

August 11, 2023

OPG REPORTS 2023 SECOND QUARTER FINANCIAL RESULTS

Darlington's Unit 3 returns to service ahead of schedule; Planning underway for three additional small modular reactors; Advancing hydroelectric opportunities

Toronto – Ontario Power Generation Inc. (OPG or Company) today reported its financial and operating results for the second quarter of 2023, with net income attributable to the Shareholder of \$418 million, compared to \$446 million for the same period last year.

Darlington Refurbishment Unit 3 return-to-service ahead of schedule

On July 17, 2023, Darlington Nuclear Generating Station's (Darlington GS) Unit 3 reconnected to the electricity grid after its overhaul, 169 days ahead of schedule. The OPG and partner project team developed innovative techniques and applied lessons learned during the refurbishment of Darlington's Unit 2 to drive schedule savings. This included an industry-first combined pressure tube and calandria tube removal process that is expected to create additional efficiencies during the subsequent unit refurbishments.

"This world-class project performance demonstrates OPG's expertise and commitment to completing the station's four-unit refurbishment safely and with quality by the end of 2026," said OPG President and CEO Ken Hartwick. "It's a testament to OPG's detailed planning, and the performance, expertise and commitment from our refurbishment project team, partners, and skilled tradespeople."

Darlington's Unit 1 refurbishment is well underway and proceeding on schedule. With Unit 3 returned to service, OPG has taken the final unit to be refurbished, Unit 4, offline to begin work. The Darlington Refurbishment project will secure approximately 3,512 megawatts (MW) of clean, reliable nuclear power for Ontario for an additional 30-plus years.

New Nuclear

In July 2023, the Ontario Energy Minister announced that OPG and its new nuclear integrated project delivery partners could proceed with three additional small modular reactors at the Darlington New Nuclear site, where preparation for the first unit is currently underway.

"Small modular reactors are key to meeting Ontario's growing electricity demand, and this fleet-style approach to their deployment makes economic sense," said Hartwick. "Building multiple BWRX-300 units at the Darlington site will drive down regulatory, construction and operating costs. We will also be able to leverage common

infrastructure, some of which we are now building, to support four units rather than just one, which will further reduce our costs.”

Along with the Province’s announcement, the Ontario Government released the ‘Powering Ontario’s Growth’ plan outlining the next steps toward meeting the province’s increasing demand for electricity. As part of the Province’s growth plan, OPG will work with Bruce Power, with support from the Independent Electricity System Operator (IESO), to develop a feasibility study by the end of 2024, for future nuclear generation facilities in Ontario.

Hydroelectric Opportunities

The Province’s growth plan includes a request for OPG to optimize current hydroelectric generation and conduct further due diligence on high potential hydroelectric sites in northern Ontario, while engaging with Indigenous communities. The plan also calls on the IESO to assess the proposed Marmora hydroelectric pumped storage facility. This proposed project, a joint venture between OPG and Northland Power Inc., is a first-of-a-kind for Canada and would convert a long inactive, open-pit iron ore mine in eastern Ontario into a hydroelectric battery to generate electricity.

“As we work to generate more power from existing hydroelectric facilities, we continue to have discussions with First Nations and communities to further understand the potential for new hydroelectric development in the north and support the IESO’s review of pumped hydro,” said Hartwick. “With Ontario’s largest, most diverse clean power portfolio and our talented team of employees, OPG will help power a growing economy while enabling net zero goals and ensuring the participation of Indigenous communities.”

Second quarter highlights include:

Net Income attributable to the Shareholder

Net income attributable to the Shareholder decreased by \$28 million for the three months ended June 30, 2023, compared to the same period in 2022. The decrease was primarily attributable to lower nuclear electricity generation due to a higher number of planned outages at the Pickering nuclear generating station (GS), and increased compensation expenses. The decrease was partially offset by a higher regulated price for OPG’s nuclear electricity generation previously approved by the Ontario Energy Board (OEB), a lower income tax expense and a gain related to the sale of certain non-core real estate assets.

The increased compensation expenses resulted from the impact on OPG’s collective agreements from the November 29, 2022 Ontario Superior Court’s decision, which found unconstitutional the *Protecting a Sustainable Public Sector for Future Generations Act, 2019* that set limits on compensation increases for employees in the Ontario public sector, and the OEB decision on June 27, 2023 denying OPG’s requested regulatory variance account to record the related costs for the OEB’s future review and disposition. On July 17, 2023, OPG filed a motion asking the OEB to review the decision denying the variance account. In response to this request, the OEB has agreed to hear the merits of OPG’s motion, with submissions to be filed during the third quarter of 2023.

Generating and Operating Performance

Electricity generated was 19.5 terawatt hours (TWh) and 39.2 TWh for the three and six month periods ended June 30, 2023, respectively, compared to 20.1 TWh and 41.3 TWh for the same periods in 2022.

Regulated – Nuclear Generation Segment

Electricity generation from the regulated nuclear stations decreased by 0.7 TWh and 2.3 TWh during the three and six month periods ended 2023, respectively, compared to the same periods in 2022. The decrease for the three months ended June 30, 2023 was primarily due to higher planned outage days at the Pickering GS. The decrease for the six months ended June 30, 2023 was primarily due to the planned removal from service of Darlington GS Unit 1 for the duration of the unit's refurbishment, which began in February 2022, and higher planned and unplanned outage days at the Pickering GS.

The Darlington GS unit capability factor increased to 99.9 per cent for each of the three and six month periods ended June 30, 2023, compared to 91.4 per cent and 96.1 per cent for the three and six month periods ended June 30, 2022, respectively. The increases in both periods were primarily due to fewer unplanned outage days, demonstrating excellent station reliability.

The Pickering GS unit capability factor decreased to 74.5 per cent and 74.6 per cent for the three and six month periods ended June 30, 2023, respectively, compared to 87.8 per cent and 85.6 per cent for the same periods in 2022. The decrease for the three months ended June 30, 2023 was primarily due to higher planned outage days while the decrease for the six months ended June 30, 2023 was primarily due higher planned and unplanned outage days.

Regulated – Hydroelectric Generation Segment

Electricity generation from the regulated hydroelectric stations for the three and six month periods ended June 30, 2023 was comparable to the same periods in 2022.

The regulated hydroelectric stations' availability decreased slightly to 90.8 per cent and 89.9 per cent for the three and six month periods ended June 30, 2023, respectively, compared to 91.6 per cent and 90.6 per cent for the same periods in 2022. The decreases in both periods were primarily due to higher planned and unplanned outage days at the R.H. Saunders GS.

Contracted Hydroelectric and Other Generation Segment

Electricity generation from the Contracted Hydroelectric and Other Generation business segment increased by 0.5 TWh during the six months ended June 30, 2023, compared to the same period in 2022, primarily due to higher water flows in Ontario during the first quarter of 2023. Electricity generation for the three months ended June 30, 2023 was comparable to the same period in 2022.

Availability of the hydroelectric stations in the business segment increased to 91.0 per cent and 91.7 per cent for the three and six month periods ended June 30, 2023, respectively, compared to 86.7 per cent and 87.2 per cent for the same periods in 2022.

The increases in both periods were primarily due to fewer unplanned outages at the Lower Mattagami generating stations.

Atura Power

Electricity generation from the Atura Power business segment increased by 0.3 TWh and decreased by 0.4 TWh during the three and six month periods ended June 30, 2023, respectively, compared to the same periods in 2022. The increase for the three months ended June 30, 2023 was primarily due to increased demand for electricity generation from combined cycle plants due to warmer weather conditions. The decrease for the six months ended June 30, 2023, was primarily due to milder weather conditions during the first quarter of 2023, which offset the increase in electricity generation during the second quarter of 2023.

Thermal Availability of the generating stations in the segment decreased to 89.9 per cent as at June 30, 2023, compared to 91.4 per cent as at June 30, 2022, primarily due to planned outages at the Napanee GS and the Portlands Energy Centre and unplanned outages at the Halton Hills GS and the Portlands Energy Centre.

Generation Development

OPG is undertaking a number of generation development and other major projects in support of Ontario's electricity system.

Darlington Refurbishment

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

On July 17, 2023, following successful completion of start-up activities, the refurbished Unit 3 of the Darlington GS was reconnected to the electricity grid, ahead of schedule. This represents another significant milestone in OPG's path toward ensuring that the Darlington GS can continue to provide at least another 30 years of cost effective, reliable and clean energy for Ontario. Unit 3 was the second Darlington GS unit to undergo refurbishment and was taken offline on September 3, 2020. Unit 3 provides 878 MW of baseload electricity generating capacity in Ontario.

On July 19, 2023, OPG commenced the refurbishment of Unit 4 of the Darlington GS with the defueling of the reactor, following the unit's safe shutdown. Unit 4 is the fourth Darlington GS unit to undergo refurbishment and is scheduled to be returned to service in 2026.

Unit 1 refurbishment activities are progressing on schedule and are currently in the third major segment, Reassembly, which involves the installation and reassembly of reactor components. The refurbishment of Unit 1 and Unit 4 incorporates the benefits of experience with the Unit 2 and Unit 3 refurbishments, and additional strategic improvements.

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.

Pickering Refurbishment

OPG has completed an updated feasibility assessment for refurbishing Units 5 to 8 at the Pickering GS as requested by the Province in September 2022. The updated assessment was based on the anticipated refurbishment project scope. In August 2023, OPG's Board of Directors agreed with and authorized OPG to submit the feasibility assessment to the Province and to continue with certain limited preliminary planning and preparation activities for the potential project, pending the Province's decision whether to proceed with the refurbishment. OPG expects to submit the results of the assessment to the Province in August 2023.

Further details on the Company's major projects can be found in the Management's Discussion and Analysis as at and for the three and six month periods ended June 30, 2023, section, *Core Business and Outlook* under the heading, *Project Excellence*.

FINANCIAL AND OPERATIONAL HIGHLIGHTS

<i>(millions of dollars – except where noted)</i>	Three Months Ended June 30		Six Months Ended June 30	
	2023	2022	2023	2022
Revenue	1,828	1,856	3,658	3,814
Fuel expense	216	237	426	483
Operations, maintenance and administration expenses	847	715	1,596	1,432
Depreciation and amortization expenses	262	279	525	555
Accretion on fixed asset removal and nuclear waste management liabilities	294	286	589	572
Earnings on nuclear fixed asset removal and nuclear waste management	(263)	(257)	(522)	(515)
Other net (gains) expenses	(16)	5	(4)	15
Earnings before interest and income taxes	488	591	1,048	1,272
Net interest expense	33	46	69	96
Income tax expense	32	94	123	218
Net income	423	451	856	958
Net income attributable to the Shareholder	418	446	847	949
Net income attributable to non-controlling interest ¹	5	5	9	9
Earnings (loss) before interest and income taxes				
Electricity generating business segments	472	599	1,077	1,300
Regulated – Nuclear Sustainability Services	(28)	(26)	(61)	(51)
Other	44	18	32	23
Earnings before interest and income taxes	488	591	1,048	1,272
Cash flow provided by operating activities	643	757	1,145	1,617
Capital expenditures ²	694	643	1,237	1,157
Electricity generation (TWh)				
Regulated – Nuclear Generation	8.7	9.4	17.3	19.6
Regulated – Hydroelectric Generation	8.0	8.2	16.3	16.2
Contracted Hydroelectric and Other Generation ³	1.6	1.6	3.1	2.6
Atura Power	1.2	0.9	2.5	2.9
Total OPG electricity generation	19.5	20.1	39.2	41.3
Nuclear unit capability factor (per cent) ⁴				
Darlington Nuclear GS	99.9	91.4	99.9	96.1
Pickering Nuclear GS	74.5	87.8	74.6	85.6
Availability (per cent)				
Regulated – Hydroelectric Generation	90.8	91.6	89.9	90.6
Contracted Hydroelectric and Other Generation – hydroelectric stations	91.0	86.7	91.7	87.2
Atura Power ⁵	89.9	91.4	89.9	91.4
Equivalent forced outage rate				
Contracted Hydroelectric and Other Generation – thermal stations	1.5	0.7	3.6	0.4

¹ Relates to the following: the 25 per cent interest of Amisk-oo-Skow Finance Corporation, a corporation wholly owned by the Moose Cree First Nation, in Lower Mattagami Limited Partnership; the 33 per cent interest of Coral Rapids Power Corporation, a corporation wholly owned by the Taykwa Tagamou Nation, in PSS Generating Station Limited Partnership; the 15 per cent and 5 per cent interests of corporations wholly owned by Six Nations of Grand River Development Corporation and the Mississaugas of the Credit First Nation, respectively, in Nanticoke Solar LP; and non-controlling interests in certain electricity generating facilities in the United States.

² Includes net changes in accruals; excludes the acquisition of the new corporate headquarters building and surrounding lands at 1908 Colonel Sam Drive in Oshawa, Ontario in February 2023.

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

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

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

About OPG

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

Ontario Power Generation Inc.'s unaudited interim consolidated financial statements and Management's Discussion and Analysis as at and for the three and six month periods ended June 30, 2023, can be accessed on OPG's web site (www.opg.com), the Canadian Securities Administrators' web site (www.sedarplus.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
2023 SECOND QUARTER REPORT

TABLE OF CONTENTS

Forward-Looking Statements	3
The Company	4
Highlights	7
Significant Developments	13
Core Business and Outlook	16
Environmental, Social, Governance and Sustainability	26
Discussion of Operating Results by Business Segment	30
Regulated – Nuclear Generation Segment	30
Regulated – Nuclear Sustainability Services Segment	32
Regulated – Hydroelectric Generation Segment	33
Contracted Hydroelectric and Other Generation Segment	34
Atura Power Segment	35
Liquidity and Capital Resources	36
Balance Sheet Highlights	38
Critical Accounting Policies and Estimates	38
Risk Management	39
Related Party Transactions	41
Internal Control over Financial Reporting and Disclosure Controls	43
Quarterly Financial Highlights	44
Key Operating Performance Indicators and Non-GAAP Financial Measures	45

ONTARIO POWER GENERATION INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS

This Management's Discussion and Analysis (MD&A) should be read in conjunction with the unaudited interim consolidated financial statements and accompanying notes of Ontario Power Generation Inc. (OPG or Company) as at and for the three and six month periods ended June 30, 2023. 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, 2022.

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, *Critical Accounting Policies and Estimates* under the heading, *Exemptive Relief for Reporting under US GAAP*, in OPG's 2022 annual MD&A. This MD&A is dated August 11, 2023.

Additional information about OPG, including the Company's Annual Information Form, is available on SEDAR+ at www.sedarplus.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, government policy, 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:

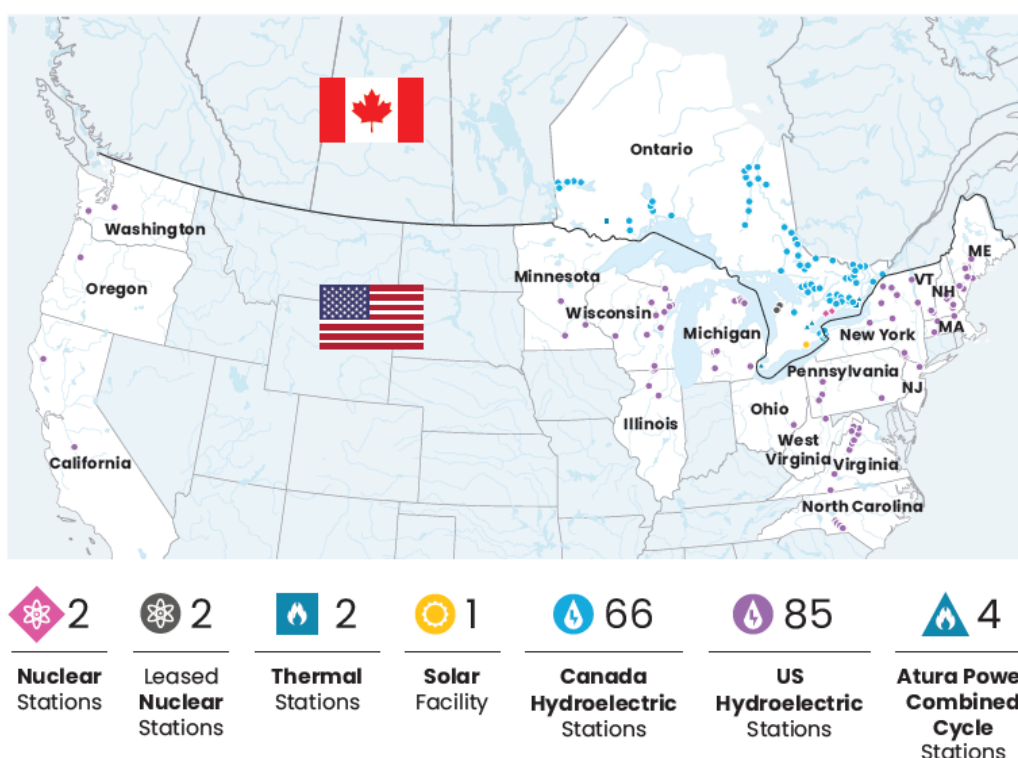
- "Earnings before Interest, Income Taxes, Depreciation and Amortization"; and
- "Gross Margin".

