ONTARIO POWER GENERATION

Bernard Lord
Board Chair

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February 12, 2018

The Honourable Glenn Thibeault
Minister of Energy
4th Floor, Hearst Block
900 Bay Street
Toronto, Ontario
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Sent by email

Dear Minister,

On behalf of the OPG Board of Directors (the Board), I am writing to provide you with OPG's 2018-2021 Business Plan (the Plan) which was approved by the Board at its meeting on February 12, 2018, in fulfillment of our 2015 Memorandum of Agreement.

Highlights of the 2018-2021 Business Plan:

Overall, the 2018-2021 Business Plan shows improvement compared to last year's business plan in large part due to efficiency efforts on Operations Maintenance & Administration (OM&A) costs and improvements and optimization in our generation forecast. This plan fully reflects the outcome of the OEB Decision on OPG's base regulated rates. This is the first such business plan with OPG operating under incentive regulation for regulated hydroelectric assets and a custom incentive regulation approach for regulated nuclear assets. The key highlights of the business plan, excluding the impact of the Fair Hydro Plan, on a calendar year basis, are as shown in the table below:

	Actual	Business Plan			
	2017	2018	2019	2020	2021
Net Income Attributable to Shareholder, excl. Fair Hydro Trust *($ millions)*	859	995	968	764	1,160
Total Return to Shareholder, excl. Fair Hydro Trust *($ millions)*	1,393	1,391	1,422	1,259	1,667
Return on Equity, excl. Fair Hydro Trust	7.7%	8.5%	7.7%	5.7%	8.1%
Debt Ratio, excl. Fair Hydro Trust*	34%	36%	33%	30%	26%
Enterprise Total Generating Cost *($/MWh)*	50.7	54.7	50.6	53.9	48.9
Production (net of Surplus Baseload Generation) *(TWh)*	73.8	72.4	74.5	70.6	71.0
OM&A Expenses from Ongoing Operations *($ millions)*	2,819	2,850	2,732	2,807	2,570
Capital Expenditures *($ millions)*	1,926	2,082	1,859	1,781	1,830
Total Headcount (Regular and Term Employees)	9,354	9,434	9,358	9,287	9,180

*Excludes Class A Shares and Fair Hydro Trust Senior Debt

The final revenue rates for OPG are still to be finalized by the OEB. The OEB Decision on revenue requirements was released December 28, 2017. A draft Payment Amounts Order (PAO) was submitted by OPG on January 17, 2018. Subsequent Intervenor and Board staff submissions were made and OPG filed its Final Reply to the PAO process on February 5, 2018. A final decision on the payments process, that will determine OPG's cash flow through rates, will be issued by the OEB sometime in the first half of this year. The payments process is more complicated than in previous applications as it must reflect a rate smoothing proposal that meets the intent of the updated O. Reg 53/05 that aims to make smoother customer bills. Smoothing does not impact OPG's financial commitments to the Province.

Total Return to Shareholder (the combination of Net Income, Income Tax and non income tax PILS) is forecast to be $5.9 billion for the fiscal years ended March 31, 2018 to 2021 as noted in the table below:

