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November 10, 2022

OPG REPORTS 2022 THIRD QUARTER FINANCIAL RESULTS

OPG to support Ontario's future electricity demand; Company plans to safely extend operation and evaluate redevelopment of Pickering nuclear station

Toronto – Ontario Power Generation Inc. (OPG or Company) today reported its financial and operating results for the third quarter of 2022, with net income attributable to the Shareholder of \$484 million, compared to \$426 million for the same period last year.

Third quarter highlights include:

Pickering B Units planned for operation to September 2026, subject to CNSC approval, and to undergo a feasibility study for possible redevelopment

In September 2022, the Ontario Minster of Energy and OPG announced a plan to extend the operation of Units 5 to 8 of the Pickering nuclear generating station (Pickering B) to September 2026, which would provide Ontario with over 2,000 megawatts (MW) of clean and reliable energy capacity for an additional nine months. The extension is subject to the approval of the Canadian Nuclear Safety Commission (CNSC). As part of the announcement, OPG was also tasked with undertaking an update to its previous feasibility assessment for the redevelopment of Pickering B to operate beyond September 2026.

"The Province's request is a testament to OPG's history of operating our facilities safely and reliably, our strong project performance, including the Darlington Nuclear Refurbishment project, and our leading role in providing clean energy to Ontario's homes, businesses and institutions," said Ken Hartwick, OPG President and CEO. "Thanks to the hard work and dedication of our employees, the Pickering station is seeing some of its best performance ever and we are ready to support its safe operation through September 2026, subject to the required CNSC approvals."

Sir Adam Beck I Hydroelectric GS G1 Unit returns to service

Following the successful replacement of the G2 unit at the Sir Adam Beck I Generating Station (GS) in the spring of this year, OPG completed installation of the G1 unit in October 2022. Successful completion of this work at G1 and G2 added approximately 115 MW of clean electricity at the Company's flagship hydroelectric station.

"These new generator units are lighter, more efficient, and can generate more energy with less water required to pass through the turbine," said Hartwick. "For more than a century, the Sir Adam Beck complex has been providing electricity to Ontarians. These upgrades will help it continue to produce clean, climate-change fighting power for many more decades."

Darlington New Nuclear Project obtains financing from Canada Infrastructure Bank

In the third quarter of 2022, OPG entered into a credit facility agreement with the Canada Infrastructure Bank (CIB) to finance the preparation of the Darlington New Nuclear Project. OPG secured the facility to support the cost-effective development of clean, nuclear energy infrastructure to help meet Ontario's future projected electricity needs.

"This low-interest facility will help OPG to further progress our Small Modular Reactor (SMR) to be operational at the Darlington New Nuclear Project site by the end of this decade," said Hartwick. "We know nuclear energy, including from SMRs, is an essential part of the electricity mix to help decarbonize the energy sector. New generation from SMRs will be especially necessary as electricity demands increase due to electrification of higher-emitting sectors, including transportation. The CIB facility is a strong sign of the federal government's support for this critical project."

Net Income attributable to the Shareholder

Net income attributable to the Shareholder increased by \$58 million and \$199 million for the three and nine month periods ended September 30, 2022, respectively, compared to the same periods in 2021.

The increases in both periods were primarily attributable to the net impact of new regulated prices for OPG's nuclear electricity generation resulting from the decisions issued by the Ontario Energy Board (OEB) in the second half of 2021, and higher earnings from the Contracted Hydroelectric and Other Generation business segment primarily due to higher wholesale electricity market prices from US operations.

The increases in both periods were partially offset by the impact of lower electricity generation within the Regulated – Nuclear Generation business segment due to the commencement of the refurbishment of Darlington GS Unit 1 in mid-February 2022, higher income tax expense resulting from higher earnings and fair value adjustments of non-core equity investments recognized in 2021.

Generating and Operating Performance

Electricity generated was 20.4 terawatt hours (TWh) and 61.7 TWh for the three and nine month periods ended September 30, 2022, respectively, compared to 21.0 TWh and 59.3 TWh for the same periods in 2021.

Regulated – Nuclear Generation Segment

Electricity generation from the Regulated – Nuclear Generation business segment decreased by 1.9 TWh and 1.8 TWh for three and nine month periods ended September 30, 2022, respectively, compared to the same periods in 2021. As expected, the decreases in both periods were primarily due to the removal from service of Darlington GS Unit 1 for the duration of the unit's refurbishment, which began in mid-February 2022. For the nine months ended September 30, 2022, the decrease was partially offset by higher electricity generation during the first quarter of 2022, primarily due to fewer planned cyclical maintenance outage days and fewer unplanned outage days at both the Darlington and Pickering nuclear generating stations.

The Darlington GS unit capability factor decreased to 92.5 per cent and increased to 95.0 per cent for the three and nine month periods ended September 30, 2022, respectively, compared to 99.7 per cent and 86.5 per cent for the same periods in 2021. The decrease for the three months ended September 30, 2022 was primarily due to a higher number of unplanned outage days. For the nine months ended September 30, 2022, the increase was primarily due to fewer planned and unplanned outage days.

The Pickering GS unit capability factor increased to 94.9 per cent and 88.8 per cent for the three and nine month periods ended September 30, 2022, respectively, compared to 94.1 per cent and 83.5 per cent for the same periods in 2021. The increase for the three months ended September 30, 2022, was primarily due to fewer unplanned outage days, partially offset by a higher number of planned outage days. For the nine months ended September 30, 2022, the increase was primarily due to fewer planned and unplanned outage days.

Regulated – Hydroelectric Generation Segment

The increase in electricity generation of 0.4 TWh and 2.1 TWh from the Regulated – Hydroelectric Generation business segment for the three and nine month periods ended September 30, 2022, compared to the same periods in 2021, was primarily due to significantly higher water flows across most of Ontario and lower surplus baseload generation as a result of higher electricity demand.

Availability increased to 82.9 per cent for the three months ended September 30, 2022, compared to 81.9 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 nine months ended September 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 and 0.1 TWh for the three and nine month periods ended September 30, 2022, compared to the same periods in 2021, primarily due to higher water flows in Northeastern Ontario.

Availability of the hydroelectric stations in the segment increased to 88.5 per cent for the three months ended September 30, 2022, compared to 83.1 per cent for the same period in 2021, primarily due to fewer unplanned outages at the Lower Mattagami generating stations. For the nine months ended September 30, 2022, hydroelectric availability was comparable to the same period in 2021.

Atura Power

Electricity generation from the Atura Power business segment increased by 0.7 TWh and 2.0 TWh for the three and nine month periods ended September 30, 2022, respectively, compared to the same periods in 2021. The increases in both periods were primarily due to higher demand for electricity generation from combined cycle plants, reflecting the ongoing refurbishments of nuclear generating stations in Ontario.

Availability of the generating stations in the segment decreased to 91.0 per cent as at September 30, 2022, compared to 93.5 per cent as at September 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.

Significant developments during the third 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 the originally planned schedule and is now expected to be returned to service by late 2023. Unit 3 refurbishment is currently in the third major segment, Reassembly, which involves the installation and reassembly of reactor components. Following completion of the fuel channel installation series in July 2022, the project has commenced the lower feeder installation series. Additionally, as part of the refurbishment, OPG completed the static commissioning of the Unit 3 turbine generator in September 2022.

Unit 1 refurbishment activities are progressing on schedule and are currently in the second major segment, Disassembly. The project completed the removal of 960 feeder tubes from the reactor in November 2022 and has begun preparatory work for the removal of 480 fuel channel assemblies.

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 nine month periods ended September 30, 2022 section, *Core Business and Outlook* under the heading, *Project Excellence*.

FINANCIAL AND OPERATIONAL HIGHLIGHTS

	Three Mon Septem		Nine Months Ende September 30	
(millions of dollars – except where noted)	2022	2021	2022	2021
Revenue	1,978	1,712	5,792	5,207
Fuel expense	350	241	833	628
Operations, maintenance and administration expenses	666	555	2,098	2,067
Depreciation and amortization expenses	281	277	836	832
Accretion on fixed asset removal and nuclear waste management liabilities	285	274	857	818
Earnings on nuclear fixed asset removal and nuclear waste management funds	(259)	(243)	(774)	(722
Other net expenses (gains)	14	` 47 [′]	29	(50
Earnings before interest and income taxes	641	561	1,913	1,634
Net interest expense	45	53	141	167
Income tax expense	108	78	326	220
Net income	488	430	1,446	1,247
Net income attributable to the Shareholder	484	426	1,433	1,234
Net income attributable to the Shareholder Net income attributable to non-controlling interest ¹	404 4	420 4	1,433	1,234
Earnings (loss) before interest and income taxes	<u></u>		13	10
Electricity generating business segments	675	619	1,975	1,625
Regulated – Nuclear Sustainability Services	(23)	(28)	(74)	(87
Other	(11)	(30)	12	96
Earnings before interest and income taxes	641	(30) 561	1,913	1,634
	1,001	889	2,618	1,03 4 1,965
Cash flow provided by operating activities Capital expenditures ²	649	556	1,806	1,462
Electricity generation (TWh)	043	550	1,000	1,402
Regulated – Nuclear Generation	9.8	11.7	29.4	31.2
Regulated – Nuclear Generation Regulated – Hydroelectric Generation	7.3	6.9	23.5	21.4
Contracted Hydroelectric and Other Generation ³	1.1	0.9	3.7	3.6
Atura Power	2.2	1.5	5.1	3.1
Total OPG electricity generation	20.4	21.0	61.7	59.3
Nuclear unit capability factor (per cent) 4		21.0	<u> </u>	- 00.0
Darlington Nuclear GS	92.5	99.7	95.0	86.5
Pickering Nuclear GS	94.9	94.1	88.8	83.5
Availability (per cent)		0 1. 1		00.0
Regulated – Hydroelectric Generation	82.9	81.9	88.5	88.4
Contracted Hydroelectric and Other Generation – hydroelectric stations	88.5	83.1	87.0	87.6
Atura Power ⁵	91.0	93.5	91.0	93.5
Equivalent forced outage rate				
Contracted Hydroelectric and Other Generation – thermal stations	4.6	0.9	1.9	1.6

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.

Includes net changes in accruals.

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

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.

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 nine month periods ended September 30, 2022, can be accessed on OPG's web site (www.opg.com), the Canadian Securities Administrators' web site (www.sedar.com), 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**

ONTARIO POWER GENERATION INC. MANAGEMENT'S DISCUSSION AND ANALYSIS

2022 THIRD 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 nine month periods ended September 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). In September 2022, the OSC approved an exemption which allows the Company to continue to apply US GAAP up to January 1, 2027. The term of the exemption is subject to certain conditions, which may result in the expiry of the exemption prior to January 1, 2027. For details, refer to the section, *Changes in Accounting Policies and Estimates*, under the heading, *Exemptive Relief for Reporting under US GAAP*. This MD&A is dated November 10, 2022.

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

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:

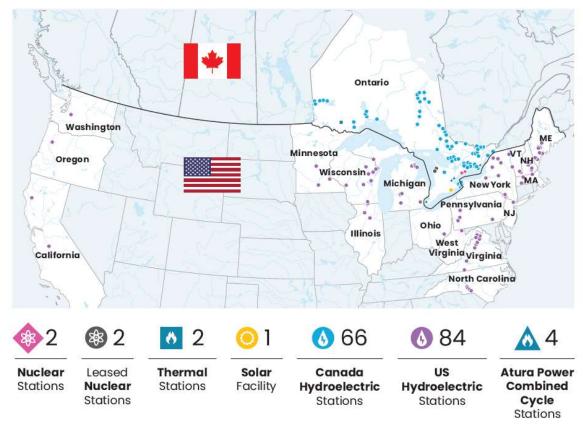
- "Earnings before Interest, Income Taxes, Depreciation and Amortization"; and
- "Gross Margin".

