Unit 3 is tracking toward safely returning to service several months ahead of schedule, by late 2023," said OPG President and CEO Ken Hartwick. "This is a real testament to the dedicated support of OPG's skilled workforce, working as "One Team" with our project partners, suppliers, contractors and Ontario's robust nuclear supply chain. The team's commitment to implementing lessons learned and innovative tooling to increase efficiency showcases OPG's ability to complete large, complex projects on or ahead of plan."

Sir Adam Beck I Hydroelectric GS G2 Unit returns to service

In May 2022, OPG successfully completed the replacement of the G2 unit at the Sir Adam Beck I GS, adding approximately 58 MW of renewable in-service generating capacity to the Company's regulated hydroelectric fleet. The completion of the G2 unit marks the first full unit replacement to take place in the station's 100-year history.

"Our investments in the flagship Sir Adam Beck I GS are vital to our fight against climate change," said Hartwick. "The successful replacement of the G2 unit and the upcoming return to service of the G1 unit later this year will ensure that the station will continue to provide Ontario with clean, renewable power for years to come and support our net-zero emission goals."

OPG and X-energy to pursue Xe-100 Small Modular Reactors

In June 2022, OPG and X-energy signed a framework agreement to pursue opportunities to deploy Xe-100 small modular reactors for industrial applications in Canada.

"As part of our climate change plan, we pledged to assist with decarbonization of the markets where we operate," said Hartwick. "Through this partnership, OPG will support the use of nuclear technology to help heavy industry reach climate change goals by utilizing clean, safe electricity and high temperature steam to power their production facilities and enable decarbonization of their industrial processes."

Net Income attributable to the Shareholder

Net income attributable to the Shareholder decreased by \$72 million and increased by \$141 million for the three and six month periods ended June 30, 2022, respectively, compared to the same periods in 2021.

The decrease in the second quarter of 2022, compared to the same period in 2021, was primarily attributable to lower electricity generation within the Regulated – Nuclear Generation business segment due to the commencement of the refurbishment of Darlington GS Unit 1 and market gains on non-core equity investments recognized in the second quarter of 2021. The decreases were partially offset by the net impact of new regulated prices for OPG's nuclear electricity generation resulting from the decisions issued by the Ontario Energy Board in the second half of 2021.

In addition to the drivers above, the impact of higher electricity generation from the regulated nuclear stations in the first quarter of 2022 contributed to the increase for the six months ended June 30, 2022.

Generating and Operating Performance

Electricity generated was 20.1 terawatt hours (TWh) and 41.3 TWh for the three and six month periods ended June 30, 2022, respectively, compared to 19.2 TWh and 38.3 TWh for the same period in 2021.

Regulated – Nuclear Generation Segment

Electricity generation from the regulated nuclear stations decreased by 1.2 TWh during the second quarter of 2022, as compared to the same period in 2021. The decrease was primarily due to the commencement of the refurbishment of Darlington GS Unit 1, which was taken offline mid-February 2022. Electricity generation for the six months ended June 30, 2022, was comparable to the same period in 2021.

The Darlington GS unit capability factor increased to 91.4 per cent and 96.1 per cent for the three and six month periods ended June 30, 2022, respectively, compared to 85.8 per cent and 79.7 per cent for the same periods in 2021. The increases in both periods were primarily due to fewer planned outage days.

The Pickering nuclear generating station's unit capability factor increased to 87.8 per cent and 85.6 per cent for the three and six month periods ended June 30, 2022, respectively, compared to 84.0 per cent and 78.1 per cent for the same periods in 2021. The increase for the three months ended June 30, 2022, compared to the same period in 2021, was primarily due to fewer planned outage days, partially offset by a higher number of unplanned outage days. The increase for the six months ended June 30, 2022, compared to the same period in 2021, was primarily due to fewer planned outage days. The increase for the six months ended June 30, 2022, compared to the same period in 2021, was primarily due to fewer planned and unplanned outage days.

Regulated – Hydroelectric Generation Segment

Electricity generation from the regulated hydroelectric stations increased by 1.6 TWh and 1.7 TWh during the three and six month periods ended June 30, 2022, respectively, compared to the same periods in 2021. The increase in both periods was primarily due to significantly higher water flows across most of Ontario.

The regulated hydroelectric stations' availability increased to 91.6 per cent for the three months ended June 30, 2022, compared to 88.8 per cent for the same period in 2021. The increase was primarily due to fewer planned outages across the regulated hydroelectric fleet. Availability for the six months ended June 30, 2022, was comparable to the same period in 2021.

Contracted Hydroelectric and Other Generation Segment

Electricity generation from the Contracted Hydroelectric and Other Generation business segment increased by 0.2 TWh during the three months ended June 30, 2022, compared to the same period in 2021, primarily due to higher generation from hydroelectric facilities in the United States. Electricity generation for the six months ended June 30, 2022, was comparable to the same period in 2021.

Availability of the Ontario-based hydroelectric stations in the segment decreased to 86.7 per cent for the three months ended June 30, 2022, compared to 89.6 per cent for the same period in 2021, primarily due to higher unplanned outages at the Lower Mattagami generating stations. For the six months ended June 30, 2022, hydroelectric availability was comparable to the same period in 2021.

Atura Power

Electricity generation from the Atura Power business segment increased by 0.3 TWh and 1.3 TWh during the three and six month periods ended June 30, 2022, respectively, compared to the same periods in 2021. The increase in both periods was primarily due to higher electricity demand in the Ontario market.

Thermal Availability of the generating stations in the segment decreased to 91.4 per cent as at June 30, 2022, compared to 94.0 per cent as at June 30, 2021, primarily due to a planned outage at the Napanee GS.

Generation Development

OPG is undertaking a number of generation development and other major projects in support of Ontario's electricity system. The Company continues to execute on these projects while maintaining enhanced safety measures in response to the COVID-19 pandemic.

Significant developments during the second quarter of 2022 included the following:

Darlington Refurbishment

The Darlington Refurbishment project will extend the operating life of the four-unit Darlington GS by at least 30 years.

The refurbishment of Unit 3 is progressing ahead of schedule and is expected to be returned to service by late 2023, which is ahead of the originally planned completion date of the first quarter of 2024. Unit 3 refurbishment is currently in the third major segment, Reassembly, which includes the installation and reassembly of reactor components. The project completed the upper and middle feeder installation series in the second quarter of 2022 and the fuel channel installation series in July 2022. Upon completion of the fuel channel installation, the project commenced the lower feeder installation series.

Unit 1 refurbishment activities are progressing on schedule. The islanding of Unit 1, which involves physically separating the unit from the two operating units, was completed in June 2022, on plan, signifying the completion of the first major segment of the unit's refurbishment. The second segment, Disassembly, commenced immediately following the islanding with preparatory work to support the removal of feeder tubes.

Planning and pre-requisite activities of the last unit to undergo refurbishment, Unit 4, are progressing as planned.

OPG continues to assess and seek ways to manage the impact of the COVID-19 pandemic on the total cost of the project, which is otherwise continuing to track to the \$12.8 billion budget.

Further details on the Company's major projects can be found in the Management's Discussion and Analysis as at and for the three and six month periods ended June 30, 2022, section, *Core Business and Outlook* under the heading, *Project Excellence*.

FINANCIAL AND OPERATIONAL HIGHLIGHTS

	Three Months Ended June 30			hs Ended
(millions of dollars _ over twhere noted)	2022	e 30 2021	Jun 2022	e 30 2021
(millions of dollars – except where noted) Revenue	1,856	1,804	3,814	3,495
Fuel expense	237	203	3,014 483	3,495 387
•	715	203 700	403	1,512
Operations, maintenance and administration expenses				
Depreciation and amortization expenses	279	277	555	555
Accretion on fixed asset removal and nuclear waste management liabilities	286	271	572	544
Earnings on nuclear fixed asset removal and nuclear waste management funds	(257)	(240)	(515)	(479)
Other net expenses (gains)	5	(106)	15	(97)
Earnings before interest and income taxes	591	699	1,272	1,073
Net interest expense	46	54	96	114
Income tax expense	94	123	218	142
Net income	451	522	958	817
Net income attributable to the Shareholder	446	518	949	808
Net income attributable to non-controlling interest ¹		4	9	9
Earnings (loss) before interest and income taxes	-	· ·		
Electricity generating business segments	599	607	1,300	1,006
Regulated – Nuclear Sustainability Services	(26)	(28)	(51)	(59)
Other	18	120	23	126
Earnings before interest and income taxes	591	699	1,272	1,073
Cash flow provided by operating activities	757	524	1,617	1,076
Capital expenditures ²	643	485	1,157	906
Electricity generation (TWh)	040	100	1,107	000
Regulated – Nuclear Generation	9.4	10.6	19.6	19.5
Regulated – Hydroelectric Generation	8.2	6.6	16.2	14.5
Contracted Hydroelectric and Other Generation ³	1.6	1.4	2.6	2.7
Atura Power	0.9	0.6	2.9	1.6
Total OPG electricity generation	20.1	19.2	41.3	38.3
Nuclear unit capability factor (per cent) ⁴				0010
Darlington Nuclear GS	91.4	85.8	96.1	79.7
Pickering Nuclear GS	87.8	84.0	85.6	78.1
Availability (per cent)				
Regulated – Hydroelectric Generation	91.6	88.8	90.6	90.3
Contracted Hydroelectric and Other Generation – hydroelectric stations	86.7	89.6	87.2	87.7
Atura Power ⁵	91.4	94.0	91.4	94.0
Equivalent forced outage rate				
Contracted Hydroelectric and Other Generation – thermal stations	0.7	2.4	0.4	2.5

¹ Relates to the following: the 25 per cent interest of 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; the 15 per cent and 5 per cent interests of corporations wholly owned by Six Nations of Grand River Development Corporation and the Mississaugas of the Credit First Nation, respectively, in Nanticoke Solar LP; and non-controlling interests in certain electricity generating facilities in the United States.

² Includes net changes in accruals.

³ Includes OPG's proportionate share of electricity generation from co-owned and minority-held facilities.

⁴ Excludes nuclear unit(s) during the period in which they are undergoing refurbishment. Accordingly, Unit 3 and Unit 1 of the Darlington GS are excluded from the measure since commencing refurbishment on September 3, 2020 and February 15, 2022, respectively.

⁵ Reflects the thermal availability of the combined cycle plants as at the period end date, calculated on a three-year rolling average basis.

About OPG

As a global climate change leader and the largest, most diverse electricity generator in the province of Ontario, OPG and its family of companies are helping lead the charge to a post-carbon economy.

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, 2022, can be accessed on OPG's web site (<u>www.opg.com</u>), the Canadian Securities Administrators' web site (<u>www.sedar.com</u>), or can be requested from the Company.

For further information, please contact:

Ontario Power Generation 416-592-4008 or 1-877-592-4008 Follow us @opg

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ONTARIO POWER GENERATION INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS

2022 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 month periods ended June 30, 2022. 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, 2021.

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 (IFRS). The current exemption 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 2021 annual MD&A. This MD&A is dated August 9, 2022.

Additional information about OPG, including the Company's Annual Information Form, is available on SEDAR at <u>www.sedar.com</u> and the Company's website at <u>www.opg.com</u>.

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", "budget", "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 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, availability and operating lives, fuel costs, surplus baseload generation (SBG), fixed asset removal and nuclear waste management and associated funding requirements, performance and earnings of investment funds, refurbishment of existing facilities, development and construction of new facilities, acquisition transactions and other business expansion opportunities, performance of 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 and markets in Ontario and the United States of America (United States or US), the continued application and renewal of energy supply agreements (ESAs) and other contracts for non-regulated facilities, foreign currency exchange rates, commodity prices, wholesale electricity market prices, 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, the COVID-19 pandemic, changes in the Company's workforce, renewal of union collective agreements, business continuity events, the weather, climate change, technological change, financing requirements and liquidity, funding sources, applications to the Ontario Energy Board (OEB) for regulated prices, the impact of regulatory decisions by the OEB, forecasts of earnings, cash flow, earnings before interest, income taxes, depreciation and amortization, gross margin, operations, maintenance and administration (OM&A) expenses and project and other 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:

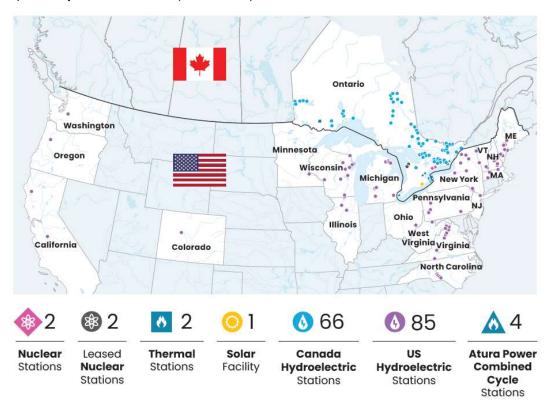
- "Earnings before Interest, Income Taxes, Depreciation and Amortization"; and
- "Gross Margin".

For a detailed description of each of the non-GAAP measures used in this MD&A, 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 generating capacity of 18,153 megawatts (MW) as at June 30, 2022.

As at June 30, 2022, OPG owned and operated two nuclear generating stations, 66 hydroelectric generating stations, two thermal generating stations, one solar facility and four combined cycle gas turbine (combined cycle) plants in Ontario, Canada. The combined cycle plants are natural gas-fired facilities owned and operated through the Company's wholly-owned subsidiary operating as Atura Power. Through its US-based wholly-owned subsidiary, OPG Eagle Creek Holdings LLC (Eagle Creek), OPG also wholly or jointly owned and operated 85 hydroelectric generating stations and held minority interests in 14 hydroelectric and two solar facilities in the US as at June 30, 2022. In addition, OPG owns two nuclear generating stations in Ontario, the Bruce A GS and the Bruce B GS, which are leased on a long-term basis to, and operated by, Bruce Power L.P. (Bruce Power).



Income from co-owned and minority-held facilities is accounted for using the equity method of accounting. OPG's proportionate share of in-service generating capacity and electricity generation volume from co-owned and minority-held facilities is included in the Company's generation portfolio statistics set out in this MD&A.

Income from the stations leased to Bruce Power is included in revenue under the Regulated – Nuclear Generation business segment. The leased stations are not included in the Company's electricity generation and other operating statistics set out in this MD&A.

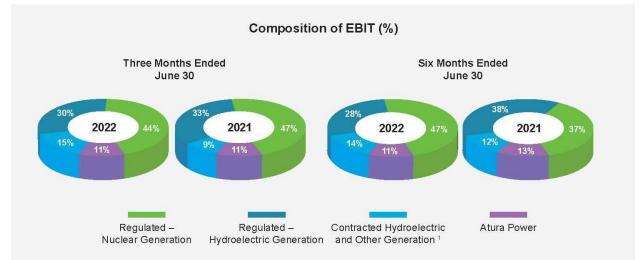
ONTARIO POWER GENERATION INC. Management's Discussion & Analysis For the three and six month periods ended June 30, 2022 and 2021

Reporting Structure

The composition of OPG's reportable business segments effective as at June 30, 2022 is as follows:

- Regulated Nuclear Generation;
- Regulated Nuclear Sustainability Services;
- Regulated Hydroelectric Generation;
- Contracted Hydroelectric and Other Generation; and
- Atura Power

The composition of OPG's earnings before interest and income taxes (EBIT) by electricity generating business segment for the three and six month periods ended June 30, 2022 and 2021 were as follows:



¹ Includes contracted revenue from hydroelectric generating stations operating under ESAs in Ontario, with expiration dates ranging from 2059 to 2067.

In-Service Generating Capacity

OPG's in-service generating capacity by business segment as at June 30, 2022 and December 31, 2021 was as follows:

	As At			
<u>(</u> <i>MW</i>)	June 30 2022	December 31 2021		
Regulated – Nuclear Generation ¹	4,850	5,728		
Regulated – Hydroelectric Generation	6,493	6,420		
Contracted Hydroelectric and Other Generation ²	4,095	4,095		
Atura Power	2,715	2,715		
Total	18,153	18,958		

¹ The in-service generating capacity as at June 30, 2022 excludes Unit 1 and Unit 3 of the Darlington GS. Unit 1 was taken offline in mid-February 2022 and Unit 3 was taken offline in September 2020. Unit 1 and Unit 3 each have a generating capacity of 878 MW and are concurrently undergoing refurbishment.

² Includes OPG's proportionate share of in-service generating capacity from co-owned and minority shareholdings in electricity generating facilities.

