# Second Quarter 2020 Investor Briefing



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Words such as "anticipate", "believe", "budget", "foresee", "forecast", "expect", "schedule", "intend", "plan", "plan", "strategy", "may", "strategy", "may", "strategy", "may", "strategy", "may", "strategy", "forecast", "estimate", "expect", "schedule", "strategy", "may", "strategy", "may", "strategy", "may", "should", "could", and other similar words and expressions are used to indicate forward-looking statements. The absence of any such word or expression does not indicate that a statement is not forward-looking information contained in this presentation are not guarantees of future performance and involve inherent assumptions and risks and uncertainties that are difficult to predict. All forward-looking information could be inaccurate to a material degree. In particular, forward-looking statements may contain assumptions such as those relating to OPG's generating station performance, availability and operating lives, fuel costs, surplus baseload generation, cost of 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, performance of acquired businesses, defined benefit pension and other post-employment benefit obligations and funds, income taxes, proposed new legislation, the ongoing evolution of electricity market prices, acquisition transactions, performance of acquired businesses, defined benefit pension and other contracts for non-regulated facilities, development and construction of new facilities, acquisition transactions, performance of acquired businesses, defined benefit pension and other post-employment benefit obligations and funds, income taxes, percentage relating to the comment of the post-employment benefit obligations and funds, income taxes, percentage relating to the contract obligations and other contracts and other contract

#### NON-GAAP MEASURES

This presentation also contains reference to certain financial measures (non-GAAP measures) that do not have any standardized meaning prescribed by United States generally accepted accounting principles ("US GAAP") and, therefore, may not be comparable to similar measures presented by other issuers. The Company believes that these indicators are important since they provide additional information about OPG's performance, facilitate comparison of results over different periods, and present measures consistent with the Company's strategies to provide value to the Province of Ontario as its sole 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 and calculations of Return On Equity Excluding Accumulated Other Comprehensive Income, Enterprise Total Generation Cost per MWh, Earnings before interest, income taxes, depreciation and amortization and Gross Margin are found in the section, Key Operating Performance Indicators and Non-GAAP Financial Measures of the Company's quarterly Management's Discussion and Analysis, which is available on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a> or on the Company's website at <a href="https://www.opg.com">www.opg.com</a>.

# Agenda

Highlights

Response to COVID-19

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### **Highlights**

OPG is delivering strong financial results and executing on major projects, while managing risks of COVID-19. Continues to safely and reliably operate a diverse generating fleet and advance infrastructure investments and initiatives, supporting economic recovery and a clean energy future.

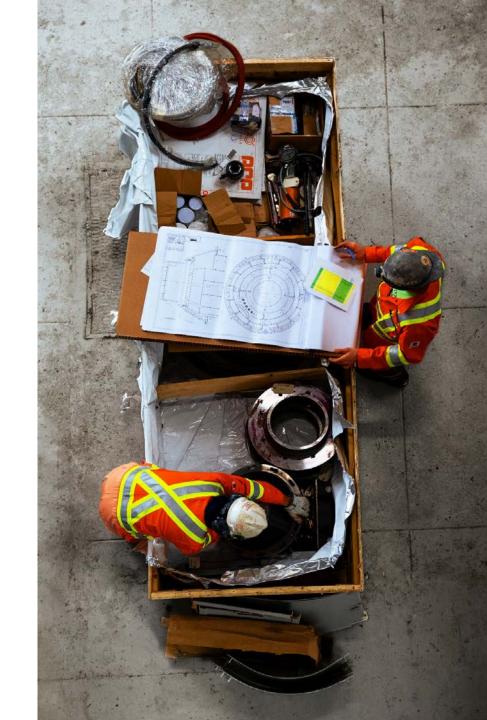
- > Strong financial performance driven by previously approved prices for company's regulated output, higher electricity generation from the nuclear business, and acquisition of a portfolio of natural gas-fired plants in Ontario in April 2020.
- ➤ In June 2020, successfully completed the refurbishment of Darlington station's Unit 2, OPG's first nuclear reactor to be refurbished. Unit 2 provides 878 MW of cost effective, reliable and clean baseload electricity to Ontario's electricity grid. At the end of July 2020, Darlington station's Unit 3 was taken offline for a planned outage in advance of beginning refurbishment.
- In April 2020, initiated the execution phase of a project to redevelop the Calabogie hydroelectric station in eastern Ontario. The new facility will replace double the original station's capacity to approximately 11 MW.
- ➤ In June 2020, formed a joint venture with Global First Power Ltd. and Ultra Safe Nuclear Corporation to advance development of a proposed Micro Modular Reactor (MMR<sup>TM</sup>) at Chalk River Laboratories site in Ontario, the first commercial partnership on the development of a small modular reactor (SMR) in Canada.