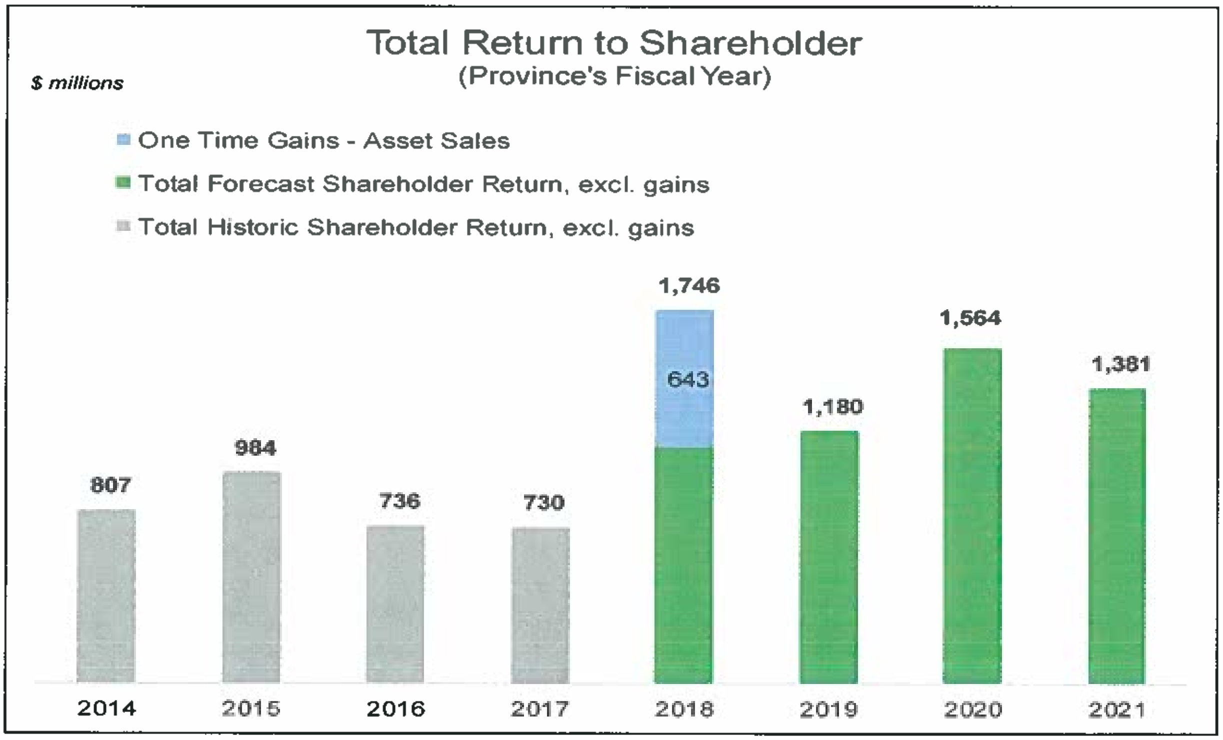
Total Shareholder Return

$ millions	2018*	2019	2020	2021	Total
Net Income Attributable to Shareholder	**1,195**	**795**	**1,053**	**877**	
Non Income Tax PILs					
GRC: Payable to OEFC	206	209	212	212	
GRC: Payable to MOF	103	101	103	103	
GRC: Payable to Niagara Parks Commission	7	7	7	8	
Property Tax Payable to OEFC	13	14	14	13	
Total Non Income Tax PILs	**330**	**331**	**336**	**335**	
Income Tax PILs	**221**	**54**	**175**	**169**	
Total Shareholder Return**	**1,746**	**1,180**	**1,564**	**1,381**	**5,871**
Improvement from 2017-2019 Business Plan	**528**	**4**	**307**	**-**	**838**

* Includes Gain from Sale of 700 University (EBT $376M; Net Income $283M), and an estimate of the Sale of Lakeview (EBT ~$270M; Net Income ~$200M)

** Excludes EBT from Fair Hydro Plan of $10M, $80M, $150M and $225M for fiscal years ended March 31, 2018-2021

The fiscal results achieved in the 2018-2021 Business Plan reflect an improvement of over $800M compared to last year's plan for the fiscal years 2018 – 2020. In fact, since 2014 when our financial commitments were first communicated using the Total Return to Shareholder metric, OPG's results have been stable as seen in the chart below and are forecast to show a positive trend over the plan period.



While the OEB Decision disallowed a variety of revenue requirement items, OPG has taken proactive steps that will help mitigate a large portion of those disallowances including:

- Reducing over $600M in OM&A costs between 2018 and 2021 through cost cutting and efficiency measures. These steps will also help position OPG to be a more efficient operator, particularly in planning for the ultimate shutdown of the Pickering generating station in 2024.
- Leveraging off the excellent performance of Pickering and outage execution in general in the nuclear fleet, generation improvements are planned from nuclear and reflected in the forecast

- Continuing to invest in our hydroelectric operations to optimize performance and availability to increase generation output from the hydroelectric assets

OPG remains focused on delivering projects safely, with high quality, on time and on budget. Major development projects over the Plan period are consistent with the recent 2017 LTEP, and include:

- Continuing and completing the refurbishment of the first *Darlington* unit (Unit 2), on time and on budget;
- Commencing the execution phase of the second Darlington unit (Unit 3) for refurbishment;
- Expansion of the *Ranney Falls* hydroelectric station in 2017/18 and other smaller hydroelectric redevelopments;
- Execution of dam safety upgrade initiatives at Lower Mattagami;
- Completion of the 44 MW Nanticoke solar project by 2019; and
- Investments of $200 million in organic growth opportunities leveraging OPG's core competencies beyond the current core generation portfolio.

With respect to the Darlington Refurbishment project, OPG is satisfied that the OEB agrees with the company's position that the program is a well planned, well controlled large project and that the OEB has agreed to put into service the $4.8 billion costs of Unit 2 as tabled by OPG in addition to the $0.4 billion in remaining pre requisite projects excluding the Heavy Water Storage and Drum Handling Facility. Combined with projects that have been placed into the rate base previously, total life to date in-service capital from Darlington Refurbishment will be approximately $5.5 billion by the time Unit 2 is completed.