The total in-service generating capacity as at June 30, 2022, decreased by 805 MW compared to December 31, 2021. The decrease was primarily due to the commencement of the refurbishment of Unit 1 of the Darlington nuclear GS (Darlington GS), which was taken offline in mid-February 2022. This is the third Darlington GS unit to undergo refurbishment. The decrease was partially offset by the replacement of the G2 unit of the Sir Adam Beck I hydroelectric GS, which was completed in May 2022, and the replacement of the G3 unit at the Ranney Falls hydroelectric GS, which was completed in June 2022. Further details on the Company's major projects can be found in the section, *Core Business and Outlook* under the heading, *Project Excellence*.

HIGHLIGHTS

Overview of Results

This section provides an overview of OPG's unaudited interim consolidated operating results for the three and six month periods ended June 30, 2022, compared to the same periods in 2021. A discussion of OPG's performance by business segment can be found in the section, *Discussion of Operating Results by Business Segment*.

	Three Months Ended June 30		Jun	hs Ended e 30		
(millions of dollars – except where noted)	2022	2021	2022	2022 2021		
Revenue	1,856	1.804	3.814	3.495		
Fuel expense	237	203	483	387		
Operations, maintenance and administration expenses	715	700	1,432	1,512		
Depreciation and amortization expenses	279	277	555	555		
Accretion on fixed asset removal and nuclear waste	210	211	000	000		
management liabilities	286	271	572	544		
Earnings on nuclear fixed asset removal and nuclear waste			••	•••		
management funds	(257)	(240)	(515)	(479)		
Other net expenses (gains)	5	(106)	15	(97)		
Earnings before interest and income taxes	591	699	1,272	1,073		
Net interest expense	46	54	96	114		
Income tax expense	94	123	218	142		
	54	120	210	172		
Net income	451	522	958	817		
Net income attributable to the Shareholder	446	518	949	808		
Net income attributable to non-controlling interest ¹	5	4	9	9		
Flacture to a construction (TIA/h) 2	20.1	19.2	41.3	38.3		
Electricity generation (TWh) ²	20.1	19.2	41.3	30.3		
Cash flow provided by operating activities	757	524	1,617	1,076		
Capital expenditures ³	643	485	1,157	906		
Earnings (loss) before interest and income taxes by						
business seament						
Regulated – Nuclear Generation	268	284	617	373		
Regulated – Hydroelectric Generation	185	201	378	376		
Contracted Hydroelectric and Other Generation	76	56	155	123		
Atura Power	70	66	150	134		
Total electricity generating business segments	599	607	1,300	1,006		
	(00)	(00)	(=4)	(50)		
Regulated – Nuclear Sustainability Services	(26)	(28)	(51)	(59)		
Other	18	120	23	126		
Earnings before interest and income taxes	591	699	1,272	1,073		

¹ Relates to the following: 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 and 5 percent interests of corporations wholly owned by Six Nations of Grand River Development Corporation and the Mississaugas of the Credit First Nation, respectively, in Nanticoke Solar LP; and non-controlling interests in certain electricity generating facilities in the United States.

² Includes OPG's proportionate share of electricity generation from co-owned and minority-held facilities.

³ Includes net changes in accruals.

Second Quarter

Net income attributable to the Shareholder was \$446 million for the second quarter of 2022, representing a decrease of \$72 million compared to the same quarter in 2021.

Earnings before interest and income taxes were \$591 million for the second quarter of 2022, a decrease of \$108 million compared to the same quarter in 2021.

Significant factors that decreased EBIT:

- Lower revenue from the Regulated Nuclear Generation business segment of \$105 million due to lower electricity generation of 1.2 terawatt hours (TWh), primarily due to the commencement of the refurbishment of Darlington GS Unit 1, which was taken offline in mid-February 2022;
- An increase in depreciation and amortization expenses of \$58 million from the Regulated Nuclear Generation business segment, excluding amortization expense related to the recovery of OEB-authorized regulatory variance and deferral account (regulatory account) balances, primarily due to amounts recorded in 2021 as recoverable from customers in regulatory accounts in connection with differences in the current accounting end-of-life assumptions for the Pickering nuclear GS (Pickering GS) from those assumed in the base regulated price for OPG's nuclear electricity generation (nuclear base regulated price) in effect during 2021;
- A gain of \$83 million recorded in the second quarter of 2021 within the Other category related to changes in the market value of non-core equity holdings in a publicly traded smart energy storage company; and
- A gain of \$30 million recorded in the second quarter of 2021 within the Other segment on the sale of OPG's former Thunder Bay GS site recognized upon completion of the transaction in April 2021. The former coal-fired generation plant, subsequently converted to operate as a single-unit advanced biomass-fueled generating station, had ceased operations in 2018.

Significant factors that increased EBIT:

- Higher revenue from the Regulated Nuclear Generation business segment of \$138 million from a higher nuclear base regulated price effective January 1, 2022; and
- Higher EBIT of \$20 million from the Contracted Hydroelectric and Other Generation business segment, primarily due to higher earnings from US operations due to higher wholesale electricity market prices.

Net interest expense decreased by \$8 million in the second quarter of 2022, compared to the same quarter in 2021, primarily due to a higher amount of interest costs capitalized related to the Darlington Refurbishment project, partially offset by a higher amount of interest recorded as refundable to customers through regulatory accounts.

Income tax expense decreased by \$29 million for the three months ended June 30, 2022, compared to the same period in 2021. The decrease was primarily due to lower earnings before taxes.

Year-To-Date

Net income attributable to the Shareholder was \$949 million for the first six months of 2022, representing an increase of \$141 million compared to the same period in 2021.

Earnings before interest and income taxes were \$1,272 million for the first six months of 2022, an increase of \$199 million compared to the same period in 2021.

Significant factors that increased EBIT:

- Higher revenue from the Regulated Nuclear Generation business segment of \$288 million from a higher nuclear base regulated price effective January 1, 2022;
- Lower OM&A expenses of \$91 million from the Regulated Nuclear Generation business segment, as expected, primarily due to a planned cyclical maintenance outage for Unit 1 of the Darlington GS during the first quarter of 2021; and
- Higher EBIT of \$32 million from the Contracted Hydroelectric and Other Generation business segment, primarily due to higher earnings from US operations due to higher wholesale electricity market prices.

Significant factors that decreased EBIT:

- An increase in depreciation and amortization expenses of \$118 million from the Regulated Nuclear Generation business segment, excluding amortization expense related to the recovery of OEB-authorized regulatory account balances, primarily due to amounts recorded in 2021 as recoverable from customers in regulatory accounts in connection with differences in the current accounting end-of-life assumptions for the Pickering GS from those assumed in the nuclear base regulated price in effect during 2021; and
- Gains of \$113 million recorded in the second quarter of 2021 within the Other category related to changes in the market value of non-core equity holdings in a publicly traded smart energy storage company and the sale of OPG's former Thunder Bay GS site.

Net interest expense decreased by \$18 million for the six months ended June 30, 2022, compared to the same period in 2021. The decrease was primarily due to a higher amount of interest costs capitalized related to the Darlington Refurbishment project.

Income tax expense increased by \$76 million for the six months ended June 30, 2022, compared to the same period in 2021. The increase was primarily due to higher earnings before taxes.

Trends

OPG's quarterly electricity generation from the Regulated – Hydroelectric Generation, Contracted Hydroelectric and Other Generation, and Atura Power business 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 small-scale generation embedded in distribution networks, and the impact of conservation efforts. Historically, there has been greater electricity demand in Ontario during the winter and summer months due to heating and air conditioning demands.

OPG's quarterly electricity generation from hydroelectric facilities is impacted by weather conditions that affect water flows. Historically, there have been higher water flows in the second quarter as a result of snow and ice melt entering the river systems. The financial impact of variability in water flows on the Regulated – Hydroelectric Generation business segment is mitigated by OEB-authorized regulatory accounts.

The financial impact of variability in electricity generation from the Contracted Hydroelectric and Other Generation business segment and the Atura Power business segment is mitigated by the terms of the applicable ESAs with the Independent Electricity System Operator (IESO) and other long-term contracts for the contracted generating facilities in Ontario.

Electricity generation and the financial results of the Regulated – Nuclear Generation business segment are primarily impacted by outage activities at the nuclear generating stations. The frequency and timing of planned outages under a station's maintenance outage cycle and timing of refurbishment activities may result in period-over-period variability in OPG's financial results. The maintenance outage cycle at each of OPG's nuclear generating stations determines the number of planned outages in a particular year. Outage cycles are designed to ensure continued safe and reliable long-term operations of the stations and their compliance with the CNSC's regulatory requirements.

The Darlington and Pickering nuclear generating stations have been designed to operate at full power as baseload generating facilities and therefore their electricity production does not vary with changes in grid-supplied electricity demand.

Electricity Generation

Electricity generation for the three and six month periods ended June 30, 2022 and 2021 was as follows:

	Three Months Ended June 30			Six Months Ended June 30		
<u>(</u> <i>TWh</i>)	2022	2021	2022	2021		
Regulated – Nuclear Generation	9.4	10.6	19.6	19.5		
Regulated – Hydroelectric Generation	8.2	6.6	16.2	14.5		
Contracted Hydroelectric and Other Generation ¹	1.6	1.4	2.6	2.7		
Atura Power 1	0.9	0.6	2.9	1.6		
Total OPG electricity generation	20.1	19.2	41.3	38.3		

¹ Includes OPG's proportionate share of electricity generation from co-owned and minority shareholdings in electricity generating facilities.

Total OPG electricity generation increased by 0.9 TWh and 3.0 TWh for the three and six month periods ended June 30, 2022, respectively, compared to the same periods in 2021.

Electricity generation from the Regulated – Nuclear Generation business segment decreased by 1.2 TWh for the three months ended June 30, 2022, compared to the same period in 2021, was primarily due to the commencement of the refurbishment of Darlington GS Unit 1, which was taken offline mid-February 2022. Electricity generation from the Regulated – Nuclear Generation business segment increased marginally by 0.1 TWh for the six months ended June 30, 2022, compared to the same period in 2021, primarily due to fewer planned cyclical maintenance outage days

and fewer unplanned outage days at both Darlington and Pickering nuclear generating stations. The increase was largely offset by the commencement of the refurbishment of Darlington GS Unit 1.

The increase in electricity generation of 1.6 TWh and 1.7 TWh from the Regulated – Hydroelectric Generation business segment for the three and six month periods ended June 30, 2022, respectively, compared to the same periods in 2021, was primarily due to significantly higher water flows across most of Ontario.

The increase in electricity generation of 0.2 TWh from the Contracted Hydroelectric and Other Generation business segment for the three months ended June 30, 2022, compared to the same period in 2021, was primarily due to the acquisition of the Racine hydroelectric GS in the US in December 2021. Electricity generation for the six months ended June 30, 2022 was comparable to the same period in 2021, reflecting lower water flows in the US that were largely offset by the acquisition of the Racine GS.

Electricity generation from the Atura Power business segment increased by 0.3 TWh and 1.3 TWh for the three and six month periods ended June 30, 2022, respectively, compared to the same periods in 2021. The increases in both periods were primarily due to higher electricity demand in the Ontario market.

For the three and six month periods ended June 30, 2022, Ontario's electricity demand as reported by the IESO, excluding electricity exports out of province, was 31.7 TWh and 68.1 TWh, respectively, compared to 31.1 TWh and 65.6 TWh for the same periods in 2021. 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 surplus in Ontario was higher for the three months ended June 30, 2022, compared to the same period in 2021, and lower for the six months ended June 30, 2022, compared to the same period in 2021. Production forgone at OPG's regulated hydroelectric stations due to SBG conditions was 0.9 TWh and 1.1 TWh during the three and six month periods ended June 30, 2022, compared to 0.8 TWh and 1.4 TWh, respectively, for the same periods in 2021. The gross margin impact of production forgone at OPG's regulated hydroelectric stations for gone at OPG's regulated hydroelectric stations forgone at OPG's regulated hydroelectric station forgone at OPG's regulated hydroelectric stations due to SBG conditions was offset by the impact of a regulatory account authorized by the OEB. OPG did not forgo any electricity production at its nuclear generating stations due to SBG conditions.

Cash Flow from Operations

Cash flow provided by operating activities was \$757 million for the three months ended June 30, 2022, compared to \$524 million for the same period in 2021, and \$1,617 million for the six months ended June 30, 2022, compared to \$1,076 million for the same period in 2021. The increase for both periods was largely due to higher revenue receipts, reflecting a higher OEB-approved nuclear base regulated price and higher electricity generation from the Regulated – Hydroelectric Generation business segment.

Capital Expenditures

Capital expenditures for the three and six month periods ended June 30, 2022 and 2021 were as follows:

		Three Months Ended June 30		hs Ended e 30
(millions of dollars)	2022	2021	2022	2021
Regulated – Nuclear Generation – Darlington Refurbishment Project	240	216	471	394
Regulated – Nuclear Generation – Excluding Darlington Refurbishment Project	169	93	282	181
Regulated – Hydroelectric Generation	68	80	125	156
Contracted Hydroelectric and Other Generation	87	64	161	125
Atura Power	49	12	60	13
Other	30	20	58	37
Total capital expenditures ¹	643	485	1,157	906

¹ Includes net changes in accruals.

Total capital expenditures increased by \$158 million and \$251 million for the three and six month periods ended June 30, 2022, respectively, compared to the same periods in 2021.

Capital expenditures for the Darlington Refurbishment project increased by \$24 million and \$77 million for the three and six month periods ended June 30, 2022, respectively, compared to the same periods in 2021. The increases in both periods were mainly due to higher refurbishment activities at the Darlington GS, driven by the commencement of the refurbishment of Unit 1 in mid-February 2022.

Excluding the Darlington Refurbishment project, capital expenditures for the Regulated – Nuclear Generation business segment increased by \$76 million and \$101 million for the three and six month periods ended June 30, 2022, respectively, compared to the same periods in 2021. The increases in both periods were primarily related to small modular reactor (SMR) expenditures at the Darlington New Nuclear Project (DNNP) site and the replacement of the primary moisture separator at Unit 3 of the Darlington GS.

Capital expenditures for the Regulated – Hydroelectric Generation business segment decreased by \$12 million and \$31 million for the three and six month periods ended June 30, 2022, respectively, compared to the same periods in 2021. The decreases in both periods were mainly due to the completion of the overhaul and upgrade of Unit 5 of the Sir Adam Beck I GS in 2021 and higher capital expenditures at the hydroelectric stations in the Western Region in 2021.

Capital expenditures for the Contracted Hydroelectric and Other Generation business segment increased by \$23 million and \$36 million for the three and six month periods ended June 30, 2022, respectively, compared to the same periods in 2021. The increases in both periods primarily reflected higher expenditures on the Smoky Falls Dam Safety project and the Little Long Dam Safety project.

Capital expenditures for the Atura Power business segment increased by \$37 million and \$47 million for the three and six month periods ended June 30, 2022, respectively, compared to the same periods in 2021. The increase in both periods was primarily due to higher expenditures at the Napanee GS.

Capital expenditures for the Other category increased by \$10 million and \$21 million for the three and six month periods ended June 30, 2022, respectively, compared to the same periods in 2021. The increases in both periods are largely reflective of planned investments in information technology systems as part of OPG's digital strategy.

Further details on the Company's major projects can be found in the section, *Core Business and Outlook* under the heading, *Project Excellence*.

SIGNIFICANT DEVELOPMENTS

Project Excellence

Darlington Refurbishment

The refurbishment of Unit 3 is progressing ahead of schedule and is expected to be returned to service by late 2023, which is ahead of the originally planned completion date of the first quarter of 2024. The earlier return to service date reflects OPG's commitment to incorporating lessons learned from the successful Unit 2 refurbishment into the planning and execution of the refurbishment of Unit 3 to date. These improvements have led to innovation, efficiencies and enhanced safety and quality for Unit 3 execution activities. The Unit 3 refurbishment is in the third major segment, Reassembly, which includes the installation and reassembly of reactor components, including new feeder tubes and fuel channel assemblies. The project completed the upper and middle feeder installation series in the second quarter of 2022 and the fuel channel installation series in July 2022. Upon completion of the fuel channel installation, the project commenced the lower feeder installation series.

The islanding of Unit 1, which involves physically separating the unit from the two operating units, was completed in June 2022, on plan, signifying the completion of the first major segment of the unit's refurbishment. The refurbishment of Unit 1 will incorporate the benefits of experience with the first two units to undergo refurbishment, Unit 2 and Unit 3, and additional strategic improvements. The Darlington Refurbishment project is discussed further in the section, *Core Business and Outlook* under the heading, *Project Excellence*.