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 18,236 megawatts (MW) as at June 30, 2023.

As at June 30, 2023, OPG owned and operated two nuclear generating stations, 66 hydroelectric generating stations, two thermal generating stations, one solar facility and four combined cycle gas turbine (combined cycle) plants in Ontario, Canada. The combined cycle plants are natural gas-fired facilities owned and operated through the Company's wholly-owned subsidiary operating as Atura Power. Through its US-based wholly-owned subsidiary, OPG Eagle Creek Holdings LLC (Eagle Creek), OPG also wholly or jointly owned and operated 85 hydroelectric generating stations and held minority interests in 14 hydroelectric and two solar facilities in the US as at June 30, 2023. 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.

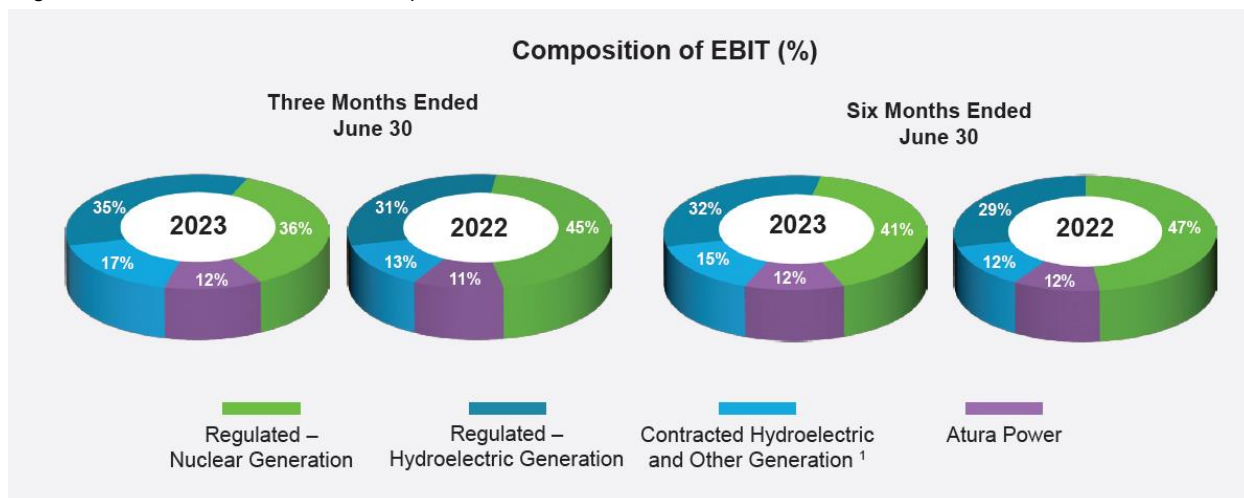
Income from the stations leased to Bruce Power is included in revenue under the Regulated – Nuclear Generation business segment. The leased stations are not included in the Company's electricity generation and other operating statistics set out in this MD&A.

Reporting Structure

The composition of OPG's reportable business segments effective as at June 30, 2023 was 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 six month periods ended June 30, 2023 and 2022 were as follows:



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

In-Service Generating Capacity

OPG's in-service generating capacity by business segment as at June 30, 2023 and December 31, 2022 was as follows:

(MW)	As At	
	June 30 2023	December 31 2022
Regulated – Nuclear Generation ¹	4,850	4,850
Regulated – Hydroelectric Generation	6,566	6,555
Contracted Hydroelectric and Other Generation ²	4,105	4,105
Atura Power	2,715	2,715
Total ³	18,236	18,225

¹ The in-service generating capacity as at June 30, 2023 and December 31, 2022 excludes Unit 1 and Unit 3 of the Darlington GS. Unit 1 was taken offline in February 2022 and Unit 3 was taken offline in September 2020. Unit 1 and Unit 3 each have a generating capacity of 878 MW.

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

³ In-service generating capacity represents the portion of installed capacity (the highest level of MW output which a generating unit can maintain indefinitely under reference conditions, without damage to the unit) that has not been removed from service.

The total in-service generating capacity as at June 30, 2023 increased by 11 MW compared to December 31, 2022, due to the completion of the redevelopment of the Calabogie hydroelectric GS (Calabogie GS) in April 2023. For further details on the project, refer to the section, *Significant Developments* under the heading, *Project Excellence – Redevelopment of Calabogie Hydroelectric GS*.

HIGHLIGHTS

Overview of Results

This section provides an overview of OPG's unaudited interim consolidated operating results for the three and six month periods ended June 30, 2023, compared to the same periods in 2022. A discussion of OPG's performance by business segment can be found in the section, *Discussion of Operating Results by Business Segment*.

<i>(millions of dollars – except where noted)</i>	Three Months Ended June 30		Six Months Ended June 30	
	2023	2022	2023	2022
Revenue	1,828	1,856	3,658	3,814
Fuel expense	216	237	426	483
Operations, maintenance and administration expenses	847	715	1,596	1,432
Depreciation and amortization expenses	262	279	525	555
Accretion on fixed asset removal and nuclear waste management liabilities	294	286	589	572
Earnings on nuclear fixed asset removal and nuclear waste management funds	(263)	(257)	(522)	(515)
Other net (gains) expenses	(16)	5	(4)	15
Earnings before interest and income taxes	488	591	1,048	1,272
Net interest expense	33	46	69	96
Income tax expense	32	94	123	218
Net income	423	451	856	958
Net income attributable to the Shareholder	418	446	847	949
Net income attributable to non-controlling interest ¹	5	5	9	9
Electricity generation (TWh) ²	19.5	20.1	39.2	41.3
Cash Flow				
Cash flow provided by operating activities	643	757	1,145	1,617
Capital expenditures ³	694	643	1,237	1,157
Earnings (loss) before interest and income taxes by business segment				
Regulated – Nuclear Generation	168	268	445	617
Regulated – Hydroelectric Generation	165	185	342	378
Contracted Hydroelectric and Other Generation	81	76	165	155
Atura Power	58	70	125	150
Total electricity generating business segments	472	599	1,077	1,300
Regulated – Nuclear Sustainability Services	(28)	(26)	(61)	(51)
Other	44	18	32	23
Earnings before interest and income taxes	488	591	1,048	1,272

¹ Relates to the following: 25 percent interest of Amisk-oo-Skow Finance Corporation, a corporation wholly owned by the Moose Cree First Nation, in Lower Mattagami Limited Partnership; the 33 percent interest of Coral Rapids Power Corporation, a corporation wholly owned by the Taykwa Tagamou Nation, in PSS Generating Station Limited Partnership; the 15 percent interest and 5 percent interests of corporations wholly owned by Six Nations of Grand River Development Corporation and the Mississaugas of the Credit First Nation, respectively, in Nanticoke Solar LP; and non-controlling interests in certain electricity generating facilities in the United States.

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

³ Includes net changes in accruals; excludes the acquisition of the new corporate headquarters building and surrounding lands at 1908 Colonel Sam Drive in Oshawa, Ontario in February 2023.

Second Quarter

Net income attributable to the Shareholder was \$418 million for the second quarter of 2023, representing a decrease of \$28 million compared to the same quarter in 2022.

Earnings before interest and income taxes were \$488 million for the second quarter of 2023, a decrease of \$103 million compared to the same quarter in 2022.

Significant factors that decreased EBIT:

- Higher OM&A expenses of \$123 million from the Regulated – Nuclear Generation business segment, primarily due to increased compensation expenses resulting from the impact on OPG's collective agreements from the Ontario Superior Court's decision that found unconstitutional provincial legislation that set limits on compensation increases for employees in the Ontario public sector, and the OEB's subsequent decision on June 27, 2023 denying OPG's request for a regulatory variance account to record the related cost impacts. Higher expenditures related to a higher number of planned outage days at the Pickering nuclear generating station (Pickering GS) as part of the station's cyclical maintenance schedule also contributed to the increased OM&A expenses. For further details on the increased compensation expenses, refer to the section, *Significant Developments* under the heading, *Financial Strength – Ontario Court Bill 124 Decision*;
- Net decrease in revenue of \$33 million from the Regulated – Nuclear Generation business segment as a result of lower electricity generation of 0.7 terawatt hours (TWh), partially offset by a higher base regulated price for OPG's nuclear electricity generation (nuclear base regulated price). The lower electricity generation was primarily due to a higher number of planned outage days at the Pickering GS; and
- Lower revenue of \$16 million from the Regulated – Hydroelectric Generation business segment primarily due to the impact of higher market prices on congestion management revenues in 2022.

Significant factors that increased EBIT:

- A gain of \$30 million recognized in the second quarter of 2023 within the Other category related to the sale of certain premises located at 800 Kipling Avenue in Toronto, Ontario in October 2022; and
- Higher non-electricity revenues of \$21 million from the Regulated – Nuclear Generation business segment, largely from increased heavy water tritium removal (detrition) services.

Net interest expense decreased by \$13 million in the second quarter of 2023, compared to the same quarter in 2022, primarily due to higher interest earned on the Company's cash and cash equivalent balance.

Income tax expense decreased by \$62 million for the three months ended June 30, 2023, compared to the same period in 2022. The decrease was primarily due to certain tax expense adjustments and lower earnings before income taxes.

Year-To-Date

Net income attributable to the Shareholder was \$847 million for the first six months of 2023, representing a decrease of \$102 million compared to the same period in 2022.

Earnings before interest and income taxes were \$1,048 million for the first six months of 2023, a decrease of \$224 million compared to the same period in 2022.

Significant factors that decreased EBIT:

- Net decrease in revenue of \$172 million from the Regulated – Nuclear Generation business segment, as a result of lower electricity generation of 2.3 TWh, partially offset by a higher nuclear base regulated price. The lower electricity generation was primarily due to a higher number of outage days at the Pickering GS and the planned removal from service of Darlington nuclear generating station's (Darlington GS) Unit 1 for the duration of the unit's refurbishment, which began in February 2022;
- Higher OM&A expenses of \$123 million from the Regulated – Nuclear Generation business segment, primarily due to increased compensation expenses and higher expenditures related to a higher number of planned outage days at the Pickering GS as part of the station's cyclical maintenance schedule. For further details on the increased compensation expenses, refer to the section, *Significant Developments* under the heading, *Financial Strength – Ontario Court Bill 124 Decision*; and
- Lower revenue of \$23 million from the Regulated – Hydroelectric Generation business segment, primarily due to the impact of higher market prices on congestion management revenues in 2022.

Significant factors that increased EBIT:

- Higher non-electricity revenues of \$55 million from the Regulated – Nuclear Generation business segment was largely driven by increased detritiation services and isotope sales; and
- A gain of \$30 million recognized in the second quarter of 2023 within the Other category related to the sale of certain premises located at 800 Kipling Avenue in Toronto, Ontario in October 2022.

Net interest expense decreased by \$27 million for the six months ended June 30, 2023, compared to the same period in 2022, primarily due to higher interest earned on the Company's cash and cash equivalent balance.

Income tax expense decreased by \$95 million for the six months ended June 30, 2023, compared to the same period in 2022. The decrease was primarily due to certain tax expense adjustments and lower earnings before income 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 the timing of refurbishment activities may result in period-over-period variability in OPG's financial results. The maintenance outage cycle at each of OPG's nuclear generating stations determines the number of planned outages in a particular year. Outage cycles are designed to ensure continued safe and reliable long-term operations of the stations and their compliance with the CNSC's regulatory requirements.

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

Electricity Generation

Electricity generation for the three and six month periods ended June 30, 2023 and 2022 was as follows:

(TWh)	Three Months Ended June 30		Six Months Ended June 30	
	2023	2022	2023	2022
Regulated – Nuclear Generation	8.7	9.4	17.3	19.6
Regulated – Hydroelectric Generation	8.0	8.2	16.3	16.2
Contracted Hydroelectric and Other Generation ¹	1.6	1.6	3.1	2.6
Atura Power	1.2	0.9	2.5	2.9
Total OPG electricity generation	19.5	20.1	39.2	41.3

¹ 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 and 2.1 TWh for the three and six month periods ended June 30, 2023, respectively, compared to the same periods in 2022, mainly due to lower electricity generation from the Regulated – Nuclear Generation business segment.

Electricity generation from the Regulated – Nuclear Generation business segment decreased by 0.7 TWh for the three months ended June 30, 2023, compared to the same period in 2022, primarily due to an increase in the number of planned outage days at the Pickering GS. The decrease of 2.3 TWh for the six months ended June 30, 2023, compared to the same period in 2022, was primarily due to the planned removal from service of Darlington GS Unit 1 for

the duration of the unit's refurbishment, which began in February 2022, and a higher number of planned and unplanned outage days at the Pickering GS.

Electricity generation from the Regulated – Hydroelectric Generation business segment for the three and six month periods ended June 30, 2023, was comparable to the same periods in 2022.

Electricity generation from the Contracted Hydroelectric and Other Generation business segment increased by 0.5 TWh during the six months ended June 30, 2023, compared to the same period in 2022, primarily due to higher water flows in Ontario during the first quarter of 2023. The electricity generation for the three months ended June 30, 2023, was comparable to the same period in 2022.

Electricity generation from the Atura Power business segment increased by 0.3 TWh during the three months ended June 30, 2023, compared to the same period in 2022, primarily due to increased demand for electricity generation from combined cycle plants due to warmer weather conditions. The decrease of 0.4 TWh during the six months ended June 30, 2023, compared to the same period in 2022, was primarily due to milder weather conditions during the first quarter of 2023, which offset the increase in electricity generation during the second quarter of 2023.

Ontario's electricity demand as reported by the IESO for the three and six month periods ended June 30, 2023, excluding electricity exports out of province, was 31.7 TWh and 67.3 TWh, respectively, compared to 31.7 TWh and 68.1 TWh for the same periods in 2022.

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 six month periods ended June 30, 2023, compared to the same periods in 2022. Production forgone at OPG's regulated hydroelectric stations due to SBG conditions was 0.5 TWh and 0.8 TWh during the three and six month periods ended June 30, 2023, compared to 0.9 TWh and 1.1 TWh, respectively, for the same periods in 2022. 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 \$643 million and \$1,145 million for the three and six month periods ended June 30, 2023, respectively, compared to \$757 million and \$1,617 million for the same periods in 2022. The decreases in both periods were primarily due to lower cash receipts from the Regulated – Nuclear Generation business segment, reflecting lower nuclear electricity generation revenue and higher OM&A expenses, as well as higher income tax payments.

Capital Expenditures

Capital expenditures for the three and six month periods ended June 30, 2023 and 2022 were as follows:

<i>(millions of dollars)</i>	Three Months Ended June 30		Six Months Ended June 30	
	2023	2022	2023	2022
Regulated – Nuclear Generation – Darlington Refurbishment Project	265	240	490	471
Regulated – Nuclear Generation – Excluding Darlington Refurbishment Project	218	169	372	282
Regulated – Hydroelectric Generation	72	68	127	125
Contracted Hydroelectric and Other Generation	80	87	160	161
Atura Power	31	49	35	60
Other ¹	28	30	53	58
Total capital expenditures ²	694	643	1,237	1,157

¹ Excludes the acquisition of the new corporate headquarters building and surrounding lands at 1908 Colonel Sam Drive in Oshawa, Ontario in February 2023.

² Includes net changes in accruals.

Total capital expenditures increased by \$51 million and \$80 million for the three and six month periods ended June 30, 2023, respectively, compared to the same periods in 2022.

Capital expenditures for the Darlington Refurbishment project increased by \$25 million and \$19 million for the three and six month periods ended June 30, 2023, respectively, compared to the same periods in 2022. The increases in both periods were mainly due to higher refurbishment activities at the Darlington GS, driven by execution work on Unit 1 and preparation activities for Unit 4, which commenced refurbishment in July 2023. The increases in both periods were partially offset by lower capital expenditures on Unit 3, which was placed in service in July 2023.

Excluding the Darlington Refurbishment project, capital expenditures for the Regulated – Nuclear Generation business segment increased by \$49 million and \$90 million for the three and six month periods ended June 30, 2023, respectively, compared to the same periods in 2022. The increases in both periods were primarily related to small modular reactor (SMR) expenditures at the Darlington New Nuclear Project (DNNP) site and expenditures on the Darlington GS Unit 3 and Unit 1 primary moisture separators, a component of steam generators. The Unit 3 primary moisture separators were completed in July 2023, when the unit was placed in service.