In terms of impact to customers, OPG's payments application would result in a typical residential customer bill increase of $0.65 per month per year over the 5-year rate period. In return, the first of the four Darlington units will have been refurbished, providing decades of clean, reliable supply of electricity at a cost lower than other alternatives; a fact that was validated by the Financial Accountability Office's report on refurbishments in Ontario that was issued in November 2017. In addition, the life of Pickering will have been extended through 2024, reducing customer cost by over $600 million. The cost to customers of electricity generated by OPG during this period is expected to remain approximately 40% below the average non-OPG cost of electricity in Ontario.

Critical Factors in the 2018-2021 Business Plan

There are a number of factors that impact achieving this Business Plan that I would like to bring to your attention.

- **Pickering Relicensing:** The Plan reflects the continued investment and work required to support the continued operations of the Pickering plant until 2024 with CNSC approval. The OEB has confirmed and accepted the incremental investment required to achieve the extended operating life for the station and the economic regulatory risk has been greatly reduced. The needed work to ensure the ability to operate the units longer is being executed through upcoming outages at the station. While this critical work is ongoing, the nuclear business has been able to execute outages as planned and has optimized outage schedules to increase reliability and generation output from the plant. A key piece to complete the path forward for Pickering will be success at the upcoming hearing with the CNSC to renew the station's operating license. The existing license is set to expire at the end of August 2018. A 10 year operating license is being sought that would see the plant through to its end of commercial operations as well as allow for the defueling and other key work required to safely lay up the units. Support from across the company and from stakeholders will be crucial as part of the relicensing exercise. The benefits of an extended Pickering station life include reduced CO_2 emissions, support for lower smoothed nuclear rates during refurbishment of Darlington, and continued employment for the approximate 4,000 staff impacted by a Pickering closure. An earlier closure of the station would not deliver the benefits noted and would trigger severance and other closure related costs that would put upward pressure on customer prices.

- **Continued support for Darlington refurbishment efforts:** OPG is approaching the mid point in the schedule for refurbishment of Unit 2 and the project is tracking on time and on budget. While the subsequent unit planned for refurbishment (Unit 3) will not commence execution until Unit 2 is successfully returned to service by February 2020 at the latest, planning efforts and acquisition of long lead time materials must continue. To end of 2017, $93 million has been spent on planning activities for Unit 3 with a further $540 million planned over the 2018 – 2020 period prior to breaker open. OPG is pleased that the Province has agreed with OPG's assessment of progress to date and is not exercising an "off ramp" for Unit 3. This is another clear milestone for the project and OPG is looking forward to continued support from the Province that will culminate in the refurbishment of all 4 units within the overall budget of $12.8 billion.

- **Collective Bargaining impacts:** 2018 is a watershed year in terms of setting a path forward with our unionized workforce. The OEB, in its Decision, sent clear signals that the cost basis of OPG's regulated operations does not benchmark favourably on several fronts including compensation and in portions of corporate support costs. The fact that our total compensation for our unionized workforce, inclusive of pension and benefits, benchmarks above median sends a clear mandate to address these issues as part of collective bargaining. While such changes are difficult to achieve, 2018 offers a key opportunity in that both agreements with the Power Workers Union and the Society of Energy Professionals come due during the year.

- **Fair Hydro Plan:** The end of 2017 marked the commencement of OPG's involvement as the financial services manager for the Fair Hydro Plan. Over time, additional equity infusion from the Province will be made in part to finance portions of the global adjustment deferred asset that is being acquired from the IESO. Through this process, OPG will earn financial returns, mainly from the Province's incremental equity investment, that will be returned to the Province via increased net income. As disclosed in the footnote to the Total Shareholder Return forecast above, those amounts become larger as more of the deferred Global Adjustment asset is acquired by the Fair Hydro Trust, reaching $225 in net income by 2021.

- **OPG's Capital Allocation:** The business plan is focused on increasing net income and ROE from core operations through improved operational performance of the generating fleet and a number of steps to realign the corporate cost structure and operating model. In turn, OPG's increasingly improving financial performance, cost effective public debt platform and industry experience position the company well for developing a portfolio of organic and external investment options in low-carbon generating assets and potential extensions to the business complementary to existing operations.

OPG's 2018-2021 Business Plan sets ambitious but achievable goals and targets, and will deliver increased value to the Shareholder and Ontario electricity customers. OPG has demonstrated stable returns to the shareholder over the past 5 years and the 2018-2021 Business Plan forecasts a positive, increasing trend.