OPG and X-energy Agreement to Pursue Xe-100 Small Modular Reactors

In June 2022, OPG and X-energy signed a framework agreement to pursue opportunities to deploy Xe-100 SMRs for industrial applications in Canada. Under the agreement, OPG and X-energy will pursue opportunities to deploy Xe-100 advanced reactors in Ontario at industrial sites and identify further potential end users and sites throughout Canada. By combining high-temperature steam and power production, Xe-100 SMRs can directly support the decarbonization of heavy industry including oil sands operations, mining applications, and other industrial processes.

Sir Adam Beck I GS Units G1 and G2 Replacement

In May 2022, OPG successfully completed the replacement of the G2 unit at the Sir Adam Beck I GS, adding approximately 58 MW of renewable in-service generating capacity to the Company's regulated hydroelectric fleet. The completion of the G2 unit marks the first full unit replacement to take place in the station's history. The G1 unit is expected to be placed in-service in the second half of 2022, and is tracking on budget.

Low-carbon Hydrogen Development

Through Atura Power, OPG is laying the groundwork for low-carbon hydrogen production hubs in Ontario as part of a new hydrogen-related business. In April 2022, Atura Power announced the Niagara Hydrogen Centre as its first site for large-scale hydrogen production. The Niagara-based Atura Power hydrogen facility is part of the Province's broader hydrogen strategy, which was released in the same month. The Niagara Hydrogen Centre will use a 20 MW electrolyzer to produce hydrogen, using water and electricity as inputs. During the second quarter of 2022, Atura Power announced partnerships with two Canadian engineering firms to further the advancement of the detailed design and technical selection of key project equipment at the Niagara Hydrogen Centre. Atura Power is also evaluating additional sites in Ontario for low-carbon hydrogen production, including Halton Hills, Brighton Beach (Windsor), Lambton, and Nanticoke. The final investment decision for the Niagara Hydrogen Centre, and the advancement of the four hydrogen hubs feasibility studies, is expected in the second half of 2022, pending an award of federal funding.

Northern Ontario Hydroelectric Opportunities Report

In January 2022, the Province requested OPG to examine opportunities for new hydroelectric development in northern Ontario. As part of this preliminary assessment, the Province asked OPG to work with the Ontario Waterpower Association to update previous evaluations of hydroelectric potential in northern Ontario, while engaging with Indigenous communities to understand how they could benefit from future hydroelectric generation projects. As requested by the Province, OPG shared the results of this work in April 2022 with the Ontario Ministry of Energy and the IESO so that they can be considered as part of the IESO's work toward developing an achievable pathway to net-zero emissions in Ontario's electricity sector.

Financial Strength

Green Bonds

In July 2022, OPG released an update to its Green Bond Framework to include eligible nuclear projects in recognition of the critical role the technology plays in fighting climate change and in achieving OPG's own climate change goals.

On July 14, 2022, OPG issued a nuclear green bond offering under its Medium Term Note Program, a first-of-its-kind for the Company, for \$300 million of senior notes maturing in July 2032, with a coupon interest rate of 4.92 percent. The net proceeds from the issuance will be used to finance or re-finance eligible projects as defined under OPG's updated Green Bond Framework, which now includes the Darlington Refurbishment project and maintenance of existing nuclear facilities.

CORE BUSINESS 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 the customers and Shareholder.

The following sections provide an update to OPG's disclosures in the 2021 annual MD&A related to its four business imperatives – operational excellence, project excellence, financial strength, and social licence. A detailed discussion of these imperatives as part of OPG's corporate strategy is included in the 2021 annual MD&A in the sections, *The Company* and *Core Business 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 assets, through a highly trained and engaged workforce. Workplace safety and public safety are overriding priorities in all activities performed at OPG.

Electricity Generation Production and Reliability

- OPG's plan to optimize the end of operations dates of the Pickering GS includes operating Units 1 and 4 to the end of September 2024 and December 2024, respectively, and Units 5 to 8 until the end of 2025. In connection with this objective, OPG continues to perform additional technical analysis and inspections to confirm fitness-for-service of fuel channels and other major station components in support of optimizing the station's planned shutdown sequence to 2025, including confirming the validity of the previously established Periodic Safety Review (PSR) and associated Integrated Implementation Plan (IIP). In July 2022, CNSC staff concurred with OPG's reassessment of the PSR, which confirmed that there is a high level of safety throughout the continued operation of the station to 2025. OPG is required to notify the CNSC of the results of the IIP reassessment by the end of 2022, in support of the CNSC's regulatory approval required for post-2024 commercial operation through a public hearing process.
- Unit 2 of the Darlington GS achieved a new record for its longest continuous operation. Before being taken offline for an unplanned maintenance outage on June 22, 2022, Unit 2 supplied energy to Ontario's electricity grid for a total of 529 consecutive days without being taken out of service for maintenance or repairs.
- During the second quarter of 2022, OPG's hydroelectric operations experienced high water levels and flows as a result of spring freshet, due to high snowpack and substantial rain experienced primarily in the Northwestern region 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 Emergency Preparedness and Response Plan (EPRP). The EPRP includes enhanced training programs and emphasizes the importance of learning from experience.
- OPG continues to execute on a turbine and generator overhaul program for its hydroelectric generating units across Ontario. Over the next 20 years, the estimated \$2.5-billion program will ensure that the Company's hydroelectric fleet can secure decades of clean hydroelectric generation that will help OPG meet the province's future clean power needs and the Company's climate change goals. During the second quarter of 2022, OPG completed the overhaul and upgrade of Unit 3 at the Barrett Chute GS, and the station service upgrade at Whitedog GS. The Company also continued execution of the overhaul work on Unit 7 of the Otto Holden GS, Unit 1 of the Silver Falls GS, and the rehabilitation of R.H. Saunders GS concrete infrastructure to ensure continued safe operations.

Sale of Non-Core Real Estate Site

OPG has executed an agreement to sell the premises located at 800 Kipling Avenue in Toronto, Ontario as part of a corporate real estate strategy to reduce and optimize the existing real estate footprint. The after-tax gain on sale expected to be recognized upon completing the transaction, including the impact of revisions to the related asset retirement obligation, is estimated to be approximately \$125 million, subject to certain closing conditions. The sale is expected to be completed in the second half of 2022.

Collective Agreements

The one-year collective agreement between the Power Workers' Union and OPG expired on March 31, 2022. Renewal negotiation is ongoing.

ONTARIO POWER GENERATION INC. Management's Discussion & Analysis For the three and six month periods ended June 30, 2022 and 2021



Project Excellence

OPG is undertaking a number of generation development and other projects to maximize the value of and expand its generating fleet in support of Ontario's electricity system, striving for excellence in the planning and delivery of all capital and maintenance projects across the organization. The status updates of OPG's major projects are outlined below.

Project	Capital expenditures	Approved budget	Expected in-service	Current Status
(millions of dollars)	Year-to-date ¹ Life-to-date		date	
Darlington Refurbishment	471 8,730	12,800 5	Unit 1 — 2025	Unit 3 refurbishment is progressing ahead of schedule and is in the Reassembly segment. Unit 1 is progressing on schedule and is in the Disassembly segment. The project is tracking to the overall timeline to refurbish all four of the station's units by the end of 2026. For further details, see below.
Little Long Dam Safety Project	112 429	650	2023	During the second quarter of 2022, OPG completed the installation of the east bridge deck and concrete placements at the east gates. Excavation at the west cofferdam was also completed during the second quarter of 2022. Replacement of the existing Adam Creek gates continues. OPG has commenced drilling at the west upstream wall. The project is expected to be completed in 2023 and is tracking on budget.
Smoky Falls Dam Safety Project	36 69	390	2025	During the second quarter of 2022, OPG completed the recommissioning of Gate 1 and the removal of the east bridge deck and existing gate structures. Closure of the existing bays and stabilization work of the dam continues. The project is expected to be completed in 2025 and is tracking on budget.
Redevelopment of Calabogie Hydroelectric GS	28 118	145	2023	During the second quarter of 2022, OPG successfully completed testing of the new powerhouse crane and concreting of the stay rings and water passages of both the G1 and G2 units. Installation of the switchyard and equipment continues, as planned. Due to repairs required for the upstream gate embedded parts and machining of turbine stay rings, the new in-service date for the project is expected to be in early 2023. The project continues to track on budget.

Year-to-date represents capital expenditures for the six months ended June 30, 2022.
 The total project budget of \$12.8 billion is for the refurbishment of all four units at the Darlington GS.

Project	Capital expenditures		Approved budget	Expected in-service	Current Status
(millions of dollars)	Year-to-date ¹ Life-to-	date		date	
Sir Adam Beck I GS Units G1 and G2 Replacement	13	107	128	2022	In May 2022, OPG successfully completed the replacement of the G2 unit. The project continues to advance the installation of the G1 unit turbine and generator. The G1 unit is expected to be placed in-service in the second half of 2022 and is tracking on budget. The project is discussed further in the section, <i>Significant Developments</i> under the heading, <i>Project Excellence –</i> <i>Sir Adam Beck I GS Units G1 and G2</i> <i>Replacement.</i>

¹ Year-to-date represents capital expenditures for the six months ended June 30, 2022.

Darlington Refurbishment

The Darlington Refurbishment project commenced in 2016 as the four Darlington GS units were 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 refurbishment of the first unit, Unit 2, was completed in June 2020. The second unit, Unit 3, commenced refurbishment in September 2020 and is expected to be returned to service by late 2023, ahead of the originally planned return to service date of the first quarter of 2024. The third unit, Unit 1, commenced refurbishment in mid-February 2022 and is scheduled to be returned to service in the second quarter of 2025. Planning and pre-requisite activities for the refurbishment of the fourth unit, Unit 4, are progressing as planned. The planning, pre-requisite and execution work for Unit 1 and Unit 4 refurbishments has and will incorporate the benefits of experience with the first two units, Unit 2 and Unit 3, and additional strategic improvements. The refurbishment of Unit 4 is scheduled to be completed by the end of 2026.

Unit 3 refurbishment is currently in the third major segment, Reassembly. The upper and middle feeder installation series was completed during the second quarter of 2022 and the fuel channel installation series was completed in July 2022. The lower feeder installation series commenced following the completion of the fuel channel installation and is expected to be completed in the fourth quarter of 2022.

Unit 1 refurbishment activities are progressing on schedule, with the islanding of Unit 1 completed in June 2022. The second segment, Disassembly, commenced immediately following the islanding with preparatory work to support the removal of feeder tubes, including opening the reactor air lock doors, setting up specialized tooling and equipment, and commencing the disassembly of reactor components.

OPG continues to assess and seek ways to manage the impact of the COVID-19 pandemic on the project's total cost, which is otherwise continuing to track to the \$12.8 billion budget.

Ranney Falls Hydroelectric GS

In June 2022, OPG successfully completed the replacement of the G3 unit, a 10 MW single-unit, at the Ranney Falls GS site, doubling the site's in-service generating capacity from 10 to 20 MW. The project also included a new powerhouse and spillway. The Ranney Falls GS is included in the Regulated – Hydroelectric Generation business segment.

ONTARIO POWER GENERATION INC. Management's Discussion & Analysis For the three and six month periods ended June 30, 2022 and 2021



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 return on the Shareholder's investment, while seeking to minimize the impact on electricity customers through continuous improvement of the Company's cost structure.

For regulated operations, achievement of the above objectives is largely dependent on outcomes of OPG's applications for regulated prices to the OEB and prudent growth of rate base earning a return. Rate base for OPG represents the average net level of investment in regulated fixed and intangible assets in service and an allowance for working capital. OPG is focused on demonstrating in its applications for regulated prices that the costs required to operate and invest in the Company's regulated assets are reasonable and being prudently incurred and should be fully recovered, and that the Shareholder's investment in these assets should earn an appropriate return. For further information on OEB-approved rate base levels, refer to OPG's 2021 annual MD&A in the section, *Revenue Mechanisms for Regulated and Non-Regulated Generation*.

The following table presents the OEB-authorized regulated prices for electricity generated from OPG's regulated facilities in Ontario for the period from January 1, 2021 to December 31, 2026 in effect as of the date of this MD&A:

(\$/MWh)	2021	2022	2023	2024	2025	2026
Permitted Nuclear Constantion						
Regulated – Nuclear Generation						
Base regulated price ¹	89.70	104.06	107.79	103.48	102.85	111.33
Deferral and variance account rate riders	6.13	1.16	1.25	1.15	5.34	7.58
Total regulated price	95.83	105.22	109.04	104.63	108.19	118.91
Regulated – Hydroelectric Generation						
Base regulated price	43.88	43.88	43.88	43.88	43.88	43.88
Deferral and variance account rate riders	2.05	1.03	1.03	1.03	0.69	0.69
Total regulated price	45.93	44.91	44.91	44.91	44.57	44.57

¹ Base regulated prices for the nuclear facilities were established 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. Base regulated prices for the nuclear facilities do not include amounts deferred in the Rate Smoothing Deferral Account.

The base regulated prices in effect beginning January 1, 2022 were established by the final payment amounts order issued by the OEB in January 2022 reflecting the OEB's decisions on OPG's 2022-2026 rate application issued during the second half of 2021.

Pursuant to the OEB's January 2022 payment amounts order, \$19 million of the approved nuclear revenue requirements will be deferred in the Rate Smoothing Deferral Account in 2022. Additionally, \$64 million will be deferred in 2023 and no portion of the nuclear revenue requirements will be deferred over the 2024-2026 period. Amounts deferred in the Rate Smoothing Deferral Account are recorded as revenue in the Regulated – Nuclear Generation business segment in the period to which the underlying approved revenue requirement relates. *Ontario Regulation 53/05* requires the OEB 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.

Pursuant to *Ontario Regulation 53/05*, the base regulated price for OPG's hydroelectric electricity generation (hydroelectric base regulated price) for the period from January 1, 2022 to December 31, 2026 has been set equal to the 2021 hydroelectric base regulated price.

For generation assets that do not form part of the rate regulated operations, OPG generally seeks to secure long-term revenue arrangements that support an appropriate return on the investment. In line with this strategy, all of OPG's non-regulated facilities in Ontario are subject to ESAs with the IESO or other long-term contracts.

Ensuring Availability of Cost Effective Funding

OPG actively monitors its funding requirements and forecasts availability of funds to ensure that it can meet the Company's operational needs, project and other commitments and long-term obligations. In addition to funds generated from operations, OPG utilizes the following primary funding sources: commercial paper; letters of credit; credit facilities; long-term debt sourced from the Ontario Electricity Financial Corporation (OEFC), an agency of the Province; public debt offerings; and private placement project financing.

The Company's financing strategy leverages the strength of its balance sheet to obtain cost effective long-term corporate debt. OPG also accesses the capital markets for private placement project financing, secured by the assets of the project, where the characteristics of the project support such financing.

Credit Ratings

Maintaining an investment grade credit rating supports OPG's ability to access cost effective financing. As at June 30, 2022, the Company's credit ratings were as follows:

Type of Rating	DBRS Limited	S&P Global Ratings	Moody's Investors	
	(DBRS) ¹	(S&P) ²	Service (Moody's) ³	
Issuer rating	A (low)	BBB+	A3	
Senior unsecured debt	A (low)	BBB+	A3	
Trend/Outlook	Stable	Stable	Stable	
Commercial paper program – Canada	R-1 (low)	A-1 (low)	NR ⁴	
Commercial paper program – US	NR ⁴	A-2	P-2	

¹ In April 2022, DBRS confirmed OPG's issuer rating at A (low), senior unsecured debt rating at A (low) and Canadian commercial paper rating at R-1 (low), all with Stable trends.

² In August 2022, S&P confirmed OPG's ratings including BBB+ issuer's rating with stable outlook, BBB+ senior unsecured debt rating and A-1 (low) Canada commercial paper rating.

³ In April 2022, Moody's confirmed OPG's ratings including A3 issuer's rating with stable outlook, A3 senior unsecured debt rating and P-2 US commercial paper rating.

⁴ NR indicates no rating assigned.

Additional discussion of the Company's credit facilities and liquidity can be found in the section, *Liquidity and Capital Resources*.



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, and strives to be a leader in climate change action and Equity, Diversity & Inclusion (ED&I) practices.

Further details on social licence activities and initiatives can be found in the section, *Environmental, Social, Governance and Sustainability*.

Outlook

Operating Performance

Broader global economic volatility, including further elevated levels of inflation combined with supply chain disruptions, may affect OPG's operating and capital portfolio. Despite this risk, OPG expects net income for the 2022 year to be higher than 2021 reflecting the impact of higher OEB-approved nuclear base regulated prices effective January 1, 2022, and the decrease in earnings in 2021 as a result of the OEB's disallowance of costs and adjustments to the in-service date for inclusion in rate base of the approved costs for the Heavy Water Storage and Drum Handling Facility. OPG continues to monitor and proactively manage the impact of inflation through its established risk mitigation measures, including contracting mechanisms and procurement.