Capital expenditures for the Regulated – Hydroelectric Generation business segment were comparable to the same periods in 2022.

Capital expenditures for the Contracted Hydroelectric and Other Generation business segment decreased by \$7 million for the three months ended June 30, 2023, compared to the same period in 2022. The decrease was primarily due to lower expenditures on the Little Long Dam Safety project, partly offset by higher expenditures on the Smoky Falls Dam Safety project and the replacement of the Unit 3 condenser tubes at the Lennox GS. Capital expenditures were comparable for the business segment for the six months ended June 30, 2023, compared to the same period in 2022.

Capital expenditures for the Atura Power business segment decreased by \$18 million and \$25 million for the three and six month periods ended June 30, 2023, respectively, compared to the same periods in 2022. The decreases in both periods were primarily due to lower expenditures at the Napanee GS.

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

SIGNIFICANT DEVELOPMENTS

Project Excellence

Darlington Refurbishment

On July 17, 2023, following the successful completion of start-up activities, the refurbished Unit 3 of the Darlington GS was reconnected to the electricity grid, ahead of schedule. The return to service of Unit 3 represents another significant milestone in OPG's path toward ensuring that the Darlington GS can continue to provide at least another 30 years of cost effective, reliable and clean energy for Ontario. Unit 3 was the second Darlington GS unit to undergo refurbishment and was taken offline on September 3, 2020. Unit 3 provides 878 MW of baseload electricity generating capacity in Ontario.

On July 19, 2023, OPG commenced the refurbishment of Unit 4 of the Darlington GS with the defueling of the reactor, following the unit's safe shutdown. Unit 4 is the last of four units at the Darlington GS to undergo refurbishment and is scheduled to be returned to service in 2026.

Unit 1 refurbishment activities are continuing to progress on schedule. The refurbishments of Unit 1 and Unit 4 incorporate the benefits of experience with the Unit 2 and Unit 3 refurbishments, and additional strategic improvements.

The Darlington Refurbishment project is discussed further in the section, *Core Business and Outlook* under the heading, *Project Excellence*.

Nuclear Small Modular Reactors

In July 2023, the Province announced that OPG will initiate planning and licensing for three additional SMRs at the DNNP site, bringing the total number of planned SMRs at the site to four. Pending regulatory approvals for the construction of the units, the DNNP's total generating capacity is expected to reach approximately 1,200 MW. This development comes after OPG's submission of a Licence to Construct application to the CNSC for the first SMR at the site in October 2022. The projected in-service dates for the additional SMRs are in the mid-2030s. Small modular reactors at the DNNP site are prescribed as regulated facilities by the OEB.

Battery Energy Storage Development

In partnership with Ameresco Inc., the Company's subsidiary Atura Power has entered into a capacity agreement with the IESO to build a 250 MW four-hour battery energy storage system at the Napanee GS. The project was selected through the IESO's expedited long-term procurement process, which sought 900 MW of new electricity storage capacity. The facility at the Napanee GS will provide support to Ontario's energy grid by drawing and storing electricity off-peak when power demand is low and returning it to the system at times of higher electricity demand. Construction is expected to commence in 2024, with the facility projected to be in-service in 2026 under a 21-year capacity agreement.

Frederick House Lake Dam Project

OPG has initiated a project to improve the dam safety at the Frederick House Lake Dam, located in northeastern Ontario. The dam was built in the 1930s and provides water storage to the Abitibi Canyon hydroelectric GS. The project will rehabilitate the 85-year-old spillway and sluiceway structures in compliance with provincial dam safety requirements. In June 2023, the project entered the execution phase, having completed the front-end engineering and design phase. OPG is progressing the procurement of critical services and advanced detailed engineering, design and permitting activities, as well as site preparation and mobilization. The project is expected to be in service in 2026, with a budget of \$90 million. The Abitibi Canyon GS is reported in the Regulated – Hydroelectric Generation business segment.

Redevelopment of Calabogie Hydroelectric GS

OPG has completed the redevelopment of the Calabogie GS, located along the Madawaska River in eastern Ontario. Following the completion of installation and commissioning activities, Unit 1 and Unit 2 were placed in service in April 2023, within the \$168 million approved budget. The project replaced the original station with a higher generating capacity powerhouse, which is more efficient in utilizing the available river flows. As a result, the installed capacity of the new station has doubled to approximately 11 MW. The Calabogie GS is reported in the Regulated – Hydroelectric Generation business segment.

Financial Strength

Ontario Court Bill 124 Decision

Protecting a Sustainable Public Sector for Future Generations Act, 2019 (Bill 124), which came into force on November 8, 2019, set limits on compensation increases for unionized and non-unionized employees in the Ontario public sector and applied to OPG. Bill 124 limited the maximum annual increase in both wages and total compensation to one percent for a three-year period, referred to as the moderation period, subject to certain exceptions. A broad range of unions and organizations challenged the constitutionality of Bill 124. In a decision dated November 29, 2022, the Ontario Superior Court found that Bill 124 was unconstitutional and declared it to be void and of no effect (Bill 124 Court Decision). On December 29, 2022, the Government of Ontario filed an appeal of the decision with the Ontario Court of Appeal, which was heard in June 2023.

OPG's approved regulated prices for the 2022-2026 period were set on the basis of cost forecasts that assumed the application of Bill 124. On March 1, 2023, OPG filed an application with the OEB requesting to establish a variance account to record and therefore offset compensation cost impacts attributable to the nuclear facilities as a result of the Bill 124 Court Decision, subject to future review and disposition by the OEB. On June 27, 2023, the OEB issued a decision and order denying OPG's request and, as a result, OPG is unable to record these costs in the proposed variance account. On July 17, 2023, OPG filed a motion asking the OEB to review the June 2023 decision. In response to this request, the OEB has agreed to hold a written hearing on the merits of OPG's motion, with submissions from OPG and intervening parties to be filed during the third quarter of 2023. The impact of the Bill 124 Court Decision on OPG's collective agreements and the OEB's June 2023 decision resulted in an increase in OM&A expenses related to compensation costs of approximately \$100 million for the six months ended June 30, 2023.

For further details on the Company's collective agreements, refer to the section, *Core Business and Outlook* under the heading, *Operational Excellence – Collective Agreements*.

Operational Excellence

Province's Powering Ontario's Growth Plan

In response to the IESO's Pathways to Decarbonization Report in December 2022, the Province released the Powering Ontario's Growth plan in July 2023. The plan outlines the proposed actions the Province is taking to meet increasing electricity demand with initiatives including new nuclear generating facilities at the Bruce and Darlington New Nuclear Project sites, building new transmission lines, assessing hydroelectric pumped storage, optimizing OPG's hydroelectric fleet and competitive procurements of new clean resources including battery energy storage, wind, solar and biogas. In response to this plan, OPG will conduct further due diligence on high potential hydroelectric sites in northern Ontario, while engaging with Indigenous communities. Following the release of the plan, the Province issued a letter to the IESO asking it to work on several initiatives including collaborating with OPG and Bruce Power to develop a feasibility study for future nuclear generation in Ontario. The assessment is expected to be submitted to the Province by December 2024. In conjunction with this assessment, OPG will also begin evaluating its existing sites to better understand the potential for future nuclear generation options.

Under the Long-Duration Storage Project Assessment for hydroelectric pumped storage, the Province's plan and associated letter to the IESO also calls on the IESO to assess the proposed 400 MW Marmora pumped storage facility project and to conduct a cost-benefit analysis by September 30, 2023. This proposed project, a joint venture between OPG and Northland Power Inc., is a first-of-a-kind for Canada and would convert a long inactive, open-pit iron ore mine in eastern Ontario into a hydroelectric battery to generate electricity. In parallel with the Powering Ontario's Growth plan, the Province released a proposal for amendments to *Ontario Regulation 53/05*, or creation of a new regulation, to potentially enable the rate regulation of the Marmora pumped storage facility project by the OEB. The Province is expected to make a determination on the project including whether to pursue these potential regulatory amendments by November 30, 2023, following the analysis by the IESO.

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.

The following sections provide an update to OPG's disclosures in the 2022 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 2022 annual MD&A in the sections, *The Company* and *Core Business and Outlook*.



Operational Excellence

Operational excellence at OPG is demonstrated through the safe and environmentally responsible generation of reliable and cost-effective electricity from the Company's assets, by a highly trained and engaged workforce. Workplace health and safety and public safety are overriding priorities in all activities performed at OPG.

Feasibility Assessment for Refurbishing Units 5 to 8 at Pickering GS

OPG has completed an updated feasibility assessment for refurbishing Units 5 to 8 at the Pickering GS as requested by the Province in September 2022. The updated assessment was based on the anticipated refurbishment project scope. In August 2023, OPG's Board of Directors (Board) agreed with and authorized OPG to submit the feasibility assessment to the Province and to continue with certain limited preliminary planning and preparation activities for the potential project, pending the Province's decision whether to proceed with the refurbishment. OPG expects to submit the results of the assessment to the Province in August 2023.

Electricity Generation Production and Reliability

Nuclear Operations

OPG's updated plan to optimize the end of operations dates for 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 subject to the CNSC's regulatory approvals. In June 2023, OPG submitted an application to the CNSC to continue operations of Units 5 to 8 of the Pickering GS until 2026. 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 the station's planned end-of-life dates, which included confirmation of the validity of previously established Periodic Safety Review (PSR). The PSR, a comprehensive assessment of the station's design and operation, previously confirmed that there is a high level of safety throughout the continued operation of the station to 2024. OPG submitted the PSR's Global Issues Assessment Report to the CNSC in May 2023. The associate Integrated Implementation Plan will contain new actions to support operation of Units 5 to 8 of the Pickering GS to 2026. Operating any of the Pickering GS units past December 31, 2024 is subject to the CNSC's regulatory approval through a public hearing process.

On June 6, 2023, the Federal Court of Canada endorsed the CNSC's move to require pre-placement and random alcohol and drug testing of workers in safety-critical positions at high-security nuclear facilities, as mandated by CNSC regulatory document *REGDOC 2.2.4 – Fitness for Duty, Vol. II: Managing Alcohol and Drug Use (version 3)* (REGDOC 2.2.4) issued in November 2020. These requirements ensure that Canada is in line with the international best practices for the operation of high-security nuclear facilities. Following the court ruling, the CNSC directed that OPG and other licensees implement the requirements no later than December 1, 2023. On July 11, 2023, the Power Workers' Union (PWU) and the Society of United Professionals (Society) filed a motion to appeal the Federal Court's June 6, 2023 decision and a motion to stay the implementation of the pre-placement and random drug and alcohol testing pending the outcome of the appeal.

In April 2023, following an application process to the CNSC including a set of public hearings, the CNSC announced the renewal of OPG's operating licence for the Nuclear Sustainability Services' Darlington Waste Management Facility for a ten-year period, valid until April 30, 2033.

Renewable Generation Operations

As part of the efforts to refurbish the Company's existing hydroelectric stations, OPG continues to progress on a cyclical turbine and generator overhaul program for its hydroelectric generating units across Ontario. During the second quarter of 2023, activities included the completion of the overhaul of Unit 4 at Barrett Chute GS and the continued execution of overhaul work on Unit 9 at the R.H. Saunders GS, Unit 1 at the Barrett Chute GS and Unit 5 at the Otto Holden GS. Additionally, the Company continues to progress on the rehabilitation of the concrete infrastructure at the R.H. Saunders GS. Work is also progressing on the replacement of the existing headgates at the Sir Adam Beck II GS and on the replacement of the sluice gate superstructure at the Chenaux GS.

During the second quarter of 2023, OPG began execution activities on the Otter Rapids Project Camp. The construction camp is expected to bring cost efficiencies due to the nature of travel between OPG's remote generating stations in northern Ontario, which are planned to undergo overhauls over the next decade.

For additional information on the Company's major projects, refer to the section, *Core Business and Outlook* under the heading, *Project Excellence*.

OPG coordinates and collaborates with various government agencies, municipalities, Indigenous partners and community stakeholders to ensure the river systems on which the Company operates are managed safely and effectively, while meeting electricity generation needs. During the spring of 2023, a number of river systems in Ontario experienced high water levels and flows as a result of above normal snowpack and a warmer period in the month of April 2023, resulting in sudden and substantial snowmelt. This included notable flooding experienced on the Ottawa River during the period. OPG managed these conditions safely and effectively, by maintaining a strong focus on dam and public safety.

Thermal Operations

Atura Power's combined cycle plants typically operate as cycling dispatchable facilities under their respective ESAs with the IESO or other long-term contracts and are an important component of maintaining the current and future reliability of Ontario's electricity system. These assets provide the system with the flexibility to meet changing daily system demand and capacity requirements, and enable variable sources of renewable generation such as wind and solar. In May 2023, the IESO announced the results of its procurement of generating capacity upgrades from existing contracted facilities and the finalization of a new 10-year contract for Atura Power's Brighton Beach GS, including capacity upgrades. Atura Power was awarded capacity upgrades and contract extensions for the Portlands Energy Centre and the Halton Hills GS. The upgrades at these three facilities are expected to be in service in 2025. As of June 30, 2023, the contracts for Atura Power's facilities have the following terms:

Generating Facility	Original Contract Expiry Date	Current Contract Expiry Date	Current in-Service Capacity (MW) ¹	Average Upgrade Capacity (MW)
Brighton Beach GS ²	July 2024	July 2034	570	42.5
Portlands Energy Centre ³	April 2029	April 2034	562	50
Halton Hills GS	August 2030	April 2035	683	31.5
Napanee GS	March 2040	March 2040	900	-

¹ The current in-service generating capacity excludes average upgrade capacity.

² The facility will continue to operate under an energy conversion agreement with Shell Energy North America (Canada) Inc until July 2024, at which time the new ESA will be with the IESO.

³ The ESA included an option for Atura Power or the IESO to exercise an extension of the contract expiry by five years, which has been awarded in connection with the generating capacity upgrade.

Federal Government's Review of Canada's Radioactive Waste Policy

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 was 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 waste materials, and in particular low-level waste and intermediate-level waste, which, at the federal government's request, has been led by the Nuclear Waste Management Organization (NWMO).

In March 2023, Natural Resources Canada released the modernized *Policy for Radioactive Waste and Decommissioning*. The policy sets out the federal government's vision for radioactive waste management and decommissioning of nuclear facilities, with the overall priority of ensuring the protection of the health, safety and security of people and the environment. As part of this vision, the policy calls for key elements of Canada's radioactive waste disposal infrastructure to be in place by 2050. Some of the specific priorities outlined in the policy include the following:

- Ensuring collaboration among waste owners and producers on planning and developing long-term solutions for radioactive waste management and decommissioning approaches, including through an Integrated Strategy for Canada's Radioactive Waste (ISRW), taking into account emerging technologies such as SMRs and international guidance where appropriate;
- Ensuring meaningful engagement, advancing reconciliation and working in partnership with Indigenous peoples on matters relating to radioactive waste management and decommissioning, including through the implementation of the United Nations Declaration on the Rights of Indigenous Peoples;
- Ensuring that adequate funding is made available by waste owners and producers for the long-term management of radioactive waste; and
- Ensuring that radioactive wastes are safely minimized through appropriate operating and decommissioning practices, including recycling and reuse of materials, and that facilities are decommissioned within an appropriate time frame to reduce the burden on future generations.

On June 30, 2023, the NWMO submitted its ISRW for consideration by Canada's Minister of Natural Resources. The strategy focuses on recommendations for Canada's waste disposal planning for low-level, intermediate-level, and a small amount of non-fuel high-level waste. It recommends that low-level waste be disposed in near-surface disposal facilities implemented by waste generators and waste owners, and that intermediate-level and the small amount of non-fuel high-level waste be disposed in a central deep geological repository implemented by the NWMO. The NWMO would prepare a detailed plan defining a consent-based process to select an appropriate site for this deep geological repository, inclusive of engagement strategy and funding approach, taking into account experience and learnings gained from implementing other siting processes for nuclear facilities. This siting process would be separate from the NWMO's ongoing work to site Canada's plan for the disposal of used nuclear fuel. These recommendations are consistent with the conceptual long-term disposal strategy assumptions underlying OPG's current estimates for the low-level and intermediate-level waste management obligations.

Sale and Purchase of Assets

In October 2022, OPG sold certain 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. In the fourth quarter of 2022, OPG recognized an after-tax gain on the sale of approximately \$111 million, including the impact of revisions to the related asset retirement obligation. In June 2023, upon satisfaction of certain conditions, an additional payment was received in connection with the sale and an additional after-tax gain of approximately \$23 million was recognized.

In February 2023, OPG acquired the building and surrounding lands at 1908 Colonel Sam Drive in Oshawa, Ontario for \$102 million. The building will be retrofitted prior to occupancy and will serve as the Company's new corporate headquarters, superseding previously announced plans to construct a new corporate campus in Clarington, Ontario.