### Response to COVID-19

OPG's preparedness plans and response actions have been effective in managing risks associated with COVID-19 to date. As of June 2020, OPG has safely resumed on-site activities that were temporarily suspended in response to the pandemic, minimizing disruption to project milestones.

- ➤ Beginning in the second half of March 2020, OPG took a number of additional steps to safeguard the health and safety of its employees and contractors, and ensure the continued safe, reliable generation of electricity to Ontario. This included a temporary deferral of refurbishment activities on Darlington station's Unit 3 and other on-site project activities.
- ➤ Beginning in June 2020, OPG has safely relaunched suspended projects, including pre-requisite fieldwork for the refurbishment of Darlington Unit 3, with enhanced safety measures based on public health guidance.
- > OPG continues to review operating strategies and contingency plans to ensure it remains well positioned for ongoing safe and effective execution of work during the pandemic.







### Net Income Attributable to Shareholder

In 2020, there was higher revenue from regulated prices and higher electricity generation in the Regulated – Nuclear Generation segment, as well as earnings from the newly acquired gas-fired assets.

The increase in generation was due to return to service of Darlington Unit 2 and fewer planned cyclical maintenance outage days at the Darlington station.

The change in nuclear regulated price was previously approved by the Ontario Energy Board (OEB) and includes recovery of Darlington Refurbishment costs.



## Segment Earnings before Interest and Tax



<sup>&</sup>lt;sup>1</sup> Contracted Gas Generation segment was introduced in the second quarter of 2020 to report results of the company's four natural-gas fired plants in Ontario, operated through a wholly-owned subsidiary. Atura Power.

## **Electricity Generation**

Regulated - Nuclear Generation production increased primarily due to the return to service of Darlington Unit 2, with all four Darlington units operating until Unit 3 was taken offline at the end of July 2020, and fewer planned cyclical maintenance outage days at the Darlington station, partially offset by a higher number of planned outage days at the Pickering station.

**Regulated - Hydroelectric Generation** production decreased primarily due to **lower electricity demand** in Ontario.

Contracted Hydroelectric and Other Generation production increased due to electricity generation from hydroelectric facilities in the United States acquired in October 2019.

Contracted Gas Generation production increased primarily due to acquisition of a portfolio of natural gas-fired plants on April 29, 2020.



# **Enterprise Total Generating Cost (TGC)**

### A measure of how productive our expenditures are in relation to energy generation

- ▶ In 2020, enterprise TGC decreased due to higher electricity generation from Ontario-based generating stations and, for the six month period, lower OM&A expenses at the nuclear facilities.
- Addition of natural gas-fired plants is not expected to have a significant impact on overall TGC

**Enterprise TGC per MWh** is defined as OM&A expenses, fuel expense and capital expenditures incurred during the period, divided by total electricity generation plus electricity generation forgone due to surplus baseload generation conditions during the period. Excludes costs of the Darlington Refurbishment project, US operations, other generation development projects, business development initiatives and the impact of regulatory variance and deferral accounts.

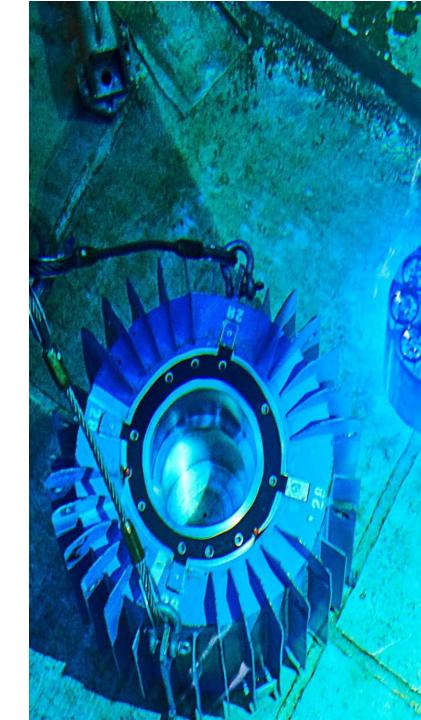




### **Energy Industry Leader**

OPG's strategy is to be a transformational North American clean energy leader that drives economic growth and prosperity for Ontario and beyond. Business strategy highlights include:

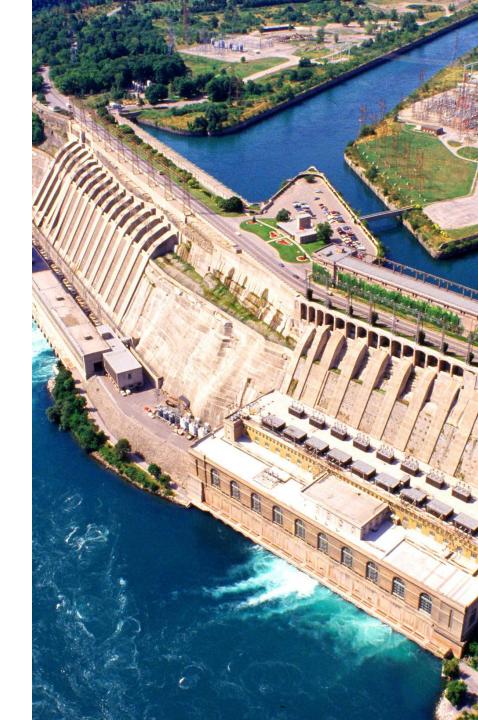
- > **Nuclear refurbishment** Darlington Refurbishment Project to provide at least 30 more years of reliable, clean, cost effective power to Ontario.
- Expansion of hydroelectric fleet increasing hydroelectric capacity by approximately 145 MW through the Sir Adam Beck G1 and G2 replacement project and the redevelopment of the Calabogie and Ranney Falls stations in Ontario.
- ➤ **Acquisitions** completed approximately \$5 billion of strategic acquisitions that will help ensure future reliable electricity production and diversify our generation portfolio, while the Company prepares for the end of the Pickering station's operations in 2025.
- ▶ Innovative technologies and solutions formed a joint venture to explore nuclear SMR technology as a versatile source of safe, carbon-free, cost effective energy. Also launching the Centre for Canadian Nuclear Sustainability, an innovative facility for sustainable solutions for nuclear materials, and continuing to develop the energy services business.
- ➤ **Green bonds** in April 2020, issued a further \$1.2 billion of green bonds to finance or refinance eligible projects as defined under OPG's Green Bond Framework, primarily allocated to the October 2019 acquisition of Cube Hydro facilities in the United States.



### **Building Our Business**

Through strategic acquisitions since late 2018, OPG has added more than 2,450 MW of primarily contracted generating capacity to its diverse fleet. OPG is focused on the integration of these assets to harness their long-term value.

- > OPG has closed **approximately \$5 billion** of strategic acquisitions. These acquisitions will support electrification across North America, provide long-term value for Ontarians, and generate reliable power for future generations.
- Through its subsidiary Eagle Creek Renewable Energy, OPG acquired a renewable generation portfolio of approximately **627 MW** in the United States, across 85 hydroelectric stations.
- ➤ OPG acquired a portfolio of combined-cycle natural gas-fired plants in Ontario on April 29, 2020 and the remaining 50 percent of the Brighton Beach natural gas-fired station in 2019, which together added more than 1,850 MW of contracted generating capacity being operated through subsidiary Atura Power. OPG's natural gas fleet plays a key role in maintaining the current and future reliability of the province's electricity system and enabling renewable electricity generation sources.





### Darlington Refurbishment

OPG has completed the refurbishment of Unit 2 of the Darlington nuclear generating station, reconnecting 878 MW of baseload generation capacity to Ontario's electricity grid.

- > On June 4, 2020, following successful completion of start-up activities, Unit 2 was returned to service in line with our high quality and safety standards. This significant milestone adds \$4.8 billion to the regulated asset base.
- During the period of June 4, 2020 to July 30, 2020, all four Darlington units were generating electricity to the grid for the first time since 2016, as the start of Unit 3 refurbishment was temporarily deferred from the spring in response to COVID-19.
- > On July 30, 2020, Unit 3 was taken offline for a planned outage. Execution of Unit 3 refurbishment activities will begin by September 2020 with defueling, immediately following the outage. Unit 3 refurbishment is scheduled to be completed in 2024.
- > OPG continues to assess and seek ways to manage the impact of the COVID-19 pandemic on the total cost of the project, which is otherwise continuing to track to the \$12.8 billion budget. The refurbishment of all four units is scheduled to be completed by the end of 2026.



