

# 2018 Ontario Power Generation Year in Review Fact Sheet

## Our Company

Ontario Power Generation Inc. (OPG) is an electricity generation company whose principal business is the generation and sale of electricity. In Ontario, Canada, OPG owns and operates two nuclear, 66 hydroelectric and two thermal generating stations. In the U.S., through its subsidiary Eagle Creek Renewable Energy, LLC (Eagle Creek), OPG owns and operates 63 hydroelectric generating stations and has minority shareholdings in 13 hydroelectric generating stations and two solar facilities. OPG also leases two other nuclear stations to Bruce Power and co-owns the Portlands Energy Centre generating station (GS) and the Brighton Beach GS. As at December 31, 2018, OPG had an in-service generating capacity of 16,295 MW.

## Operational and Financial Highlights

- Electricity generated for the year was 74.0 TWh, in line with 74.1 TWh generated in 2017.
- Net income for the year was \$1,213 M, compared to \$881 M in 2017. The increase reflects a full year effect of new regulated prices for nuclear and most of OPG's hydroelectric generation, continued strong plant operating performance and an after-tax gain of \$205 M on the sale of the former Lakeview GS.
- OPG has made significant progress on several generation development projects, including:
  - The \$12.8 B Darlington Refurbishment project that will extend the station's operating life by at least 30 years. In early May 2018, the second major segment of the Unit 2 refurbishment, the removal of existing reactor components, was completed. OPG is now in the third major segment, the installation and reassembly of reactor components. OPG is progressing through the third major segment, having completed installation of new calandria tubes in October 2018 and with the installation of new fuel channels targeting completion in the first half of 2019. The new upper and middle feeder installation series is now underway. The overall project continues to track on schedule and on budget.
  - The construction of a 10 MW single-unit powerhouse on the existing Ranney Falls hydroelectric GS site. Construction continues with the balance of plant activities. In 2018, gate installation was completed and gate hydraulic systems installation is in progress. Turbine and generator unit fabrication has been completed, and installation commenced in the first quarter of 2019. The project is tracking on schedule and on budget.
- The construction of the 44 MW solar facility at OPG's former Nanticoke GS site. The Nanticoke Solar facility was placed in-service on March 1, 2019, completed on schedule and is expected to close below the approved budget.
- OPG issued its inaugural green bond offering in June 2018. The \$450 M 30-year bonds were priced with a coupon interest rate of 3.84 per cent and represent the first green bond issuance in the Canadian energy sector.

- OPG obtained a 10-year licence renewal for the Pickering GS from the CNSC in August 2018, valid until August 31, 2028, which supports the plan to extend safe and reliable commercial operation of the station and subsequently place the station in a safe storage state.
- OPG acquired 100 per cent ownership interest of Eagle Creek Renewable Energy, LLC, a hydropower platform with interests in 76 hydroelectric generating stations and two solar facilities throughout the U.S. for approximately US\$298 M in November 2018. At December 31, 2018, Eagle Creek's portfolio provided approximately 226 MW of in-service generating capacity.

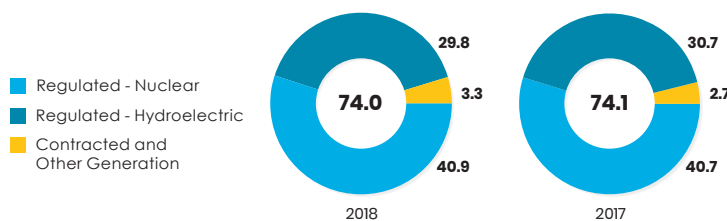
## Financial Results

For the year ended December 31

(\$ millions unless otherwise noted)	2018	2017
Revenue	5,537	5,158
Fuel Expense	671	689
Gross Margin	4,866	4,469
OM&A	2,825	2,824
Other Net Expenses	880	839
Other Gains	(270)	(379)
Income before Interest and Income Taxes	1,431	1,185
Net Interest Expense & Income Taxes	218	304
<b>Net Income</b>	<b>1,213</b>	<b>881</b>
<b>Net Income attributable to the Shareholder</b>	<b>1,195</b>	<b>860</b>
Cash Flow provided by Operating Activities	1,687	944
Capital Expenditures	1,859	1,926
Total Assets	52,252	48,822
Total Liabilities	39,125	36,911
Total Equity	13,127	11,911
Return on Equity Excluding Accumulated Other Comprehensive Income <sup>1</sup> (%) 12-month rolling average	9.5	7.6

<sup>1</sup> Refer to the 2018 Management's Discussion & Analysis (MD&A) for details on this non-GAAP financial measure.