With the regulatory certainty provided by the OEB in its recent decision, the path forward for OPG is clear: to continue to provide reliable, safe and economic generation of electricity while challenging existing cost structures to drive enhanced efficiencies. OPG will achieve this while staying focussed on the successful execution of Darlington refurbishment and looking for growth opportunities to leverage existing operational strength. OPG's current business portfolio is heavily weighted on Ontario-centric regulated nuclear and hydroelectric generation. Although perceived as relatively low risk, this lack of diversification increases OPG's overall business viability risk. Diversifying OPG's business by developing a portfolio of options of future storage, gas, solar, hydroelectric and nuclear opportunities inside and outside of Ontario, focusing on innovation including investments in disruptive innovation, and investigating potential extensions to OPG's business is necessary to reduce OPG's overall business viability risk over the long term. With its strong financial position, OPG will continuously monitor for business growth opportunities and, where appropriate and with the support of the Shareholder, act as needed in order to maintain OPG's scale as a valuable public asset.

Sincerely,

Bernard Lord

cc. OPG Board of Directors
Serge Imbrogno, Deputy Minister of Energy

Enclosure

OPG's 2018-2021 Business Plan

February 12, 2018

ONTARIO POWER GENERATION

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Overview

OPG's 2018-2021 Business Plan is focused on continuing to drive sustained value for the Shareholder and customers in line with the Company's strategic direction and builds on the progress made to date in advancing the underlying strategic imperatives of operational excellence, project excellence, financial strength and social licence. The plan is aligned with Ontario's 2017 Long-Term Energy Plan (LTEP), through continuing to execute the Darlington refurbishment, implement plans for Pickering continued operation to 2024, invest in hydroelectric fleet upgrades and development, and pursue commercial innovation strategies in the electricity sector. The plan reflects the Ontario Energy Board's (OEB) December 28, 2017 decision on OPG's 2017-2021 regulated rates and includes preliminary, unaudited results for OPG's 2017 fiscal year. Financial information presented includes the impact of consolidating the Fair Hydro Trust established in December 2017 to finance Ontario's Fair Hydro Plan.

The plan is underpinned by the Company's strategic direction that seeks to deliver an appropriate return on the Shareholder's investment in OPG, while maintaining the Company's position as the low cost provider of safe, clean and reliable electricity in Ontario. The plan makes progress toward achieving these strategic priorities by implementing key enterprise and business unit level initiatives and by establishing goals to drive plan-over-plan improvement in operational and financial performance. The plan builds on OPG's strong performance in 2017, seeking to maximize the value of existing assets by continuing to further improve fleet performance and optimize nuclear outages during a period of relative regulatory certainty provided by the OEB's recent decision. At the same time, the plan recognizes that the OEB's decision to disallow certain operations, maintenance and administration (OM&A) expenses, in large part based on benchmarking results for OPG's historical cost and operating performance, and reduce capital funding for the nuclear business will challenge OPG's ability to earn the target rate of return on the Shareholder's investment, absent changes to the Company's current cost structure.

OPG's ability to successfully deliver on the strategic direction requires a realignment of the Company's cost structure and operating model in order to further improve the cost performance of the core generating fleet, including corporate support functions. Continuous improvement in operational and cost performance should support more favourable outcomes of future OEB decisions. Longer-term success also requires a platform for material strategic investments to maintain and enhance OPG's scale, risk profile and energy industry leadership across carbon-friendly technologies, particularly as the Company prepares for post-Pickering operations. This includes continuing to take steps to enhance the Company's sustainable footprint in line with the Company's social licence strategic imperative. In pursuing these strategies, an absolute priority for OPG remains maintaining a strong nuclear and public safety record, while delivering the Darlington refurbishment on time and on budget.

The financing of the Fair Hydro Trust impacts OPG's net income and return profiles. In order to evaluate performance plans and results on a comparable basis, additional financial metrics are required within OPG's operations. In the discussion that follows, the following terms are used to describe OPG's financial performance:

- ***Net income*** and ***Total Return on Equity (ROE)*** are based on OPG's consolidated financial performance and corporate capital structure, including the impact of the Fair Hydro Trust;
- ***Operating net income*** and ***Operating ROE*** exclude the impact of the Fair Hydro Trust and exclude the gains on sale of 700 University Ave. property and the Lakeview site and corresponding dividend payments to the Shareholder from net income and corporate capital structure;
- ***Regulated ROE*** is return on OPG's regulated operations calculated using an equity thickness of 45%, as reflected in the deemed capital structure used by the OEB to set OPG's regulated rates.

Highlights of the 2018-2021 Business Plan are as follows:

- Operating net income and Operating ROE are trending upward over the period on higher nuclear production, lower OM&A costs, and rate base growth upon return to service of Darlington Unit 2;
- Operating net income and Operating ROE temporarily decline in 2020 due to the six-unit Pickering VBO and other major planned outages scheduled in the year;
- The Fair Hydro Trust contributes to increasing amounts of incremental net income as the total investment interest grows, driving down Total ROE due to Province's equity injections;

- Operating cash flow inclusive of Fair Hydro Trust returns is sufficient to fund capital expenditures over the period, with OPG's debt ratio excluding Fair Hydro Trust dropping to 26% by 2021, assuming no acquisition investments;
- Net income and ROE in 2017 are adversely affected by a partial-year effective date of June 1, 2017 for new regulated rates.