In July 2023, Eagle Creek entered into agreements to sell 22 hydroelectric generating stations in the US with a total capacity of approximately 47 MW across a number of regions, along with two storage reservoirs in the Mid-Western US, as part of the Company's strategy to optimize the US hydroelectric portfolio. The transactions are expected to close in the first quarter of 2024, subject to regulatory approval.

Collective Agreements

On April 11, 2023, the PWU ratified a two-year renewal collective agreement negotiated by the parties, covering the period from April 1, 2022, to March 31, 2024. The PWU bargaining unit represents over 50 percent of OPG's workforce. As the agreement was established subsequent to the issuance of the Bill 124 Court Decision, it is not currently subject to the requirements of Bill 124.

The current two-year collective agreement between the Society and OPG expires on December 31, 2023. The collective agreement was established by an arbitration award issued in December 2021 and covered the first two years of the corresponding three-year moderation period under Bill 124. On May 8, 2023, the arbitrator issued an award that modified the collective agreement to increase compensation in light of the Bill 124 Court Decision. The Society bargaining unit represents over 30 percent of OPG's workforce.

OPG's obligations under the collective agreements may be affected by the outcome of the Government of Ontario's ongoing appeal of the Bill 124 Court Decision. For details on the implications of the Bill 124 Court Decision, refer to the section, *Significant Developments* under the heading, *Financial Strength – Ontario Court Bill 124 Decision*.

On June 26, 2023, the Society filed a related employer application with the Ontario Labour Relations Board. The application identified OPG and Atura Power as responding parties and asserts that they constitute a single employer for purposes of the Ontario *Labour Relations Act, 1995*, or in the alternative that a sale of business has occurred. Both OPG and Atura Power are opposing the application. A mediation date has been scheduled for September 2023.



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 is outlined below.

Project <i>(millions of dollars)</i>	Capital expenditures		Approved budget	Expected in-service Date	Current status
	Year-to-date	Life-to-date			
Darlington Refurbishment	490	9,719	12,800 ¹	Unit 1 – 2025 Unit 4 – 2026	Unit 3 was successfully returned to service in July 2023. Refurbishment of Unit 4 commenced subsequently in July 2023. Unit 1 is progressing on schedule and is in the Reassembly 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	61	600	700	2023	During the second quarter of 2023, following the removal of the west cofferdam, installation work continues on the west upstream wall supports. The replacement of the existing Adam Creek gates continues. The project is expected to be completed at the end of 2023 and is tracking on budget.
Smoky Falls Dam Safety Project	59	176	390	2025	During the second quarter of 2023, following the completion of concrete work, gate replacement work commenced. Closure of the surplus bays and dam stabilization continues on schedule. The project is expected to be completed in 2025 and is tracking on budget.
Frederick House Lake Dam Project	2	4	90	2026	Construction work to rehabilitate the Frederick House Lake Dam commenced in June 2023, having completed the front-end engineering and design phase. The project is expected to be completed in 2026.

¹ The total project budget of \$12.8 billion is for the refurbishment of all four units at the Darlington GS.

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 refurbishment of the second unit, Unit 3, was completed in July 2023, ahead of schedule. The third unit, Unit 1, commenced refurbishment in February 2022 and is scheduled to be returned to service in the second quarter of 2025. The refurbishment of the last unit, Unit 4, commenced after Unit 3 was returned to service and is scheduled to be completed by the end of 2026.

Unit 3 was returned to service in July 2023 in line with the Company's high quality and safety standards, following successful completion of start-up activities and receipt of all appropriate regulatory approvals from the CNSC. Upon returning the unit to service, capital expenditures totaling approximately \$2.3 billion were placed in service.

OPG commenced the refurbishment of Unit 4 in July 2023 following the return to service of Unit 3. The first major segment of the Unit 4 refurbishment, Shut Down, which involves removal of fuel from the reactor and islanding of the unit, is progressing as planned, with defueling of the reactor in progress.

Unit 1 refurbishment activities are progressing on schedule and are currently in the third major segment, Reassembly, which involves the installation and reassembly of reactor components, including new feeder tubes and fuel channel assemblies. The calandria tube installation series followed by the fuel channel installation series are expected to be completed in the second half of 2023. The upper and middle feeder installation series are also continuing, with the installation of 960 new feeder tubes being completed in two segments, starting with the upper and middle feeders and followed by the lower feeders. As part of the refurbishment, OPG continues to progress through the reconditioning of the Unit 1 turbine generator, with the overhaul of the turbine generator and the installation of the turbine control systems upgrade expected to be completed in the second half of 2023.

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.

Atura Power

Atura Power continues to advance planning and preparation activities for a number of projects to meet the ongoing needs of Ontario's electricity system and help enable the province's transition toward a low-carbon economy. This includes the battery energy storage system at the Napanee GS and generating capacity upgrades at Atura Power's other combined cycle facilities, under long-term contracts awarded by the IESO, as well as the Niagara Hydrogen Centre. The budgets for these projects are expected to total approximately \$1 billion. For further details, refer to the section, *Significant Developments* under the heading, *Project Excellence – Battery Energy Storage Development*, *Core Business and Outlook* under the heading, *Thermal Operations*, and *Financial Strength* under the heading, *Growth and Transformation – Low-Carbon Hydrogen Development*.



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 2022 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, 2022 to December 31, 2026 in effect as of the date of this MD&A:

(\$/MWh)	2022	2023	2024	2025	2026
Regulated – Nuclear Generation					
Base regulated price ¹	104.06	107.79	103.48	102.85	111.33
Deferral and variance account rate riders	1.16	1.25	1.15	5.34	7.58
Total regulated price	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
Deferral and variance account rate riders	1.03	1.03	1.03	0.69	0.69
Total regulated price	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 *Ontario Regulation 53/05*, the base regulated price for OPG's hydroelectric electricity generation (hydroelectric base regulated price) for the period from January 1, 2022 to December 31, 2026 has been set equal to the 2021 hydroelectric base regulated price.

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

Ensuring Availability of Cost Effective Funding

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

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

Credit Ratings

Maintaining an investment grade credit rating supports OPG's ability to access cost effective financing. As at June 30, 2023, the Company's credit ratings were as follows:

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

¹ In April 2023, DBRS confirmed OPG's A (low) issuer rating, A (low) senior unsecured debt rating and R-1 (low) Canadian commercial paper rating, all with Stable trends.

² In August 2023, S&P confirmed OPG's ratings including BBB+ issuer's rating with stable outlook, BBB+ senior unsecured debt rating and A-1 (low) Canada commercial paper rating.

³ In June 2023, Moody's confirmed OPG's A3 issuer rating with stable outlook, A3 senior unsecured debt rating and P-2 US commercial paper rating.

⁴ NR indicates no rating assigned.

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

Budget 2023 Federal Investment Tax Credits

In March 2023, the Canadian federal government announced certain refundable investment tax credits (ITC), as part of Budget 2023, including a 15 percent refundable Clean Electricity ITC, a 30 percent Clean Technology ITC and a Clean Hydrogen ITC ranging from 15 percent to 40 percent for certain eligible investments. The Clean Electricity ITC will be available to federally tax-exempt entities, including OPG. The ITCs are available for certain clean energy projects up to and including 2034. Among others, eligible investments in new projects including SMRs and large-scale nuclear reactors, hydroelectric electricity generation, certain stationary electricity storage systems including battery and pumped hydroelectric storage projects and refurbishment of certain existing facilities qualify for the Clean Electricity ITC. For entities subject to federal tax, some of these projects qualify for the Clean Technology ITC. Certain clean hydrogen production projects qualify for the Clean Hydrogen ITC. Budget 2023 sets out certain requirements that must be met in order to access the ITCs and OPG is continuing to monitor developments in this area.

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 and pursuing new developments, as well as investing in innovative technologies and new lines of business in the electricity sector. Opportunities are evaluated using financial and risk-based analyses as well as the application of strategic considerations, including the evaluation of potential partnerships with other commercial entities where aligned with OPG's business objectives.

Nuclear Small Modular Reactors

OPG and its subsidiary, Laurentis Energy Partners (LEP), continue collaboration with Saskatchewan Power Corporation (SaskPower) to further deployment of SMRs in Saskatchewan. In June 2023, SaskPower and LEP entered into a Master Services Agreement (MSA) to help advance SaskPower's SMR development project. This follows SaskPower and OPG's renewed collaboration agreement in February 2023 to continue working together on new nuclear development, including SMRs, in both Saskatchewan and Ontario. These agreements enable the parties to provide mutual support by sharing lessons learned, best practices, and operating experience.

In June 2023, LEP announced the next step in their continued relationship with ORLEN Synthos Green Energy (OSGE) through the signing of an MSA, a Polish joint venture company established by PKN ORLEN S.A. and Synthos Green Energy S.A. Through this agreement, LEP will broaden its support to OSGE in its plans to deploy SMRs in Poland.

Low Carbon Hydrogen Development

Atura Power is continuing preparation for the commencement of site work for the Niagara Hydrogen Centre in Niagara Falls, Ontario as its first site for large-scale hydrogen production, with plans to bring it online by early 2025. The facility will use a 20 MW electrolyzer to produce green hydrogen by utilizing water and hydroelectricity as inputs.

Transit Electrification

In June 2023, PowerON Energy Solutions (PowerON), a subsidiary of OPG, entered into a 20-year agreement with Oakville Transit to design, build, finance, own, operate and maintain the charging infrastructure for its electric bus fleet in Oakville, Ontario. PowerON will also expand Oakville's Transit garage facility to accommodate additional electric buses. PowerON's focus is to support large-scale electrification projects by providing turnkey solutions encompassing all electrical infrastructure from the electricity grid connection to vehicle chargers.



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 health and safety and corporate citizenship, including environmental stewardship, transparency, community engagement and Indigenous relations. The Company also strives to be a leader in climate change action, equity, diversity and inclusion (ED&I) practices, and to advance reconciliation with Indigenous peoples.

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

Outlook

Operating Performance

OPG expects net income for the 2023 year to be more favourable than 2022, reflecting the refurbishment of Unit 3 of the Darlington GS being completed ahead of schedule, partially offset by increased compensation expenses. For further details on the increased compensation expenses, refer to the section, *Significant Developments* under the heading, *Financial Strength – Ontario Court Bill 124 Decision*.

The Company's operating results in 2023 may be impacted by macro-economic factors and global events, as discussed further in the section, *Risk Management*.

Nuclear Segregated Funds

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

As at June 30, 2023, the Decommissioning Segregated Fund was overfunded by approximately 34 percent and the Used Fuel Segregated Fund was overfunded by approximately 6 percent based on the approved reference plan under ONFA reference plan in effect for the years 2022 to 2026.

Further details on OPG's Outlook, including Capital Expenditures and Financing and Liquidity, can be found in OPG's 2022 annual MD&A in the section, *Core Business and Outlook* under the heading, *Outlook*.

ENVIRONMENTAL, SOCIAL, GOVERNANCE AND SUSTAINABILITY

OPG recognizes that its environmental, social and governance (ESG) practices, and operating in a safe, sustainable and inclusive manner 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 sustainability, climate change action, and Indigenous relations. This is accomplished through the implementation of operational and growth strategies that minimize the Company's environmental footprint, support reductions in greenhouse gas (GHG) emissions, increase resilience to climate change impacts, and to advancing Reconciliation with Indigenous peoples, 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.

OPG's ESG reports, including the latest annual report issued in July 2023, are available on the Company's website at www.opg.com.

Environmental

In March 2022, the Canadian government began consultations to develop Clean Electricity Regulations (CER) to support the goal of transitioning to net-zero carbon emissions from electricity generation by 2035. These regulations are expected to increase policy certainty by providing a basis for provinces and territories to plan, operate and decarbonize their electricity systems. A key component of CER will be the regulation of carbon dioxide emissions from natural gas generation, including emissions performance standards, financial compliance requirements for emissions, and the role of natural gas generation to support electricity affordability and reliability. On August 10, 2023, Environment and Climate Change Canada released unofficial, draft regulations for comment until November 2, 2023, with final regulations expected to be in place by the end of 2024. OPG is engaged in the CER consultation process through industry associations and directly with Environment and Climate Change Canada.

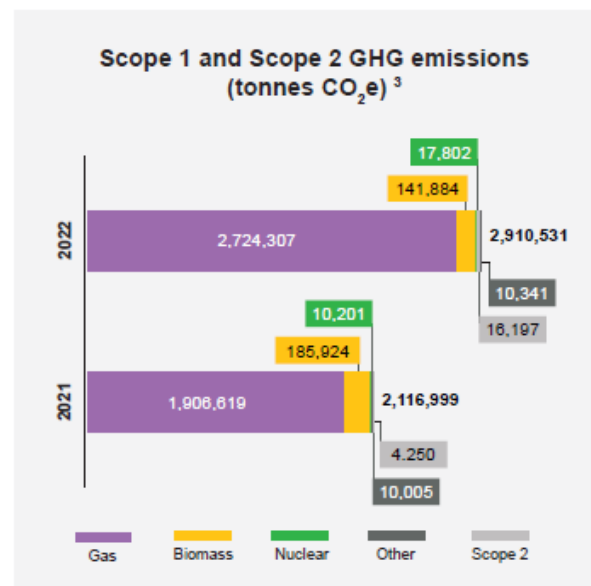
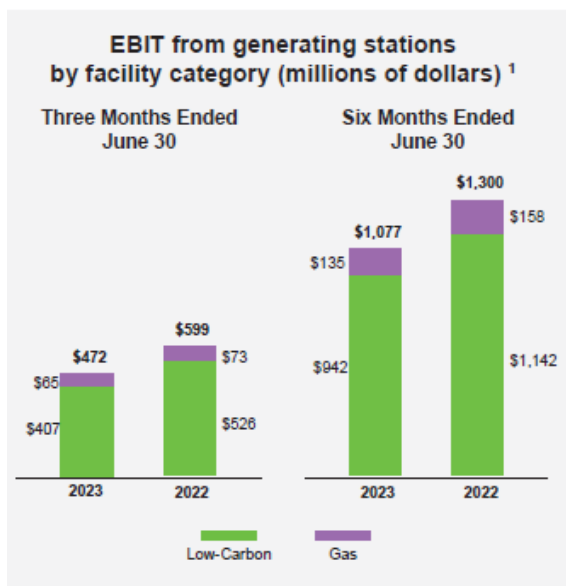
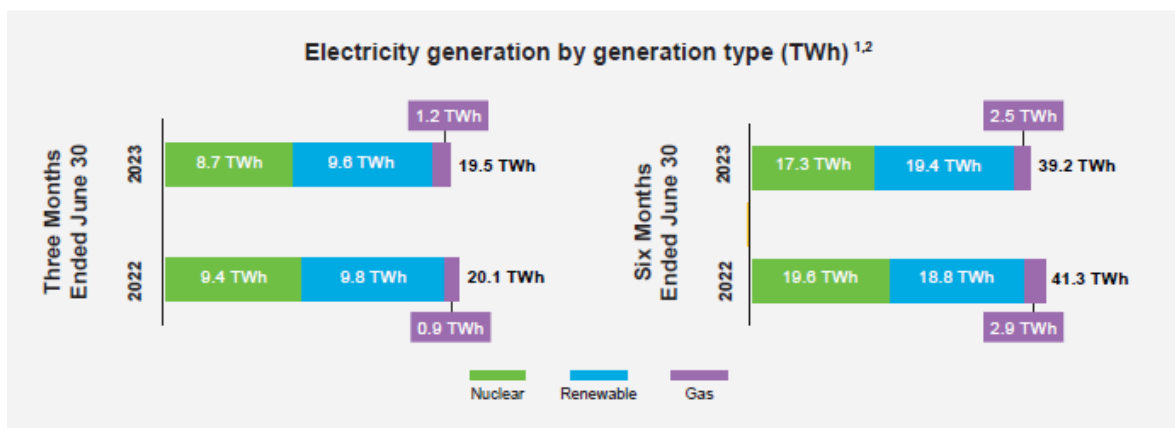
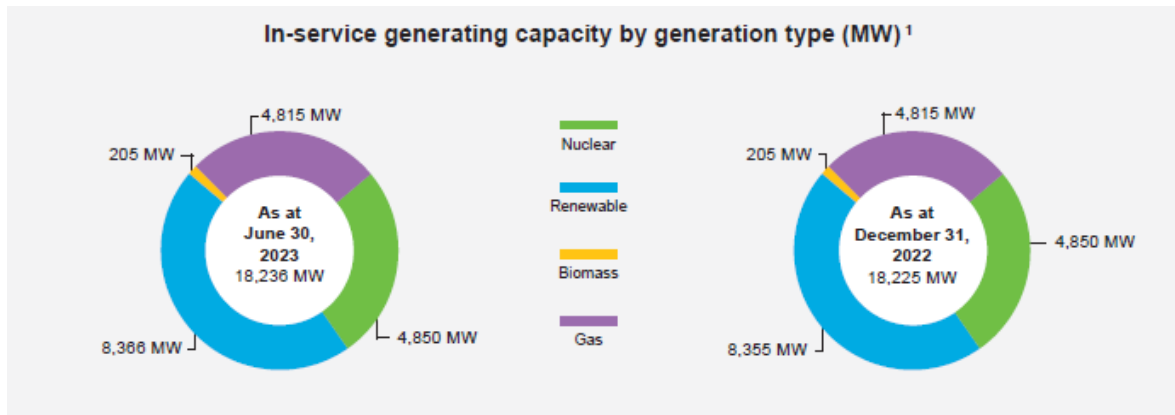
Climate Change

Since the launch of its Climate Change Plan in 2020, OPG has made advancements in a number of areas to ensure sustainable, resilient operations and to invest in the generation of clean energy. This includes progressing the Darlington Refurbishment project, continuing to lead the development of SMRs, and executing work required to maximize the safe and reliable operating life of the Pickering GS. OPG also continues to advance projects to increase the generating capacity of its hydroelectric generating assets and is exploring the potential for new hydroelectric development. OPG is supporting the electrification of Ontario's transportation sector by expanding the electric vehicle fast-charging network and providing electrification and charging infrastructure solutions through the Ivy Charging Network joint venture and the PowerON subsidiary. Additionally, Atura Power is laying the groundwork for low-carbon hydrogen production in the province and has been selected to construct a battery energy storage system to help meet Ontario's on-peak electricity demand. OPG intends to periodically review and update the Climate Change Plan to reflect the Company's current climate-related initiatives and actions.