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 18,150 megawatts (MW) as at September 30, 2022.

As at September 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 84 hydroelectric generating stations and held minority interests in 14 hydroelectric and two solar facilities in the US as at September 30, 2022. In addition, OPG owns two nuclear generating stations in Ontario, the Bruce A GS and the Bruce B GS (Bruce nuclear generating stations), 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.

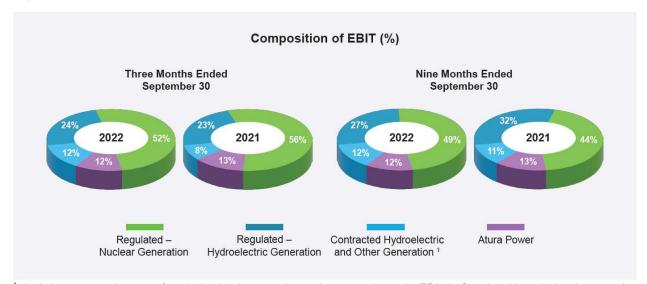
Income from the stations leased to Bruce Power is included in revenue under the Regulated – Nuclear Generation business segment. The leased stations are not included in the Company's electricity generation and other operating statistics set out in this MD&A.

Reporting Structure

The composition of OPG's reportable business segments effective as at September 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 segments for the three and nine month periods ended September 30, 2022 and 2021 were as follows:



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 September 30, 2022 and December 31, 2021 was as follows:

	As At			
(MW)	September 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	4,092	4,095		
Atura Power	2,715	2,715		
Total	18,150	18,958		

The in-service generating capacity as at September 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.

The total in-service generating capacity as at September 30, 2022, decreased by 808 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*.

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

HIGHLIGHTS

Overview of Results

This section provides an overview of OPG's unaudited interim consolidated operating results for the three and nine month periods ended September 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.

(millions of dollars – except where noted)	Three Months Ended September 30 2022 2021		Nine Mon Septen 2022	
Revenue Fuel expense Operations, maintenance and administration expenses Depreciation and amortization expenses Accretion on fixed asset removal and nuclear waste	1,978 350 666 281	1,712 241 555 277	5,792 833 2,098 836	5,207 628 2,067 832
management liabilities Earnings on nuclear fixed asset removal and nuclear waste management funds	285 (259)	274 (243)	857 (774)	818 (722)
Other net expenses (gains)	14	47	29	(50)
Earnings before interest and income taxes	641	561	1,913	1,634
Net interest expense Income tax expense	45 108	53 78	141 326	167 220
Net income	488	430	1,446	1,247
Net income attributable to the Shareholder Net income attributable to non-controlling interest ¹	484 4	426 4	1,433 13	1,234 13
Electricity generation (TWh) ²	20.4	21.0	61.7	59.3
Cash flow provided by operating activities	1,001	889	2,618	1,965
Capital expenditures ³	649	556	1,806	1,462
Earnings (loss) before interest and income taxes by business segment				
Regulated – Nuclear Generation	349	348	966	721
Regulated – Hydroelectric Generation Contracted Hydroelectric and Other Generation	160 82	144 49	538 237	520 172
Atura Power	84	78	234	212
Total electricity generating business segments	675	619	1,975	1,625
Regulated – Nuclear Sustainability Services Other	(23) (11)	(28) (30)	(74) 12	(87) 96
Earnings before interest and income taxes	641	561	1,913	1,634

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

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

³ Includes net changes in accruals.

Third Quarter

Net income attributable to the Shareholder was \$484 million for the third quarter of 2022, representing an increase of \$58 million compared to the same quarter in 2021.

Earnings before interest and income taxes were \$641 million for the third quarter of 2022, an increase of \$80 million compared to the same quarter in 2021.

Significant factors that increased EBIT:

- Higher revenue from the Regulated Nuclear Generation business segment of \$143 million from a higher base regulated price for OPG's nuclear electricity generation (nuclear base regulated price) effective January 1, 2022;
- A net regulatory liability of \$47 million recorded in the third quarter of 2021 to recognize the OEB's decision approving a proposed settlement related to OPG's five-year application for nuclear base regulated prices effective January 1, 2022 (Settlement Agreement). As part of the Settlement Agreement, OPG agreed to credit ratepayers the difference between the Company's net favourable electricity revenue impact and incremental OM&A expenses arising from the COVID-19 pandemic response over 2020 and 2021;
- Higher EBIT of \$33 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;
- A loss of \$33 million recorded in the third 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 company; and
- Lower OM&A expenses of \$17 million from the Regulated Nuclear Generation business segment, excluding the impact of the Settlement Agreement, primarily due to higher expenditures incurred in 2021 related to the cyclical maintenance schedule at the Darlington GS.

Significant factors that decreased EBIT:

- Lower revenue from the Regulated Nuclear Generation business segment of \$169 million, net of fuel expense, due to lower electricity generation of 1.9 terawatt hours (TWh), primarily due to the commencement of the refurbishment of Darlington GS Unit 1, which was taken offline in mid-February 2022; and
- An increase in depreciation and amortization expenses of \$61 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 nuclear base regulated price in effect during 2021.

Net interest expense decreased by \$8 million in the third quarter of 2022, compared to the same quarter in 2021, largely 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 increased by \$30 million for the three months ended September 30, 2022, compared to the same period in 2021. The increase was primarily due to higher earnings before taxes.

Year-To-Date

Net income attributable to the Shareholder was \$1,433 million for the first nine months of 2022, representing an increase of \$199 million compared to the same period in 2021.

Earnings before interest and income taxes were \$1,913 million for the first nine months of 2022, an increase of \$279 million compared to the same period in 2021.

Significant factors that increased EBIT:

- Higher revenue from the Regulated Nuclear Generation business segment of \$431 million from a higher nuclear base regulated price effective January 1, 2022;
- Lower OM&A expenses of \$108 million from the Regulated Nuclear Generation business segment, excluding
 the impact of the Settlement Agreement, as expected, primarily due to a planned cyclical maintenance outage
 for Unit 1 of the Darlington GS during the first quarter of 2021;
- Higher EBIT of \$65 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; and
- A net regulatory liability of \$47 million recorded in the third quarter of 2021 to recognize the OEB's decision approving the Settlement Agreement.

Significant factors that decreased EBIT:

- An increase in depreciation and amortization expenses of \$179 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;
- Lower revenue from the Regulated Nuclear Generation business segment of \$158 million, net of fuel
 expense, due to lower electricity generation of 1.8 TWh, primarily due to the commencement of the
 refurbishment of Darlington GS Unit 1, which was taken offline in mid-February 2022;
- A gain of \$50 million recorded during the nine months ended September 30, 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 category on the sale of OPG's former Thunder Bay GS site completed in April 2021.

Net interest expense decreased by \$26 million for the nine months ended September 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 \$106 million for the nine months ended September 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 nine month periods ended September 30, 2022 and 2021 was as follows:

	Three Months Ended September 30		Nine Months Ended September 30		
(TWh)	2022	2021	2022	2021	
Regulated – Nuclear Generation	9.8	11.7	29.4	31.2	
Regulated – Hydroelectric Generation	7.3	6.9	23.5	21.4	
Contracted Hydroelectric and Other Generation ¹	1.1	0.9	3.7	3.6	
Atura Power	2.2	1.5	5.1	3.1	
Total ODC electricity generation	20.4	21.0	64.7	E0 2	
Total OPG electricity generation	20.4	21.0	61.7	59.3	

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

Total OPG electricity generation decreased by 0.6 TWh for the three months ended September 30, 2022, compared to the same period in 2021, and increased by 2.4 TWh for the nine months ended September 30, 2022, compared to the same period in 2021.

Electricity generation from the Regulated – Nuclear Generation business segment decreased by 1.9 TWh and 1.8 TWh for three and nine month periods ended September 30, 2022, respectively, compared to the same periods in 2021. As expected, the decreases in both periods were primarily due to the removal from service of Darlington GS Unit 1 for the duration of the unit's refurbishment, which began in mid-February 2022. For the nine months ended September 30, 2022, the decrease was partially offset by higher electricity generation during the first quarter of 2022, primarily due to fewer planned cyclical maintenance outage days and fewer unplanned outage days at both the Darlington and Pickering nuclear generating stations.

The increase in electricity generation of 0.4 TWh and 2.1 TWh from the Regulated – Hydroelectric Generation business segment for the three and nine month periods ended September 30, 2022, compared to the same periods in 2021, was primarily due to significantly higher water flows across most of Ontario and lower SBG as a result of higher electricity demand.

Electricity generation from the Contracted Hydroelectric and Other Generation business segment increased by 0.2 TWh and 0.1 TWh for the three and nine month periods ended September 30, 2022, compared to the same periods in 2021, primarily due to higher water flows in Northeastern Ontario.

Electricity generation from the Atura Power business segment increased by 0.7 TWh and 2.0 TWh for the three and nine month periods ended September 30, 2022, respectively, compared to the same periods in 2021. The increases in both periods were primarily due to higher demand for electricity generation from combined cycle plants, reflecting the ongoing refurbishments of nuclear generating stations in Ontario.

For the three and nine month periods ended September 30, 2022, Ontario's electricity demand as reported by the IESO, excluding electricity exports out of province, was 35.8 TWh and 103.8 TWh, respectively, compared to 34.9 TWh and 100.5 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 lower for the three and nine month periods ended September 30, 2022, compared to the same periods in 2021. Production forgone at OPG's regulated hydroelectric stations due to SBG conditions was 0.1 TWh and 1.3 TWh during the three and nine month periods ended September 30, 2022, compared to 0.3 TWh and 1.7 TWh, respectively, for the same periods in 2021. The gross margin impact of production 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 \$1,001 million and \$2,618 million for the three and nine month periods ended September 30, 2022, respectively, compared to \$889 million and 1,965 million for the same periods in 2021.

The increase for the three months ended September 30, 2022, compared to the same period in 2021, was largely due to higher reimbursements of eligible expenditures on nuclear fixed asset removal and nuclear waste management liabilities (Nuclear Liabilities) from the nuclear fixed asset and nuclear waste management funds (Nuclear Segregated Funds), higher earnings from the Company's US operations due to higher wholesale electricity market prices and lower expenditures on the Nuclear Liabilities.

The increase for the nine months ended September 30, 2022, compared to the same period in 2021, 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, higher earnings from the Company's US operations due to higher wholesale electricity market prices, lower expenditures on the Nuclear Liabilities and higher reimbursements of expenditures on the Nuclear Liabilities from the Nuclear Segregated Funds.

Capital Expenditures

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

	Septen	iths Ended nber 30	Nine Months Ended September 30		
(millions of dollars)	2022	2021	2022	2021	
Regulated – Nuclear Generation – Darlington Refurbishment Project	243	209	714	603	
Regulated – Nuclear Generation – Excluding Darlington Refurbishment Project	193	108	475	289	
Regulated – Hydroelectric Generation	85	117	210	273	
Contracted Hydroelectric and Other Generation	86	83	247	208	
Atura Power	24	5	84	18	
Other	18	34	76	71	
Total capital expenditures ¹	649	556	1,806	1,462	

¹ Includes net changes in accruals.