2018-2021 Business Plan Summary	**Actual**	**Business Plan**			
	2017	**2018**	**2019**	**2020**	**2021**
Net Income Attributable to Shareholder *($ millions)*	860	1,043	1,066	919	1,373
Operating Net Income Attributable to Shareholder *($ millions)*	576	795	968	764	1,160
Total Return on Equity	7.6%	8.1%	7.2%	5.4%	7.1%
Operating Return on Equity	5.3%	6.8%	7.7%	5.7%	8.1%
Regulated Return on Equity	Average of 8.2% over the 2017 to 2021 period				
Debt Ratio, excl. Fair Hydro Trust*	34%	36%	33%	30%	26%
Enterprise Total Generating Cost *($/MWh)*	50.7	54.7	50.6	53.9	48.9
Production (net of Surplus Baseload Generation) *(TWh)*	73.8	72.4	74.5	70.6	71.0
OM&A Expenses from Ongoing Operations *($ millions)*	2,819	2,850	2,732	2,807	2,570
Capital Expenditures *($ millions)*	1,926	2,082	1,859	1,781	1,830
Total Headcount (Regular and Term Employees)	9,354	9,434	9,358	9,287	9,180

*Excludes Class A Shares and Fair Hydro Trust Senior Debt

Key Assumptions and Risks

- Province's concurrence is received to proceed with the refurbishment of subsequent Darlington units, and the project continues to be executed consistent with the approved overall project budget and schedule. Failure to receive the concurrence or to meet project cost and schedule commitments could potentially result in significant write-offs against net income as well as reputational damage. Costs incurred for Darlington Unit 2 refurbishment and pre-requisite projects beyond total in-service amounts including contingency approved by the OEB for 2017-2021 will be subject to a future prudence review. The OEB has found that OPG's performance on the Darlington refurbishment should be evaluated at the overall program level rather than by individual component.
- Activities continue to be successfully carried out to enable Pickering continued operation beyond 2020, with a corresponding operating licence granted by the Canadian Nuclear Safety Commission (CNSC) by August 2018. Inability to extend Pickering operation beyond 2020 would result in advancement of significant employee downsizing and organizational restructuring impacts and station decommissioning expenditures, and require OPG to notify the OEB. Continuing Pickering operation has a moderating effect on OPG's nuclear rates.
- OPG's strategy to pursue non-organic expansion options including gas, solar and hydroelectric assets primarily outside of Ontario and potential extensions to the business must meet Shareholder's expectations. Lack of material growth investments and their commensurate contributions to scale, income and cash flow, together with a less diversified asset portfolio, will result in a loss of scale following retirement of Pickering, increase the risk of being unable to withstand significant variances or shocks to the business plan, diminish ability to support de-carbonisation policy and ultimately erode the value of Shareholder's investment.
- Future employee termination costs associated with the Pickering end of commercial operations are not included in the business plan. Accounting criteria requiring recognition of a liability for these costs are currently assumed to be met during the next nuclear rate-setting period, commencing in 2022. Recognition of the costs prior to 2022 would require assurance over their future recovery in order to avoid a significant charge against net income.

- Inability to retain and attract leadership talent and qualified management employees could adversely impact the execution of Darlington refurbishment, continued Pickering operation and other strategic priorities. Management and staff must continue to adapt to OPG's evolving corporate culture and higher level of commercial discipline, including commercial implications of the recently established public debt platform.
- OPG continues to report its financial results under United States generally accepted accounting principles (US GAAP) rather than International Financial Reporting Standards (IFRS), with the Ontario Securities Commission expected to grant an extension to the exemption allowing OPG to prepare its consolidated financial statements under US GAAP. Adoption of IFRS would be expected to cause significant volatility in OPG's net income compared to US GAAP.
- OPG's pension, OPEB and nuclear waste obligations, and related funds are exposed to financial market conditions. The plan assumes that the funds perform according to long-term expectations.

Further details of the key planning assumptions for the 2018-2021 period are found in Appendix 1 and additional key risks to the plan are identified in Appendix 2.

Net Income, Total Shareholder Return and Customer Price

Total net income attributable to the Shareholder is forecast to grow from $860 million in 2017 to $1,373 million in 2021, reflecting regulated rates based on the OEB's 2017-2021 rate decision inclusive of a significant increase in rate base upon return to service of Darlington Unit 2, continuous operational improvement, and the impact of the Fair Hydro Trust. This includes a plan-over-plan increase of ~$390 million in 2018-2021 Operating net income. The planned net income levels are critically dependent on OPG's ability to achieve targeted OM&A cost reduction and production goals set out in the plan, and ability to deliver the Darlington refurbishment on time and on budget.