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 dual-fueled Lennox GS and the Company's combined cycle plants operated through Atura Power.

² Electricity generated from the Biomass category represents 0.05 TWh as at June 30, 2023 and June 30, 2022.

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

Climate change metrics

<i>In-service generating capacity by generation type</i> ¹	In-service generating capacity from low-carbon emitting sources increased as at June 30, 2023, compared to December 31, 2022. The increase of 11 MW was due to the completion of the redevelopment of Calabogie GS in April 2023.
<i>Electricity generation by generation type</i> ²	During the three and six month periods ended June 30, 2023, approximately 94 percent of OPG's total electricity generation was supplied by low-carbon sources. The percentage of total electricity supplied by low-carbon sources was comparable to the same periods in 2022.
<i>EBIT from generating stations by facility category</i> ³	Earnings before interest and income taxes from low-carbon generation decreased during the three and six month periods ended June 30, 2023, compared to the same periods in 2022, primarily due to lower earnings from the Regulated – Nuclear Generation business segment. For further details, refer to the section, <i>Discussion of Operating Results by Business Segment</i> under the heading, <i>Regulated – Nuclear Generation Segment</i> .
<i>Scope 1 GHG emissions – Direct and Emission Rate</i> ⁴	The Scope 1 GHG emissions metric identifies direct carbon dioxide equivalent (CO ₂ e) emissions from OPG's thermal and nuclear operations and other facilities. For the year ended December 31, 2022, 2,866,190 tonnes of CO ₂ e (2021 – 2,092,543 tonnes of CO ₂ e) were emitted by thermal operations, representing approximately 99 percent of OPG's total CO ₂ e emissions, with the remainder emitted by nuclear operations and other facilities. The increase in CO ₂ e emissions in 2022 was primarily due to increased electricity generation from Atura Power's combined cycle plants. For the year ended December 31, 2022, OPG emitted CO ₂ e at an average rate of 36.9 grams per kilowatt-hour (kWh) of its total electricity generation (2021 – 27.2 grams per kWh).
<i>Scope 2 GHG emissions – Indirect</i> ⁴	The Scope 2 GHG emissions metric identifies indirect CO ₂ e emissions from the purchase of energy from utility providers. For the year ended December 31, 2022, an estimated 16,197 tonnes of CO ₂ e (2021 – 4,250 tonnes of CO ₂ e) were emitted based on purchases of electricity. The increase in CO ₂ e emissions in 2022 was primarily due to ongoing efforts to improve the GHG emissions inventory for this category.

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.

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

³ Identifies the portion of OPG's EBIT from electricity generating stations derived from low-carbon generation sources.

⁴ Scope 1 GHG emissions, Emission Rate and Scope 2 GHG emissions are reported annually.

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, healthy and agile workforce in a dynamic and changing industry, and is fundamental to achieving the Company's strategic goals.

OPG continues to advance the Company's ED&I Strategy. A key priority of the Strategy is strengthening and diversifying the Company's leadership team to meet the needs of an evolving labour market and workforce. During the second quarter of 2023, OPG delivered ED&I education across the enterprise to help build capacity in support of this objective, including interactive education for leaders on issues related to anti-racism and employment equity and how leaders can contribute to meeting ED&I Strategy goals and targets. Additionally, OPG and the BlackNorth Initiative launched the BlackNorth Connect program, an online platform to connect Black candidates with employment, mentorship, scholarship, bursary and internship opportunities across various industries. OPG also hosted its largest Women's Leadership Forum to date in May 2023, bringing together hundreds of employees from across the Company to promote women's leadership across the energy sector. The ED&I Strategy can be found on the Company's website www.opg.com.

Indigenous Relations

OPG owns and operates electricity generation assets within the treaty and traditional territories of Indigenous peoples across Ontario. OPG's Indigenous Relations Policy and Reconciliation Action Plan formalize the Company's commitment to working with Indigenous communities to foster positive and mutually beneficial relationships that will create social and economic benefits through partnership and collaboration. 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' Progressive Aboriginal Relations program, which recognizes OPG as a national best-practices organization with a demonstrated commitment in the area of Indigenous relations. OPG's Reconciliation Action Plan can be found on the Company's website www.opg.com.

DISCUSSION OF OPERATING RESULTS BY BUSINESS SEGMENT

Regulated – Nuclear Generation Segment

<i>(millions of dollars – except where noted)</i>	Three Months Ended June 30		Six Months Ended June 30	
	2023	2022	2023	2022
<i>Electricity Generation (TWh)</i>	8.7	9.4	17.3	19.6
Revenue	1,039	1,035	2,079	2,167
Fuel expense	67	64	134	132
Gross margin	972	971	1,945	2,035
Operations, maintenance and administration expenses	669	546	1,228	1,105
Property taxes	6	8	12	13
Earnings before interest, income taxes, depreciation and amortization	297	417	705	917
Depreciation and amortization expenses	129	149	260	300
Earnings before interest and income taxes	168	268	445	617

Earnings before interest and income taxes from the segment decreased by \$100 million and \$172 million for the three and six month periods ended June 30, 2023, respectively, compared to the same periods in 2022.

The decrease in earnings during the three months ended June 30, 2023, compared to the same period in 2022, was primarily due to higher OM&A expenses of \$123 million driven by increased compensation expenses and higher expenditures related to a higher number of planned outage days at the Pickering GS as part of the station's cyclical maintenance schedule. Additionally, the decrease in earnings was due to lower revenues of \$33 million as a result of lower electricity generation of 0.7 TWh, net of the impact of a higher OEB-approved nuclear base regulated price. The decrease in earnings was partially offset by higher non-electricity generation revenue, largely driven by increased detritiation services, and higher amounts deferred in the Rate Smoothing Deferral Account.

The decrease in earnings during the six months ended June 30, 2023, compared to the same period in 2022, was primarily due to lower revenue of \$172 million as a result of lower electricity generation of 2.3 TWh, net of the impact of a higher OEB-approved nuclear base regulated price. The lower electricity generation was primarily due to a higher number of planned and unplanned outage days at the Pickering GS and the removal from service of Darlington GS Unit 1 for the duration of the unit's refurbishment, which began in February 2022. The decrease in earnings was also due to higher OM&A expenses of \$123 million driven by increased compensation expenses and higher expenditures related to a higher number of outage days at the Pickering GS. The decrease in earnings was partially offset by higher non-electricity generation revenue, largely driven by increased detritiation services and isotope sales, and higher amounts deferred in the Rate Smoothing Deferral Account.

For further details on the increased compensation expenses refer to the section, *Significant Developments* under the heading, *Financial Strength – Ontario Court Bill 124 Decision*.

The lower depreciation and amortization expenses for the three and six month periods ended June 30, 2023, compared to the same periods in 2022, primarily reflected amounts recorded 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 2023.

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

	Three Months Ended June 30		Six Months Ended June 30	
	2023	2022	2023	2022
Planned Outage Days				
Darlington GS ¹	-	0.3	-	0.3
Pickering GS	127.6	47.2	251.6	135.2
Unplanned Outage Days				
Darlington GS ¹	0.8	15.6	1.2	16.0
Pickering GS	12.9	22.9	33.9	24.8

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

Planned outages days at the Darlington GS for the three and six month periods ended June 30, 2023 were comparable to the same periods in 2022.

The higher planned outage days at the Pickering GS during the three and six month periods ended June 30, 2023, compared to the same periods in 2022, were primarily driven by the station's cyclical maintenance schedule and other planned maintenance and repair work executed at the station in 2023.

The fewer unplanned outage days at the Darlington GS for the three and six month periods ended June 30, 2023, compared to the same periods in 2022, were primarily due to turbine maintenance activities at the station during the second quarter of 2022.

The fewer unplanned outage days at the Pickering GS during the three months ended June 30, 2023, compared to the same period in 2022, were primarily due to turbine generator maintenance activities at the station in 2022. The higher unplanned outages at the station during the six months ended June 30, 2023, compared to the same period in 2022, were mainly due to required repair work associated with a turbine governing system on Unit 1 during the first quarter of 2023.

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

	Three Months Ended June 30		Six Months Ended June 30	
	2023	2022	2023	2022
Unit Capability Factor (%) ¹				
Darlington GS	99.9	91.4	99.9	96.1
Pickering GS	74.5	87.8	74.6	85.6

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 have been excluded from the measure since commencing refurbishment on September 3, 2020 and February 15, 2022, respectively.

The Unit Capability Factor at the Darlington GS increased for the three and six month periods ended June 30, 2023, compared to the same periods in 2022, primarily due to fewer unplanned outage days, demonstrating excellent station reliability.

The Unit Capability Factor at the Pickering GS decreased for the three and six month periods ended June 30, 2023, compared to the same periods in 2022. The decrease for the three months ended June 30, 2023 was primarily due to higher number of planned outage days, while the decrease for the six months ended June 30, 2023 was primarily due to higher number of planned and unplanned outage days.

Regulated – Nuclear Sustainability Services Segment

<i>(millions of dollars – except where noted)</i>	Three Months Ended June 30		Six Months Ended June 30	
	2023	2022	2023	2022
Revenue	73	48	121	98
Operations, maintenance and administration expenses	73	48	121	98
Accretion on nuclear fixed asset removal and nuclear waste management liabilities	291	283	583	566
Earnings on nuclear fixed asset removal and nuclear waste management funds	(263)	(257)	(522)	(515)
Loss before interest and income taxes	(28)	(26)	(61)	(51)

The segment loss before interest and income taxes increased by \$2 million and \$10 million for the three and six month periods ended June 30, 2023, respectively, compared to the same periods in 2022. The increases were primarily due to higher accretion expense on the Nuclear Liabilities, partially offset by higher earnings on the Nuclear Segregated 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.

For both the three and six month periods ended June 30, 2023, the higher earnings from the Nuclear Segregated Funds were primarily due to the growth in the present value of the underlying funding liabilities per the approved ONFA reference plan in effect. As both the Decommissioning Segregated Fund and the Used Fuel Segregated Fund were in an overfunded position during the three and six month periods ended June 30, 2023, and during the same periods in 2022, they were not impacted by market returns or the rate of return guarantee provided by the Province for a portion of the Used Fuel Segregated Fund.

When both funds are in an overfunded position, OPG limits the amount of Nuclear Segregated Funds assets reported on the 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 2022 annual MD&A in the section, *Critical Accounting Policies and Estimates* under the heading, *Nuclear Fixed Asset Removal and Nuclear Waste Management Funds*.

Regulated – Hydroelectric Generation Segment

<i>(millions of dollars – except where noted)</i>	Three Months Ended June 30		Six Months Ended June 30	
	2023	2022	2023	2022
<i>Electricity generation (TWh)</i>	8.0	8.2	16.3	16.2
Revenue ¹	392	407	777	794
Fuel expense	86	88	152	152
Gross margin	306	319	625	642
Operations, maintenance and administration expenses	93	90	190	176
Property tax	-	-	-	1
Other losses	3	-	3	1
Earnings before interest, income taxes, depreciation and amortization	210	229	432	464
Depreciation and amortization expenses	45	44	90	86
Earnings before interest and income taxes	165	185	342	378

¹ During the three and six month periods ended June 30, 2023, the Regulated – Hydroelectric Generation business segment revenue included incentive payments of \$2 million and \$4 million, respectively, related to the OEB-approved hydroelectric incentive mechanism (three and six month periods ended June 30, 2022 – incentive payment reductions of \$4 million and \$1 million, respectively). The mechanism provides a pricing incentive to OPG to shift hydroelectric production from lower market price periods to higher market price periods, reducing the overall costs to customers. The incentive payments are reduced to remove incentive revenues arising in connection with SBG conditions.

Earnings before interest and income taxes from the segment decreased by \$20 million and \$36 million for the three and six month periods ended June 30, 2023, respectively, compared to the same periods in 2022. The decreases in both periods were largely due to the impact of higher market prices on congestion management revenues in 2022. The decrease during the six months ended June 30, 2023 was also due to higher OM&A expenses primarily due to increased compensation expenses. For further details on the increase compensation expenses, refer to the section, *Significant Developments* under the heading, *Financial Strength – Ontario Court Bill 124 Decision*.

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

	Three Months Ended June 30		Six Months Ended June 30	
	2023	2022	2023	2022
Hydroelectric Availability (%) ¹	90.8	91.6	89.9	90.6

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

Hydroelectric Availability decreased slightly for the three and six month periods ended June 30, 2023, compared to the same periods in 2022, primarily due to higher planned and unplanned outage days at the R.H. Saunders GS.

Contracted Hydroelectric and Other Generation Segment

<i>(millions of dollars – except where noted)</i>	Three Months Ended June 30		Six Months Ended June 30	
	2023	2022	2023	2022
<i>Electricity Generation (TWh)</i>	1.6	1.6	3.1	2.6
Revenue	206	190	423	383
Fuel expense	13	8	28	20
Gross margin	193	182	395	363
Operations, maintenance and administration expenses	69	61	140	116
Accretion on fixed asset removal liabilities	2	2	4	4
Property taxes	4	3	8	9
Other (gains) losses	(3)	-	(3)	1
Earnings before interest, income taxes, depreciation and amortization	121	116	246	233
Depreciation and amortization expenses	40	40	81	78
Earnings before interest and income taxes	81	76	165	155

Earnings before interest and income taxes from the segment increased by \$5 million and \$10 million for the three and six month periods ended June 30, 2023, respectively, compared to the same periods in 2022.

The increases in both periods were mainly due to higher earnings from the Ontario-based hydroelectric facilities, driven by higher revenues from the Lower Mattagami hydroelectric generating stations. The increase for the three months ended June 30, 2023 was partially offset by lower earnings from US operations reflecting the impact of lower wholesale electricity market prices. The increase for the six months ended June 30, 2023 was also due to higher earnings from US operations during the first quarter of 2023.

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

	Three Months Ended June 30		Six Months Ended June 30	
	2023	2022	2023	2022
Hydroelectric Availability (%) ^{1,2}	91.0	86.7	91.7	87.2
Thermal EFOR (%) ²	1.5	0.7	3.6	0.4

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

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

Hydroelectric Availability increased for the three and six month periods ended June 30, 2023, compared to the same periods in 2022, primarily due to fewer unplanned outages at the Lower Mattagami generating stations.

The Thermal EFOR increased for the three and six month periods ended June 30, 2023, compared to the same periods in 2022, primarily due to higher unplanned outages at the Atikokan GS.

Atura Power Segment

<i>(millions of dollars – except where noted)</i>	Three Months Ended June 30		Six Months Ended June 30	
	2023	2022	2023	2022
<i>Electricity Generation (TWh)</i>	1.2	0.9	2.5	2.9
Revenue	161	193	337	419
Fuel expense	50	77	112	179
Gross margin	111	116	225	240
Operations, maintenance and administration expenses	21	17	38	32
Accretion on fixed asset removal liabilities	1	1	1	1
Property taxes	1	-	2	1
Other gains	-	(1)	-	(1)
Earnings before interest, income taxes, depreciation and amortization	88	99	184	207
Depreciation and amortization expenses	30	29	59	57
Earnings before interest and income taxes	58	70	125	150

Earnings before interest and income taxes from the segment decreased by \$12 million and \$25 million for the three and six month periods ended June 30, 2023, respectively, compared to the same periods in 2022. The decrease for the three months ended June 30, 2023 was primarily due to reduced capacity payments under respective ESAs as a result of unplanned outages at the Halton Hills GS and the Portlands Energy Centre, partially offset by higher electricity generation revenues from Atura Power's other combined cycle facilities. The higher OM&A expenses for the three months ended June 30, 2023 were driven by Atura Power's ongoing business development initiatives.