Total capital expenditures increased by \$93 million and \$344 million for the three and nine month periods ended September 30, 2022, respectively, compared to the same periods in 2021.

Capital expenditures for the Darlington Refurbishment project increased by \$34 million and \$111 million for the three and nine month periods ended September 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 \$85 million and \$186 million for the three and nine month periods ended September 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 ongoing replacement of the primary moisture separator at Unit 3 of the Darlington GS.

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

Capital expenditures for the Regulated – Hydroelectric Generation business segment decreased by \$32 million and \$63 million for the three and nine month periods ended September 30, 2022, respectively, compared to the same periods in 2021. The decreases in both periods were mainly due to the higher expenditures in 2021 on the Sir Adam Beck I GS Units G1 and G2 Replacement Project and the completion of the overhaul and upgrade of Unit 5 at the Sir Adam Beck I GS. The decreases were also due to 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 \$39 million for the nine months ended September 30, 2022, compared to the same period in 2021. The increase primarily reflected higher expenditures on the Smoky Falls Dam Safety project. For the three months ended September 30, 2022, capital expenditures for the segment were comparable to the same period in 2021.

Capital expenditures for the Atura Power business segment increased by \$19 million and \$66 million for the three and nine month periods ended September 30, 2022, respectively, compared to the same periods in 2021. The increases in both periods were primarily due to higher expenditures at the Napanee GS.

Capital expenditures for the Other category decreased by \$16 million for the three months ended September 30, 2022, compared to the same period in 2021. The decrease was reflective of the completion of certain planned investments in information technology systems as part of OPG's digital strategy in 2021. Capital expenditures for the Other category for the nine months ended September 30, 2022 were comparable to the same period in 2021.

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

Operational Excellence

Continued Operations Plan for Pickering GS

On September 29, 2022, the Province announced its support for the continued safe operation of the Pickering GS, which includes Units 1 and 4 operating to the end of September 2024 and December 2024, respectively, and Units 5 to 8 operating until the end of September 2026. OPG had previously planned to operate Units 5 to 8 until the end of 2025. Operating any of the Pickering GS units past December 31, 2024 is subject to the CNSC's regulatory approval through a public hearing process. At the Province's request, OPG reviewed operational plans and concluded that continuing to keep the units operational to these planned dates is safe and technically feasible. The continued operation of Units 5 to 8 at the Pickering GS to September 2026 would provide Ontario with a reliable, cost-effective source of baseload energy during a period of refurbishments at the Darlington and Bruce nuclear generating stations while avoiding carbon emissions and maintaining several thousand jobs in the Durham region. Further details on the regulatory approval process for the Pickering GS can be found in the section, Core Business and Outlook under the headings, Operational Excellence - Electricity Generation Production and Reliability and Financial Strength -Increasing Revenue, Reducing Costs and Achieving Appropriate Return.

The Province has also asked OPG to perform an update to its feasibility assessment for the redevelopment of Units 5 to 8 at the Pickering GS, based on the latest information, to support future electricity planning decisions. OPG previously conducted such a feasibility assessment between 2006 and 2009. OPG expects to submit the updated results of the assessment by the end of 2023.

Sale of Non-Core Real Estate Site

In October 2022, OPG sold 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 the sale including the impact of revisions to the related asset retirement obligation is estimated to be approximately \$135 million, of which approximately \$25 million is expected to be recognized in 2023, subject to certain conditions.

Project Excellence

Sir Adam Beck I GS Units G1 and G2 Replacement

In October 2022, OPG successfully completed the replacement of the G1 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 G1 unit marks the second full unit replacement to take place in the station's history, after the G2 unit replacement was completed in May 2022. The overall project was completed below its \$128 million budget.

Financial Strength

Planned Sale of Hydroelectric Facilities in the United States

As at September 30, 2022, OPG, through Eagle Creek, has committed to a plan to sell 22 hydroelectric generating stations with a total capacity of approximately 47 MW across a number of regions, along with two storage reservoirs in the Mid-West region of the US as part of the Company's strategy to optimize the US hydroelectric portfolio. A letter of intent with a potential buyer has been executed and the sale is expected to be completed in the first half of 2023, subject to regulatory approval. The assets are reported within the Contracted Hydroelectric and Other Generation business segment.

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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 have been allocated to the Darlington Refurbishment project.

On October 31, 2022, OPG's wholly-owned Lower Mattagami Energy Limited Partnership (LME) completed a private placement bond offering with the issuance of \$250 million of green bonds, maturing in October 2033, with a coupon interest rate of 4.85 percent. The net proceeds from the issuance are to be used for funding the Little Long Dam Safety project. LME owns and operates certain of OPG's contracted hydroelectric facilities located along the Lower Mattagami River in Northeastern Ontario.

Darlington New Nuclear Project Bank Facility

On August 29, 2022, OPG entered into a \$970 million non-revolving term credit facility with the Canada Infrastructure Bank. The low-interest facility is made available to fund part of the expenditures required to prepare for the construction of OPG's first SMR, at the DNNP site. The availability period to borrow under the facility is expected to end in September 2027 and any outstanding amounts under the facility would have an expected maturity date of September 2042. As at September 30, 2022, there were no amounts outstanding under the facility.

Social Licence

Inaugural Environmental Social and Governance Report

In August 2022, OPG released its inaugural Environmental, Social and Governance (ESG) report, approved by the Board of Directors (Board), which details the Company's ESG performance and practices including climate change initiatives, progress toward becoming a more equitable, inclusive and diverse employer, and actions underway as part of OPG's Reconciliation Action Plan. The ESG report covers several key topics under the three pillars of Environmental, Social, and Governance. OPG's ESG Report is available on the Company's website at www.opg.com.

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.

In August 2022, the Company updated its mission statement and established a long-term vision statement to reflect the strategic direction, ambitions, and alignment with the overall long-term goals of the organization.

- OPG's mission: To build a sustainable future powered by our electricity, ideas and people.
- OPG's vision: Electrifying life in one generation.

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 updated 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 September 2026, as discussed in the section, Significant Developments under the heading, Operational Excellence - Continued Operations Plan for Pickering GS. 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 end of life dates, including confirming the validity of the previously established Periodic Safety Review (PSR) and associated Integrated Implementation Plan (IIP). The PSR, a comprehensive assessment of the station's design and operation, confirmed that there is a high level of safety throughout the continued operation of the station to 2024. 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 the end of 2025. In November 2022, OPG submitted the results of the IIP reassessment for operations to the end of 2025 to the CNSC. OPG is required to perform a PSR and IIP reassessment to the end of planed operations in September 2026, in support of the CNSC's approval required for post-2024 commercial operation.
- The station-wide Pickering GS Vacuum Building Outage (VBO) requiring the shutdown of all six operating units commenced as planned on October 6, 2022. The work performed during the VBO was a significant investment into the Pickering GS and is in line with OPG's ongoing commitment to safety and excellence across the fleet. The VBO included inspection and testing of common safety systems to ensure continued availability throughout and to the end of planned operation dates for the six Pickering GS units. Station containment structure testing was also performed during the outage with favourable results. The outage was completed safely on November 5, 2022.
- In September 2022, the Pickering GS achieved a new station record for simultaneously operating all six of its operating units. Before Unit 1 was taken offline for a planned outage on September 9, 2022, all six operating units supplied energy to Ontario's electricity grid for 109 consecutive days without being taken out of service for maintenance or repairs.

- In November 2020, the Canadian government launched a process to review and modernize Canada's approach to the safe management of Canada's nuclear by-products, consisting of two elements. The first element is to review Canada's existing Radioactive Waste Policy framework, with public participation and the goal of ensuring that the framework is consistent with international standards and best practices. The second element is to develop Canada's integrated strategy for the safe management of irradiated wastes, which, at the federal government's request, is being led by the Nuclear Waste Management Organization (NWMO). In February 2022, Natural Resources Canada issued a draft policy, Modernizing Canada's Policy for Radioactive Waste Management and Decommissioning, for public comment. In August 2022, following an engagement process, the NWMO issued a draft integrated strategy report for public comment. The NWMO has stated that its final recommendations for the Integrated Strategy for Radioactive Waste are expected to be presented to the federal government following the release of the final modernized Radioactive Waste Policy from Natural Resources Canada. OPG is participating in the federal government and NWMO's engagement processes and is monitoring developments related to the Integrated Strategy for Radioactive Waste as part of the Company's process to explore solutions for the safe long-term management of its low and intermediate level irradiated materials (referred to as low and intermediate level waste or L&ILW). OPG continues to advance initiatives to safely and efficiently reduce the environmental footprint of L&ILW requiring long-term disposal by maximizing opportunities for processing, volume reduction, and recycling of clean materials.
- 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 third quarter of 2022, OPG commenced the commissioning activities for the overhaul and upgrade of Unit 1 at the Silver Falls GS, which is expected to return to service by the end of 2022. The upgrade of the new runner, combined with improvements to the efficiency of the turbine, is expected to increase the Company's in-service capacity by approximately 5 MW. The execution of the overhaul work on Unit 7 at the Otto Holden GS and Unit 9 at the Saunders GS progressed during the quarter. The Company also continues the rehabilitation of the concrete infrastructure at the Saunders GS and the Otto Holden GS and has commenced the replacement of the headgates at the Sir Adam Beck II GS.

Collective Agreements

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



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 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	714 8,973	12,800 ²	Unit 1 — 2025	Unit 3 refurbishment is progressing to its revised 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	163 480	650	2023	During the third quarter of 2022, OPG completed the west embankment construction, installation of the hoist houses in the corresponding new bays and the demolition of the west gravity wall. In addition, the installation of the east upstream wall was completed during the quarter. The replacement of the existing Adam Creek gates continues. The project is expected to be completed in 2023 and is tracking on budget.
Smoky Falls Dam Safety Project	61 95	390	2025	During the third quarter of 2022, OPG completed the upstream and downstream water retaining 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	45 135	145	2023	During the third quarter of 2022, OPG completed construction of the embedded parts for the generator and turbine installation. In October 2022, OPG connected the newly constructed switchyard to the distribution network. The project is forecasted to require additional funding brought about by further procurement, construction and engineering related activities due to discovery work and scope changes from unanticipated site conditions. The additional costs and schedule include repairs for the upstream gate embedded parts and machining of turbine stay rings. The in-service date for the project is expected to be in early 2023 and is tracking toward a total cost of \$168 million.

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

Project (millions of dollars)	Capital expenditures Year-to-date ¹ Life-to-	date	Approved budget	Expected in-service Date	Current status
Sir Adam Beck I GS Units G1 and G2 Replacement	16	110	128	2022	In October 2022, OPG successfully completed the replacement of the G1 unit. The completion of the G1 unit marks the second full unit replacement to take place in the station's history after the G2 unit replacement was completed in May 2022. The project is discussed further in the section Significant Developments, under the heading, Project Excellence – Sir Adam Beck I GS Units G1 and G2 Replacement.

¹ Year-to-date represents capital expenditures for the nine months ended September 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 date in 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, which involves the installation and reassembly of reactor components, including new feeder tubes and fuel channel assemblies. Following completion of the fuel channel installation in July 2022, lower feeder installation series commenced and is targeting completion in the fourth quarter of 2022. Additionally, as part of the refurbishment, OPG completed the static commissioning of the Unit 3 turbine generator in September 2022.