Successful execution of the business plan will allow OPG to contribute $5.7 billion in earnings and taxes to the Shareholder over the 2018-2021 period, excluding the impact of the Fair Hydro Trust, while continuing to substantially mitigate the cost of electricity in the province. The overall customer cost of OPG's generation, taking into account the impact of the OEB's 2017-2021 rate decision, will continue to track approximately 40% below other generators in Ontario. Per OPG's proposed payment amounts order filed with the OEB in January 2018, regulated rates resulting from the OEB's decision would produce consistent annual increases of 0.4% or $0.65 on a typical residential customer's monthly bill during the 2017 to 2021 period, deferring recovery of about $750 million in OPG nuclear revenues (including interest) to future periods. The OEB is expected to issue the final payment amounts order during the first half of 2018.

The Fair Hydro Trust is forecast to contribute over $500 million in net income over the period, reflecting the spread earned on the equity contributions from the Province to fund 44% of OPG's financing of the Trust. Although the gain on the Lakeview sale is expected to contribute $200 million to net income in 2018, OPG is required to transfer the majority of the proceeds from the sale to the Province. The transfer is included in planned dividend payments to the Shareholder of over $475 million in 2018, which also includes the transfer of the majority of the proceeds from the sale of the 700 University Ave. property in 2017.

Operations, Maintenance & Administration Costs

Total plan-over-plan reductions in OM&A expenses from ongoing operations are ~$800 million over the 2018-2021 period, including ~$600 million that contributes to net income and is primarily associated with cost structure, nuclear outage and other business optimization initiatives and other changes that are not subject to true-up with customers through OEB-authorized regulatory deferral and variance accounts. A number of these initiatives are aimed at achieving sustainable productivity enhancements and cost efficiencies through optimization of resources, processes and technology, and will prepare the Company for post-Pickering operations. The initiatives are supported by a continuing corporate culture shift, significant investments in technology, and a clear focus on commercial discipline. While these planned OM&A savings are substantial, they fall short by ~$200 million of fully offsetting the shortfall in OM&A cost recoveries based on the OEB's decision, which negatively affects OPG's ability to achieve the regulated ROE target. Future business plans are expected to target additional cost improvement opportunities to close this gap by 2021.

The major sources of plan-over-plan OM&A cost reductions not subject to true up with customers are nuclear outage costs, corporate support function costs, operating business unit base OM&A programs, and Renewable Generation project costs. These reductions are underpinned by a lower headcount of ~410 employees, on average in each year plan over plan, reflecting productivity improvements and resourcing strategies aimed at mitigating Pickering closure downsizing costs. The remaining $200 million in plan-over-plan reductions in OM&A expenses from ongoing operations is from lower pension and other post-employment benefit (OPEB) costs, the majority of which will be returned to customers through OEB-authorized regulatory accounts.

Production

Higher forecast nuclear generation of 4.4 TWh compared to the previous plan, primarily reflecting outage cycle frequency and other optimization initiatives and equipment reliability improvements at Pickering, and an increase in regulated hydroelectric generation (adjusted for surplus baseload generation (SBG)) contribute ~$475 million in incremental revenue over the term of the plan. The Pickering forced loss rate target is reduced from 5.0% to 3.5% in this plan. The increase in regulated hydroelectric revenue is mainly due to higher operating efficiency, lower assumed market constraints on production and an assumed one-year deferral in the execution of a Sir Adam Beck I GS power canal outage to 2021. OPG will continue to optimize major project work sequencing in Renewable Generation, with the final timing of the power canal outages being determined as part of the planning phase of the project. The plan also reflects advancement of the planned Pickering vacuum building outage (VBO) from 2021 into 2020, shifting about 1.5 TWh of generation across the two years and contributing to a plan-over-plan reduction in net income in 2020. OPG continues to assess mitigating actions in light of an extensive nuclear outage program currently planned for 2020 that includes four major planned outages, return to service of Darlington Unit 2 and commencement of Unit 3 refurbishment, in addition to the Pickering VBO.

Main offsetting factors to the plan-over-plan increase in net income include lower regulated revenue and other impacts reflecting the results of the OEB's 2017-2021 rate decision relative to OPG's request, an increase in depreciation expense resulting from capital investments in the accelerated digital transformation strategy and Darlington plant requirements and timing of in-service asset additions, and an updated forecast of Global Adjustment costs for OPG's electricity grid withdrawals based on updated non-OPG renewable generation cost information published by the Independent Electricity System Operator (IESO).