The decrease in EBIT for the six months ended June 30, 2023, compared to the same period in 2022, was primarily due to lower gross margin as a result of decreased electricity generation driven by the impact of lower demand for electricity generation from combined cycle plants due to milder weather during the winter of 2023. The decrease was also due to reduced capacity payments under respective ESAs as a result of unplanned outages at the Halton Hills GS and the Portlands Energy Centre, and higher OM&A expenses related to Atura Power's ongoing business development initiatives.

Thermal Availability within the Atura Power business segment as at June 30, 2023 and 2022 was as follows:

	As At June 30	
	2023	2022
Thermal Availability (%) ¹	89.9	91.4

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

Thermal Availability decreased as at June 30, 2023, compared to June 30, 2022, primarily due to planned outages at the Napanee GS and the Portlands Energy Centre and unplanned outages at the Halton Hills GS and the Portlands Energy Centre.

LIQUIDITY AND CAPITAL RESOURCES

OPG maintains a range of funding sources to ensure sufficient liquidity and meet financing requirements, as discussed in the section, *Core Business and Outlook* under the heading, *Financial Strength – Ensuring Availability of Cost Effective Funding*. These sources are used for multiple purposes including: to invest in plants and technologies, undertake major projects and business acquisitions, fund long-term obligations such as contributions to the pension fund and the Nuclear Segregated Funds, make payments under the OPEB plans, fund expenditures on Nuclear Liabilities not eligible for reimbursement from the Nuclear Segregated Funds, service and repay long-term debt, and provide general working capital.

Changes in cash and cash equivalents for the three and six month periods ended June 30, 2023 and 2022 were as follows:

<i>(millions of dollars)</i>	Three Months Ended June 30		Six Months Ended June 30	
	2023	2022	2023	2022
Cash, cash equivalents and restricted cash, beginning of period	1,410	933	1,595	698
Cash flow provided by operating activities	643	757	1,145	1,617
Cash flow used in investing activities	(632)	(631)	(1,339)	(1,229)
Cash flow provided by (used in) financing activities	80	(26)	100	(52)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(3)	2	(3)	1
Net increase (decrease) in cash, cash equivalents and restricted cash	88	102	(97)	337
Cash, cash equivalents and restricted cash, end of period	1,498	1,035	1,498	1,035

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 \$1 million and \$110 million during the three and six month periods ended June 30, 2023, respectively, compared to the same periods in 2022. The increase for the six months ended June 30, 2023 was primarily due to the purchase of the new corporate headquarters building and surrounding lands at 1908 Colonel Sam Drive in Oshawa, Ontario in February 2023 and increased capital expenditures, specifically within the Regulated – Nuclear generation business segment. The increase was partially offset by the additional payment received in June 2023, in connection with the sale of certain premises located at 800 Kipling Avenue in Toronto, Ontario. The change in cash flow used in investing activities for the three months ended June 30, 2023 was comparable to the same period in 2022.

Financing Activities

Cash flow provided by financing activities increased by \$106 million and \$152 million during the three and six month periods ended June 30, 2023, respectively, compared to the same periods in 2022. The increases in both periods were primarily due to higher net issuance of long-term debt and short-term debt in 2023.

As at June 30, 2023, the Company had the following committed credit facilities:

<i>(millions of dollars)</i>	Amount
Bank facilities:	
Corporate ^{1,2}	1,807
Corporate ¹	750
Lower Mattagami Energy Limited Partnership ³	400
OPG Eagle Creek Holdings LLC and subsidiaries	25
Ontario Electricity Financial Corporation facility ²	750

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

² Represents amounts available under the facility net of debt issuances.

³ A letter of credit of \$60 million was outstanding under this facility as at June 30, 2023.

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

<i>(millions of dollars)</i>	As At	
	June 30 2023	December 31 2022
Lower Mattagami Energy Limited Partnership	130	65
Total short-term debt	130	65
Letters of credit	460	439
Guarantees	35	35

As of June 30, 2023, a total of \$460 million of Letters of Credit had been issued. This included \$298 million for the supplementary pension plans, \$16 million for Eagle Creek and its subsidiaries, \$60 million for Lower Mattagami Energy Limited Partnership, \$43 million for general corporate purposes, \$16 million for UMH Energy Partnership, \$26 million for Atura Power and \$1 million for PSS Generating Station Limited Partnership.

Long-term debt balances were as follows:

<i>(millions of dollars)</i>	As At	
	June 30 2023	December 31 2022
Medium Term Notes payable	4,650	4,650
Senior notes payable under corporate credit facilities	2,663	2,618
Project financing	2,879	2,892
Other	25	25
Total Long-term debt ¹	10,217	10,185

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

Share Capital

As at June 30, 2023 and December 31, 2022, OPG had 256,300,010 common shares issued and outstanding at a stated value of \$5,126 million. OPG is authorized to issue an unlimited number of common shares without nominal or par value. Any issue of new shares is subject to the consent of OPG's shareholder, the Province.

As at June 30, 2023, and December 31, 2022, 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.

BALANCE SHEET HIGHLIGHTS

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

<i>(millions of dollars)</i>	As At	
	June 30 2023	December 31 2022
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> .	32,444	31,767
Nuclear fixed asset removal and nuclear waste management funds <i>(current and non-current portions)</i> 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.	21,126	20,706
Long-term debt <i>(current and non-current portions)</i> The increase was primarily due to net issuances under the Company's corporate credit facilities, net of debt repayments to the OEFC.	10,185	10,152
Fixed asset removal and nuclear waste management liabilities The increase was primarily a result of accretion expense, partially offset by expenditures on fixed asset removal and nuclear waste management activities.	24,809	24,315

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.

CRITICAL 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, 2022. OPG's critical accounting policies are consistent with those noted in OPG's 2022 annual MD&A.

RISK MANAGEMENT

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. The following section provides an update to the discussion of the Company's risks and risk management activities included in OPG's 2022 annual MD&A in the section, *Risk Management*.

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 generating station include aspects such as occupational safety, resourcing, equipment reliability, human performance, climate change, regulatory requirements and technology.

Supply Chain Energy transition in Canada and the world is accelerating to support the achievement of net zero greenhouse gas emission goals, particularly through nuclear and renewable solutions and emerging technologies. OPG's growth and transformation strategies include a number of new development and refurbishment projects, requiring commitment from experienced vendors who may be limited in their capacity to successfully service OPG and other key customers in parallel. Capacity constraints, loss of key suppliers and vendor performance risks could affect OPG's growth strategy, operations and execution of major projects. OPG mitigates these risks, to the extent possible, through:

- Contract negotiations,
- Programmatic partnerships with original equipment manufacturers,
- Contract terms and vendor monitoring,
- Advanced procurement of critical long-lead components, and
- Diversification of supplier base and business continuity plans.

Increased activities are underway to identify critical goods and services risks by assessing supply and demand conditions and to develop mitigation strategies for the top risk areas.

Risks to Maintaining Financial Strength

Risks related to macro-economic factors, 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 and renewal of energy supply contracts. Additionally, escalation of the Russia/Ukraine conflict, in conjunction with geo-political tensions between the US and China, could drive long-lasting implications for global commodity and financial markets.

Credit The Company's credit risk exposure is a function of its electricity sales, trading and hedging activities, and treasury activities including investing and commercial transactions with various suppliers of goods and services. OPG's credit risk exposure relating to energy market transactions as at June 30, 2023 was \$639 million, including \$548 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.

Commodity 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.

	2023 ¹	2024	2025
Estimated fuel requirements hedged (%) ²	100	81	77

¹ Based on actual fuel requirements hedged for the six months ended June 30, 2023 and forecast for the remainder of the year.

² Represents the approximate portion of megawatt-hour (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, this represents the gross revenue charge and water rental charges. Excess fuel inventories (nuclear and thermal) in a given year are attributed to the next year for the purpose of measuring hedge ratios.

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.

The related party transactions were as follows:

<i>(millions of dollars)</i>	Three Months Ended June 30			
	2023		2022	
	Income	Expense	Income	Expense
Hydro One				
Electricity sales	2	-	5	-
Services	-	3	-	3
Dividends	1	-	2	-
Province of Ontario				
Change in Decommissioning Segregated Fund amount due to Province ¹	24	-	945	-
Change in Used Fuel Segregated Fund amount due to Province ¹	40	-	1,188	-
Hydroelectric gross revenue charge	-	30	-	31
OEFC				
Hydroelectric gross revenue charge	-	55	-	55
Interest expense on long-term notes	-	24	-	25
Income taxes	-	100	-	151
Property taxes	-	3	-	3
IESO				
Electricity-related revenue	1,642	-	1,672	-
Fair Hydro Trust				
Interest income	8	-	8	-
	1,717	215	3,820	268

¹ The Nuclear Segregated Funds are reported on OPG's consolidated balance sheets net of amounts recognized as due to the Province in respect of any excess funding and, for the Used Fuel Segregated Fund, the Province's rate of return guarantee. As at June 30, 2023 and December 31, 2022, the Nuclear Segregated Funds were reported net of amounts due to the Province of \$6,978 million and \$6,174 million, respectively.

<i>(millions of dollars)</i>	Six Months Ended June 30			
	2023		2022	
	Income	Expense	Income	Expense
Hydro One				
Electricity sales	8	-	12	-
Services	-	5	-	9
Dividends	2	-	3	-
Province of Ontario				
Change in Decommissioning Segregated Fund amount due to Province ¹	-	359	1,481	-
Change in Used Fuel Segregated Fund amount due to Province ¹	-	445	2,026	-
Hydroelectric gross revenue charge	-	59	-	58
OEFC				
Hydroelectric gross revenue charge	-	91	-	91
Interest expense on long-term notes	-	47	-	49
Income taxes	-	232	-	319
Property taxes	-	6	-	6
IESO				
Electricity-related revenue	3,269	-	3,478	-
Fair Hydro Trust				
Interest income	16	-	16	-
	3,295	1,244	7,016	532

¹ The Nuclear Segregated Funds are reported on OPG's consolidated balance sheets net of amounts recognized as due to the Province in respect of any excess funding and, for the Used Fuel Segregated Fund, the Province's rate of return guarantee. As at June 30, 2023 and December 31, 2022, the Nuclear Segregated Funds were reported net of amounts due to the Province of \$6,978 million and \$6,174 million, respectively.

Balances between OPG and its related parties are summarized below:

<i>(millions of dollars)</i>	June 30 2023	December 31 2022
Receivables from related parties		
Hydro One	1	3
IESO – Electricity related receivables	548	477
Fair Hydro Trust	4	4
OEFC	11	-
Province of Ontario	8	-
Loan receivable		
Fair Hydro Trust	906	908
Equity securities		
Hydro One shares	156	171
Accounts payable, accrued charges and other payables		
Hydro One	-	1
OEFC	105	99
Province of Ontario	6	14
IESO – Electricity related payables	1	3
Long-term debt (including current portion)		
Notes payable to OEFC	2,500	2,540

OPG may hold Province of Ontario bonds and treasury bills in the Nuclear Segregated Funds and the OPG registered pension fund. As at June 30, 2023, the Nuclear Segregated Funds held \$1,342 million of Province of Ontario bonds (December 31, 2022 – \$1,371 million) and \$4 million of Province of Ontario treasury bills (December 31, 2022 – \$2 million). As of June 30, 2023, the registered pension fund held \$75 million of Province of Ontario bonds (December 31, 2022 – \$64 million) and \$4 million of Province of Ontario treasury bills (December 31, 2022 – \$8 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.

<i>(millions of dollars – except where noted) (unaudited)</i>	June 30 2023	March 31 2023	December 31 2022	September 30 2022
Electricity generation (TWh)	19.5	19.7	16.8	20.4
Revenue	1,828	1,830	1,557	1,978
Net income	423	433	205	488
Less: Net income attributable to non-controlling interest	5	4	2	4
Net income attributable to the Shareholder	418	429	203	484
Earnings per share, attributable to the Shareholder (dollars)	\$1.52	\$1.56	\$0.74	\$1.76

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

KEY OPERATING PERFORMANCE INDICATORS AND NON-GAAP FINANCIAL MEASURES

Key Operating Performance Measures

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

Nuclear Unit Capability Factor

The nuclear Unit Capability Factor is a key measure of nuclear station performance. It measures the amount of energy that the unit(s) generated over a period of time, adjusted for externally imposed constraints such as transmission or demand limitations, as a percentage of the amount of energy that would have been produced over the same period had the unit(s) produced maximum generation. Capability factors are primarily affected by planned and unplanned outages. An outage day represents a single unit being offline or derated for an amount of time equivalent to one day. By industry definition, capability factors exclude production losses beyond plant management's control, such as grid-related unavailability. The nuclear Unit Capability Factor also excludes unit(s) during the period in which they are undergoing refurbishment. As at June 30, 2023, 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.

For further information, please contact:

Investor & Media Relations

416-592-4008

1-877-592-4008

media@opg.com

www.opg.com

www.sedarplus.com

ONTARIO POWER GENERATION INC.
INTERIM CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)
JUNE 30, 2023



INTERIM CONSOLIDATED STATEMENTS OF INCOME (UNAUDITED)

<i>(millions of dollars – except where noted)</i>	Three Months Ended June 30		Six Months Ended June 30	
	2023	2022	2023	2022
Revenue	1,828	1,856	3,658	3,814
Fuel expense	216	237	426	483
Gross margin	1,612	1,619	3,232	3,331
Operations, maintenance and administration expenses	847	715	1,596	1,432
Depreciation and amortization expenses	262	279	525	555
Accretion on fixed asset removal and nuclear waste management liabilities	294	286	589	572
Earnings on nuclear fixed asset removal and nuclear waste management funds	(263)	(257)	(522)	(515)
Property taxes	12	11	23	24
	1,152	1,034	2,211	2,068
Income before other gains, interest and income taxes	460	585	1,021	1,263
Other gains <i>(Note 17)</i>	(28)	(6)	(27)	(9)
Income before interest and income taxes	488	591	1,048	1,272
Net interest expense <i>(Note 5)</i>	33	46	69	96
Income before income taxes	455	545	979	1,176
Income tax expense	32	94	123	218
Net income	423	451	856	958
Net income attributable to the Shareholder	418	446	847	949
Net income attributable to non-controlling interest	5	5	9	9
Basic and diluted earnings per share <i>(dollars)</i> <i>(Note 13)</i>	1.52	1.62	3.08	3.46

See accompanying notes to the interim consolidated financial statements

INTERIM CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)

<i>(millions of dollars)</i>	Three Months Ended June 30		Six Months Ended June 30	
	2023	2022	2023	2022
Net income	423	451	856	958
Other comprehensive (loss) income, net of income taxes (Note 8)				
Reclassification to income of amounts related to pension and other post-employment benefits ¹	(1)	3	(2)	5
Reclassification to income of amounts related to derivatives designated as cash flow hedges ²	2	1	2	4
Net gain (loss) on derivatives designated as cash flow hedges ³	7	(5)	16	(5)
Currency translation adjustment	(42)	54	(45)	28
Other comprehensive (loss) income for the period	(34)	53	(29)	32
Comprehensive income	389	504	827	990
Comprehensive income attributable to the Shareholder	384	499	818	981
Comprehensive income attributable to non-controlling interest	5	5	9	9

¹ Net of income tax recovery of \$1 million for each of the three and six month periods ended June 30, 2023. Net of income tax expense of nil and \$1 million for the three and six month periods ended June 30, 2022, respectively.

² Net of income tax expense of nil for each of the three and six month periods ended June 30, 2023. Net of income tax expense of \$1 million for each of the three and six month periods ended June 30, 2022.

³ Net of income tax expense of \$2 million and \$5 million for the three and six month periods ended June 30, 2023, respectively. Net of income tax recovery of \$2 million for each of the three and six month periods ended June 30, 2022.

See accompanying notes to the interim consolidated financial statements.