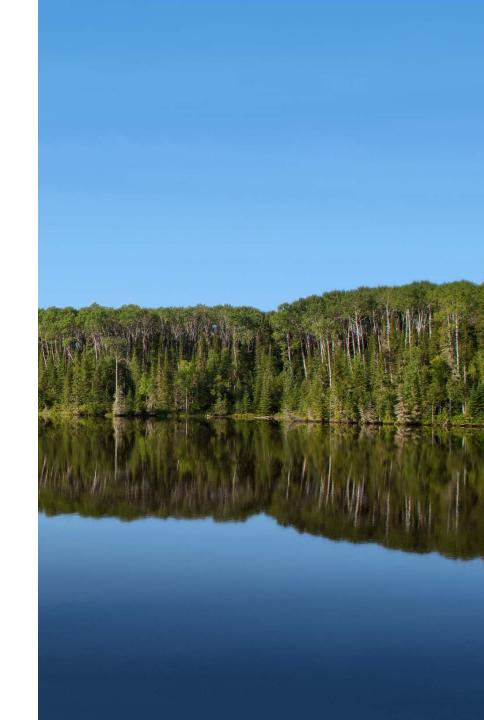
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# **Project Excellence**



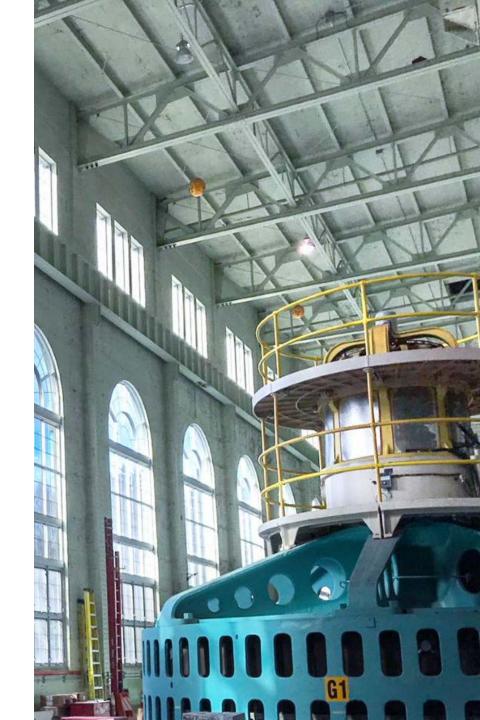
# Little Long Dam Safety

- In January 2019, OPG initiated a plan to improve dam safety along the Lower Mattagami River in Ontario, which supports several of OPG's contracted hydroelectric facilities.
  - During the second quarter of 2020, OPG continued the execution phase with procurement of critical materials and advanced detailed engineering, construction design and permitting activities.
  - Project site work resumed in June 2020 after a temporary suspension in response to the COVID-19 pandemic.
- The project is expected to improve dam safety along the river by increasing the discharge capacity and by making other reliability and operational improvements at the Little Long Main Dam to help comply with updated dam safety requirements.
- The expected in-service date is in 2023 and the project is tracking within its \$650 million budget.



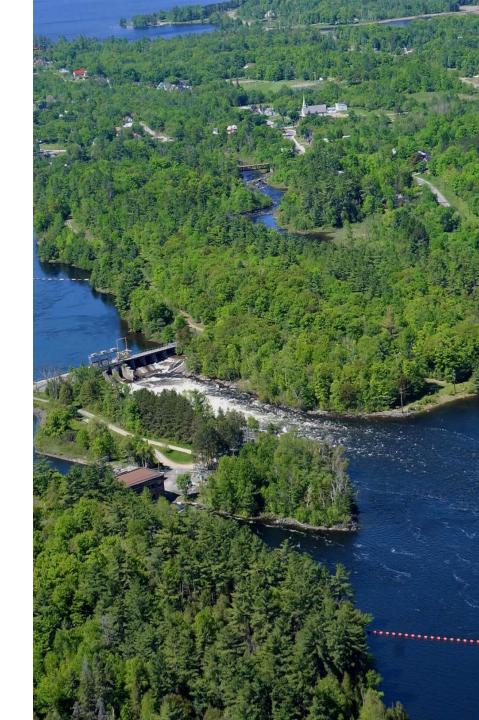
# Sir Adam Beck I G1 & G2 Replacement

- > OPG has initiated a project to replace two older generating units at the Sir Adam Beck I GS that used outdated line frequency technology prior to being decommissioned.
  - During the second quarter of 2020, OPG continued front-end engineering design activities and procurement of long lead materials.
  - Project site work resumed in June 2020 after a temporary suspension in response to COVID-19 and is focused on removing the 100-year-old embedded scroll cases for replacement.
- The project is expected to add 125 MW of incremental generating capacity, providing many more decades of cost effective, clean power from one of the flagship stations in our Ontario hydroelectric fleet.
- The expected in-service date is in 2022 and the project is tracking within its \$128 million budget.