Nuclear Segregated Funds

OPG's operating results can be affected by earnings on the nuclear fixed asset and nuclear waste management funds (Nuclear Segregated Funds) as part of the Regulated – Nuclear Sustainability Services business segment. While the Nuclear Segregated Funds are managed to achieve, in the long term, the target rate of return based on the discount rate specified in the Ontario Nuclear Funds Agreement (ONFA), rates of return earned in a given period are subject to volatility due to financial market conditions and, for the portion of the Used Fuel Segregated Fund guaranteed by the Province, changes in the Ontario consumer price index. This volatility can cause fluctuations in the Company's net income in the short term if the funds are not in a fully funded or overfunded position. The volatility is reduced by the impact of an OEB-authorized regulatory account.

As at June 30, 2022, the Decommissioning Segregated Fund was overfunded by approximately 26 percent and the Used Fuel Segregated Fund was overfunded by approximately 3 percent based on the approved ONFA Reference Plan in effect for the years 2022 to 2026 (2022 ONFA Reference Plan).

Further details on OPG's Outlook, including Capital Expenditures and Financing and Liquidity, can be found in OPG's 2021 annual MD&A in the section, *Core Business and Outlook* under the heading, *Outlook*.

ENVIRONMENTAL, SOCIAL, GOVERNANCE AND SUSTAINABILITY

OPG recognizes that its environmental, social and governance (ESG) practices, and operating in a safe, sustainable, and inclusive manner is directly connected to business success and is expected by the Company's customers, stakeholders, and Shareholder. As Ontario's largest clean energy provider, the Company strives to be a leader in ESG and climate change action. This is accomplished through the implementation of operational and growth strategies that minimize the Company's environmental footprint, support reductions in greenhouse gas emissions, and increase resilience to climate change impacts, while taking into account impacts on customers. Central to OPG's ESG and Sustainability focus is its commitment to becoming a global ED&I best practice leader by 2030.

Environmental and Sustainability

In May 2022, the CNSC released sampling results from its 2021 independent environmental monitoring program, which provided evidence that there are no anticipated health impacts from the operations at the Darlington and Pickering nuclear generating stations and that people and the environment around these facilities are protected.

In June 2022, OPG was named, for the tenth consecutive year, as one of the Best 50 Canadian Corporate Citizens by Corporate Knights. The annual corporate rankings are based on environmental, social, governance and clean economy performance indicators to score companies against their peers.

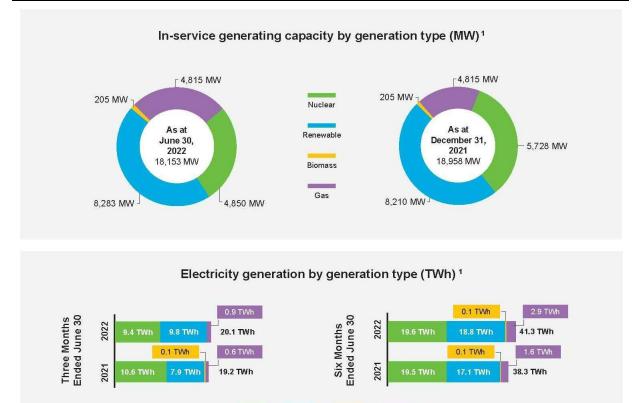
Climate Change

Since the launch of the Climate Change Plan, OPG has made advancements in several areas to ensure sustainable, resilient operations and to invest in the generation of clean energy. This includes progressing the Darlington Refurbishment project as one of Canada's largest clean energy infrastructure projects, continuing to lead the development of SMRs with the goal of deploying Canada's first commercial grid-scale SMR at the DNNP site, and executing work required to maximize the safe and reliable operating life of the Pickering GS. OPG also continues to advance a number of projects to increase the generating capacity of its hydroelectric generating assets and to support the electrification of Ontario's transportation sector.

Climate-Related Performance and Key Metrics

OPG continues to determine the most relevant climate-related impacts for the business in the context of its ESG and Sustainability framework and is engaged in the development of consistent industry metrics to quantify the level of achieved climate change resilience. OPG is in the process of developing such quantitative metrics and targets for climate change adaptation as part of an effort to integrate climate considerations into business processes. In the meantime, OPG has identified certain initial metrics that it considers relevant to stakeholders, as outlined below.

Climate Change Metrics



Nuclear Renewable

Gas



Includes OPG's proportionate share of in-service generating capacity and electricity generation from co-owned and 1 minority-held facilities, as applicable. Nuclear generating units undergoing refurbishment are excluded. Gas category includes the dual-fueled Lennox GS and the Company's combined cycle plants operated through Atura Power.

2 Scope 1 and Scope 2 emissions include OPG's proportionate share from co-owned facilities, as applicable.

3 OPG continues to evaluate and enhance its Scope 1 and 2 GHG emission sources and quantification processes.

Climate Change M	letrics
In-service generating capacity by generation type ¹	In-service generating capacity from low-carbon emitting sources decreased as at June 30, 2022, from December 31, 2021. The decrease was primarily due to the commencement of the refurbishment of the third Darlington GS unit, Unit 1, which was taken offline in mid-February 2022.
Electricity generation by generation type ²	During the three and six month periods ended June 30, 2022, approximately 95 percent and 93 percent, respectively, of OPG's total electricity generation was supplied by low-carbon sources. The percentage of total electricity supplied by low-carbon sources decreased in the three months ended June 30, 2022, compared to the same period in 2021, primarily due to lower electricity generation at the Darlington GS due to the commencement of the refurbishment of Unit 1 and from an increase in electricity generation from the Atura Power business segment due to higher electricity demand in the Ontario market. The decrease for the six months ended June 30, 2022, compared to the same period in 2021, was primarily due to increased electricity generation from the Atura Power business segment due to higher electricity demand in the Ontario market.
EBIT from generating stations by facility category ³	Earnings before interest and income taxes from low-carbon generation increased during the six months ended June 30, 2022, compared to the same period in 2021, primarily due to higher earnings from the Regulated – Nuclear Generation business segment. Earnings before interest and income taxes from low-carbon generation for the three months ended June 30, 2022 was comparable to the same period in 2021.
Value and use of net proceeds from green bond offerings	In July 2022, OPG released an update to its Green Bond Framework and issued a first-of-its- kind nuclear green bond offering, under its Medium Term Note Program, for \$300 million to finance or re-finance eligible projects as defined under OPG's Green Bond Framework. For further details, refer to the section, <i>Significant Developments</i> under the heading, <i>Financial</i> <i>Strength</i> – <i>Green Bonds</i> . During the second quarter of 2022, the Company issued its annual Use of Proceeds Report, which outlines details regarding the use of proceeds from the May 2021 green bond issuance by OPG's wholly-owned Lower Mattagami Energy Limited Partnership. OPG's Green Bond Framework and the Use of Proceeds Report are available on the Company's website at <u>www.opg.com</u>
Scope 1 GHG emissions – Direct and Emission Rate ⁴	The Scope 1 GHG emissions metric identifies direct carbon dioxide equivalent (CO ₂ eq.) emissions from OPG's thermal and nuclear operations in Ontario, including the Company's proportionate share from co-owned combined cycle facilities prior to their acquisition, and other facilities. For the year ended December 31, 2021, 2,092,543 tonnes of CO ₂ eq. (2020 – 1,308,240 tonnes of CO ₂ eq.) were emitted by thermal operations, representing approximately 99 percent of OPG's total CO ₂ eq. emissions, with the remainder emitted by nuclear operations and other facilities. The increase in CO ₂ eq. emissions in 2021 was primarily due to increased electricity production from thermal operations. For the year ended December 31, 2021, OPG emitted CO ₂ eq. at an average rate of 27.2 grams per kilowatt-hour (kWh) based on total electricity generation (2020 – 16.1 grams per kWh).
Scope 2 GHG emissions - Indirect ⁴	The Scope 2 GHG emissions metric identifies indirect CO ₂ eq. emissions from the purchase of energy from utility providers. For the year ended December 31, 2021, an estimated 4,250 tonnes of CO ₂ eq. (2020 – 3,986 tonnes of CO ₂ eq.) were emitted based on purchases of energy.

Identifies capacity available from OPG's different generation sources and tracks low-carbon energy capacity relative to other sources. Nuclear, Renewable (which includes hydroelectric and solar) and Biomass (which uses wood pellets from sustainably managed forests) generation are considered to be low-carbon emitting generation sources. Low-carbon emitting sources continue to account for the majority of OPG's total in-service generating capacity.

² Identifies electricity generated from OPG's different generation sources and tracks low-carbon energy generation sources (Nuclear, Renewable and Biomass) relative to other sources.

3

 ³ Identifies the portion of OPG's EBIT from electricity generating stations derived from low-carbon generation sources.
 ⁴ Scope 1 GHG emissions and Emission Rate and Scope 2 GHG emissions are reported annually. Data for 2022 will be available in the second quarter of 2023.

ONTARIO POWER GENERATION INC. Management's Discussion & Analysis For the three and six month periods ended June 30, 2022 and 2021

Equity, Diversity and Inclusion

OPG is committed to workplace ED&I as part of a culture in which all employees, contractors and business partners are treated with fairness and respect. OPG recognizes that ED&I is integral to building a diverse, committed and agile workforce in a dynamic and changing industry, and is therefore fundamental to achieving the Company's strategic goals.

OPG's ED&I Strategy provides a roadmap to guide the Company's journey towards ED&I excellence by further embedding ED&I principles and measuring ED&I outcomes in organizational processes and decision-making. During the second quarter of 2022, an ED&I Strategy Council was formed to provide oversight and support for the enterprise-wide implementation of the ED&I Strategy. OPG's ED&I Strategy can be found on the Company's website <u>www.opg.com</u>.

Indigenous Relations

The Company believes in building long-term, mutually beneficial working relationships with Indigenous communities, businesses and organizations across Ontario and continues to support procurement, employment and education opportunities with Indigenous communities. OPG seeks to establish these relationships based on a foundation of respect, transparency and mutual responsibility. OPG's commitment in the area of Indigenous relations includes, where appropriate, pursuing generation-related development partnerships on the basis of long-term commercial arrangements and other joint projects proximate to the Company's present and future operations. OPG maintains a certified Gold Designation under the Canadian Council for Aboriginal Business' (CCAB) Progressive Aboriginal Relations (PAR) program, recognizing OPG as a national best-practices organization with a demonstrated commitment in the area of Indigenous relations.

In October 2021, OPG launched its inaugural Reconciliation Action Plan. Building on the Company's long-standing commitment to Indigenous communities, the action plan outlines the Company's overall goals and the supporting actions OPG will take to advance reconciliation in a number of key areas. OPG continues to make progress across the company in meeting the goals outlined in the Reconciliation Action Plan. During the second quarter of 2022, OPG developed an online Reconciliation Knowledge Hub that will serve as an important information resource for all OPG employees. Additionally, OPG's Board of Directors (Board) participated in an Indigenous Cultural Competency Training session as part of an annual Reconciliation Action Plan commitment by the Board. OPG also held a number of events as part of acknowledging National Indigenous History Month and National Indigenous Peoples Day to highlight and celebrate the diversity of Indigenous languages in Ontario. In July 2022, OPG celebrated the 30th anniversary of the Indigenous Circle, OPG's longest running employee resource group. OPG's Reconciliation Action Plan can be found on the Company's website www.opg.com.

DISCUSSION OF OPERATING RESULTS BY BUSINESS SEGMENT

Regulated – Nuclear Generation Segment

	Three Mon Jun		Six Months Ended June 30	
(millions of dollars – except where noted)	2022	2021	2022	2021
Electricity Generation (TWh)	9.4	10.6	19.6	19.5
Revenue	1,035	1,055	2,167	2,001
Fuel expense	64	70	132	129
Gross margin	971	985	2,035	1,872
Operations, maintenance and administration expenses	546	550	1,105	1,196
Property taxes	8	6	13	13
Earnings before interest, income taxes, depreciation and amortization	417	429	917	663
Depreciation and amortization expenses	149	145	300	290
Earnings before interest and income taxes	268	284	617	373

Earnings before interest and income taxes from the segment decreased by \$16 million for the three months ended June 30, 2022, compared to the same period in 2021. The decrease was primarily due to lower revenue of \$105 million as a result of lower electricity generation of 1.2 TWh mainly due to the refurbishment of Unit 1 at the Darlington GS, higher depreciation and amortization expenses of \$58 million, excluding amortization expense related to the recovery of regulatory account balances, and lower non-electricity generation revenue of \$26 million, primarily due to decreased heavy water tritium removal (detritiation) services and isotope sales. These impacts were partially offset by an increase in revenue of \$138 million from a higher OEB-approved nuclear base regulated price.

The increase in segment earnings before interest and income taxes of \$244 million for the six months ended June 30, 2022, compared to the same period in 2021, was primarily due to an increase in revenue of \$288 million from a higher OEB-approved nuclear base regulated price. Additionally, there were lower amounts of OM&A expenses of \$91 million, mainly due to a planned cyclical maintenance outage for Unit 1 of the Darlington GS during the first quarter of 2021. These impacts were largely offset by higher depreciation and amortization expenses of \$118 million, excluding amortization expense related to the recovery of regulatory account balances, and lower non-electricity generation revenue of \$43 million, primarily due to decreased heavy water detritiation services and isotope sales.

For both the three and six month periods ended June 30, 2022, depreciation and amortization expenses increased compared to the same periods in 2021, primarily due to amounts recorded in 2021 as recoverable from customers in regulatory accounts in connection with differences in the current accounting end-of-life assumptions for the Pickering GS from those assumed in the nuclear base regulated price in effect during 2021. The higher depreciation and amortization expenses also reflected higher depreciation expense recognized from placing capital in service.

Lower amortization expense related to regulatory account balances was primarily offset by a reduction in revenue resulting from lower rate riders authorized by the OEB for the recovery of approved balances in OEB-authorized regulatory accounts.

As at December 31, 2021, OPG recorded a net decrease of approximately \$327 million to the nuclear fixed asset and nuclear waste management liabilities (Nuclear Liabilities), with a corresponding net decrease to the asset retirement costs capitalized as part of the carrying value of the nuclear generating stations to which the obligations relate, as a result of an update to the Company's nuclear waste management and nuclear facilities decommissioning obligations determined as part of the 2022 ONFA Reference Plan update process. The resulting changes in accretion expense on Nuclear Liabilities recorded in the Regulated – Nuclear Sustainability Services business segment and the resulting changes in depreciation, fuel and OM&A expenses recorded in the Regulated – Nuclear Generation business segment

during the three and six month periods ended June 30, 2022, compared to the same periods in 2021, were largely offset by the impact of existing regulatory accounts authorized by the OEB.

The planned and unplanned outage days at the Darlington and Pickering nuclear generating stations were as follows:

		Three Months Ended June 30		hs Ended e 30
	2022	2021	2022	2021
Planned Outage Days Darlington GS ¹ Pickering GS	0.3 47.2	23.7 77.0	0.3 135.2	79.1 199.2
Unplanned Outage Days Darlington GS ¹ Pickering GS	15.6 22.9	15.9 10.9	16.0 24.8	31.8 39.5

¹ The planned and unplanned outage days exclude unit(s) during the period in which they are undergoing refurbishment. Accordingly, Unit 3 and Unit 1 of the Darlington GS are excluded from the measure since commencing refurbishment on September 3, 2020 and February 15, 2022, respectively.

The fewer planned outage days at the Darlington GS for the three and six month periods ended June 30, 2022, compared to the same periods in 2021, were primarily driven by the station's cyclical maintenance schedule.

The fewer planned outage days at the Pickering GS for the three months ended June 30, 2022, compared to the same period in 2021, were primarily driven by the station's cyclical maintenance schedule. The fewer planned outage days at the station for the six months ended June 30, 2022, compared to the same period in 2021, were also due to higher planned outage days associated with other planned maintenance and repair work executed at the station in 2021.

The fewer unplanned outage days at the Darlington GS for the six months ended June 30, 2022, compared to the same period in 2021, were primarily driven by non-routine instrumentation and fuel handling maintenance activities at the station in 2021.

The higher unplanned outage days at the Pickering GS for the three months ended June 30, 2022, compared to the same period in 2021, were primarily required to perform turbine maintenance activities at the station. Unplanned outage days decreased at the Pickering GS for the six months ended June 30, 2022, compared to the same period in 2021, primarily due to a higher number of unplanned outage days to perform fuel handling maintenance activities in the first quarter of 2021.