INTERIM CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

<i>(millions of dollars)</i>	Six Months Ended June 30	
	2023	2022
Operating activities		
Net income	856	958
Adjust for non-cash items:		
Depreciation and amortization expenses	525	555
Accretion on fixed asset removal and nuclear waste management liabilities	589	572
Earnings on nuclear fixed asset removal and nuclear waste management funds	(522)	(515)
Pension and other post-employment benefit costs <i>(Note 9)</i>	181	200
Deferred income tax expense	32	7
Regulatory assets and regulatory liabilities	(59)	-
Other gains	(22)	(5)
Other	(21)	26
Expenditures on fixed asset removal and nuclear waste management	(202)	(195)
Reimbursement of eligible expenditures on nuclear fixed asset removal and nuclear waste management	98	69
Contributions to pension funds and expenditures on other post-employment benefits and supplementary pension plans	(167)	(149)
Net changes to other long-term assets and long-term liabilities	20	61
Net changes to non-cash working capital balances <i>(Note 16)</i>	(163)	33
Cash flow provided by operating activities	1,145	1,617
Investing activities		
Investment in property, plant and equipment and intangible assets	(1,271)	(1,203)
Purchase of new corporate headquarters real estate site <i>(Note 17)</i>	(102)	-
Proceeds from sale of non-core real estate site <i>(Note 17)</i>	34	-
Short-term investments	-	(26)
Cash flow used in investing activities	(1,339)	(1,229)
Financing activities		
Net issuance of short-term debt <i>(Note 6)</i>	65	32
Net issuance (repayment) of long-term debt <i>(Note 5)</i>	44	(76)
Distribution to non-controlling interest	(9)	(8)
Cash flow provided by (used in) financing activities	100	(52)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(3)	1
Net (decrease) increase in cash, cash equivalents and restricted cash	(97)	337
Cash, cash equivalents and restricted cash, beginning of period	1,595	698
Cash, cash equivalents and restricted cash, end of period	1,498	1,035

See accompanying notes to the interim consolidated financial statements

INTERIM CONSOLIDATED BALANCE SHEETS (UNAUDITED)

As At <i>(millions of dollars)</i>	June 30 2023	December 31 2022
Assets		
Current assets		
Cash, cash equivalents and restricted cash <i>(Note 3)</i>	1,498	1,595
Equity securities	156	171
Receivables from related parties	572	484
Nuclear fixed asset removal and nuclear waste management funds	50	51
Fuel inventory	323	252
Materials and supplies	110	106
Regulatory assets <i>(Note 4)</i>	227	227
Prepaid expenses	214	190
Other current assets <i>(Note 18)</i>	311	476
	3,461	3,552
Property, plant and equipment	45,718	44,490
Less: accumulated depreciation	13,274	12,723
	32,444	31,767
Intangible assets	749	934
Less: accumulated amortization	272	440
	477	494
Goodwill	168	172
Other assets		
Nuclear fixed asset removal and nuclear waste management funds	21,076	20,655
Loan receivable from related party	906	908
Long-term materials and supplies	385	396
Regulatory assets <i>(Note 4)</i>	4,070	3,797
Investments subject to significant influence	50	51
Pension assets	564	450
Other long-term assets	103	101
	27,154	26,358
	63,704	62,343

See accompanying notes to the interim consolidated financial statements

INTERIM CONSOLIDATED BALANCE SHEETS (UNAUDITED)

As At <i>(millions of dollars)</i>	June 30 2023	December 31 2022
Liabilities		
Current liabilities		
Accounts payable, accrued charges and other payables	1,515	1,772
Short-term debt <i>(Note 6)</i>	130	65
Long-term debt due within one year <i>(Note 5)</i>	603	43
Regulatory liabilities <i>(Note 4)</i>	215	215
	2,463	2,095
Long-term debt <i>(Note 5)</i>	9,582	10,109
Other liabilities		
Fixed asset removal and nuclear waste management liabilities <i>(Note 7)</i>	24,809	24,315
Other post-employment benefit liabilities	2,359	2,322
Long-term accounts payable and accrued charges	338	384
Deferred revenue	369	373
Deferred income taxes	2,048	1,897
Regulatory liabilities <i>(Note 4)</i>	1,931	1,859
	31,854	31,150
Equity		
Common shares <i>(Note 12)</i>	5,126	5,126
Class A shares <i>(Note 12)</i>	787	787
Contributed surplus	30	32
Retained earnings	13,587	12,740
Accumulated other comprehensive income <i>(Note 8)</i>	99	128
Equity attributable to the Shareholder	19,629	18,813
Equity attributable to non-controlling interest	176	176
Total equity	19,805	18,989
	63,704	62,343

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

See accompanying notes to the interim consolidated financial statements

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

<i>(millions of dollars)</i>	Six Months Ended June 30	
	2023	2022
Common shares (Note 12)	5,126	5,126
Class A shares (Note 12)	787	787
Contributed surplus		
Balance at beginning of period	32	34
Reclassification to income of amounts related to gain on deconsolidation of Fair Hydro Trust	(2)	(2)
Balance at end of period	30	32
Retained earnings		
Balance at beginning of period	12,740	11,104
Net income attributable to the Shareholder	847	949
Balance at end of period	13,587	12,053
Accumulated other comprehensive income (loss), net of income taxes (Note 8)		
Balance at beginning of period	128	(262)
Other comprehensive (loss) income	(29)	32
Balance at end of period	99	(230)
Equity attributable to the Shareholder	19,629	17,768
Equity attributable to non-controlling interest		
Balance at beginning of period	176	178
Income attributable to non-controlling interest	9	9
Distribution to non-controlling interest	(9)	(8)
Balance at end of period	176	179
Total equity	19,805	17,947

See accompanying notes to the interim consolidated financial statements

NOTES TO THE INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

1. BASIS OF PRESENTATION

These interim consolidated financial statements for the three and six month periods ended June 30, 2023 and 2022 include the accounts of Ontario Power Generation Inc. (OPG or the Company) and its subsidiaries. The Company consolidates its interest in entities over which it is able to exercise control and attributes the results to its sole shareholder, the Province of Ontario (the Province or the Shareholder). 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, 2022.

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:
 - I. 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 (Mandatory Rate-regulated Standard); and
 - II. Two years after the IASB publishes the final version of a mandatory Rate-regulated Standard.

All dollar amounts are presented in Canadian dollars, unless otherwise noted. Certain 2022 comparative amounts have been reclassified from consolidated financial statements previously presented to conform to the 2023 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.

3. CASH, CASH EQUIVALENTS AND RESTRICTED CASH

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

As At <i>(millions of dollars)</i>	June 30 2023	December 31 2022
Cash and cash equivalents	1,473	1,582
Restricted cash	25	13
Total cash, cash equivalents and restricted cash	1,498	1,595

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 <i>(millions of dollars)</i>	June 30 2023	December 31 2022
Regulatory assets		
<i>Variance and deferral accounts authorized by the OEB</i>		
Pension & OPEB Cash Versus Accrual Differential Deferral Account	695	799
Rate Smoothing Deferral Account	611	569
Hydroelectric Surplus Baseload Generation Variance Account	409	403
Nuclear Liability Deferral Account	286	188
Capacity Refurbishment Variance Account	165	74
Nuclear Development Variance Account	113	111
Bruce Lease Net Revenues Variance Account	88	101
Other variance and deferral accounts ¹	46	26
	2,413	2,271
Deferred Income Taxes	1,884	1,753
Total regulatory assets	4,297	4,024
Less: current portion	227	227
Non-current regulatory assets	4,070	3,797
Regulatory liabilities		
<i>Variance and deferral accounts authorized by the OEB</i>		
Pension & OPEB Cash Payment Variance Account	440	460
Pension and OPEB Cost Variance Account	221	78
Hydroelectric Water Conditions Variance Account	191	172
Nuclear Deferral and Variance Over/Under Recovery Variance Account	75	75
Ancillary Services Net Revenue Variance Account	56	48
Other variance and deferral accounts ²	134	181
	1,117	1,014
Pension and OPEB Regulatory Liability (<i>Note 9</i>)	1,006	1,029
COVID-19 net credit to ratepayers	23	31
Total regulatory liabilities	2,146	2,074
Less: current portion	215	215
Non-current regulatory liabilities	1,931	1,859

¹ Represents amounts for the Hydroelectric Deferral and Variance Over/Under Recovery Variance Account, the Fitness for Duty Deferral Account, the Pickering Closure Costs Deferral Account, the Niagara Tunnel Project Pre-December 2008 Disallowance Variance Account, the Clarington Corporate Campus Variance Account, and the Pickering B Extension Variance Account.

² Represents amounts for 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 Impact Resulting from Changes to Pickering Station End-of-Life Dates (December 31, 2017) Deferral Account and the Impact Resulting from Optimization of Pickering Station End-of-Life Dates Deferral Account.

In September 2022, the Province announced its support for the continued operation of Units 5 to 8 at OPG's Pickering nuclear generating station (Pickering GS) to September 2026, subject to the regulatory approval of the Canadian Nuclear Safety Commission. The approved regulated prices for electricity generation from OPG's nuclear facilities during the 2022-2026 period were set on the assumption of continued operation of Units 5 to 8 at the Pickering GS until the end of 2025. In December 2022, the Province amended *Ontario Regulation 53/05* to require OPG to establish the Pickering B Extension Variance Account, effective January 1, 2023. The variance account records the difference between the revenues generated from the output of Units 5 to 8 at the Pickering GS during the period from January 1, 2026 to September 30, 2026, and the sum of any forgone revenue related to forgone output from these units arising from activities undertaken in furtherance of their operation during the period from January 1, 2026 to September 30, 2026 and the revenue requirement impact resulting from actual non-capital and capital costs incurred for such activities.

OPG's approved regulated prices for the 2022-2026 period were set based on cost forecasts that assumed the application of *Protecting a Sustainable Public Sector for Future Generations Act, 2019* (Bill 124), which set limits on compensation increases for unionized and non-unionized employees in the Ontario public sector and applied to OPG. Bill 124 limited the maximum annual increase in both wages and total compensation to one percent for a three-year period, referred to as the moderation period, subject to certain exceptions. A broad range of unions and organizations challenged the constitutionality of Bill 124. In a decision dated November 29, 2022, the Ontario Superior Court found that Bill 124 was unconstitutional and declared it to be void and of no effect (Bill 124 Court Decision). The Government of Ontario filed an appeal of the decision with the Ontario Court of Appeal on December 29, 2022, which was heard in June 2023.

On March 1, 2023, OPG filed an application with the OEB requesting to establish a variance account to record compensation cost impacts attributable to the nuclear facilities as a result of the Bill 124 Court Decision for future review and disposition by the OEB. On June 27, 2023, the OEB issued a decision and order denying OPG's request and, as a result, OPG is unable to record these costs in the proposed variance account. On July 17, 2023, OPG filed a motion asking the OEB to review the June 2023 decision. In response to this request, the OEB has agreed to hold a written hearing on the merits of OPG's motion, with submissions from OPG and intervening parties to be filed during the third quarter of 2023. OPG has recognized the impact of the Bill 124 Court Decision and the OEB's June 2023 decision within the Company's interim consolidated financial statements as at and for the six months ended June 30, 2023.

5. LONG-TERM DEBT AND NET INTEREST EXPENSE

Long-term debt consists of the following:

As At <i>(millions of dollars)</i>	June 30 2023	December 31 2022
Medium Term Note Program senior notes	4,650	4,650
Senior notes payable under corporate credit facilities	2,663	2,618
Lower Mattagami Energy Limited Partnership senior notes	1,995	1,995
PSS Generating Station Limited Partnership senior notes	245	245
UMH Energy Partnership senior notes	165	166
OPG Eagle Creek Holdings LLC and subsidiaries senior notes	474	486
Other	25	25
	10,217	10,185
Plus: net fair value premium	7	7
Less: unamortized bond issuance fees	(39)	(40)
Less: amounts due within one year	(603)	(43)
Long-term debt	9,582	10,109

OPG borrowed long-term debt of \$44 million, net of repayments, under the Company's corporate credit facilities during the six months ended June 30, 2023.

Net Interest Expense

The following table summarizes the net interest expense:

<i>(millions of dollars)</i>	Three Months Ended June 30		Six Months Ended June 30	
	2023	2022	2023	2022
Interest on long-term debt	95	89	186	179
Interest on short-term debt	4	3	6	4
Interest income	(22)	(11)	(47)	(20)
Interest capitalized to property, plant and equipment and intangible assets	(38)	(30)	(72)	(56)
Interest related to regulatory assets and regulatory liabilities ¹	(6)	(5)	(4)	(11)
Net interest expense	33	46	69	96

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

6. SHORT-TERM DEBT

Committed credit facilities and maturity dates as at June 30, 2023 were as follows:

<i>(millions of dollars)</i>	Amount	Maturity
Bank facilities:		
Corporate	1,807	September 2027 and May 2028 ^{1,5}
Corporate	750	November 2023 ²
Lower Mattagami Energy Limited Partnership	400	August 2027 ³
OPG Eagle Creek Holdings LLC and subsidiaries	25	August 2023 and October 2028 ⁴
Ontario Electricity Financial Corporation facility ⁵	750	December 2026

¹ Represents amounts available under the facility net of debt issuances. Of the total credit facilities, \$807 million is expected to mature in September 2027 and is available to finance certain expenditures of the Darlington New Nuclear Project, subject to certain conditions, and \$1,000 million matures in May 2028.

² The facility has a one-year extension option beyond the maturity date of November 2023.

³ A letter of credit of \$60 million was outstanding under this facility as at June 30, 2023.

⁴ 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.

Short-term debt consists of the following:

As At <i>(millions of dollars)</i>	June 30 2023	December 31 2022
Lower Mattagami Energy Limited Partnership	130	65
Total short-term debt	130	65

As at June 30, 2023, a total of \$460 million of Letters of Credit had been issued (December 31, 2022 – \$439 million). As at June 30, 2023, this included \$298 million for the supplementary pension plans, \$16 million for OPG Eagle Creek Holdings LLC (Eagle Creek) and its subsidiaries, \$60 million for Lower Mattagami Energy Limited Partnership, \$43 million for general corporate purposes, \$16 million for UMH Energy Partnership, \$26 million for Atura Power, and \$1 million for PSS Generating Station Limited Partnership.

For the six months ended June 30, 2023, net issuances of short-term debt totalled \$65 million (June 30, 2022 – \$32 million), which was comprised of issuances of \$330 million (June 30, 2022 – \$1,011 million) and repayments of \$265 million (June 30, 2022 – \$979 million).

The weighted average interest rate on the short-term debt as of June 30, 2023 is 4.93 percent (December 31, 2022 – 4.55 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 <i>(millions of dollars)</i>	June 30 2023	December 31 2022
Liability for used nuclear fuel management	14,641	14,327
Liability for nuclear decommissioning and nuclear low and intermediate level waste management	9,888	9,699
Liability for non-nuclear fixed asset removal	280	289
Fixed asset removal and nuclear waste management liabilities	24,809	24,315

8. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

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

<i>(millions of dollars)</i>	Six Months Ended June 30, 2023			Total
	Unrealized Gains and Losses on Cash Flow Hedges	Pension and OPEB	Currency Translation Adjustment	
Balance, beginning of period	(6)	80	54	128
Net gain on cash flow hedges	16	-	-	16
Amounts reclassified from AOCI	2	(2)	-	-
Translation of foreign operations	-	-	(45)	(45)
Other comprehensive income (loss) for the period	18	(2)	(45)	(29)
Balance, end of period	12	78	9	99

<i>(millions of dollars)</i>	Six Months Ended June 30, 2022			Total
	Unrealized Gains and Losses on Cash Flow Hedges	Pension and OPEB	Currency Translation Adjustment	
Balance, beginning of period	(7)	(186)	(69)	(262)
Net loss on cash flow hedges	(5)	-	-	(5)
Amounts reclassified from AOCI	4	5	-	9
Translation of foreign operations	-	-	28	28
Other comprehensive (loss) income for the period	(1)	5	28	32
Balance, end of period	(8)	(181)	(41)	(230)

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

<i>(millions of dollars)</i>	Amount Reclassified from AOCI		Statement of Income Line Item
	Three Months Ended June 30, 2023	Six Months Ended	
Amortization of amounts related to cash flow hedges			
Losses	2	2	Net interest expense
Income tax expense	-	-	Income tax expense
	<u>2</u>	<u>2</u>	
Amortization of amounts related to pension and OPEB			
Actuarial gains	(2)	(3)	See (1) below
Income tax recovery	1	1	Income tax expense
	<u>(1)</u>	<u>(2)</u>	
Total reclassifications for the period	1	-	

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

¹ These AOCI 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 \$2 million deferred in AOCI as at June 30, 2023 are expected to be reclassified to net income within the next 12 months.