Unit 1 refurbishment is currently in the second major segment, Disassembly, with activities progressing on schedule. During the third quarter, 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, was completed. Following this, the project completed the removal of 960 feeder tubes from the reactor in November 2022 and has begun preparatory work for the removal of 480 fuel channel assemblies. The removal of fuel channel assemblies is expected to commence in the fourth quarter of 2022 with the removal of end fittings, to be followed by the removal of pressure tubes and calandria tubes, which will mark the end of the Disassembly segment.

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.



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
Pagulated Nuclear Constation						
Regulated - Nuclear Generation	00.70	404.00	407.70	100 10	400.05	444.00
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 under the Ontario Energy Board Act, 1998 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.

On October 13, 2022, the Ministry of Energy proposed an amendment to *Ontario Regulation 53/05* that would require OPG to establish a variance account to track the additional revenues and costs associated with operating Units 5 to 8 of the Pickering GS beyond December 31, 2025. The disposition of the account balance would be subject to the OEB's prudence review and approval in a future proceeding. The public comment period for the proposed regulation amendment is open until November 14, 2022. Further details on OPG's updated plan for continued operations of the Pickering GS can be found in the section, *Significant Developments* under the heading, *Operational Excellence – Continued Operations Plan for Pickering GS*.

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 September 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

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.

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

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.

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.

Growth and Transformation

OPG strives to be a leader in the North American transition toward a low-carbon economy, while maintaining and expanding the Company's scale and energy industry leadership through the pursuit of commercial-based opportunities. Aligned with OPG's Climate Change Plan, the strategy considers the Company's financial position and encompasses the renewal and expansion of the Company's portfolio of electricity generating assets, including the redevelopment of existing sites, pursuing new developments and exploring commercial innovation opportunities outside of the core generation business. Opportunities are evaluated using financial and risk-based analyses as well as strategic considerations and may be pursued in partnership with other commercial entities where aligned with OPG's business objectives.

Nuclear Small Modular Reactors

In September 2022, OPG, through its contractor E.S. Fox Limited, commenced site preparation and support infrastructure activities for the DNNP that include engineering, procurement and construction. In October 2022, OPG submitted the licence to construct application to the CNSC.

In October 2022, OPG entered into a Memorandum of Understanding (MOU) with ČEZ Group (ČEZ), a Czech Republicbased energy company, to advance the deployment of nuclear technology, including SMRs, in the respective jurisdictions. Under the MOU, OPG and ČEZ will share information related to the deployment of new nuclear projects to reduce financial, technical and schedule risk to both parties on their respective future projects.

In October 2022, Laurentis Energy Partners, a wholly-owned subsidiary of OPG, announced the signing of a Master Service Agreement with Synthos Green Energy S.A., a Polish-based energy company, to support the development and deployment of SMRs in Poland by offering services throughout the development lifecycle.

Transit Electrification

In August 2022, the Toronto Transit Commission (TTC) entered into a 20-year agreement with PowerON Energy Solutions (PowerON), a wholly-owned subsidiary of OPG, to help decarbonize Toronto's bus fleet, North America's largest transit electrification project to date. PowerON supports large-scale electrification projects by providing turnkey solutions encompassing all electrical infrastructure from the electricity grid connection to vehicle chargers. Under the agreement with the TTC, PowerON will design, build, co-invest in, and operate the charging and related electrical infrastructure to support the electrification of the TTC's bus fleet and facilities.

Clean Energy Credits

Building on the Company's strategy to help the markets where it operates achieve net-zero carbon economies, OPG offers electricity consumers voluntary Clean Energy Credits (CECs) from its hydroelectric and nuclear facilities in Ontario and, through Eagle Creek, from its hydroelectric facilities in the United States, OPG supports electricity consumers by allowing them to purchase CECs to demonstrate that their electricity comes from clean generating sources.

In September 2022, OPG announced a Canada-first strategic partnership with Microsoft Canada Inc. (Microsoft) aimed at addressing climate change and driving sustainable growth across Ontario. As part of the agreement, Microsoft will purchase CECs for its electricity consumption in Ontario from OPG's hydroelectric and nuclear facilities. The two companies will also collaborate on sustainability initiatives, including co-developing an hourly energy matching platform that utilizes Microsoft technology and digital innovation opportunities to accelerate OPG's SMR program. Beyond the CEC agreement, the two companies signed an MOU to evaluate procurement of CECs associated with the carbon-free energy to be produced by the future SMR at the DNNP site.



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 a higher OEB-approved nuclear base regulated price effective January 1, 2022, and the decrease in earnings in the fourth quarter of 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 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 September 30, 2022, the Decommissioning Segregated Fund was overfunded by approximately 26 percent and the Used Fuel Segregated Fund was overfunded by approximately 4 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 ESG practices, and operating in a safe, sustainable and inclusive manner are directly connected to business success and 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.

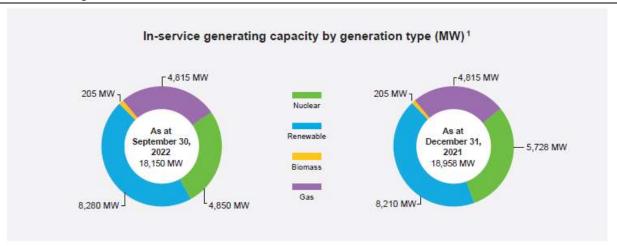
Climate Change

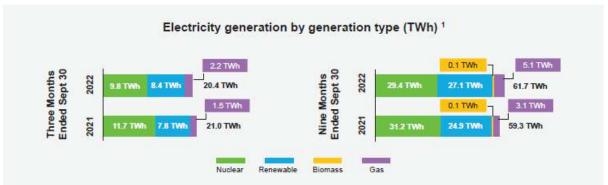
Since the launch of the Climate Change Plan in 2020, OPG has made advancements in several areas to ensure sustainable, resilient operations and to invest in the generation of clean energy. This includes progressing the Darlington Refurbishment project as one of Canada's largest clean energy infrastructure projects, continuing to lead the advancement of SMRs including deployment of 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.

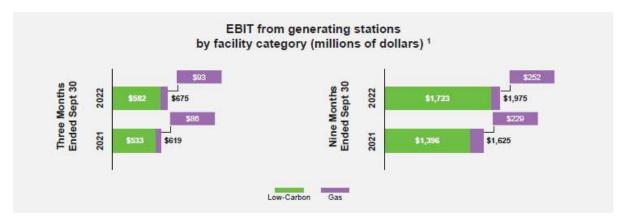
Climate-Related Performance and Key Metrics

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







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

Climate change metrics	
In-service generating capacity by generation type ¹	In-service generating capacity from low-carbon emitting sources decreased as at September 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 nine month periods ended September 30, 2022, approximately 89 and 92 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 and nine month periods ended September 30, 2022, compared to the same periods 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 demand for electricity generation from combined cycle plants, reflecting the ongoing refurbishments of nuclear generating stations in Ontario.
EBIT from generating stations by facility category ³	Earnings before interest and income taxes from low-carbon generation increased for the three months ended September 30, 2022, compared to the same period in 2021, primarily due to higher earnings from the Contracted Hydroelectric and Other Generation business segment as a result of higher earnings from US operations due to higher wholesale electricity market prices. The increase for the nine months ended September 30, 2022, compared to the same period in 2021, was primarily due to higher earnings from the Regulated – Nuclear Generation business segment.
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. The net proceeds from the issuance have been allocated to the Darlington Refurbishment project. Additionally, in October 2022, OPG's wholly owned LME completed a private placement bond offering with the issuance of \$250 million of green bonds. The net proceeds from the issuance are to be used for funding the Little Long Dam Safety project. For further details, refer to the section, <i>Significant Developments</i> under the heading, <i>Financial Strength</i> – <i>Green Bonds</i> . OPG's Green Bond Framework is available on the Company's website at www.opg.com .

¹ 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.

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 continues to advance the Company's ED&I Strategy, a copy of which is available on the Company's website www.opg.com.

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 Identifies the portion of OPG's EBIT from electricity generating stations derived from low-carbon generation sources.

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.

OPG continues to consult Indigenous communities on the DNNP, which is situated within the shared traditional and treaty territory of the Chippewa and Mississauga Anishinaabeg, including seven First Nations collectively referred to as the Williams Treaty First Nations (WTFN). Regular monthly project meetings are held with the WTFN which are supported through a DNNP agreement. OPG welcomed Elders from Hiawatha First Nation and Curve Lake First Nation who performed a traditional ceremony at the DNNP site prior to groundbreaking activities.

On September 30, 2022, OPG held a company-wide event to commemorate National Day for Truth and Reconciliation. The event included a panel discussion that focused on the determination and resilience of Indigenous communities and peoples and the importance of meaningful allyship in advancing reconciliation. The National Day for Truth and Reconciliation event supports OPG's Reconciliation Action Plan commitments to provide opportunities for OPG employees to learn about Indigenous culture, history and perspectives. OPG's Reconciliation Action Plan is available on the Company's website www.opg.com.

DISCUSSION OF OPERATING RESULTS BY BUSINESS SEGMENT

Regulated - Nuclear Generation Segment

	Three Months Ended September 30		Nine Months Ended September 30		
(millions of dollars – except where noted)	2022	2021	2022	2021	
Electricity Generation (TWh)	9.8	11.7	29.4	31.2	
Revenue	1,081	964	3,248	2,965	
Fuel expense	67	63	199	192	
Gross margin	1,014	901	3,049	2,773	
Operations, maintenance and administration expenses	507	400	1,612	1,596	
Property taxes	5	7	18	20	
Earnings before interest, income taxes, depreciation and amortization	502	494	1,419	1,157	
Depreciation and amortization expenses	153	146	453	436	
Earnings before interest and income taxes	349	348	966	721	

Earnings before interest and income taxes from the segment increased by \$1 million for the three months ended September 30, 2022, compared to the same period in 2021. The increase was primarily due to an increase in revenue of \$143 million from a higher OEB-approved nuclear base regulated price, the impact of the Settlement Agreement recognized in 2021 related to OPG's response to the COVID-19 pandemic as discussed below, and lower OM&A expenses of \$17 million, excluding the impact of the Settlement Agreement, primarily due to higher expenditures incurred in 2021 related to the cyclical maintenance schedule at the Darlington GS. These impacts were largely offset by lower electricity generation of 1.9 TWh mainly due to the commencement of refurbishment of Unit 1 at the Darlington GS in the first quarter of 2022.

The increase in segment EBIT of \$245 million for the nine months ended September 30, 2022, compared to the same period in 2021, was primarily due to an increase in revenue of \$431 million from a higher OEB-approved nuclear base regulated price and lower OM&A expenses of \$108 million, excluding the impact of the Settlement Agreement, mainly due to a planned cyclical maintenance outage for Unit 1 of the Darlington GS during the first quarter of 2021. These impacts were partially offset by lower electricity generation of 1.8 TWh mainly due to the refurbishment of Unit 1 at the Darlington GS and higher depreciation and amortization expenses.

The increase in segment earnings for the three and nine month periods ended September 30, 2022, compared to the same periods in 2021, reflected the recognition of a regulatory liability related to the OEB's approval of the Settlement Agreement in the third quarter of 2021, as part of which OPG agreed to credit ratepayers with the difference between the Company's net favourable electricity revenue impact and incremental OM&A expenses, for the regulated operations, arising from the COVID-19 pandemic response over 2020 and 2021. The net impact to the Regulated -Nuclear Generation business segment was a reduction of EBIT in the amount of \$58 million for both the three and nine month periods ended September 30, 2021, comprising a reduction in revenue of \$192 million, a reduction in fuel expense of \$11 million and a net reduction in OM&A expenses of \$124 million.