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

		Three Months Ended June 30		Six Months Ended June 30	
	2022	2021	2022	2021	
Unit Capability Factor (%) ¹					
Darlington GS	91.4	85.8	96.1	79.7	
Pickering GS	87.8	84.0	85.6	78.1	

¹ The nuclear Unit Capability Factor excludes unit(s) during the period in which they are undergoing refurbishment. Accordingly, Unit 3 and Unit 1 of the Darlington GS are excluded from the measure since commencing refurbishment on September 3, 2020 and February 15, 2022, respectively.

The Unit Capability Factor at the Darlington GS increased for the three and six month periods ended June 30, 2022, compared to the same periods in 2021, primarily due to fewer planned outage days.

The Unit Capability Factor at the Pickering GS increased for the three months ended June 30, 2022, compared to the same period in 2021, primarily due to fewer planned outage days, partially offset by a higher number of unplanned outage days. For the six months ended June 30, 2022, the Unit Capability Factor at the Pickering GS increased compared to the same period in 2021, primarily due to fewer planned and unplanned outage days.

Regulated – Nuclear Sustainability Services Segment

	Three Months Ended June 30		Six Months Ended June 30	
(millions of dollars – except where noted)	2022	2021	2022	2021
Revenue Operations, maintenance and administration expenses Accretion on nuclear fixed asset removal and nuclear waste management liabilities	48 48 283	49 49 268	98 98 566	94 94 538
Earnings on nuclear fixed asset removal and nuclear waste management funds	(257)	(240)	(515)	(479)
Loss before interest and income taxes	(26)	(28)	(51)	(59)

The segment loss before interest and income taxes decreased by \$2 million and \$8 million for the three and six month periods ended June 30, 2022, compared to the same periods in 2021, respectively. The decreases were primarily due to higher earnings on the Nuclear Segregated Funds, partially offset by higher accretion expense on the Nuclear Liabilities.

For both the three and six month periods ended June 30, 2022, the higher earnings from the Nuclear Segregated Funds were primarily due to the growth in the present value of the underlying funding liabilities per the approved ONFA reference plan in effect. 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, 2022, and during the same periods in 2021, they were not impacted by market returns and the rate of return guarantee provided by the Province for a portion of the Used Fuel Segregated Fund. Additionally, an adjustment recorded in the first quarter of 2022 to adjust the value of the Nuclear Segregated Funds reported on the consolidated balance sheet to the underlying funding liabilities reflected in the 2022 ONFA Reference Plan contributed to higher earnings for the six months ended June 30, 2022. The 2022 ONFA Reference Plan was approved by the Province in March 2022.

When both funds are in an overfunded position, OPG limits the amount of Nuclear Segregated Funds assets reported on the consolidated balance sheet to the present value of the underlying funding liabilities per the approved ONFA reference plan in effect. Further details on the accounting for the Nuclear Segregated Funds can be found in OPG's 2021 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 Generation Segment

		Three Months Ended June 30		ns Ended e 30
(millions of dollars – except where noted)	2022	2021	2022	2021
Electricity generation (TWh)	8.2	6.6	16.2	14.5
Revenue ¹	407	427	794	815
Fuel expense	88	87	152	156
Gross margin	319	340	642	659
Operations, maintenance and administration expenses	90	83	176	175
Property tax	-	1	1	1
Other losses	-	1	1	1
Earnings before interest, income taxes, depreciation and amortization	229	255	464	482
Depreciation and amortization expenses	44	54	86	106
Earnings before interest and income taxes	185	201	378	376

¹ During the three and six month periods ended June 30, 2022, the Regulated – Hydroelectric Generation business segment revenue included incentive payment reductions of \$4 and \$1 million, respectively, related to the OEB-approved hydroelectric incentive mechanism (three and six month periods ended June 30, 2021 – incentive payments of \$6 million and \$10 million, respectively). The mechanism provides a pricing incentive to OPG to shift hydroelectric production from lower market price periods to higher market price periods, reducing the overall costs to customers. The incentive payments are reduced to remove incentive revenues arising in connection with SBG conditions.

Earnings before interest and income taxes from the segment decreased by \$16 million for the three months ended June 30, 2022, compared to the same period in 2021. The decrease was mainly due to the reduction in hydroelectric incentive mechanism payment and higher OM&A expenses. The decrease was partially offset by the impact of higher market prices on congestion management revenues.

Earnings before interest and income taxes from the segment increased by \$2 million for the six months ended June 30, 2022, compared to the same period in 2021. The increase was mainly driven by the impact of higher market prices on congestion management revenues, partially offset by the reduction in hydroelectric incentive mechanism payments and higher OM&A expenses.

Lower depreciation and amortization expenses for the three and six month periods ended June 30, 2022, compared to the same periods in 2021, were mainly due to lower amortization expense related to regulatory account balances. This was primarily offset by a reduction in revenue resulting from lower rate riders authorized by the OEB for the recovery of approved balances in OEB-authorized regulatory accounts.

Hydroelectric Availability for the generating stations within the Regulated – Hydroelectric Generation business segment was as follows:

		Three Months Ended June 30		Six Months Ended June 30	
	2022	2021	2022	2021	
Hydroelectric Availability (%) ¹	91.6	88.8	90.6	90.3	

¹ Hydroelectric Availability is defined in the section, Key Operating Performance Indicators and Non-GAAP Financial Measures.

Hydroelectric Availability increased for the three months ended June 30, 2022, compared to the same period in 2021, primarily due to fewer planned outages across the regulated hydroelectric fleet. Hydroelectric Availability for the six months ended June 30, 2022 was comparable to the same period in 2021.

Contracted Hydroelectric and Other Generation Segment

Three Mont June			Six Months Endeo June 30	
(millions of dollars – except where noted)	2022	2021	2022	2021
Electricity Generation (TWh)	1.6	1.4	2.6	2.7
Revenue	190	167	383	348
Fuel expense	8	12	20	23
Gross margin	182	155	363	325
Operations, maintenance and administration expenses	61	57	116	116
Accretion on fixed asset removal liabilities	2	1	4	3
Property taxes	3	4	9	8
Other losses	-	-	1	1
Earnings before interest, income taxes, depreciation and amortization	116	93	233	197
Depreciation and amortization expenses	40	37	78	74
Earnings before interest and income taxes	76	56	155	123

Earnings before interest and income taxes from the segment increased by \$20 million and \$32 million for the three and six month periods ended June 30, 2022, respectively, compared to the same periods in 2021. The increase in both periods was primarily due to higher earnings from US operations due to higher wholesale electricity market prices and higher earnings from the Atikokan GS. The Ontario-based hydroelectric facilities subject to ESAs with the IESO continue to contribute a stable level of business segment earnings.

Hydroelectric Availability and the Thermal Equivalent Forced Outage Rate (EFOR) within the Contracted Hydroelectric and Other Generation business segment were as follows:

		Three Months Ended June 30		Six Months Ended June 30	
	2022	2021	2022	2021	
Hydroelectric Availability (%) 1.2	86.7	89.6	87.2	87.7	
Thermal EFOR (%) ²	0.7	2.4	0.4	2.5	

¹ Hydroelectric Availability reflects hydroelectric generating stations in Ontario and the United States.

² Hydroelectric Availability and Thermal EFOR are defined in the section, *Key Operating Performance Indicators and Non-GAAP Financial Measures*.

Hydroelectric Availability decreased for the three months ended June 30, 2022, compared to the same period in 2021, primarily due to higher unplanned outages at the Lower Mattagami generating stations. For the six months ended June 30, 2022, hydroelectric availability was comparable to the same period in 2021.

The Thermal EFOR decreased for the three and six month periods ended June 30, 2022, compared to the same periods in 2021, primarily due to fewer unplanned outage days at the Lennox GS.

Atura Power Segment

		Three Months Ended June 30		s Ended 30
(millions of dollars – except where noted)	2022	2021	2022	2021
Electricity Generation (TWh)	0.9	0.6	2.9	1.6
Revenue	193	143	419	302
Fuel expense	77	34	179	79
Gross margin	116	109	240	223
Operations, maintenance and administration expenses	17	15	32	32
Accretion on fixed asset removal liabilities	1	1	1	1
Property taxes	-	-	1	1
Other losses	(1)	-	(1)	-
Earnings before interest, income taxes, depreciation	99	93	207	189
and amortization				
Depreciation and amortization expenses	29	27	57	55
- · · ·				
Earnings before interest and income taxes	70	66	150	134

Earnings before interest and income taxes from the segment increased by \$4 and \$16 million for the three and six month periods ended June 30, 2022, respectively, compared to the same periods in 2021. The increase in earnings for both periods was primarily due to higher gross margin as a result of increased electricity generation driven by higher electricity demand in the Ontario market.

Thermal Availability within the Atura Power business segment as at June 30, 2022 and 2021 was as follows:

	As June	
	2022	2021
Thermal Availability (%) ¹	91.4	94.0

¹ Thermal Availability is defined in the section, *Key Operating Performance Indicators and Non-GAAP Financial Measures*. The measure reflects the thermal availability of the combined cycle plants as at the period end date, calculated on a three-year rolling average basis.

Thermal Availability decreased as at June 30, 2022, compared to the same period in 2021, primarily due to a planned outage at the Napanee GS.

LIQUIDITY AND CAPITAL RESOURCES

OPG maintains a range of funding sources to ensure sufficient liquidity and meet financing requirements, as discussed in the section, *Core Business and Outlook* under the heading, *Financial Strength – Ensuring Availability of Cost Effective Funding*. 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, 2022 and 2021 were as follows:

	Three Months Ended June 30		Six Months Ended June 30		
(millions of dollars)	2022	2021	2022	2021	
Cash, cash equivalents and restricted cash, beginning of period	933	834	698	725	
Cash flow provided by operating activities Cash flow used in investing activities Cash flow used in financing activities	757 (631) (26)	524 (472) (29)	1,617 (1,229) (52)	1,076 (699) (244)	
Effect of exchange rate changes on cash, cash equivalents and restricted cash	2	-	1	(1)	
Net increase in cash, cash equivalents and restricted cash	102	23	337	132	
Cash, cash equivalents and restricted cash, end of period	1,035	857	1,035	857	

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 increased by \$159 million and \$530 million during the three and six month periods ended June 30, 2022, respectively, compared to the same periods in 2021. The increases in both periods were largely a result of increased capital expenditures, specifically within the Regulated – Nuclear generation business segment. The March 2021 settlement transaction related to certain post-closing terms and conditions of the acquisition of a portfolio of combined cycle plants in 2020 also contributed to the increase in cash flow used in investing activities for the six months ended June 30, 2022, compared to the same period in 2021.

Financing Activities

Cash flow used in financing activities decreased by \$3 million and \$192 million during the three and six month periods ended June 30, 2022, respectively, compared to the same periods in 2021. The decrease for the six months ended June 30, 2022, compared to the same period in 2021, was primarily due to higher net issuance of short-term debt in 2022, partially offset by higher issuance of long-term debt in 2021. The change in cash flow used in financing activities for the three months period ended June 30, 2022 was comparable to the same period in 2021.

As at June 30, 2022, the Company had the following committed credit facilities:

(millions of dollars)		Amount
Bank facilities:		
Corporate ¹		1,000
Corporate ¹	US Dollars	750
Lower Mattagami Energy Limited Partnership ²		400
OPG Eagle Creek Holdings LLC and subsidiaries	US Dollars	25
OEFC facility		750

¹ These credit facilities contain a sustainability-linked feature that allows reduced pricing if the Company meets certain sustainability targets.

² Letter of credit of \$55 million was outstanding under this facility as at June 30, 2022.

Short-term debt, letters of credit and guarantees were as follows:

	Α	s At
(millions of dollars)	June 30 2022	December 31 2021
Lower Mattagami Energy Limited Partnership Corporate commercial paper	205 10	125 57
Total short-term debt	215	182
Letters of credit Guarantees	533 35	530 35

As of June 30, 2022, a total of \$533 million of Letters of Credit had been issued. This included \$395 million for the supplementary pension plans, \$16 million for Eagle Creek and its subsidiaries, \$55 million for Lower Mattagami Energy Limited Partnership, \$45 million for general corporate purposes, \$16 million for UMH Energy Partnership, \$5 million for Atura Power and \$1 million for PSS Generating Station Limited Partnership.

Long-term debt balances were as follows: 1

	Α	s At
(millions of dollars)	June 30 2022	December 31 2021
Medium Term Notes payable Notes payable to the OEFC	4,350 2,615	4,350 2,690
Project financing Other	2,636 25	2,630 25
	9,626	9,695

¹ Excludes the impact of fair value premium or discount and unamortized bond issuance fees.

Share Capital

As at June 30, 2022, and December 31, 2021, 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, 2022, and December 31, 2021, OPG had 18,343,815 Class A shares issued and outstanding at a stated value of \$787 million. OPG is entitled to redeem outstanding Class A shares as may be approved by OPG's Board of Directors.

Contractual and Commercial Commitments

Outsourcing Agreements

On February 1, 2022, OPG insourced some of its information technology service operations, which had been previously outsourced to New Horizon System Solutions LP (NHSS) since 2000. OPG will be repatriating the remaining NHSS Society of United Professionals (Society)-represented employees on November 1, 2022. Pursuant to the contractual arrangement between OPG and NHSS, NHSS' defined benefit pension assets and liabilities for all NHSS employees transferred and OPEB obligations for the Society-represented employees will be transferred to OPG on November 1, 2022.

Pension and OPEB obligations assumed by OPG as part of the arrangement are expected to be largely offset by compensation from NHSS.

BALANCE SHEET HIGHLIGHTS

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

		s At
	June 30	December 31
(millions of dollars)	2022	2021
Property, plant and equipment – net The increase was primarily due to capital expenditures during the period, partially offset by depreciation expense. Further details on capital expenditures can be found in the section, <i>Highlights</i> under the heading, <i>Capital Expenditures</i> .	30,934	30,327
Nuclear fixed asset removal and nuclear waste management funds (current and non-current portions) The increase was primarily due to earnings recognized on the Nuclear Segregated Funds, partially offset by reimbursement of eligible expenditures on nuclear fixed asset removal and nuclear waste management activities from the Nuclear Segregated Funds.	20,341	19,876
Long-term debt (current and non-current portions) The decrease was mainly due to the repayment of \$75 million to the OEFC during the six months ended June 30, 2022.	9,597	9,666
Fixed asset removal and nuclear waste management liabilities The increase was primarily a result of accretion expense, representing the increase in the present value of the obligation to reflect the passage of time, partially offset by expenditures on fixed asset removal and nuclear waste management activities.	23,877	23,415

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, 2021. A discussion of recent accounting pronouncements is included in Note 2 of OPG's unaudited interim consolidated financial statements as at and for the three and six month periods ended June 30, 2022. OPG's critical accounting policies are consistent with those noted in OPG's 2021 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 2021 annual MD&A.

Risks to Achieving Operational Excellence

OPG is exposed to a range of operational risks associated with its existing assets that could adversely impact generation output, safety performance and operating results. The operational risks of a station include aspects such as occupational safety, resourcing, equipment reliability, human performance, climate change, regulatory requirements and technology.

COVID-19 The Company continues to monitor developments relating to the COVID-19 pandemic and mitigate associated risks to the health and safety of its workers, operations and projects.

With the broader re-opening plan progressing within the province of Ontario, OPG proceeded with a relaxation of internal COVID-19 protocols. As of March 2022, OPG removed contact tracing and capacity restrictions and transitioned to passive screening. As of April 2022, OPG placed its antigen testing program on hold, while continuing to monitor trends and information from public health authorities. The program may be reinstated in the future, if appropriate. Additionally, OPG has moved to a mask-optional policy. The Company continues to manage its workplace safety in alignment with local public health guidelines.

The Crisis Management and Communications Centre (CMCC) has been stood down. The Infectious Disease Incident Response Team (IDIRT) continues to monitor both external and internal developments to determine whether controls will need to be reintroduced at a certain point to ensure continuity of operations and projects.

Risks to Maintaining Financial Strength

Risks related to rate regulation, financial markets and long-term obligations could significantly impact OPG's financial performance. The Company is also exposed to risks such as changes in market prices of electricity, renewal of energy supply contracts, and differences in realized economic value from acquisitions and other investments.

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 risk exposure relating to energy market transactions as at June 30, 2022 was \$654 million, including \$563 million with the IESO. OPG continues to consider overall credit risk exposure relating to electricity sales to be low, as the majority of sales are through the IESO-administered market in Ontario.