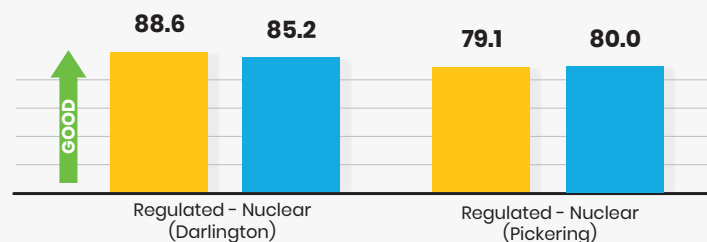
## Electricity Sold (TWh)



# 2018 Ontario Power Generation Year in Review Fact Sheet

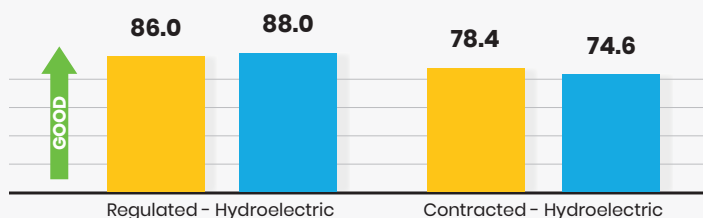
## Operating Performance

**Nuclear Unit Capability Factor (%)**<sup>1</sup> represents actual energy generated, adjusted for external constraints such as transmission or demand limitations, as a percentage of potential maximum generation over a specified period.



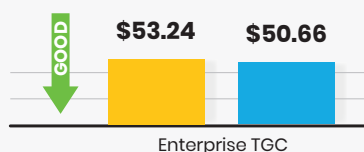
<sup>1</sup> Excludes unit(s) during the period in which they are undergoing refurbishment

**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.



## Enterprise Total Generating Cost (TGC) per MWh<sup>2</sup>

represents overall cost performance of OPG's generating operations in Ontario (excluding the Darlington Refurbishment project, other generation development project and business development costs, Eagle Creek, the impact of regulatory accounts, the Fair Hydro Trust segment and expenses ancillary to OPG's electricity generation business) divided by total electricity generation from OPG-operated generating stations in Ontario plus electricity generating forgone due to surplus baseload generation conditions in Ontario during the period.



<sup>2</sup> Refer to the 2018 MD&A for details on this non-GAAP financial performance measure.

2018 2017

## In-Service Generation Capacity

As at December 31, 2018 (MW)

Regulated - Nuclear Generation	
Darlington GS <sup>3</sup>	2,634
Pickering GS	3,094
<b>Total Regulated - Nuclear</b>	<b>5,728</b>
Regulated - Hydroelectric	
Niagara	2,319
Eastern Ontario	2,612
Northeastern Ontario	837
Northwestern Ontario	658
<b>Total Regulated - Hydroelectric</b>	<b>6,426</b>
Contracted and Other Generation	
Northeastern Ontario	1,007
Northwestern Ontario	29
Eastern Ontario	18
Eagle Creek (US) <sup>4</sup>	226
<b>Total Contracted and Other - Hydroelectric</b>	<b>1,280</b>
Lennox GS	2,100
Atikokan GS	205
Portlands Energy Centre <sup>5</sup>	275
Brighton Beach <sup>5</sup>	280
<b>Total Contracted - Thermal</b>	<b>2,860</b>
Other	1
<b>Total Contracted and Other Generation</b>	<b>4,141</b>
<b>Total</b>	<b>16,295</b>

<sup>3</sup> Excludes Unit 2 which has a generating capacity of 878 MW.

<sup>4</sup> Includes share of in-service generating capacity of approximately 10 MW from minority-held facilities.

<sup>5</sup> Represents OPG's 50 percent share of generating capacity.

## Major Projects

Project (\$ Millions)	Capital Expenditures as of December 31, 2018		Approved Budget	In-service Date
	Year-To-Date	Life-To-Date		
<b>Darlington Refurbishment</b> (Regulated Asset)	1,079	5,513	12,800 <sup>6</sup>	First Unit - 2020 Last Unit - 2026
<b>Ranney Falls GS</b> (Regulated Asset)	29	57	77	2019
<b>Nanticoke Solar Facility</b> (Contracted Asset)	86	89	107	2019

<sup>6</sup> The total project budget of \$12.8 billion is for the refurbishment of the four units at the Darlington GS.

## Credit Ratings As at December 31, 2018

	Long-Term Debt	Commercial Paper	Outlook
<b>S&amp;P</b>	BBB+	A-1 (low) Cdn	Stable
<b>DBRS</b>	A (low)	R-1 (low)	Stable