For the three and nine month periods ended September 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 for 2021. The higher depreciation and amortization expenses also reflected higher depreciation expense recognized from placing capital in service. This was partially offset by lower amortization expense related to regulatory account balances, which was in turn primarily offset by a reduction in revenue resulting from lower rate riders authorized by the OEB for the recovery of these balances.

As at December 31, 2021, OPG recorded a net decrease of approximately \$327 million to the 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 nine month periods ended September 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 September 30		ths Ended nber 30
	2022	2021	2022	2021
Planned Outage Days Darlington GS ¹ Pickering GS	- 23.8	- 22.8	0.3 159.0	79.2 222.0
Unplanned Outage Days Darlington GS ¹ Pickering GS	18.1 13.6	11.0 23.7	34.1 38.4	42.8 63.2

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 nine months ended September 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 Pickering GS for the nine months ended September 30, 2022, compared to the same period in 2021, were primarily driven by the station's cyclical maintenance schedule and 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 Pickering GS for the nine months ended September 30, 2022, compared to the same period in 2021, were 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 September 30		Nine Months Ended September 30	
	2022	2021	2022	2021	
Unit Capability Factor (%) 1					
Darlington GS	92.5	99.7	95.0	86.5	
Pickering GS	94.9	94.1	88.8	83.5	

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 decreased for the three months ended September 30, 2022, compared to the same periods in 2021, primarily due to a higher number of unplanned outage days. For the nine months ended September 30, 2022, the Unit Capability Factor increased compared to the same period in 2021, primarily due to fewer planned and unplanned outage days.

The Unit Capability Factor at the Pickering GS increased for the three months ended September 30, 2022, compared to the same period in 2021, primarily due to fewer unplanned outage days, partially offset by a higher number of planned outage days. For the nine months ended September 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 September 30		Nine Months Ended September 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	52 52 282	52 52 271	150 150 848	146 146 809
Earnings on nuclear fixed asset removal and nuclear waste management funds	(259)	(243)	(774)	(722)
Loss before interest and income taxes	(23)	(28)	(74)	(87)

The segment loss before interest and income taxes decreased by \$5 million and \$13 million for the three and nine month periods ended September 30, 2022, respectively, compared to the same periods in 2021. 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 nine month periods ended September 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 nine month periods ended September 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 nine months ended September 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 September 30		Nine Months Ended September 30	
(millions of dollars – except where noted)	2022	2021	2022	2021
Electricity generation (TWh)	7.3	6.9	23.5	21.4
Revenue ¹	364	370	1,158	1,185
Fuel expense	80	88	232	244
Gross margin	284	282	926	941
Operations, maintenance and administration expenses	80	87	256	262
Property tax	-	-	1	1
Other losses	1	-	2	1
Earnings before interest, income taxes, depreciation and amortization	203	195	667	677
Depreciation and amortization expenses	43	51	129	157
Earnings before interest and income taxes	160	144	538	520

During the three and nine month periods ended September 30, 2022, the Regulated – Hydroelectric Generation business segment revenue included incentive payments of \$8 million and \$7 million, respectively, related to the OEB-approved hydroelectric incentive mechanism (three and nine month periods ended September 30, 2021 – incentive payments of \$4 million and \$14 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 increased by \$16 million and \$18 million for the three and nine month periods ended September 30, 2022, respectively, compared to the same periods in 2021. The increases were primarily due to the impact of higher market prices on congestion management revenues and lower OM&A expenses, partially offset by an increase of \$11 million in EBIT recognized in the third quarter of 2021 in connection with the terms of the Settlement Agreement related to OPG's response to the COVID-19 pandemic.

Lower depreciation and amortization expenses for the three and nine month periods ended September 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 these balances.

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

	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
Hydroelectric Availability (%) 1	82.9	81.9	88.5	88.4

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

Contracted Hydroelectric and Other Generation Segment

		Three Months Ended September 30		Nine Months Ended September 30	
(millions of dollars – except where noted)	2022	2021	2022	2021	
Electricity Generation (TWh)	1.1	0.9	3.7	3.6	
Revenue	213	168	596	516	
Fuel expense	24	16	44	39	
Gross margin	189	152	552	477	
Operations, maintenance and administration expenses	62	56	178	172	
Accretion on fixed asset removal liabilities	2	2	6	5	
Property taxes	5	5	14	13	
Other (gains) losses	(2)	2	(1)	3	
Earnings before interest, income taxes, depreciation	122	87	355	284	
and amortization					
Depreciation and amortization expenses	40	38	118	112	
Earnings before interest and income taxes	82	49	237	172	

Earnings before interest and income taxes from the segment increased by \$33 million and \$65 million for the three and nine month periods ended September 30, 2022, respectively, compared to the same periods in 2021. The increases in both periods were primarily due to higher earnings from US operations due to higher wholesale electricity market prices. 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 September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
Hydroelectric Availability (%) 1.2	88.5	83.1	87.0	87.6
Thermal EFOR (%) ²	4.6	0.9	1.9	1.6

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

Hydroelectric Availability increased for the three months ended September 30, 2022, compared to the same period in 2021, primarily due to fewer unplanned outages at the Lower Mattagami generating stations. For the nine months ended September 30, 2022, hydroelectric availability was comparable to the same period in 2021.

The Thermal EFOR increased for the three months ended September 30, 2022, compared to the same period in 2021, primarily due to higher unplanned outages at the Lennox GS. For the nine months ended September 30, 2022, Thermal EFOR was comparable to the same period in 2021.

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

Atura Power Segment

		Three Months Ended September 30		Nine Months Ended September 30	
(millions of dollars – except where noted)	2022	2021	2022	2021	
Electricity Generation (TWh)	2.2	1.5	5.1	3.1	
Revenue	310	193	729	495	
Fuel expense	179	74	358	153	
Gross margin	131	119	371	342	
Operations, maintenance and administration expenses	17	13	49	45	
Accretion on fixed asset removal liabilities	-	-	1	1	
Property taxes	1	-	2	1	
Other losses	1	1	-	1	
Earnings before interest, income taxes, depreciation	112	105	319	294	
and amortization					
Depreciation and amortization expenses	28	27	85	82	
Earnings before interest and income taxes	84	78	234	212	

Earnings before interest and income taxes from the segment increased by \$6 million and \$22 million for the three and nine month periods ended September 30, 2022, respectively, compared to the same periods in 2021. The increases in earnings for both periods were primarily due to a higher gross margin as a result of higher demand for electricity generation from the combined cycle plants.

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

	As At September 30		
	2022	2021	
Thermal Availability (%) 1	91.0	93.5	

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 September 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 nine month periods ended September 30, 2022 and 2021 were as follows:

	Three Months Ended September 30		Nine Months Ende September 30	
(millions of dollars)	2022	2021	2022	2021
Cash, cash equivalents and restricted cash, beginning of period	1,035	857	698	725
Cash flow provided by operating activities Cash flow used in investing activities Cash flow provided by (used in) financing activities	1,001 (579) 290	889 (541) (303)	2,618 (1,808) 238	1,965 (1,240) (547)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	7	1	8	-
Net increase in cash, cash equivalents and restricted cash	719	46	1,056	178
Cash, cash equivalents and restricted cash, end of period	1,754	903	1,754	903

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 \$38 million and \$568 million during the three and nine month periods ended September 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 nine months ended September 30, 2022, compared to the same period in 2021.

Financing Activities

Cash flow provided by financing activities increased by \$593 million and \$785 million during the three and nine month periods ended September 30, 2022, respectively, compared to the same periods in 2021. The increase for the three months ended September 30, 2022 was primarily due to higher issuance of long-term debt in 2022 and higher net repayments of short-term debt in 2021. The increase for the nine months ended September 30, 2022 was primarily due to higher net repayments of short-term debt and lower net issuances of long-term debt in 2021.

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

(millions of dollars)		Amount
Bank facilities:		
Corporate ¹		1,970
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

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

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

	As At			
(millions of dollars)	September 30 2022	December 31 2021		
Lower Mattagami Energy Limited Partnership Corporate commercial paper	255	125 57		
Total short-term debt	255	182		
Letters of credit Guarantees	539 35	530 35		

As of September 30, 2022, a total of \$539 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, \$60 million for LME, \$45 million for general corporate purposes, \$16 million for UMH Energy Partnership, \$6 million for Atura Power and \$1 million for PSS Generating Station Limited Partnership.

Long-term debt balances were as follows: 1

	As	At
(millions of dollars)	September 30 2022	December 31 2021
Medium Term Notes payable	4,650	4,350
Notes payable to the OEFC	2,570	2,690
Project financing	2,666	2,630
Other	25	25
	9,911	9,695

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

Share Capital

As at September 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 September 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.

Letter of credit of \$60 million was outstanding under this facility as at September 30, 2022.

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 repatriated 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 were 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:

	As	At
	September 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> .	31,367	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.	20,500	19,876
Long-term debt (current and non-current portions) The increase was mainly due to OPG's \$300 million green bond issuance under the Medium Term Note Program, net of repayment of \$120 million to the OEFC.	9,881	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.	24,110	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 nine month periods ended September 30, 2022. OPG's critical accounting policies are consistent with those noted in OPG's 2021 annual MD&A.

Exemptive Relief for Reporting under US GAAP

In September 2022, OPG received an extension to its exemptive relief from the OSC requirements of section 3.2 of National Instrument 52-107 *Acceptable Accounting Policies and Auditing Standards*. The exemption allows OPG to file consolidated financial statements based on US GAAP, rather than IFRS, without becoming a Securities and Exchange Commission registrant. This exemption replaces the exemptive relief received by OPG from the OSC in April 2018. The exemption will terminate on the earliest of the following:

- January 1, 2027;
- · The financial year that commences after OPG ceases to have activities subject to rate regulation; and
- The financial year that commences on or following the later of:
 - The effective date prescribed by the International Accounting Standards Board (IASB) for the mandatory application of a standard within IFRS specific to entities with rate regulated activities; and
 - II. Two years after the IASB publishes the final version of a Mandatory Rate-regulated Standard.

The IASB's current standard-setting project related to entities with rate-regulated activities is ongoing.

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 Pandemic

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.

As the broader re-opening plan has progressed within Ontario throughout 2022, OPG proceeded with a relaxation of internal COVID-19 protocols. The Company's protocols for managing workplace safety are aligned with local public health guidelines. While the Crisis Management and Communications Centre was stood down in June 2022, the Infectious Disease Incident Response Team 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.

Nuclear By-**Products**

Currently, there are no licensed facilities in Canada for the permanent disposal of used nuclear fuel or L&ILW. The lack of a permanent disposal site means that these materials are stored in temporary locations. The interim storage of used nuclear fuel and L&ILW at OPG is subject to rigorous oversight and monitoring.

OPG is exploring solutions for the safe long-term management of L&ILW, which is expected to be informed by the federal government's ongoing review of Canada's Radioactive Waste Policy framework and the NWMO's development of an integrated strategy for the long-term management of irradiated wastes in Canada at the federal government's request. For used nuclear fuel, the NWMO has developed a process for moving forward with the Adaptive Phase Management (APM) plan as the long-term solution for Canada's used nuclear fuel. The APM plan contemplates the eventual long-term permanent disposal of used nuclear fuel in a deep geologic repository (DGR). The NWMO is currently undertaking a site selection process for the used fuel DGR and had indicated that it expected to complete the process by about 2023. In August 2022, the NWMO announced that, due to the impacts of the COVID-19 pandemic, it now anticipates to complete the process by fall 2024 and that this shift in timing is not expected to impact the overall schedule for the APM plan.