Changes in the market prices of fuels used to produce electricity can adversely impact OPG's Commodity Markets 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.

	2022 ¹	2023	2024
Estimated fuel requirements hedged (%) ²	80	75	78

Based on actual fuel requirements hedged for the six months ended June 30, 2022 and forecast for the remainder of the year.

² Represents the approximate portion of megawatt-hours (MWh) of expected electricity generation (and yearend inventory targets) from each type of OPG-operated facility (nuclear, hydroelectric and thermal) for which the price of fuel is fixed, or for which the Company has entered into contractual arrangements to secure the price of fuel or secure the recovery of fuel costs. In the case of regulated and contracted hydroelectric electricity generation in Ontario, the fuel price 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.

Inflation /

Central banks around the world have shifted their focus from providing pandemic-related stimulus to Recession responding to the significant increase in inflation. The lasting effects of the pandemic on supply chains and the Russian invasion of Ukraine are complicating these efforts.

> There is a risk that aggressive monetary tightening by central banks to curb inflation could lead to a global economic recession. Conversely, the high level of consumer debt, and the sensitivity of financial assets and real estate to interest rate increases, could place limitations on central banks' capacity to tighten monetary policy beyond a certain range.

Risks associated with this challenging macroeconomic environment include:

- Higher than anticipated inflation increasing OPG spending on goods, services and resources. Activities are underway to assess potential inflationary impacts to operating and capital costs and potential mitigation strategies.
- Reduction in electricity demand in Ontario and the United States.
- A delayed transition to a low-carbon economy due to associated incremental costs of new technologies.
- Supply chain disruptions and other global macroeconomic factors may impact the financial health of vendors. OPG performs vendor financial reviews prior to contract awards and monitors the financial health of its top vendors to inform vendor risk management activities.
- Decrease in the value of investments held in OPG's Nuclear Segregated Funds and pension fund. OPG manages these funds with long-term investment objectives that include optimizing asset mix of the respective funds around risks. The asset mix is designed to deliver diversification benefits over a full economic cycle, however, over the short-term, certain risk factors may contribute negatively more than others to the funds' performance.

OPG continues to monitor the macroeconomic environment to identify and, where possible, mitigate risks to its financial performance.

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 June				
	2022		2021			
(millions of dollars)	Income	Expense	Income	Expense		
Hydro One						
Electricity sales	5	-	1	-		
Services	-	3	-	2		
Dividends	2	-	2	-		
Province of Ontario						
Change in Decommissioning Segregated Fund amount due to Province ¹	945	-	-	411		
Change in Used Fuel Segregated Fund amount due to Province ¹	1,188	-	-	509		
Hydroelectric gross revenue charge	-	31	-	24		
OEFC						
Hydroelectric gross revenue charge	-	55	-	47		
Interest expense on long-term notes	-	25	-	26		
Income taxes	-	151	-	171		
Property taxes	-	3	-	3		
IESO						
Electricity-related revenue	1,672	-	1,592	-		
Fair Hydro Trust						
Interest income	8	-	8	-		
	3,820	268	1,603	1,193		

¹ The Nuclear Segregated Funds are reported on OPG's 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, 2022 and December 31, 2021, the Nuclear Segregated Funds were reported net of amounts due to the Province of \$5,083 million and \$8,590 million, respectively.

	Six Months Ended June 30			
	20	2022		21
(millions of dollars)	Income	Expense	Income	Expense
Hydro One				
Electricity sales	12	-	4	-
Services	-	9	-	4
Dividends	3	-	3	-
Province of Ontario				
Change in Decommissioning Segregated Fund amount due to Province ¹	1,481	-	-	406
Change in Used Fuel Segregated Fund amount due to Province ¹	2,026	-	-	536
Hydroelectric gross revenue charge	-	58	-	53
OEFC				
Hydroelectric gross revenue charge	-	91	-	86
Interest expense on long-term notes	-	49	-	52
Income taxes	-	319	-	235
Property taxes	-	6	-	6
IESO				
Electricity-related revenue	3,478	-	3,117	-
Fair Hydro Trust				
Interest income	16	-	16	-
	7.040	500	0.440	4 070
	7,016	532	3,140	1,378

¹ The Nuclear Segregated Funds are reported on OPG's 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, 2022 and December 31, 2021, the Nuclear Segregated Funds were reported net of amounts due to the Province of \$5,083 million and \$8,590 million, respectively.

Balances between OPG and its related parties are summarized below:

(millions of dollars)	June 30 2022	December 31 2021
Receivables from related parties		
Hydro One	2	2
IESO – Electricity related receivables	563	548
Fair Hydro Trust	4	4
OEFC	4	3
Province of Ontario	2	1
Loan receivable		
Fair Hydro Trust	909	911
Equity securities		
Hydro One shares	163	176
Accounts payable, accrued charges and other payables		
Hydro One	-	1
OEFC	85	88
Province of Ontario	5	6
IESO – Electricity related payables	4	8
Long-term debt (including current portion)		
Notes payable to OEFC	2,615	2,690

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, 2022, the Nuclear Segregated Funds held \$1,386 million of Province of Ontario bonds (December 31, 2021 – \$1,709 million) and \$12 million of Province of Ontario treasury bills (December 31, 2021 – \$13 million). As of June 30, 2022, the registered pension fund held \$83 million of Province of Ontario bonds (December 31, 2021 – \$89 million) and \$12 million of Province of Ontario treasury bills (December 31, 2021 – \$15 million). 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.

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 (ICOFR) and for its Disclosure Controls and Procedures (DC&P). 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 quarterly financial information for the last three years and financial information for each of the eight most recently completed quarters. This information is derived from OPG's unaudited interim consolidated financial statements and the audited annual consolidated financial statements, and has been prepared in accordance with US GAAP.

(millions of dollars – except where noted) (unaudited)	June 30 2022	March 31 2022	December 31 2021	September 30 2021
Electricity generation (<i>TWh</i>)	20.1	21.2	18.3	21.0
Revenue	1,856	1,958	1,670	1,712
Net income	451	507	97	430
Less: Net income attributable to non-controlling interest	5	4	6	4
Net income attributable to the Shareholder	446	503	91	426
Earnings per share, attributable to the Shareholder <i>(dollars)</i>	\$1.62	\$1.83	\$0.33	\$1.55

(millions of dollars – except where noted) (unaudited)	June 30 2021	March 31 2021	December 31 2020	September 30 2020
Electricity generation (TWh)	19.2	19.1	19.2	21.3
Revenue	1,804	1,691	1,782	1,889
Net income	522	295	211	390
Less: Net income attribute to the non-controlling interest	4	5	3	4
Net income attributable to the Shareholder	518	290	208	386
Earnings per share, attributable to the Shareholder <i>(dollars)</i>	\$1.89	\$1.06	\$0.76	\$1.41

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 business imperatives include 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

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. As at June 30, 2022, the Darlington GS had two units in service and the Pickering GS had six units in service.

Hydroelectric Availability

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

Equivalent forced outage rate is an index of the reliability of a generating unit at OPG's wholly-owned 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.

Thermal Availability

Thermal Availability represents the percentage of time a generating unit at Atura Power's combined cycle plants is capable of providing service, whether or not it is actually generating electricity, compared to the total time for the respective period, averaged by the number of facilities owned and operated through Atura Power. The measure is calculated on a three-year rolling average basis.

Other Key Indicators

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

Non-GAAP Financial Performance Measures

In addition to net income and other financial information in accordance with US GAAP, certain non-GAAP financial measures are also presented in this 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 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) Earnings before interest, income taxes, depreciation and amortization is defined as net income before net interest expense, income tax expense and depreciation and amortization expenses.

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

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ONTARIO POWER GENERATION INC.

INTERIM CONSOLIDATED FINANCIAL STATEMENTS (unaudited)

JUNE 30, 2022



INTERIM CONSOLIDATED STATEMENTS OF INCOME (UNAUDITED)

	Three Months Ended June 30		Six Months Ended June 30	
(millions of dollars – except where noted)	2022	2021	2022	2021
Revenue	1,856	1.804	3.814	3.495
Fuel expense	237	203	483	387
Gross margin	1,619	1,601	3,331	3,108
Operations, maintenance and administration evolution	715	700	4 422	1 5 1 0
Operations, maintenance and administration expenses	279		1,432	1,512
Depreciation and amortization expenses Accretion on fixed asset removal and nuclear waste	279	277 271	555 572	555 544
management liabilities	200	271	572	544
Earnings on nuclear fixed asset removal and nuclear	(257)	(240)	(515)	(479)
waste management funds	(237)	(240)	(313)	(473)
Property taxes	11	11	24	24
	1,034	1,019	2,068	2,156
Income before other gains, interest and income taxes	585	582	1,263	952
Other gains	(6)	(117)	(9)	(121)
Income before interest and income taxes	591	699	1,272	1.073
Net interest expense (Note 5)	46	54	96	114
In some hafens in some fores	545	CAE	4 470	050
Income before income taxes	545	645	1,176	959 142
Income tax expense	94	123	218	142
Net income	451	522	958	817
Net income attributable to the Shareholder	440	540	0.40	000
	446	518 4	949 9	808 9
Net income attributable to non-controlling interest	5	4	9	9
Basic and diluted earnings per share (dollars) (Note 13)	1.62	1.89	3.46	2.94

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

	Three Months Ended June 30		Six Months Ended June 30	
(millions of dollars)	2022	2021	2022	2021
Net income	451	522	958	817
Other comprehensive income (loss), net of income taxes (Note 8)				
Reclassification to income of amounts related to pension and other post-employment benefits ¹	3	3	5	8
Reclassification to income of losses on derivatives designated as cash flow hedges ²	1	3	4	6
Net loss on derivatives designated as cash flow hedges ³	(5)	-	(5)	-
Currency translation adjustment	54	(23)	28	(43)
Other comprehensive income (loss) for the period	53	(17)	32	(29)
Comprehensive income	504	505	990	788
Comprehensive income attributable to the Shareholder Comprehensive income attributable to non-controlling	499 5	501 4	981 9	779 9
interest	•		•	Ū

1 Net of income tax expense of nil and \$2 million for the three months ended June 30, 2022 and 2021, respectively. Net of income tax expense of \$1 million and \$3 million for the six months ended June 30, 2022 and 2021, respectively. Net of income tax expense of \$1 million for the three months ended June 30, 2022 and 2021. Net of income tax expense of

2 \$1 million for the six months ended June 30, 2022 and 2021.

³ Net of income tax recovery of \$2 million for each of the three and six month periods ended June 30, 2022. Net of income tax recovery of nil for each of the three and six month periods ended June 30, 2021.

INTERIM CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

	Six Months Ended June 30		
(millions of dollars)	June 2022	e 30 2021	
Operating activities			
Net income	958	817	
Adjust for non-cash items:			
Depreciation and amortization expenses	555	555	
Accretion on fixed asset removal and nuclear waste management liabilities	572	544	
Earnings on nuclear fixed asset removal and nuclear waste management funds	(515)	(479)	
Pension and other post-employment benefit costs (Note 9)	200	229	
Deferred income tax expense	7	41	
Regulatory assets and regulatory liabilities	-	(171)	
Other gains	(5)	(117)	
Other	26	2	
Expenditures on fixed asset removal and nuclear waste management	(195)	(227)	
Reimbursement of eligible expenditures on nuclear fixed asset removal and nuclear waste management	69	95	
Contributions to pension funds and expenditures on other post-employment benefits and supplementary pension plans	(149)	(158)	
Net changes to other long-term assets and long-term liabilities	61	17	
Net changes to non-cash working capital balances (Note 16)	33	(72)	
Cash flow provided by operating activities	1,617	1,076	
cash now provided by operating activities	1,017	1,070	
nvesting activities			
nvestment in property, plant and equipment and intangible assets	(1,203)	(919)	
Short-term investments	(26)	-	
Proceeds from settlement related to acquired natural gas-fired assets	-	220	
Cash flow used in investing activities	(1,229)	(699)	
Financing activities			
Repayment of long-term debt <i>(Note 5)</i>	(76)	(414)	
Net issuance (repayment) of short-term debt (Note 6)	32	(689)	
Distribution to non-controlling interest	(8)	` (9)́	
Net proceeds from issuance of long-term debt	-	868	
Cash flow used in financing activities	(52)	(244)	
Effect of exchange rate changes on cash, cash equivalents and restricted cash	1	(1)	
Net increase in cash, cash equivalents and restricted cash	337	132	
Cash, cash equivalents and restricted cash, beginning of period	698	725	
Cash, cash equivalents and restricted cash, end of period	1,035	857	

INTERIM CONSOLIDATED BALANCE SHEETS (UNAUDITED)

As At (millions of dollars)	June 30 2022	December 31 2021
Assets		
Current assets		
Cash, cash equivalents and restricted cash (Note 3)	1,035	698
Equity securities	163	176
Receivables from related parties	575	558
Nuclear fixed asset removal and nuclear waste management funds	97	69
Fuel inventory	290	247
Materials and supplies	98	103
Regulatory assets (Note 4)	288	288
Prepaid expenses	160	120
Other current assets	228	203
	2,934	2,462
Property, plant and equipment	43,128	41,975
Less: accumulated depreciation	12,194	11,648
	30,934	30,327
	000	0.40
Intangible assets	888	848
Less: accumulated amortization	404	372
	484	476
Goodwill	164	161
Other assets		
Nuclear fixed asset removal and nuclear waste management funds	20,244	19,807
Loan receivable from related party	909	911
Long-term materials and supplies	407	414
Regulatory assets (Note 4)	6,417	6,467
Investments subject to significant influence	43	42
Other long-term assets	66	86
	28,086	27,727
	62,602	61,153

INTERIM CONSOLIDATED BALANCE SHEETS (UNAUDITED)

As At (millions of dollars)	June 30 2022	December 31 2021
Liabilities		
Current liabilities		
Accounts payable, accrued charges and other payables	1,508	1,441
Short-term debt (Note 6)	215	182
Long-term debt due within one year (Note 5)	119	179
Regulatory liabilities (Note 4)	276	276
	2,118	2,078
Long-term debt (Note 5)	9,478	9,487
Other liabilities		
Fixed asset removal and nuclear waste management liabilities (Note 7)	23,877	23,415
Pension liabilities	2,738	2,846
Other post-employment benefit liabilities	3,275	3,215
Long-term accounts payable and accrued charges	338	352
Deferred revenue	378	382
Deferred income taxes	1,739	1,634
Regulatory liabilities (Note 4)	714	777
	33,059	32,621
Equity Common shares (Note 12)	5,126	5.126
Class A shares (Note 12)	787	787
Contributed surplus	32	34
Retained earnings	12,053	11,104
Accumulated other comprehensive loss (Note 8)	(230)	(262)
Equity attributable to the Shareholder	17,768	16,789
Equity attributable to non-controlling interest	179	178
Total equity	17,947	16,967
	17,347	10,907
	62,602	61,153

Commitments and Contingencies (Notes 5, 6, 9 and 14)

INTERIM CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDER'S EQUITY (UNAUDITED)

	Six Months Ended June 30		
(millions of dollars)	2022	2021	
Common shares (Note 12)	5,126	5,126	
Class A shares (Note 12)	787	787	
Contributed surplus			
Balance at beginning of period	34	36	
Reclassification to income of amounts related to gain on deconsolidation of	(2)	(1)	
Fair Hydro Trust			
Balance at end of period	32	35	
Retained earnings			
Balance at beginning of period	11,104	9.779	
Net income attributable to the Shareholder	949	808	
Balance at end of period	12,053	10,587	
Accumulated other comprehensive loss, net of income taxes (Note 8)			
Balance at beginning of period	(262)	(374)	
Other comprehensive income	32	(29)	
Balance at end of period	(230)	(403)	
Equity attributable to the Shareholder	17,768	16,132	
Equity attributable to non-controlling interest	178	178	
Balance at beginning of period			
Income attributable to non-controlling interest Distribution to non-controlling interest	9	9 (9)	
Balance at end of period	<u>(8)</u> 179	(9)	
	1/3	170	
Total equity	17,947	16,310	

NOTES TO THE INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

1. BASIS OF PRESENTATION

These interim consolidated financial statements for the three and six month periods ended June 30, 2022 and 2021 include the accounts of Ontario Power Generation Inc. (OPG or 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). 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, 2021.

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 prepared in accordance with 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 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 2021 comparative amounts have been reclassified from consolidated financial statements previously presented to conform to the 2022 interim consolidated financial statement presentation.