Return on Equity and Capital Structure

Operating ROE increases from 5.3% in 2017 to 8.1% by 2021. These ROE levels are an improvement over the previous plan. Total ROE is forecast to peak at 8.1% in 2018, mainly on account of the gain on the Lakeview sale, and to decline thereafter to 7.1% in 2021. Total ROE will be generally lower than Operating ROE due to returns on the Fair Hydro Trust related equity contributions from the Province being lower than the return on the majority of OPG's operating assets. Owing mainly to the OEB's disallowances of certain requested OM&A costs, the 2018 planned results achieve a Regulated ROE of approximately 7%, below the OEB prescribed return of 8.78% used in setting OPG's regulated rates. Regulated ROE is expected to achieve the OEB-prescribed level by the end of the planning period and averages 8.2% over the 2017-2021 period.

Operating ROE is lower than the Regulated ROE of 8.78% prescribed by the OEB in all years of the plan, reflecting OEB's disallowance of costs as well as OPG's debt ratio remaining below the 55% level reflected in the OEB-approved deemed capital structure. By 2021, OPG's planned debt ratio excluding the Fair Hydro Trust drops to 26%, assuming no capital is deployed on non-organic expansion, such as acquisitions. Management continues to examine the optimization of the Company's capital structure. The business plan is based on an existing capital allocation approach supporting Darlington refurbishment, sustaining capital investment in generating assets and maintaining flexibility to invest in the energy sector. In 2018, OPG will review and formalize a capital allocation policy to guide capital deployment decisions, including a framework for a future dividend policy.

Taking into account planned operating performance and capital investments as well as the implications of the Fair Hydro Trust, forecast credit metrics and operating cash flow levels for the business plan period are expected to continue to support OPG's current investment grade credit rating and cost effective sourcing of funds under the public debt platform. By 2021, OPG's debt is forecast at $5.9 billion, which is largely consistent with current levels, as operating cash flow inclusive of Fair Hydro Trust returns is sufficient to fund capital expenditures over the period. The Fair Hydro Trust external senior debt is projected to increase to $5.9 billion by 2021.

Capital Investments and Business Development

In addition to realigning the cost structure and operating model, OPG's strategy to improve ROE is to expand the business through strategic investments earning commensurate risk-adjusted market rates of return. This strategy will help to optimize the capital structure by gradually reducing equity and increasing debt, while increasing net income. With limited organic development opportunities expected in Ontario, non-organic investments in a portfolio of low-carbon generating assets primarily outside of Ontario as well as potential extensions to OPG's business will be essential to ensuring the Company is able to deliver long-term Shareholder value.

In support of this strategy, the plan allocates incremental capital funding of ~$200 million for potential organic business development investments over the 2018-2021 period, including expansion of nuclear isotopes sales and nuclear services, future regulation procurement projects and investments in other innovative technologies that would leverage OPG's core competencies. Although non-organic investments are not specifically assumed in the plan, OPG forecasts that up to $3 billion would be available for such investments over the plan term through increased leverage. OPG recognizes that the amount and timing of non-organic investments will depend on market opportunities and Shareholder's expectations, and will take into account the need for continued excellence in core operations and Darlington refurbishment execution and the need to maintain OPG's credit metrics. Based on these factors, OPG would take a measured, paced approach to the non-organic element of its strategy.

Total capital expenditures over the planning period are ~$570 million higher compared to the previous plan. In addition to the incremental $200 million to fund organic business expansion opportunities, this includes ~$120 million in additional investment to support industry-leading performance at Darlington post refurbishment and ~$40 million of incremental investment in OPG's accelerated digital transformation strategy to enable productivity improvement and modernize information technology infrastructure. Darlington refurbishment expenditures inclusive of a revised cost estimate for the Heavy Water Storage and Drum Handling Facility (D2O Project) increase by ~$105 million compared to last year's plan due to timing of expenditures, with total cost flows through Unit 2 return to service remaining consistent with Board-approved levels. The D2O Project is expected to be completed within the funds previously released to the Darlington refurbishment program.

Planned non-refurbishment capital investments in nuclear regulated assets and information technology are higher than amounts allowed by the OEB in setting regulated rates for 2017 to 2021. In setting the nuclear rates, the OEB disallowed certain capital project costs, reduced OPG's forecast of non-refurbishment capital in-service additions included in rate base for the duration of the 2017-2021 rate-setting period, and applied an efficiency stretch factor to further reduce OPG's revenues from in-service additions. Management believes that proceeding with planned capital investments in excess of 2017-2021 rate base amounts is prudent because they will provide long-term value by improving asset performance and enabling operating cost reductions. The remaining undepreciated value of these investments is expected to be included in rate base in the next rate application. In addition, the plan reflects implementation of an enterprise-wide scalable project delivery model and project management system aimed at ensuring consistent delivery of all projects on time and on budget. Together with demonstrated strong performance in delivering on the planned capital program, these enhancements should support improved OEB decision outcomes in the future.