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.

Inflation / Recession

Central banks around the world have shifted their focus from providing pandemic-related stimulus to 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 ongoing 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 that 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.

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 September 30, 2022 was \$650 million, including \$569 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.

Markets

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

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

	2022 ¹	2023	2024
Estimated fuel requirements hedged (%) ²	79	74	77

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

Represents the approximate portion of megawatt-hours (MWh) of expected electricity generation (and year-end 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.

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 Months Ended September 30			
	20)22		21
(millions of dollars)	Income	Expense	Income	Expense
Hydro One				
Electricity sales	3	-	4	_
Services	•	-	_	1
Dividends	1	-	1	-
Province of Ontario				
Change in Decommissioning Segregated Fund amount due to Province ¹	1	-	-	2
Change in Used Fuel Segregated Fund amount due to Province ¹	-	12	-	7
Hydroelectric gross revenue charge	-	26	-	25
OEFC				
Hydroelectric gross revenue charge	-	58	-	57
Interest expense on long-term notes	-	24	-	26
Income taxes	-	149	-	153
Property taxes	-	3	-	3
IESO				
Electricity-related revenue	1,819	-	1,767	-
Fair Hydro Trust				
Interest income	9	-	9	-
	1,833	272	1,781	274

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 September 30, 2022 and December 31, 2021, the Nuclear Segregated Funds were reported net of amounts due to the Province of \$5,094 million and \$8,590 million, respectively.

	Nine Months Ended September 30				
	20	22	2021		
(millions of dollars)	Income	Expense	Income	Expense	
Lludro One					
Hydro One	45		0		
Electricity sales	15	-	8	-	
Services	-	9	-	5	
Dividends	4	-	4	-	
Province of Ontario					
Change in Decommissioning Segregated	1,482	_		408	
Fund amount due to Province 1	1,402	-	-	400	
Change in Used Fuel Segregated Fund amount	2,014	_	_	543	
due to Province 1	_,-,-				
Hydroelectric gross revenue charge	-	84	-	78	
OEFC					
Hydroelectric gross revenue charge	-	149	-	143	
Interest expense on long-term notes	-	73	-	78	
Income taxes	-	468	-	388	
Property taxes	-	9	-	9	
IESO					
Electricity-related revenue	5,297	-	4,883	-	
Fair Hydro Trust					
Interest income	25	_	25	_	
	8,837	792	4,920	1,652	

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 September 30, 2022 and December 31, 2021, the Nuclear Segregated Funds were reported net of amounts due to the Province of \$5,094 million and \$8,590 million, respectively.

Balances between OPG and its related parties are summarized below:

(millions of dollars)	September 30 2022	December 31 2021
Receivables from related parties	4	0
Hydro One	1	2
IESO – Electricity related receivables	569	548
Fair Hydro Trust	12	4
OEFC	-	3
Province of Ontario	-	1
Loan receivable		
Fair Hydro Trust	908	911
Equity securities		
Hydro One shares	159	176
Accounts payable, accrued charges and other payables		
Hydro One	3	1
OEFC	70	88
Province of Ontario	5	6
IESO – Electricity related payables	2	8
Long-term debt (including current portion)		
Notes payable to OEFC	2,570	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 September 30, 2022, the Nuclear Segregated Funds held \$1,356 million of Province of Ontario bonds (December 31, 2021 – \$1,709 million) and \$48 million of Province of Ontario treasury bills (December 31, 2021 – \$13 million). As of September 30, 2022, the registered pension fund held \$81 million of Province of Ontario bonds (December 31, 2021 – \$89 million) and \$15 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)	September 30 2022	June 30 2022	March 31 2022	December 31 2021
Electricity generation (<i>TWh</i>)	20.4	20.1	21.2	18.3
Revenue	1,978	1,856	1,958	1,670
Net income	488	451	507	97
Less: Net income attributable to non-controlling interest	4	5	4	6
Net income attributable to the Shareholder	484	446	503	91
Earnings per share, attributable to the Shareholder (dollars)	\$1.76	\$1.62	\$1.83	\$0.33

(millions of dollars – except where noted) (unaudited)	September 30 2021	June 30 2021	March 31 2021	December 31 2020
Electricity generation (<i>TWh</i>)	21.0	19.2	19.1	19.2
Revenue	1,712	1,804	1,691	1,782
Net income	430	522	295	211
Less: Net income attribute to the non-controlling interest	4	4	5	3
Net income attributable to the Shareholder	426	518	290	208
Earnings per share, attributable to the Shareholder (dollars)	\$1.55	\$1.89	\$1.06	\$0.76

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 September 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)

SEPTEMBER 30, 2022



INTERIM CONSOLIDATED STATEMENTS OF INCOME (UNAUDITED)

	Three Months Ended September 30		Nine Months Ended September 30	
(millions of dollars – except where noted)	2022	2021	2022	2021
Revenue	1,978	1.712	5,792	5,207
Fuel expense	350	241	833	628
Gross margin	1,628	1,471	4,959	4,579
Operations, maintenance and administration expenses	666	555	2,098	2,067
Depreciation and amortization expenses	281	277	836	832
Accretion on fixed asset removal and nuclear waste	285	274	857	818
management liabilities				
Earnings on nuclear fixed asset removal and nuclear	(259)	(243)	(774)	(722)
waste management funds				
Property taxes	12	13	36	37
	985	876	3,053	3,032
Income before other losses (gains), interest and income taxes	643	595	1,906	1,547
Other losses (gains)	2	34	(7)	(87)
Income before interest and income taxes	641	561	1,913	1,634
Net interest expense (Note 5)	45	53	141	167
Income before income taxes	596	508	1,772	1,467
Income tax expense	108	78	326	220
псоте их ехрепзе	100	70	320	220
Net income	488	430	1,446	1,247
Net income attributable to the Shareholder	40.4	400	4 422	4 004
	484	426	1,433	1,234
Net income attributable to non-controlling interest	4	4	13	13
Basic and diluted earnings per share (dollars) (Note 13)	1.76	1.55	5.22	4.49

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

(millions of dollars)	Three Months Ended September 30		Nine Months Ended September 30	
(millions of dollars)	2022	2021	2022	2021
Net income	488	430	1,446	1,247
Other comprehensive income, net of income taxes (Note 8)				
Reclassification to income of amounts related to pension and other post-employment benefits ¹	1	5	6	13
Reclassification to income of losses on derivatives designated as cash flow hedges ²	2	3	6	9
Net loss on derivatives designated as cash flow hedges ³	(14)	-	(19)	_
Currency translation adjustment	118	44	146	1
Other comprehensive income for the period	107	52	139	23
Comprehensive income	595	482	1,585	1,270
Comprehensive income attributable to the Shareholder Comprehensive income attributable to non-controlling interest	591 4	478 4	1,572 13	1,257 13

Net of income tax expense of \$1 million for each of the three months ended September 30, 2022 and 2021. Net of income tax expense of \$2 million and \$4 million for the nine months ended September 30, 2022 and 2021, respectively.

Net of income tax expense of nil for each of the three months ended September 30, 2022 and 2021. Net of income tax expense of \$1 million for each of the nine months ended September 30, 2022 and 2021.

3 Net of income tax recovery of \$4 million and \$6 million for the three and nine month periods ended September 30, 2022.

respectively. Net of income tax recovery of nil for each of the three and nine month periods ended September 30, 2021.

INTERIM CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

	Nine Mon Septen	ths Ended
(millions of dollars)	2022	2021
Omeration and initial		
Operating activities	4.440	4 0 4 7
Net income	1,446	1,247
Adjust for non-cash items:	000	000
Depreciation and amortization expenses	836	832
Accretion on fixed asset removal and nuclear waste management liabilities	857	818
Earnings on nuclear fixed asset removal and nuclear waste management funds	(774)	(722)
Pension and other post-employment benefit costs (Note 9)	304	344
Deferred income tax expense	13	26
Regulatory assets and regulatory liabilities	18	(183)
Other gains	-	(83)
Other	38	(2)
Expenditures on fixed asset removal and nuclear waste management	(294)	(335)
Reimbursement of eligible expenditures on nuclear fixed asset removal and nuclear waste management	166	148
Contributions to pension funds and expenditures on other post-employment benefits and supplementary pension plans	(221)	(235)
Net changes to other long-term assets and long-term liabilities	107	48
Net changes to other long-term assets and long-term habilities Net changes to non-cash working capital balances (<i>Note 16</i>)	122	62
Cash flow provided by operating activities	2,618	1,965
cash now provided by operating activities	2,010	1,900
Investing activities		
Investment in property, plant and equipment and intangible assets	(1,802)	(1,460)
Short-term investments	(6)	<u>-</u>
Proceeds from settlement related to acquired natural gas-fired assets	-	220
Cash flow used in investing activities	(1,808)	(1,240)
Financing activities		
Net proceeds from issuance of long-term debt (Note 5)	300	868
Repayment of long-term debt <i>(Note 5)</i>	(121)	(464)
Net issuance (repayment) of short-term debt (Note 6)	` 72 [°]	(937)
Distribution to non-controlling interest	(13)	`(14)
Cash flow provided by (used in) financing activities	238	(547)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	8	-
Net increase in cash, cash equivalents and restricted cash	1,056	178
Cash, cash equivalents and restricted cash, beginning of period	698	725
Cash, cash equivalents and restricted cash, end of period	1,754	903

INTERIM CONSOLIDATED BALANCE SHEETS (UNAUDITED)

As At (millions of dollars)	September 30 2022	December 31 2021
Assets		
Current assets		
Cash, cash equivalents and restricted cash (Note 3)	1,754	698
Equity securities	159	176
Receivables from related parties	582	558
Nuclear fixed asset removal and nuclear waste management funds	54	69
Fuel inventory	276	247
Materials and supplies	101	103
Regulatory assets (Note 4)	227	288
Prepaid expenses	162	120
Other current assets (Note 17 and 18)	293	203
	3,608	2,462
Property, plant and equipment	43,830	41,975
Less: accumulated depreciation	12,463	11,648
Less. accumulated depreciation	31,367	30,327
	,	,-
Intangible assets	898	848
Less: accumulated amortization	422	372
	476	476
Goodwill	174	161
Other assets		
Nuclear fixed asset removal and nuclear waste management funds	20,446	19,807
Loan receivable from related party	908	911
Long-term materials and supplies	408	414
Regulatory assets (Note 4)	6,504	6,467
Investments subject to significant influence	54	42
Other long-term assets	50	86
	28,370	27,727
	63,995	61,153

INTERIM CONSOLIDATED BALANCE SHEETS (UNAUDITED)

As At (millions of dollars)	September 30 2022	December 31 2021
Liabilities		
Current liabilities		
Accounts payable, accrued charges and other payables	1,683	1,441
Short-term debt (Note 6)	255	182
Long-term debt due within one year (Note 5)	74	179
Regulatory liabilities (Note 4)	215	276
	2,227	2,078
Long-term debt (Note 5)	9,807	9,487
Other liabilities		
Fixed asset removal and nuclear waste management liabilities (<i>Note 7</i>)	24,110	23,415
Pension liabilities	2,689	2,846
Other post-employment benefit liabilities	3,298	3,215
Long-term accounts payable and accrued charges	3,290	352
Deferred revenue	375	382
Deferred income taxes	1,782	1,634
Regulatory liabilities (Note 4)	810	777
regulatery hazimiles (1.1010-1)	33,424	32,621
Equity		
Common shares (Note 12)	5,126	5,126
Class A shares (Note 12)	787	787
Contributed surplus	32	34
Retained earnings	12,537	11,104
Accumulated other comprehensive loss (Note 8)	(123)	(262)
Equity attributable to the Shareholder	18,359	16,789
Equity attributable to non-controlling interest	178	178
Total equity	18,537	16,967
	63,995	61,153