Seasonal Variations

OPG's quarterly electricity generation from the Regulated – Hydroelectric Generation, Contracted Hydroelectric and Other Generation, and Atura Power business 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 small-scale generation embedded in distribution networks, and the impact of conservation efforts. Historically, there has been greater electricity demand in Ontario during the winter and summer months due to heating and air conditioning demands.

OPG's quarterly electricity generation from hydroelectric facilities is impacted by weather conditions that affect water flows. Historically, there have been higher water flows in the second quarter as a result of snow and ice melt entering the river systems. The financial impact of variability in water flows on the Regulated – Hydroelectric Generation business segment is mitigated by regulatory variance and deferral accounts (regulatory accounts) authorized by the Ontario Energy Board (OEB).

The financial impact of variability in electricity generation from the Contracted Hydroelectric and Other Generation business segment and the Atura Power business segment is mitigated by the terms of the applicable Energy Supply Agreements with the Independent Electricity System Operator (IESO) and other long-term contracts for the contracted generating facilities in Ontario.

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 fiscal year.

Recent Accounting Pronouncements Not Yet Adopted

Changes to Credit Losses on Financial Instruments

In June 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-13, *Measurement of Credit Losses on Financial Instruments* (ASU 2016-13), an update to Topic 326, *Financial Instruments – Credit Losses*. ASU 2016-13 requires financial assets measured at amortized cost to be presented at the net amount expected to be collected, through an allowance for credit losses to be deducted from the amortized cost basis of the asset. Available-for-sale debt securities will also require the use of an allowance to record estimated credit losses. In November 2019, the FASB issued ASU 2019-11, *Codification Improvements to Topic 326, Financial Instruments – Credit Losses*, which clarified that ASU 2016-13 is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, with early adoption permitted. The revised guidance will be applied through a cumulative catch-up adjustment to retained earnings in the period of adoption. OPG continues to assess the impact of this update to its consolidated financial statements.

3. CASH, CASH EQUIVALENTS AND RESTRICTED CASH

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

As At (millions of dollars)	June 30 2022	December 31 2021
Cash and cash equivalents Restricted cash	1,016 19	692
Total cash, cash equivalents and restricted cash	1,035	698

Restricted cash is held primarily for prescribed purposes, including debt service, general collateral purposes and other contractual arrangements.

4. REGULATORY ASSETS AND REGULATORY LIABILITIES

The regulatory assets and regulatory liabilities consist of the following:

As at (millions of dollars)	June 30 2022	December 31 2021
Regulatory assets		
Variance and deferral accounts authorized by the OEB		
Pension & OPEB Cash Versus Accrual Differential Deferral Account	890	979
Rate Smoothing Deferral Account	550	531
Hydroelectric Surplus Baseload Generation Variance Account	413	404
Bruce Lease Net Revenues Variance Account	105	145
Nuclear Development Variance Account	124	122
Other variance and deferral accounts ¹	118	91
	2,200	2,272
Pension and OPEB Regulatory Asset (Note 9)	2,818	2,877
Deferred Income Taxes	1,687	1,606
Total regulatory assets	6,705	6,755
Less: current portion	288	288
Non-current regulatory assets	6,417	6,467
Regulatory liabilities		
Variance and deferral accounts authorized by the OEB		
Pension & OPEB Cash Payment Variance Account	482	509
Impact Resulting from Changes to Pickering Station End-of-Life Dates	121	163
(December 31, 2017) Deferral Account		100
Hydroelectric Water Conditions Variance Account	157	135
Nuclear Deferral and Variance Over/Under Recovery Variance Account	78	80
Other variance and deferral accounts ²	113	119
	951	1,006
COVID-19 net credit to ratepayers	39	47
Total regulatory liabilities	990	1,053
Less: current portion	276	276
Non-current regulatory liabilities	714	777

¹ Represents amounts for the Pension and OPEB Cost Variance Account, the Nuclear Liability Deferral Account, the Hydroelectric Deferral and Variance Over/Under Recovery Variance Account, the Fitness for Duty Deferral Account, the Pickering Closure Costs Deferral Account and the Niagara Tunnel Project Pre-December 2008 Disallowance Variance Account.

² Represents amounts for the Ancillary Services Net Revenue Variance Account, the Capacity Refurbishment Variance Account, the Income and Other Taxes Variance Account, the Hydroelectric Incentive Mechanism Variance Account, the SR&ED ITC Variance Account, the Pension & OPEB Forecast Accrual Versus Actual Cash Payment Differential Carrying Charges Variance Account and the Impact Resulting from Optimization of Pickering Station End-of-Life Dates Deferral Account.

In December 2021, OPG completed a comprehensive update of the estimate for its obligations for nuclear waste management and nuclear facilities decommissioning as part of the required process to periodically update the reference plan under the Ontario Nuclear Funds Agreement (ONFA) between OPG and the Province. The updated reference plan, for the years 2022 to 2026, was approved by the Province in March 2022, with an effective date of January 1, 2022. The regulated prices in effect during this period, established through the final payment amounts issued by the OEB in January 2022 on OPG's 2022-2026 rate application, do not reflect the impact of the 2022 ONFA Reference Plan. As a result, for the six months ended June 30, 2022, OPG recorded a regulatory asset of \$94 million in the Nuclear Liability Deferral Account, representing the revenue requirement impact for the Darlington and Pickering nuclear generating stations arising from the approved 2022 ONFA Reference Plan. OPG will continue to record additions to the Nuclear Liability Deferral Account until impacts arising from the approved 2022 ONFA Reference Plan of the OEB in setting new base regulated prices in the future. The cost impact of changes to OPG's

Nuclear Liabilities associated with the Bruce nuclear generating stations is recorded as part of additions to the Bruce Lease Net Revenue Variance Account.

5. LONG-TERM DEBT AND NET INTEREST EXPENSE

Long-term debt consist of the following:

As At (millions of dollars)	June 30 2022	December 31 2021
Medium Term Note Program senior notes	4,350	4,350
Senior notes payable to the Ontario Electricity Financial Corporation	2,615	2,690
Lower Mattagami Energy Limited Partnership senior notes	1,745	1,745
OPG Eagle Creek Holdings LLC and subsidiaries senior notes	478	471
PSS Generating Station Limited Partnership senior notes	245	245
UMH Energy Partnership senior notes	168	169
Other	25	25
	9,626	9,695
Plus: net fair value premium	9	10
Less: unamortized bond issuance fees	(38)	(39)
Less: amounts due within one year	(119)	(179)
Long-term debt	9,478	9,487

OPG repaid long-term debt of \$75 million to the Ontario Electricity Financial Corporation (OEFC) during the six months ended June 30, 2022.

On July 14, 2022, OPG issued \$300 million of green bonds under its Medium Term Notes Program. The issuance consisted of senior notes maturing in July 2032, with a coupon interest rate of 4.92 percent.

Net Interest Expense

The following table summarizes the net interest expense:

	Three Months Ended June 30		Six Months Ended June 30	
(millions of dollars)	2022	2021	2022	2021
Interest on long-term debt	89	90	179	185
Interest on short-term debt	3	3	4	5
Interest income	(11)	(10)	(20)	(19)
Interest capitalized to property, plant and equipment and intangible assets	(30)	(19)	(56)	(35)
Interest related to regulatory assets and regulatory liabilities 1	(5)	(10)	(11)	(22)
Net interest expense	46	54	96	114

¹ Includes interest to recognize the cost of financing regulatory account balances as authorized by the OEB, and interest costs deferred in certain regulatory accounts.

6. SHORT-TERM DEBT

Committed credit facilities and maturity dates as at June 30, 2022 were as follows:

(millions of dollars)		Amount	Maturity
Bank facilities:			
Corporate		1,000	May 2027
Corporate	US Dollars	750	November 2022 ¹
Lower Mattagami Energy Limited Partnership		400	August 2026 ²
OPG Eagle Creek Holdings LLC and subsidiaries	US Dollars	25	August 2023 and October 2028 ³
OEFC facility ⁴		750	December 2026

¹ The facility has a one-year extension option beyond the maturity date of November 2022.

² Letter of credit of \$55 million was outstanding under this facility as at June 30, 2022.

³ Of the total credit facility, \$5 million matures in August 2023 and \$20 million matures in October 2028.

⁴ Represents amounts available under the facility, net of debt issuances.

Short-term debt consist of the following:

As At	June 30	December 31
(millions of dollars)	2022	2021
Lower Mattagami Energy Limited Partnership	205	125
Corporate commercial paper	10	57
Total short-term debt	215	182

As at June 30, 2022, a total of \$533 million of Letters of Credit had been issued (December 31, 2021 – \$530 million). As at June 30, 2022, this included \$395 million for the supplementary pension plans, \$16 million for OPG Eagle Creek Holdings LLC and its subsidiaries, \$55 million for Lower Mattagami Energy Limited Energy Partnership, \$45 million for general corporate purposes, \$16 million for UMH Energy Partnership, \$55 million for Atura Power, and \$1 million for PSS Generating Station Limited Partnership.

For the six months ended June 30, 2022, net issuances of short-term debt totalled \$32 million (June 30, 2021 – net repayments of \$689 million), which was comprised of issuances of \$1,011 million (June 30, 2021 - \$2,123 million) and repayments of \$979 million (June 30, 2021 - \$2,812 million).

The weighted average interest rate on the short-term debt as at June 30, 2022 is 1.88 percent (December 31, 2021 – 0.28 percent).

7. FIXED ASSET REMOVAL AND NUCLEAR WASTE MANAGEMENT LIABILITIES

Liabilities for fixed asset removal and nuclear waste management on a present value basis consist of the following:

As At (millions of dollars)	June 30 2022	December 31 2021
Liability for used nuclear fuel management Liability for nuclear decommissioning and nuclear low and intermediate level waste management	14,032 9,542	13,744 9,371
Liability for non-nuclear fixed asset removal	303	300
Fixed asset removal and nuclear waste management liabilities	23,877	23,415

8. ACCUMULATED OTHER COMPREHENSIVE LOSS

The changes in the balance of each component of accumulated other comprehensive loss (AOCL), net of income taxes, were as follows:

	S	ix Months Ended	June 30, 2022	
(millions of dollars)	Unrealized Gains ar Losses on Cash Flo Hedges		Currency Translation Adjustment	Total
AOCL, beginning of period	(7)	(186)	(69)	(262)
Net loss on cash flow hedges Amounts reclassified from AOCL Translation of foreign operations	(5) 4 -	- 5 -	- - 28	(5) 9 28
Other comprehensive (loss) income for the period	(1)	5	28	32
AOCL, end of period	(8)	(181)	(41)	(230)

	Six Months Ended June 30, 2021				
(millions of dollars)	Unrealized Gains ar Losses on Cash Flo Hedges		Currency Translation Adjustment	Total	
AOCL, beginning of period	(18)	(296)	(60)	(374)	
Amounts reclassified from AOCL Translation of foreign operations	6	8	- (43)	14 (43)	
Other comprehensive income (loss) for the period	6	8	(43)	(29)	
AOCL, end of period	(12)	(288)	(103)	(403)	

The significant amounts reclassified out of each component of AOCL, net of income taxes, were as follows:

	Amount Reclass	ified from AO	CL
	Three Months Ended	Six Months Ended	
(millions of dollars)	June 30	, 2022	Statement of Income Line Item
Amortization of losses from cash flow hedges Losses Income tax recovery	2 (1) 1	5 (1) 4	Net interest expense Income tax expense
Amortization of amounts related to pension and OPEB			
Actuarial losses	3	6	See (1) below
Income tax recovery	-	(1)	Income tax expense
	3	5	
Total reclassifications for the period	4	9	

¹ These AOCL components are included in the computation of pension and OPEB costs (see Note 9 for additional details).

	Amount Reclassified from AOCL					
	Three Months	Six Months				
	Ended	Ended				
(millions of dollars)	June 30	, 2021	Statement of Income Line Item			
Amortization of losses from cash flow hedges						
Losses	4	7	Net interest expense			
Income tax recovery	(1)	(1)	Income tax expense			
	3	6				
Amortization of amounts related to pension and OPEB						
Actuarial losses, net of past service credits	5	11	See (1) below			
Income tax recovery	(2)	(3)	Income tax expense			
	3	8				
Total reclassifications for the period	6	14				

¹ These AOCL components are included in the computation of pension and OPEB costs (see Note 9 for additional details).

Existing pre-tax net losses for derivatives of \$9 million deferred in AOCL as at June 30, 2022 are expected to be reclassified to net income within the next 12 months.

9. PENSION AND OTHER POST-EMPLOYMENT BENEFITS

OPG's pension and other post-employment benefit (OPEB) costs for the three months ended June 30, 2022 and 2021 are as follows:

	Regis Pensio	tered n Plans	Suppler Pensior		Other Emplo Bene	yment
(millions of dollars)	2022	2021	2022	2021	2022	2021
Components of cost recognized for the period						
Current service costs	86	92	1	2	23	25
Interest on projected benefit obligation	133	105	4	3	24	19
Expected return on plan assets, net of expenses	(229)	(215)	-	-	-	-
Amortization of past service credits ¹	-	-	-	-	-	(1)
Amortization of net actuarial loss ¹	31	68	2	3	-	1
Costs recognized ²	21	50	7	8	47	44

¹ The amortization of net actuarial loss is recognized as an increase to other comprehensive income. This increase in the three months ended June 30, 2022 was partially offset by a decrease in the Pension and OPEB Regulatory Asset of \$30 million (three months ended June 30, 2021 - \$66 million).

² These pension and OPEB costs for the three months ended June 30, 2022 exclude the net addition of costs of \$25 million resulting from the recognition of changes in the regulatory assets for the Pension and OPEB Cost Variance Account, the Pension & OPEB Cash Versus Accrual Differential Deferral Account and the Pension & OPEB Cash Payment Variance Account (three months ended June 30, 2021 - net addition of costs of \$12 million, respectively).

OPG's pension and OPEB costs for the six months ended June 30, 2022 and 2021 are as follows:

	Registere Pla	d Pension Ins		mentary n Plans	Other Emplo Ben	yment
(millions of dollars)	2022	2021	2022	2021	2022	2021
Components of cost recognized for the period						
Current service costs	172	184	3	4	45	48
Interest on projected benefit obligation	266	211	6	5	48	39
Expected return on plan assets, net of expenses	(456)	(430)	-	-	-	-
Amortization of past service credits ¹	-	-	-	-	-	(1)
Amortization of net actuarial loss ¹	61	136	4	5	-	3
Costs recognized ²	43	101	13	14	93	89

¹ The amortization of net actuarial loss is recognized as an increase to other comprehensive income. This increase in the six months ended June 30, 2022 was partially offset by a decrease in the Pension and OPEB Regulatory Asset of \$59 million (six months ended June 30, 2021 - \$132 million).

² These pension and OPEB costs for the six months ended June 30, 2022 exclude the net addition of costs of \$51 million resulting from the recognition of changes in the regulatory assets for the Pension and OPEB Cost Variance Account, the Pension & OPEB Cash Versus Accrual Differential Deferral Account and the Pension & OPEB Cash Payment Variance Account (six months ended June 30, 2021 - net addition of costs of \$25 million, respectively).

10. RISK MANAGEMENT AND DERIVATIVES

OPG is exposed to risks related to changes in market interest rates on debt, movements in foreign currency that affect the Company's assets, liabilities and forecasted transactions, and fluctuations in commodity prices. Select derivative instruments are used to manage such risks. Derivatives are used as hedging instruments, as well as for trading purposes.

Interest Rates

Interest rate risk is the risk that the value of assets and liabilities can change due to movements in interest rates. Interest rate risk for OPG arises with the need to refinance existing debt or undertake new financing. The management of these risks includes using derivatives to hedge the exposure in accordance with corporate risk management policies. OPG periodically uses interest rate swap agreements to mitigate elements of interest rate risk exposure associated with anticipated financing.

Foreign Exchange

OPG's financial results are exposed to volatility in the Canadian/US foreign exchange rate as debt issuances, fuels and certain materials and services purchased for generating stations and major development projects may be denominated in, or tied to, US dollars. To manage this risk, the Company employs various financial instruments such as forwards and other derivative contracts, in accordance with approved corporate risk management policies. Additionally, volatility in the Canadian/US foreign exchange rate also impacts OPG's financial results from certain of its subsidiaries, whose operations are based exclusively in the United States.

Commodity Prices

OPG is 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.

A number of OPG's hydroelectric facilities in the US sell energy and capacity into the wholesale electricity market and therefore are subject to volatility of wholesale electricity market pricing. Although revenue from these facilities represents a small portion of OPG's overall revenue, the Company may enter into derivative instruments from time to time to further mitigate this risk.