# Calabogie Hydroelectric Station

- In April 2020, OPG initiated the execution phase of a project to redevelop the Calabogie generating station, located along the Madawaska River in eastern Ontario.
- ➤ Constructed in 1917, the original generating station was nearing the end of its operational life when it was extensively damaged by a storm in 2018.
- > The new facility will replace the original powerhouse with a higher capacity powerhouse that will double the station's original capacity to approximately 11 MW.
- The project's expected in-service date is in 2022 with an approved budget of \$137 million.



# Ranney Falls Hydroelectric Station

- ➤ OPG continued commissioning activities on the new 10 MW single-unit powerhouse on the existing Ranney Falls generating station site during the second quarter of 2020.
- > The new unit will replace an existing unit that reached its end of life, doubling the total station generating capacity.
- Due to equipment component issues previously identified during commissioning, and the impact of the COVID-19 pandemic, OPG expects to place the project in-service in the third quarter of 2020.
- > The project continues to track to its \$77 million budget.





# **Corporate Profile**

### ONTARIO'S LARGEST CLEAN ENERGY GENERATOR

100% OWNED BY THE **PROVINCE OF ONTARIO** 

\$59.8 BILLION OF ASSETS 1

**CREDIT RATINGS DBRS** A(low) **S&P GLOBAL** BBB+ **MOODY'S A3** 

#### Revenue (\$M)



#### Cash Flow from Operations (\$M)



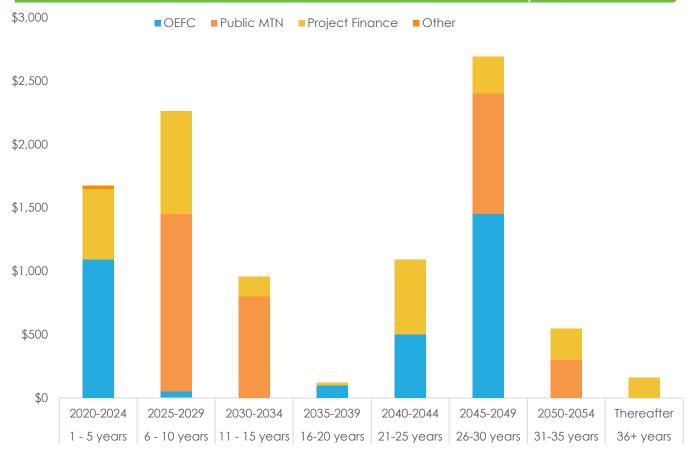
### Total Assets (\$B)

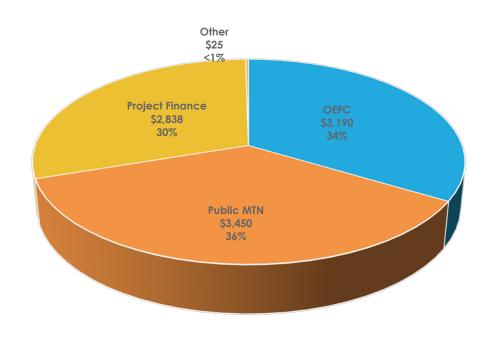


■ Fixed & Intangible Assets ■ Nuclear Segregated Funds ■ Other

# Long Term Debt (\$M)

#### **EXISTING DEBT MATURITIES AS AT JUNE 30, 2020**









### Outlook

#### Regulated – Nuclear

- Net income for 2020 is expected to continue to reflect an increase in revenue from higher OEB-approved nuclear regulated price.
- ➤ Higher than planned electricity generation from the Darlington station in the second half of 2020, due to deferral of Unit 3 refurbishment and immediately preceding planned outage to end of July 2020, and planned deferral of a Unit 1 planned outage from fall of 2020 to 2021.
- Continued expectation of a higher number of planned outage days at the Pickering station in 2020 based on the station's cyclical outage schedule, relative to 2019.

#### Regulated – Hydroelectric, and Contracted Hydroelectric and Other

➤ Both segments are expected to continue to provide a generally stable level of earnings in 2020, partially offset by lower earnings from the US hydroelectric facilities due to weaker wholesale spot electricity prices being experienced in the US markets.

#### **Contracted Gas**

The acquisition of a portfolio of natural gas-fired assets in April 2020 will generate additional net income during the second half of 2020, relative to 2019.

#### Financing and Cash Flow

Taking into account the closing of the acquisition on April 29, 2020 and the planned capital expenditure program, existing funding sources, including strong operating cash flow, will continue to meet all financing and liquidity requirements.







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