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

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

(millions of dollars)	Nine Months Ended September 30 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 Fair Hydro Trust	(2)	(1)
Balance at end of period	32	35
Retained earnings		
Balance at beginning of period	11,104	9,779
Net income attributable to the Shareholder	1,433	1,234
Balance at end of period	12,537	11,013
	, -	,
Accumulated other comprehensive loss, net of income taxes (Note 8)		
Balance at beginning of period	(262)	(374)
Other comprehensive income	139	23
Balance at end of period	(123)	(351)
Equity attributable to the Shareholder	18,359	16,610
Equity attributable to non-controlling interest		
Balance at beginning of period	178	178
Income attributable to non-controlling interest	13	13
Distribution to non-controlling interest	(13)	(14)
Balance at end of period	178	177
Total equity	18,537	16,787

NOTES TO THE INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

1. BASIS OF PRESENTATION

These interim consolidated financial statements for the three and nine month periods ended September 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 September 2022, 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, 2027;
- The financial year that commences after OPG ceases to have activities subject to rate regulation; and
- The financial year that commences on or following the later of:
 - The effective date prescribed by the International Accounting Standards Board (IASB) for the mandatory application of a standard within IFRS specific to entities with rate regulated activities; and
 - II. Two years after the IASB publishes the final version of a Mandator Rate-regulated Standard.

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 interim 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)	September 30 2022	December 31 2021
Cash and cash equivalents Restricted cash	1,734 20	692 6
Total cash, cash equivalents and restricted cash	1,754	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)	September 30 2022	December 31 2021
Regulatory assets		
Variance and deferral accounts authorized by the OEB		
Pension & OPEB Cash Versus Accrual Differential Deferral Account	846	979
Rate Smoothing Deferral Account	559	531
Hydroelectric Surplus Baseload Generation Variance Account	404	404
Nuclear Liability Deferral Account	141	_
Nuclear Development Variance Account	123	122
Bruce Lease Net Revenues Variance Account	92	145
Other variance and deferral accounts 1	50	91
	2,215	2,272
Pension and OPEB Regulatory Asset (Note 9)	2,788	2,877
Deferred Income Taxes	1,728	1,606
Total regulatory assets	6,731	6,755
Less: current portion	227	288
Non-current regulatory assets	6,504	6,467
Regulatory liabilities		
Variance and deferral accounts authorized by the OEB		
Pension & OPEB Cash Payment Variance Account	471	509
Hydroelectric Water Conditions Variance Account	177	135
Impact Resulting from Changes to Pickering Station End-of-Life Dates (December 31, 2017) Deferral Account	100	163
Nuclear Deferral and Variance Over/Under Recovery Variance Account	77	80
Other variance and deferral accounts ²	165	119
	990	1,006
COVID-19 net credit to ratepayers	35	47
Total regulatory liabilities	1,025	1,053
Less: current portion	215	276
Non-current regulatory liabilities	810	777
1 Represents amounts for the Hydroelectric Deferral and Variance Over/Under Re	covery Variance Acco	ount the Canacit

Represents amounts for the Hydroelectric Deferral and Variance Over/Under Recovery Variance Account, the Capacity Refurbishment 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.

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 nine months ended September 30, 2022, OPG recorded a regulatory asset of \$141 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

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

Plan are reflected by 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)	September 30 2022	December 31 2021
Medium Term Note Program senior notes	4,650	4,350
Senior notes payable to the Ontario Electricity Financial Corporation	2,570	2,690
Lower Mattagami Energy Limited Partnership senior notes	1,745	1.745
OPG Eagle Creek Holdings LLC and subsidiaries senior notes	508	471
PSS Generating Station Limited Partnership senior notes	245	245
UMH Energy Partnership senior notes	168	169
Other	25	25
	9,911	9,695
Plus: net fair value premium	9	10
Less: unamortized bond issuance fees	(39)	(39)
Less: amounts due within one year	(74)	(179)
Long-term debt	9,807	9,487

OPG repaid long-term debt of \$120 million to the Ontario Electricity Financial Corporation (OEFC) during the nine months ended September 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.

On October 31, 2022, OPG's wholly-owned Lower Mattagami Energy Limited Partnership (LME) completed a private placement bond offering with the issuance of \$250 million of green bonds, maturing in October 2033 with a coupon interest rate of 4.85 percent.

Net Interest Expense

The following table summarizes the net interest expense:

	Three Mont Septem		Nine Months Ended September 30	
(millions of dollars)	2022	2021	2022	2021
Interest on long-term debt	93	93	272	278
Interest on short-term debt	3	1	7	6
Interest income	(15)	(10)	(35)	(29)
Interest capitalized to property, plant and equipment and intangible assets	(33)	(22)	(89)	(57)
Interest related to regulatory assets and regulatory liabilities 1	(3)	(9)	(14)	(31)
Net interest expense	45	53	141	167

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 September 30, 2022 were as follows:

(millions of dollars)		Amount	Maturity
Bank facilities:			
Corporate		1,970	May 2027 and September 2027 1
Corporate	US Dollars	750	November 2022 ²
Lower Mattagami Energy Limited Partnership		400	August 2027 ³
OPG Eagle Creek Holdings LLC and subsidiaries	US Dollars	25	August 2023 and October 2028 ⁴
OEFC facility ⁵		750	December 2026

- Of the total credit facilities, \$1,000 million matures in May 2027 and \$970 million matures in September 2027.
- ² The facility has a one-year extension option beyond the maturity date of November 2022.
- Letter of credit of \$60 million was outstanding under this facility as at September 30, 2022.
- Of the total credit facility, \$5 million matures in August 2023 and \$20 million matures in October 2028.
- ⁵ Represents amounts available under the facility, net of debt issuances.

On August 29, 2022, OPG entered into a \$970 million non-revolving term credit facility. The availability period to borrow under the facility is expected to end in September 2027. Outstanding amounts under the facility would have an expected maturity date of September 2042. As at September 30, 2022, there were no amounts outstanding under the facility.

Short-term debt consist of the following:

As At (millions of dollars)	September 30 2022	December 31 2021
Lower Mattagami Energy Limited Partnership Corporate commercial paper	255 -	125 57
Total short-term debt	255	182

As at September 30, 2022, a total of \$539 million of Letters of Credit had been issued (December 31, 2021 -\$530 million). As at September 30, 2022, this included \$395 million for the supplementary pension plans, \$16 million for OPG Eagle Creek Holdings LLC and its subsidiaries, \$60 million for LME, \$45 million for general corporate purposes, \$16 million for UMH Energy Partnership, \$6 million for Atura Power, and \$1 million for PSS Generating Station Limited Partnership.

For the nine months ended September 30, 2022, net issuances of short-term debt totalled \$72 million (September 30, 2021 - net repayments of \$937 million), which was comprised of issuances of \$1,361 million (September 30, 2021 – \$3,004 million) and repayments of \$1,289 million (September 30, 2021 – \$3,941 million).

The weighted average interest rate on the short-term debt as of September 30, 2022 is 3.38 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)	September 30 2022	December 31 2021
Liability for used nuclear fuel management Liability for nuclear decommissioning and nuclear low and intermediate level waste management	14,184 9,628	13,744 9,371
Liability for non-nuclear fixed asset removal	298	300
Fixed asset removal and nuclear waste management liabilities	24,110	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:

	Nine Months Ended September 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	(19) 6 -	- 6 -	- - 146	(19) 12 146			
Other comprehensive (loss) income for the period	(13)	6	146	139			
AOCL, end of period	(20)	(180)	77	(123)			

	Nine Months Ended September 30, 2021						
(millions of dollars)	Unrealized Gains and Currency Losses on Cash Flow Pension and Translation Hedges OPEB Adjustment						
(minions or donars)	rieuges	OFED	Aujustilielit	Total			
AOCL, beginning of period	(18)	(296)	(60)	(374)			
Amounts reclassified from AOCL Translation of foreign operations	9	13	- 1	22 1			
Other comprehensive income for the period	9	13	1	23			
AOCL, end of period	(9)	(283)	(59)	(351)			

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

	Amount Reclass	sified from AO	CL
	Three Months	Nine Months	
	Ended	Ended	
(millions of dollars)	Septembe	r 30, 2022	Statement of Income Line Item
Amortization of losses from cash flow hedges			
Losses	2	7	Net interest expense
Income tax recovery	-	(1)	Income tax expense
•	2	6	
Amortization of amounts related to pension and OPEB			
Actuarial losses	2	8	See (1) below
Income tax recovery	(1)	(2)	Income tax expense
	1	6	·
-			
Total reclassifications for the period	3	12	

	Amount Reclas	sified from AO	CL
	Three Months	Nine Months	
	Ended	Ended	
(millions of dollars)	Septembe	r 30, 2021	Statement of Income Line Item
Amortization of losses from cash flow hedges			
Losses	3	10	Net interest expense
Income tax recovery	-	(1)	Income tax expense
	3	9	-
Amortization of amounts related to pension and OPEB			
Actuarial losses, net of past service credits	6	17	See (1) below
Income tax recovery	(1)	(4)	Income tax expense
·	5	13	<u> </u>
Total reclassifications for the period	8	22	

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 \$8 million deferred in AOCL as at September 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 September 30, 2022 and 2021 are as follows:

	Registered Pension Plans				Other Post- Employment Benefits	
(millions of dollars)	2022	2021	2022	2021	2022	2021
Components of cost recognized for the period						
Current service costs	89	92	2	3	22	23
Interest on projected benefit obligation	133	106	2	2	25	21
Expected return on plan assets, net of expenses	(227)	(216)	-	_	-	_
Amortization of net actuarial loss 1	30	69	2	2	-	1
Costs recognized ²	25	51	6	7	47	45

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

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

	Registered Pension Supplementary Plans Pension Plans		• • • • • • • • • • • • • • • • • • • •		yment	
(millions of dollars)	2022	2021	2022	2021	2022	2021
Components of cost recognized for the period						
Current service costs	261	276	5	7	67	71
Interest on projected benefit obligation	399	317	8	7	73	60
Expected return on plan assets, net of expenses	(683)	(646)	-	_	-	-
Amortization of past service credits 1	-	-	-	_	-	(1)
Amortization of net actuarial loss 1	91	205	6	7	-	4
Costs recognized ²	68	152	19	21	140	134

The amortization of net actuarial loss is recognized as an increase to other comprehensive income. This increase in the nine months ended September 30, 2022 was partially offset by a decrease in the Pension and OPEB Regulatory Asset of \$89 million (nine months ended September 30, 2021 - \$198 million).

These pension and OPEB costs for the three months ended September 30, 2022 exclude the net addition of costs of \$26 million resulting from the recognition of changes in net 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 September 30, 2021 - net addition of costs of \$12 million).

These pension and OPEB costs for the nine months ended September 30, 2022 exclude the net addition of costs of \$77 million resulting from the recognition of changes in net 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 (nine months ended September 30, 2021 - net addition of costs of \$37 million).

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 September 30, 2022 and December 31, 2021.