Credit

The Company's credit risk exposure is primarily a function of its electricity and other sales. The majority of OPG's revenue is derived from electricity sales through the IESO administered market. Market participants in the IESO 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 risk is considered acceptable 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 was \$1 million as at June 30, 2022 and December 31, 2021.

The fair value of the derivative instruments totalled a net liability of \$16 million as at June 30, 2022 (December 31, 2021 - \$19 million).

11. FAIR VALUE MEASUREMENTS

OPG is required to classify fair value measurements using a fair value hierarchy. This hierarchy groups financial assets and liabilities into three levels, based on the inputs used in measuring the fair value of the financial assets and liabilities. The fair value hierarchy has the following levels:

- Level 1: Valuation of inputs is based on unadjusted quoted market prices observed in active markets for identical assets or liabilities.
- Level 2: Valuation is based on inputs other than quoted prices under Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3: Valuation is based on inputs for the asset or liability that are not based on observable market data.

The fair value of financial instruments traded in active markets is based on quoted market prices as at the consolidated balance sheet dates. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's-length basis. The quoted market price used for financial assets held by OPG is the current bid price. These instruments are included in Level 1 and are comprised primarily of equity investments and fund investments.

For financial instruments for which quoted market prices are not directly available, fair values are estimated using forward price curves developed from observable market prices or rates. The estimation of fair value may include the use of valuation techniques or models, based wherever possible on assumptions supported by observable market prices or rates prevailing as at the consolidated balance sheet dates. This is the case for over-the-counter derivatives and securities, which include energy commodity derivatives, foreign exchange derivatives, interest rate swap derivatives and fund investments. Various other fund investments are valued at the unit values supplied by the 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.

OPG's financial instruments and their fair value as at June 30, 2022 and December 31, 2021 consist of the following:

	Fair Value		Fair Value Carrying Value ¹		Carrying Value ¹		
(millions of dollars)	2022	2021	2022	2021	Balance Sheet Line Item		
Nuclear Segregated Funds (includes current portion) ²	20,341	19,876	20,341	19,876	Nuclear fixed asset removal and nuclear waste management funds		
Loan receivable - from Fair Hydro Trust	782	940	909	911	Loan receivable		
Investment in Hydro One Limited Shares	163	176	163	176	Equity securities		
Payable related to cash flow hedges	(5)	(9)	(5)	(9)	Long-term accounts payable and accrued charges		
Long-term debt (includes current portion)	(8,648)	(10,757)	(9,597)	(9,666)	Long-term debt		
Other financial instruments	38	17	38	17	Various		

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

² 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 ONFA when the Nuclear Segregated Funds are in a surplus position.

The fair value of 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.

The following tables present financial assets and financial liabilities measured at fair value in accordance with the fair value hierarchy:

As At		June 3	0, 2022	
(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	5,996	5,107	-	11,103
Investments measured at NAV ¹				3,274
Due to Province				14,377 (2,789)
Used Fuel Segregated Fund, net				11,588
Decommissioning Segregated Fund Investments measured at fair value, excluding investments measured at NAV	4,640	3,825	-	8,465
Investments measured at NAV ¹				2,582
Due to Province				11,047 (2,294)
Decommissioning Segregated Fund, net				8,753
Equity securities	163	-	-	163
Other financial assets	49	2	38	89
Liabilities				
Other financial liabilities	(49)	(2)	-	(51)
As At		Decembe	- 24 - 2024	
(millions of dollars)	Level 1	Decembe Level 2	Level 3	Total
	Level I		Level J	TOLAT
Assets				
Used Fuel Segregated Fund Investments measured at fair value, excluding	7,342	6,013	-	13,355
investments measured at NAV Investments measured at NAV ¹				2,725

Investments measured at NAV ¹				2,725
				16,080
Due to Province				(4,815)
Used Fuel Segregated Fund, net				11,265
Decommissioning Segregated Fund				
Investments measured at fair value, excluding investments measured at NAV	5,628	4,592	-	10,220
Investments measured at NAV ¹				2,166
				12,386
Due to Province				(3,775)
Decommissioning Segregated Fund, net				8,611
Equity securities	176	-	-	176
Other financial assets	13	-	36	49
Liabilities				
Other financial liabilities	(32)	-	-	(32)

¹ Represents investments measured at fair value using NAV as a practical expedient, which have not been classified in the fair value hierarchy. The fair value amounts for these investments presented in this table are intended to permit the reconciliation of the fair value hierarchy to amounts presented on the interim consolidated balance sheets.

During the six months ended June 30, 2022, there were no transfers between Level 1 and Level 2 and into or out of Level 3.

The changes in the net assets measured at fair value that are classified as Level 3 financial instruments for the six months ended June 30, 2022 were as follows:

(millions of dollars)	Other Financial Instruments
Opening balance, January 1, 2022	36
Unrealized losses included in revenue	(6)
Realized losses included in revenue	(4)
Purchases	12
Closing balance, June 30, 2022	38

Investments Measured at Net Asset Value

Nuclear Segregated Funds

Nuclear Segregated Funds' investments classified as Level 3 consist of real estate, infrastructure, and agriculture investments within the alternative investment portfolio. The fair value of these investments is determined using financial information as provided by the general partners of the limited partnership funds in which the Nuclear Segregated Funds are invested. Direct investments are valued 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.

(millions of dollars except where noted)	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice
Real Assets				
Infrastructure	3,197	1,151	n/a	n/a
Real Estate	2,480	1,128	n/a	n/a
Agriculture	179	7	n/a	n/a
Pooled Funds				
Short-term Investments	9	n/a	Daily	1-5 days
Fixed Income	1,890	n/a	Daily	1-5 days
Equity	785	n/a	Daily	1-5 days
Total	8,540	2,286		

The classes of investments within the Nuclear Segregated Funds that are reported on the basis of Net Asset Value (NAV) as at June 30, 2022 were as follows:

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

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 these investments. The ownership interest in the respective funds are not redeemable. However, the Nuclear Segregated Funds may transfer any of their ownership interests to another party, as stipulated in the partnership agreements and/or shareholders' agreements. Cash distributions are received based on the operations of the underlying investments and/or as the underlying investments are liquidated. It is not possible to estimate when the underlying assets of the infrastructure funds in this class 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 an 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 investments in the respective funds are not redeemable. However, the Nuclear Segregated Funds may transfer any of their ownership interests to another party, as stipulated in the partnership agreements and/or shareholders' agreements. For investments in private real estate corporations, shares may be redeemed through a pre-established redemption process. Cash distributions are received based on the operations of the underlying investments and/or as the underlying investments are liquidated. It is not possible to estimate when the underlying assets in this class will be liquidated.

Agriculture

This class includes a diversified portfolio of global farmland 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 in the respective funds are not redeemable. However, the Nuclear Segregated Funds may transfer any of their ownership interests to another party, as stipulated in the partnership agreements and/or shareholders' agreements. Cash distributions are received based on the operations of the underlying investments and/or as the underlying investments are liquidated. It is not possible to estimate when the underlying assets in this class will be liquidated.

Pooled Funds

This class represents investments in pooled funds, which primarily include a diversified portfolio of fixed income securities, issued mainly by Canadian corporations, and diversified portfolios of Emerging Market listed equity. The investment objective of the pooled funds is to achieve capital appreciation and income through professionally managed portfolios. The fair value of the investments in this class has been estimated using NAV per share of the investments. There are no significant restrictions on the ability to sell the investments in this class.

12. SHARE CAPITAL

Common Shares

As at June 30, 2022 and December 31, 2021, 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, 2022 and December 31, 2021, OPG had 18,343,815 Class A shares issued and outstanding at a stated value of \$787 million.

13. 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.

Class A shares are included in the weighted average number of shares outstanding. The weighted average number of shares outstanding as at June 30, 2022 and December 31, 2021 was 274.6 million. There were no dilutive securities during the six months ended June 30, 2022 and for the year ended December 31, 2021.

14. COMMITMENTS AND CONTINGENCIES

Litigation

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

As at June 30, 2022 and December 31, 2021, the total amount of guarantees provided by OPG was \$35 million. As at June 30, 2022, the potential impact of the fair value of the outstanding guarantees to income is \$1 million and OPG does not expect to make any payments associated with these guarantees.

Contractual Obligations

OPG's contractual obligations as at June 30, 2022 were as follows:

(millions of dollars)	2022 ¹	2023	2024	2025	2026	Thereafter	Total
Fuel supply agreements	42	128	57	46	42	36	351
Contributions to the OPG registered pension plan ²	88	180	48	-	-	-	316
Long-term debt repayment	78	44	607	582	675	7,640	9,626
Interest on long-term debt	179	349	338	324	307	4,634	6,131
Short-term debt repayment	215	-	-	-	-	-	215
Commitments related to Darlington Refurbishment project ³	197	-	-	-	-	-	197
Operating licences	24	46	47	48	48	248	461
Operating lease obligations	6	9	7	5	4	16	47
Accounts payable and accrued charges	1,231	1	-	-	-	-	1,232
Other	52	77	22	35	13	112	311
Total	2.112	834	1.126	1.040	1.089	12.686	18,887

¹ Represents amounts for the remainder of the year.

² The pension contributions include ongoing funding requirements in accordance with the actuarial valuation of the OPG registered pension plan as at April 1, 2021. The next actuarial valuation of the OPG registered pension plan must have an effective date no later than April 1, 2024. 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 April 1, 2024 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.

³ 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.

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.

Outsourcing Agreements

On February 1, 2022, OPG insourced some of its information technology service operations, which had been previously outsourced to New Horizon System Solutions LP (NHSS) since 2000. OPG will be repatriating the remaining NHSS Society of United Professionals (Society)-represented employees on November 1, 2022. Pursuant to the contractual arrangement between OPG and NHSS, NHSS' defined benefit pension assets and liabilities for all NHSS employees transferred and OPEB obligations for the Society-represented employees will be transferred to OPG on November 1, 2022.

Pension and OPEB obligations assumed by OPG as part of the arrangement are expected to be largely offset by compensation from NHSS.

15. Business Segments

Segment Income (Loss)		Regulated		Uı	nregulated			
For the Three Months Ended		Nuclear		Contracted				
June 30, 2022	Nuclear	Sustainability	Hydroelectric	Hydroelectric and				
(millions of dollars)	Generation	Services	Generation	Other Generation	Atura Power	Other	Elimination	Total
Revenue	1,029	-	407	205	193	7		1,841
Leasing revenue	6	-	-		-	4	-	10
Other revenue	_	48	-	(15)	-	40	(68)	5
Total revenue	1,035	48	407	190	193	51	(68)	1,856
Fuel expense	64	-	88	8	77	-	-	237
Gross margin	971	48	319	182	116	51	(68)	1,619
Operations, maintenance and administration expenses	546	48	90	61	17	21	(68)	715
Depreciation and amortization expenses	149	-	44	40	29	17	-	279
Accretion on fixed asset removal and nuclear waste management liabilities	-	283	-	2	1	-	-	286
Earnings on nuclear fixed asset removal and nuclear waste management funds	-	(257)	-	-	-	-	-	(257)
Property taxes	8	-	-	3	-	-	-	11
Other gains	-	-	-	-	(1)	(5)	-	(6)
Income (loss) before interest and income taxes	268	(26)	185	76	70	18	-	591
Net interest expense								46
Income before income taxes								545
Income tax expense								94
Net income								451

Segment Income (Loss)		Regulated		U	nregulated			
For the Three Months Ended June 30, 2021	Nuclear	Nuclear Sustainability	Hydroelectric	Contracted Hydroelectric and	-			
(millions of dollars)	Generation	Services	Generation	Other Generation	Atura Power	Other	Elimination	Total
Revenue	1,048	-	427	167	143	2	-	1,787
Leasing revenue	6	-	-	-	-	3	-	9
Other revenue	1	49	-	-	-	25	(67)	8
Total revenue	1,055	49	427	167	143	30	(67)	1,804
Fuel expense	70	-	87	12	34	-	-	203
Gross margin	985	49	340	155	109	30	(67)	1,601
Operations, maintenance and administration expenses	550	49	83	57	15	13	(67)	700
Depreciation and amortization expenses	145	-	54	37	27	14	-	277
Accretion on fixed asset removal and nuclear waste management liabilities	-	268	-	1	1	1	-	271
Earnings on nuclear fixed asset removal and nuclear waste management funds	-	(240)	-	-	-	-	-	(240)
Property taxes	6	-	1	4	-	-	-	11
Other loss (gains)	-	-	1	-	-	(118)	-	(117)
Income (loss) before interest and income taxes	284	(28)	201	56	66	120	-	699
Net interest expense								54
Income before income taxes								645
Income tax expense								123
Net income								522

Segment Income (Loss)		Regulated		ι	Inregulated			
For the Six Months Ended		Nuclear		Contracted				
June 30, 2022	Nuclear	Sustainability	Hydroelectric	Hydroelectric and				
(millions of dollars)	Generation	Services	Generation	Other Generation	Atura Power	Other	Elimination	Total
Revenue	2,154	-	794	408	419	25	-	3,800
Leasing revenue	13	-	-	-	-	7	-	20
Other revenue	-	98	-	(25)	-	57	(136)	(6)
Total revenue	2,167	98	794	383	419	89	(136)	3,814
Fuel expense	132	-	152	20	179	-	-	483
Gross margin	2,035	98	642	363	240	89	(136)	3,331
Operations, maintenance and administration expenses	1,105	98	176	116	32	41	(136)	1,432
Depreciation and amortization expenses	300	-	86	78	57	34	-	555
Accretion on fixed asset removal and nuclear waste management liabilities	-	566	-	4	1	1	-	572
Earnings on nuclear fixed asset removal and nuclear waste management funds	-	(515)	-	-	-	-	-	(515)
Property taxes	13	-	1	9	1	-	-	24
Other losses (gains)	-	-	1	1	(1)	(10)	-	(9)
Income (loss) before interest and income taxes	617	(51)	378	155	150	23	-	1,272
Net interest expense								96
								=.
Income before income taxes								1,176
Income tax expense								218
Net income								958

Segment Income (Loss)		Regulated		U	Inregulated			
For the Six Months Ended June 30, 2021	Nuclear	Nuclear Sustainability	Hydroelectric	Contracted Hydroelectric and	•			
(millions of dollars)	Generation	Services	Generation	Other Generation	Atura Power	Other	Elimination	Total
Revenue	1,987	-	815	348	302	7	-	3,459
Leasing revenue	[′] 13	-	-	-	-	7	-	20
Other revenue	1	94	-	-	-	49	(128)	16
Total revenue	2,001	94	815	348	302	63	(128)	3,495
Fuel expense	129	-	156	23	79	-	-	387
Gross margin	1,872	94	659	325	223	63	(128)	3,108
Operations, maintenance and administration expenses	1,196	94	175	116	32	27	(128)	1,512
Depreciation and amortization expenses	290	-	106	74	55	30	-	555
Accretion on fixed asset removal and nuclear waste management liabilities	-	538	-	3	1	2	-	544
Earnings on nuclear fixed asset removal and nuclear waste management funds	-	(479)	-	-	-	-	-	(479)
Property taxes	13	-	1	8	1	1	-	24
Other losses (gains)	-	-	1	1	-	(123)	-	(121)
Income (loss) before interest and taxes	373	(59)	376	123	134	126	_	1,073
Net interest expense								114
Income before income taxes								959
Income tax expense								142
Net income								817

16. NET CHANGES IN NON-CASH WORKING CAPITAL BALANCES

	Six Months Ended June 30				
(millions of dollars)	2022	2021			
Receivables from related parties	(17)	(112)			
Fuel inventory	(40)	(40)			
Materials and supplies	ົ13	12			
Prepaid expenses	(3)	(14)			
Other current assets	21	11			
Accounts payable, accrued charges and other payables	59	71			
Net changes in non-cash working capital balances	33	(72)			

17. SALE OF NON-CORE REAL ESTATE SITES

OPG has executed an agreement to sell the premises located at 800 Kipling Avenue in Toronto, Ontario. The after-tax gain on sale expected to be recognized upon completing the transaction, including the impact of revisions to the related asset retirement obligation, is estimated to be approximately \$125 million, subject to certain closing conditions. The sale is expected to be completed in the second half of 2022. The asset is held within the Other current assets category in the interim consolidated balance sheets.

In March 2022, OPG received a Shareholder Declaration and a Shareholder Resolution that requires the Company to not proceed with and to terminate the agreement of purchase and sale with the Corporation of the Town of Port Hope to sell the property located at 2655 Lakeshore Road in the Town of Port Hope, Ontario. The asset is included within property, plant and equipment in the interim consolidated balance sheet as at June 30, 2022.