9. PENSION AND OTHER POST-EMPLOYMENT BENEFITS

OPG's pension and other post-employment benefit (OPEB) costs for the three months ended June 30, 2023 and 2022 are as follows:

<i>(millions of dollars)</i>	Registered Pension Plans		Supplementary Pension Plans		Other Post-Employment Benefits	
	2023	2022	2023	2022	2023	2022
<i>Components of cost recognized for the period</i>						
Current service costs	45	86	1	1	16	23
Interest on projected benefit obligation	197	133	4	4	32	24
Expected return on plan assets, net of expenses	(250)	(229)	-	-	-	-
Amortization of past service credits ¹	(1)	-	-	-	-	-
Amortization of net actuarial loss (gain) ¹	-	31	-	2	(13)	-
Costs recognized ²	(9)	21	5	7	35	47

¹ The net impact of amortization of past service costs (credits) and net actuarial loss (gain) is recognized as an increase (decrease) to other comprehensive income. This decrease for the three months ended June 30, 2023 was partially offset by a decrease in the Pension and OPEB Regulatory Liability of \$12 million (three months ended June 30, 2022 – a decrease in the Pension and OPEB Regulatory Asset of \$30 million).

² Pension and OPEB costs for the three months ended June 30, 2023 exclude the net addition of costs of \$57 million resulting from the recognition of changes in the regulatory assets and regulatory liabilities for the Pension and OPEB Cost Variance Account, the Pension & OPEB Cash Versus Accrual Differential Deferral Account and the Pension & OPEB Cash Payment Variance Account (three months ended June 30, 2022 – net addition of costs of \$25 million).

OPG's pension and OPEB costs for the six months ended June 30, 2023 and 2022 are as follows:

<i>(millions of dollars)</i>	Registered Pension Plans		Supplementary Pension Plans		Other Post-Employment Benefits	
	2023	2022	2023	2022	2023	2022
<i>Components of cost recognized for the period</i>						
Current service costs	91	172	2	3	32	45
Interest on projected benefit obligation	393	266	8	6	64	48
Expected return on plan assets, net of expenses	(500)	(456)	-	-	-	-
Amortization of past service credits ¹	(1)	-	-	-	-	-
Amortization of net actuarial loss (gain) ¹	-	61	-	4	(26)	-
Costs recognized ²	(17)	43	10	13	70	93

¹ The net impact of amortization of past service costs (credits) and net actuarial loss (gain) is recognized as an increase (decrease) to other comprehensive income. This decrease for the six months ended June 30, 2023 was partially offset by a decrease in the Pension and OPEB Regulatory Liability of \$24 million (six months ended June 30, 2022 – a decrease in the Pension and OPEB Regulatory Asset of \$59 million).

² These pension and OPEB costs for the six months ended June 30, 2023 exclude the net addition of costs of \$118 million resulting from the recognition of changes in the regulatory assets and regulatory liabilities for the Pension and OPEB Cost Variance Account, the Pension & OPEB Cash Versus Accrual Differential Deferral Account and the Pension & OPEB Cash Payment Variance Account (six months ended June 30, 2022 – net addition of costs of \$51 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, the United States dollar. 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 (US).

Commodity Prices

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

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

Credit

The Company's credit risk exposure is primarily a function of its electricity and other sales. The majority of OPG's revenue is derived from electricity sales through the IESO administered market. Market participants in the IESO market provide collateral in accordance with the IESO prudential support requirements to cover funds that they might owe to the market. Although the credit exposure to the IESO represents a significant portion of OPG's accounts receivable, the risk is considered acceptable due to the IESO's primary role in the Ontario electricity market. The remaining receivables exposure is to a diverse group of generally high quality counterparties. OPG's allowance for doubtful accounts was \$1 million as at June 30, 2023 and December 31, 2022.

The fair value of the derivative instruments totalled a net asset of \$11 million as at June 30, 2023 (December 31, 2022 – net liability of \$6 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 interim consolidated balance sheet dates. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's-length basis. The quoted market price used for financial assets held by OPG is the current bid price. These instruments are included in Level 1 and consist 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 interim consolidated balance sheet dates. This is the case for over-the-counter derivatives and securities, which include energy commodity derivatives, foreign exchange derivatives, interest rate swap derivatives and fund investments. Various other fund investments are valued at the unit values supplied by the fund administrators. The unit values represent the underlying net assets at fair values, determined using closing market prices. Valuation models use general assumptions and market data and, therefore, do not reflect the specific risks and other factors that would affect a particular instrument's fair value. The methodologies used for calculating the fair value adjustments are reviewed on an ongoing basis to ensure that they remain appropriate. If all significant inputs required to fair value an instrument are observable, the instrument is included in Level 2.

If one or more of the significant inputs is not based on observable market data, the instrument is included in Level 3. Specific valuation techniques are used to value these instruments. Significant Level 3 inputs include recent comparable transactions, comparable benchmark information, bid/ask spread of similar transactions and other relevant factors.

OPG's financial instruments and their fair value as at June 30, 2023 and December 31, 2022 was as follows:

<i>(millions of dollars)</i>	Fair Value		Carrying Value ¹		Balance Sheet Line Item
	2023	2022	2023	2022	
Nuclear Segregated Funds (includes current portion) ²	21,126	20,706	21,126	20,706	Nuclear fixed asset removal and nuclear waste management funds
Loan receivable - from Fair Hydro Trust	798	786	906	908	Loan receivable
Investment in Hydro One Limited Shares	156	171	156	171	Equity securities
Payable related to cash flow hedges	(1)	(3)	(1)	(3)	Long-term accounts payable and accrued charges
Long-term debt (includes current portion)	(9,369)	(9,180)	(10,185)	(10,152)	Long-term debt
Other financial instruments	91	79	91	79	Various

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

² The Nuclear Segregated Funds are comprised of the Decommissioning Segregated Fund and the Used Fuel Segregated Fund. OPG's fair value of the Nuclear Segregated Funds is set not to exceed an amount equal to the funding liability pursuant to the Ontario Nuclear Funds Agreement (ONFA) when the Nuclear Segregated Funds are in a surplus position.

The fair value of OPG's long-term debt issued under the Medium Term Note Program is based on indicative pricing from the market. The fair value of these debt instruments is based on Level 2 inputs. The fair value of all other long-term debt instruments is determined based on a conventional pricing model, which is a function of future cash flows, the current market yield curve and term to maturity. These inputs are considered Level 2 inputs.

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

As At <i>(millions of dollars)</i>	June 30, 2023			Total
	Level 1	Level 2	Level 3	
Assets				
<i>Used Fuel Segregated Fund</i>				
Investments measured at fair value, excluding investments measured at NAV	6,299	5,744	-	12,043
Investments measured at NAV ¹				3,832
				15,875
Due to Province				(3,857)
Used Fuel Segregated Fund, net				12,018
<i>Decommissioning Segregated Fund</i>				
Investments measured at fair value, excluding investments measured at NAV	4,840	4,394	-	9,234
Investments measured at NAV ¹				2,995
				12,229
Due to Province				(3,121)
Decommissioning Segregated Fund, net				9,108
Equity securities	156	-	-	156
Other financial assets	31	3	85	119
Liabilities				
Other financial liabilities	(20)	(3)	(5)	(28)

As At <i>(millions of dollars)</i>	December 31, 2022			Total
	Level 1	Level 2	Level 3	
Assets				
<i>Used Fuel Segregated Fund</i>				
Investments measured at fair value, excluding investments measured at NAV	6,371	5,141	-	11,512
Investments measured at NAV ¹				3,687
				15,199
Due to Province				(3,412)
Used Fuel Segregated Fund, net				11,787
<i>Decommissioning Segregated Fund</i>				
Investments measured at fair value, excluding investments measured at NAV	4,929	3,862	-	8,791
Investments measured at NAV ¹				2,890
				11,681
Due to Province				(2,762)
Decommissioning Segregated Fund, net				8,919
Equity securities	171	-	-	171
Other financial assets	68	5	91	164
Liabilities				
Other financial liabilities	(75)	(6)	(4)	(85)

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

During the six months ended June 30, 2023, there were no transfers between Level 1 and Level 2 and into or out of Level 3.

The changes in the net assets measured at fair value that are classified as Level 3 financial instruments for the six months ended June 30, 2023 were as follows:

<i>(millions of dollars)</i>	Other Financial Instruments
Opening balance, January 1, 2023	87
Unrealized gains included in revenue	1
Realized losses included in revenue	(12)
Purchases	4
Closing balance, June 30, 2023	80

Investments Measured at Net Asset Value

Nuclear Segregated Funds

Nuclear Segregated Funds' investments measured at Net Asset Value (NAV) consist of real estate, infrastructure, and agriculture investments within the real assets investments 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 NAV as at June 30, 2023 were as follows:

<i>(millions of dollars except where noted)</i>	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice
Real Assets				
Infrastructure	3,654	1,588	n/a	n/a
Real Estate	2,993	1,246	n/a	n/a
Agriculture	180	7	n/a	n/a
Pooled Funds				
Short-term Investments	18	n/a	Daily	1-5 days
Fixed Income	2,190	n/a	Daily	1-5 days
Equity	839	n/a	Daily	1-5 days
Total	9,874	2,841		

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

Pooled Funds

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

12. SHARE CAPITAL

Common Shares

As at June 30, 2023 and December 31, 2022, 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 a new class of shares is subject to the consent of the Province. OPG is entitled to redeem outstanding Class A shares as may be approved by OPG's Board of Directors.

As at June 30, 2023 and December 31, 2022, OPG had 18,343,815 Class A shares issued and outstanding at a stated value of \$787 million.

13. EARNINGS PER SHARE

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

Class A shares are included in the weighted average number of shares outstanding. The weighted average number of shares outstanding as at June 30, 2023 and December 31, 2022 was 274.6 million. There were no dilutive securities during the six months ended June 30, 2023 and for the year ended December 31, 2022.

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. Each of these matters are subject to various uncertainties. Some of these matters may be resolved unfavourably. While it is not possible to determine the ultimate outcome of the various pending actions, it is the Company's belief that their resolution is not likely to have a material adverse impact on its consolidated financial position.

Guarantees

As at June 30, 2023, the total amount of guarantees provided by OPG was \$35 million (December 31, 2022 – \$35 million). As at June 30, 2023, the potential impact of the fair value of the outstanding guarantees to income is \$1 million and OPG does not expect to make any payments associated with these guarantees.

Contractual Obligations

OPG's contractual obligations as at June 30, 2023 were as follows:

<i>(millions of dollars)</i>	2023 ¹	2024	2025	2026	2027	Thereafter	Total
Fuel supply agreements	29	159	133	101	69	169	660
Contributions to the OPG registered pension plan ²	95	197	-	-	-	-	292
Long-term debt repayment	2	606	585	674	530	7,820	10,217
Interest on long-term debt	193	369	354	337	327	4,522	6,102
Short-term debt repayment	130	-	-	-	-	-	130
Commitments related to Darlington Refurbishment project ³	170	-	-	-	-	-	170
Operating licences	26	53	55	56	49	205	444
Operating lease obligations	7	13	10	10	7	20	67
Accounts payable, accrued charges and other payables	1,324	-	-	-	-	-	1,324
Other	65	15	16	13	12	90	211
Total	2,041	1,412	1,153	1,191	994	12,826	19,617

¹ Represents amounts for the remainder of the year.

² The pension contributions include ongoing funding requirements in accordance with the actuarial valuation of the OPG registered pension plan as at January 1, 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.

³ Represents estimated currently committed costs to close the project, including accruals for completed work, demobilization of project staff and cancellation of existing contracts and material orders.

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

Collective Bargaining Agreements

The Company maintains labour agreements with the Power Workers' Union (PWU) and the Society of United Professionals (Society).

On April 11, 2023, the PWU ratified a two-year renewal collective agreement negotiated by the parties, covering the period from April 1, 2022 to March 31, 2024. The PWU bargaining unit represents over 50 percent of OPG's workforce. As the agreement was established subsequent to the issuance of the Bill 124 Court Decision, it is not currently subject to the requirements of Bill 124.

The current two-year collective agreement between the Society and OPG expires on December 31, 2023. The collective agreement was established by an arbitration award issued in December 2021 and covered the first two years of the corresponding three-year moderation period under Bill 124. On May 8, 2023, the arbitrator issued an award that modified the collective agreement to increase compensation in light of the Bill 124 Court Decision. The Society bargaining unit represents over 30 percent of OPG's workforce.

OPG's obligations under the collective agreements may be affected by the outcome of the Government of Ontario's ongoing appeal of the Bill 124 Court Decision.

On June 26, 2023, the Society filed a related employer application with the Ontario Labour Relations Board. The application identified OPG and Atura Power as responding parties and asserts that they constitute a single employer for purposes of the Ontario *Labour Relations Act, 1995*, or in the alternative that a sale of business has occurred. Both OPG and Atura Power are opposing the application. A mediation date has been scheduled for September 2023.

15. BUSINESS SEGMENTS

Segment Income (Loss) For the Three Months Ended June 30, 2023 <i>(millions of dollars)</i>	Regulated			Unregulated			Elimination	Total
	Nuclear Generation	Nuclear Sustainability Services	Hydroelectric Generation	Contracted Hydroelectric and Other Generation	Atura Power	Other		
Revenue	1,033	-	392	209	161	7	-	1,802
Leasing revenue	6	-	-	-	-	-	-	6
Other revenue	-	73	-	(3)	-	36	(86)	20
Total revenue	1,039	73	392	206	161	43	(86)	1,828
Fuel expense	67	-	86	13	50	-	-	216
Gross margin	972	73	306	193	111	43	(86)	1,612
Operations, maintenance and administration expenses	669	73	93	69	21	8	(86)	847
Depreciation and amortization expenses	129	-	45	40	30	18	-	262
Accretion on fixed asset removal and nuclear waste management liabilities	-	291	-	2	1	-	-	294
Earnings on nuclear fixed asset removal and nuclear waste management funds	-	(263)	-	-	-	-	-	(263)
Property taxes	6	-	-	4	1	1	-	12
Other losses (gains)	-	-	3	(3)	-	(28)	-	(28)
Income (loss) before interest and income taxes	168	(28)	165	81	58	44	-	488
Net interest expense								33
Income before income taxes								455
Income tax expense								32
Net income								423

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

Segment Income (Loss) For the Six Months Ended June 30, 2023 <i>(millions of dollars)</i>	Regulated			Unregulated			Elimination	Total
	Nuclear Generation	Nuclear Sustainability Services	Hydroelectric Generation	Contracted Hydroelectric and Other Generation	Atura Power	Other		
Revenue	2,066	-	777	403	337	13	-	3,596
Leasing revenue	13	-	-	-	-	2	-	15
Other revenue	-	121	-	20	-	64	(158)	47
Total revenue	2,079	121	777	423	337	79	(158)	3,658
Fuel expense	134	-	152	28	112	-	-	426
Gross margin	1,945	121	625	395	225	79	(158)	3,232
Operations, maintenance and administration expenses	1,228	121	190	140	38	37	(158)	1,596
Depreciation and amortization expenses	260	-	90	81	59	35	-	525
Accretion on fixed asset removal and nuclear waste management liabilities	-	583	-	4	1	1	-	589
Earnings on nuclear fixed asset removal and nuclear waste management funds	-	(522)	-	-	-	-	-	(522)
Property taxes	12	-	-	8	2	1	-	23
Other losses (gains)	-	-	3	(3)	-	(27)	-	(27)
Income (loss) before interest and income taxes	445	(61)	342	165	125	32	-	1,048
Net interest expense								69
Income before income taxes								979
Income tax expense								123
Net income								856

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

16. NET CHANGES IN NON-CASH WORKING CAPITAL BALANCES

<i>(millions of dollars)</i>	Six Months Ended June 30	
	2023	2022
Receivables from related parties	(105)	(17)
Fuel inventory	(74)	(40)
Materials and supplies	12	13
Prepaid expenses	(5)	(3)
Other current assets	235	21
Accounts payable, accrued charges and other payables	(226)	59
Net changes in non-cash working capital balances	(163)	33

17. PURCHASE AND SALE OF REAL ESTATE SITES

In October 2022, OPG sold the premises located at 800 Kipling Avenue in Toronto, Ontario. In the fourth quarter of 2022, OPG recognized an after-tax gain on the sale of approximately \$111 million, including the impact of revisions to the related asset retirement obligation. In June 2023, upon satisfaction of certain conditions, an additional payment was received in connection with the sale and an additional after-tax gain of approximately \$23 million was recognized.

In February 2023, OPG acquired the building and surrounding lands at 1908 Colonel Sam Drive in Oshawa, Ontario, for \$102 million. The building will be retrofitted prior to occupancy and will serve as the Company's new corporate headquarters.

18. ASSETS HELD FOR SALE

In July 2023, Eagle Creek entered into agreements to sell 22 hydroelectric generating stations in the US with a total capacity of approximately 47 megawatts across a number of regions, along with two storage reservoirs in the Mid-Western US, as part of the Company's strategy to optimize the US hydroelectric portfolio. The transactions are expected to close in the first quarter of 2024, 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 interim consolidated balance sheet within the Contracted Hydroelectric and Other Generation business segment.