The fair value of the derivative instruments totalled a net liability of \$32 million as at September 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 September 30, 2022 and December 31, 2021 consist of the following:

	Fair \	/alue	Carrying	ן Value ¹	
(millions of dollars)	2022	2021	2022	2021	Balance Sheet Line Item
Nuclear Segregated Funds (includes current portion) ²	20,500	19,876	20,500	19,876	Nuclear fixed asset removal and nuclear waste management funds
Loan receivable - from Fair Hydro Trust	788	940	908	911	Loan receivable
Investment in Hydro One Limited Shares	159	176	159	176	Equity securities
Payable related to cash flow hedges	(4)	(9)	(4)	(9)	Long-term accounts payable and accrued charges
Long-term debt (includes current portion)	(8,934)	(10,757)	(9,881)	(9,666)	Long-term debt
Other financial instruments	(4)	17	(4)	17	Various

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

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

As At		Septembe	r 30, 2022	
(millions of dollars)	Level 1	Level 2	Level 3	Total
Acceta				
Assets Used Fuel Segregated Fund				
Investments measured at fair value, excluding	5,903	5,088		10,991
investments measured at NAV	5,905	5,000	-	10,991
Investments measured at NAV ¹				3,483
invocation incucation at 1777				14,474
Due to Province				(2,801)
Used Fuel Segregated Fund, net				11,673
				·
Decommissioning Segregated Fund				
Investments measured at fair value, excluding	4,568	3,822	-	8,390
investments measured at NAV				
Investments measured at NAV ¹				2,730
				11,120
Due to Province				(2,293)
Decommissioning Segregated Fund, net				8,827
Equity securities	159	•	•	159
Other financial assets	30	1	34	65
Liabilities				
Other financial liabilities	(67)	(1)	(4)	(69)
Other illiandial liabilities	(67)	(1)	(1)	(69)

As At	December 31, 2021							
(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	7,342	6,013	-	13,355				
Investments measured at NAV ¹				2,725				
Due to Province				16,080 (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				
Due to Province				12,386 (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 nine months ended September 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 nine months ended September 30, 2022 were as follows:

(millions of dollars)	Other Financial Instruments
Opening balance, January 1, 2022	36
Purchases	21
Unrealized losses included in revenue	(10)
Realized losses included in revenue	(9)
Distributions	(5)
Closing balance, September 30, 2022	33

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.

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

(millions of dollars except where noted)	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice
Real Assets				
Infrastructure	3,403	1,165	n/a	n/a
Real Estate	2,624	1,178	n/a	n/a
Agriculture	186	7	n/a	n/a
Pooled Funds				
Short-term Investments	18	n/a	Daily	1-5 days
Fixed Income	1,906	n/a	Daily	1-5 days
Equity	737	n/a	Daily	1-5 days
Total	8,874	2,350		

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 September 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 September 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 September 30, 2022 and December 31, 2021 was 274.6 million. There were no dilutive securities during the nine months ended September 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 September 30, 2022 and December 31, 2021, the total amount of guarantees provided by OPG was \$35 million. As at September 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 September 30, 2022 were as follows:

(millions of dollars)	2022 ¹	2023	2024	2025	2026	Thereafter	Total
Fuel supply agreements	18	152	76	59	54	148	507
Contributions to the OPG registered pension plan ²	57	194	197	-	-	-	448
Long-term debt repayment	31	44	608	593	675	7,960	9,911
Interest on long-term debt	84	365	354	341	323	4,726	6,193
Short-term debt repayment	255	-	-	-	-	-	255
Commitments related to Darlington Refurbishment project ³	192	-	-	-	-	-	192
Operating licences	9	46	47	48	48	248	446
Operating lease obligations	3	13	12	9	9	20	66
Accounts payable and accrued charges	1,316	3	_	_	_	_	1,319
Other Other	23	17	14	11	10	101	176
Total	1,988	834	1,308	1,061	1,119	13,203	19,513

¹ Represents amounts for the remainder of the year.

Contractual and commercial commitments as noted exclude certain purchase orders, as they represent purchase authorizations rather than legally binding contracts, and are subject to change without significant penalties.

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 repatriated 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 were 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.

The pension contributions include ongoing funding requirements in accordance with the actuarial valuation of the OPG registered pension plan as at January 1, 2022 filed with the Financial Services Regulatory Authority of Ontario in September 2022. The next actuarial valuation of the OPG registered pension plan must have an effective date no later than January 1, 2025. 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 January 1, 2025 are excluded due to significant variability in the assumptions required to project the timing of future cash flows. The amount of OPG's additional, voluntary contribution, if any, is revisited from time to time.

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

15. BUSINESS SEGMENTS

Segment Income (Loss)		Regulated		Uı	nregulated			
For the Three Months Ended		Nuclear		Contracted				
September 30, 2022	Nuclear	Sustainability	Hydroelectric	Hydroelectric and				
(millions of dollars)	Generation	Services	Generation	Other Generation	Atura Power	Other	Elimination	Total
Revenue	1,074	_	364	204	310	3	-	1,955
Leasing revenue	7	-	-	-	-	4	-	11
Other revenue	-	52	-	9	-	17	(66)	12
Total revenue	1,081	52	364	213	310	24	(66)	1,978
Fuel expense	67	-	80	24	179	-	-	350
Gross margin	1,014	52	284	189	131	24	(66)	1,628
Operations, maintenance and administration expenses	507	52	80	62	17	14	(66)	666
Depreciation and amortization expenses	153	-	43	40	28	17	-	281
Accretion on fixed asset removal and nuclear waste management liabilities	-	282	-	2	-	1	-	285
Earnings on nuclear fixed asset removal and nuclear waste management funds	-	(259)	-	-	-	-	-	(259)
Property taxes	5	-	-	5	1	1	-	12
Other losses (gains)	-	-	1	(2)	1	2	-	2
Income (loss) before interest and income taxes	349	(23)	160	82	84	(11)	-	641
Net interest expense								45
		·	·			·		
Income before income taxes								596
Income tax expense								108
Net income								488

Segment Income (Loss)		Regulated		U	Inregulated			
For the Three Months Ended September 30, 2021	Nuclear	Nuclear Sustainability	Hydroelectric	Contracted Hydroelectric and	_			
(millions of dollars)	Generation	Services	Generation	Other Generation	Atura Power	Other	Elimination	Total
Revenue	957	_	370	168	193	2	_	1,690
Leasing revenue	6	-	-	-	-	6	-	12
Other revenue	1	52	-	-	-	25	(68)	10
Total revenue	964	52	370	168	193	33	(68)	1,712
Fuel expense	63	-	88	16	74	-	-	241
Gross margin	901	52	282	152	119	33	(68)	1,471
Operations, maintenance and administration expenses	400	52	87	56	13	15	(68)	555
Depreciation and amortization expenses	146	_	51	38	27	15	-	277
Accretion on fixed asset removal and nuclear waste management liabilities	-	271	-	2	-	1	-	274
Earnings on nuclear fixed asset removal and nuclear waste management funds	-	(243)	-	-	-	-	-	(243)
Property taxes	7	_	-	5	-	1	-	13
Other losses	-	-	-	2	1	31	-	34
Income (loss) before interest and income taxes	348	(28)	144	49	78	(30)	-	561
Net interest expense								53
Income before income taxes Income tax expense								508 78
Net income								430

Segment Income (Loss)		Regulated		ı	Inregulated			
For the Nine Months Ended		Nuclear		Contracted	_			
September 30, 2022	Nuclear	Sustainability	Hydroelectric	Hydroelectric and				
(millions of dollars)	Generation	Services	Generation	Other Generation	Atura Power	Other	Elimination	Total
Revenue	3,228		1,158	612	729	28	_	5,755
Leasing revenue	20	_	_		_	11	_	31
Other revenue	-	150	_	(16)	-	74	(202)	6
Total revenue	3,248	150	1,158	596	729	113	(202)	5,792
Fuel expense	199	-	232	44	358	-	` -	833
Gross margin	3,049	150	926	552	371	113	(202)	4,959
Operations, maintenance and administration expenses	1,612	150	256	178	49	55	(202)	2,098
Depreciation and amortization expenses	453	-	129	118	85	51		836
Accretion on fixed asset removal and nuclear waste management liabilities	-	848	-	6	1	2	-	857
Earnings on nuclear fixed asset removal and nuclear waste management funds	-	(774)	-	-	-	-	-	(774)
Property taxes	18	_	1	14	2	1	_	36
Other losses (gains)	-	-	2	(1)	-	(8)	-	(7)
Income (loss) before interest and income taxes	966	(74)	538	237	234	12	-	1,913
Net interest expense								141
Income before income taxes								1,772
Income tax expense								326
Net income								1,446

Segment Income (Loss)		Regulated		L	Inregulated			
For the Nine Months Ended September 30, 2021 (millions of dollars)	Nuclear Generation	Nuclear Sustainability Services	Hydroelectric Generation	Contracted Hydroelectric and Other Generation	Atura Power	Other	Elimination	Total
Revenue	2,944	-	1,185	516	495	9	-	5,149
Leasing revenue	19	-	-	-	-	13	-	32
Other revenue	2	146	-	-	-	74	(196)	26
Total revenue	2,965	146	1,185	516	495	96	(196)	5,207
Fuel expense	192	-	244	39	153	-	` <u>-</u>	628
Gross margin	2,773	146	941	477	342	96	(196)	4,579
Operations, maintenance and administration expenses	1,596	146	262	172	45	42	(196)	2,067
Depreciation and amortization expenses	436	_	157	112	82	45	· -	832
Accretion on fixed asset removal and nuclear waste management liabilities	-	809	-	5	1	3	-	818
Earnings on nuclear fixed asset removal and nuclear waste management funds	-	(722)	-	-	-	-	-	(722)
Property taxes	20	_	1	13	1	2	-	37
Other losses (gains)	_	-	1	3	1	(92)	-	(87)
Income (loss) before interest and taxes	721	(87)	520	172	212	96	-	1,634
Net interest expense								167
Income before income taxes Income tax expense								1,467 220
Net income								1,247

16. NET CHANGES IN NON-CASH WORKING CAPITAL BALANCES

millions of dollars)	Nine Months Ended September 30				
(millions of dollars)	2022	2021			
Receivables from related parties	(24)	(86)			
Fuel inventory	(25)	(19)			
Materials and supplies	`15 ´	`14 [′]			
Prepaid expenses	(14)	(47)			
Other current assets	7	`30 [°]			
Accounts payable, accrued charges and other payables	163	170			
Net changes in non-cash working capital balances	122	62			

17. SALE OF NON-CORE REAL ESTATE SITES

In October 2022, OPG sold the premises located at 800 Kipling Avenue in Toronto, Ontario. The after-tax gain on the sale including the impact of revisions to the related asset retirement obligation is estimated to be approximately \$135 million, of which approximately \$25 million is expected to be recognized in 2023, subject to certain conditions. The asset is held within Other current assets 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 September 30, 2022.

18. ASSETS HELD FOR SALE

As at September 30, 2022, OPG's wholly owned subsidiary, OPG Eagle Creek Holdings LLC., has committed to a plan to sell 22 hydroelectric generating stations with a total capacity of approximately 47 MW across a number of regions of the United States, along with two storage reservoirs in the Mid-West region of the United States. A letter of intent with a potential buyer has been executed and the sale is expected to be completed in the first half of 2023, subject to regulatory approval. The assets are no longer depreciated or amortized effective September 30, 2022 and are held within Other current assets on the consolidated balance sheet within the Contracted Hydroelectric and Other Generation business segment.