The plan continues to reflect resource levels necessary to support the execution of several current major projects in line with approved project budgets and schedules, including return to service of refurbished Darlington Unit 2 by February 2020 and commencement of Darlington Unit 3 execution immediately thereafter, completion of the Ranney Falls GS redevelopment by 2019, and completion of the Nanticoke solar facility by 2019. These projects are continuing to track on budget and on schedule. Pre-execution expenditures incurred for the refurbishment of Darlington Unit 3, including acquisition of long lead-time materials and components, are $93 million as of December 31, 2017, with a further ~$540 million reflected in the plan over 2018 to February 2020. Planned development, re-development and station upgrade projects over the business plan period are expected to increase OPG's total renewable generation capacity by 170 MW by 2021, including the Ranney Falls GS and Nanticoke solar facility projects.

The plan supports OPG's ongoing commitment to continued engagement with the Saugeen Ojibway Nation toward securing support for the proposed low and intermediate level waste deep geologic repository (L&ILW DGR), recognizing the impact of inherent uncertainty in the ultimate outcome of the Environmental Assessment decision on the timing of project construction. During the planning period, OPG will also continue to maintain the Darlington new site preparation licence, and plans to complete the decommissioning of the former Nanticoke GS by 2020 and the former Lambton GS by 2021.

The plan reflects an increased and accelerated focus on innovation and technology, both to drive efficiencies in current operations and to build momentum for new business opportunities leveraging disruption in the energy sector. A combination of capital and OM&A funding is included in the plan in areas such as transportation electrification, nuclear innovation, distributed generation technologies, smart grids and other disruptive innovation technologies. These investments will help leverage OPG's clean electricity in support of action on climate change, including positioning OPG as a leader in transportation electrification in Ontario and driving a pan-Canadian nuclear strategy. These investments will also enhance OPG's brand and social licence.

Social Licence

During the planning period, OPG will focus on building its brand and reinforcing its social licence, with an emphasis on high standards of public trust and transparency, leadership in clean, cost-effective energy generation and innovation, community engagement and Indigenous Relations. OPG will continue to leverage Power with Purpose as the key platform for stakeholder outreach and branding initiatives, and will build on the Company's existing customer engagement activities to more formally incorporate customer engagement into subsequent business plans, as expected by the OEB. OPG will also focus on fostering a diverse, progressive and engaged workforce to enable the Company's future success.

During 2018, OPG will expand the communication of its social licence focus as part of its financial reporting framework, including through external disclosures related to Environment, Sustainability and Governance. Emerging guidance in North America will increase the requirements in this area, bringing public companies in line with more advanced disclosures common in Europe. OPG is well positioned with its virtually emission free generation fleet to move towards a leadership position in this area.

Labour Considerations

OM&A cost savings, operating cash flow and net income levels ultimately achieved during the planning period as well as the ability to implement longer-term cost structure changes will be impacted by outcomes of collective agreement negotiations with the Power Workers' Union (PWU) and The Society of Energy Professionals during 2018. Collective agreement outcomes, as well as staffing strategies, will impact the ability to mitigate future employee termination and related costs as a result of the end of Pickering commercial operations, estimated between $1 billion and $2 billion. Consistent with previous business plans, a liability for such employee termination costs is not included in the 2018-2021 Business Plan. US GAAP requires employee termination costs to be recognized when the scope, timing and amount of the downsizing program can be reasonably estimated with sufficient detail and would be unlikely to change significantly. The termination costs associated with the Pickering retirement are assumed to meet net income recognition criteria in 2022 at the earliest, and were not included in the setting of 2017-2021 regulated rates.

A discussion of the 2018-2021 Business Plan, organized by each of OPG's four strategic imperatives, is provided below. The detailed financial and headcount information is included in Appendix 3.

Financial Strength

In line with the Company's commercial mandate, OPG's objective is to achieve a consistent level of strong financial performance that delivers an appropriate level of return on the Shareholder's investment and positions the Company for future growth. In pursuing commercial objectives, OPG takes into account the impact on Ontario electricity customers by continuously seeking further efficiencies in the Company's cost structure.

The business plan is focused on increasing net income and ROE from core operations through improved operational performance of the generating fleet and a number of steps to realign the corporate cost structure and operating model. In turn, OPG's increasingly improving financial performance, cost effective public debt platform and industry experience position the Company well for developing a portfolio of organic and non-organic investment options in low-carbon generating assets and potential extensions to the business complementary to existing operations. Pursuing such investments will position OPG for long-term success, enabling it to deliver long-term Shareholder value and maintain scale in view of the upcoming Pickering retirement.

To facilitate this strategy, OPG will develop a capital allocation policy in 2018 aimed at maintaining OPG's current investment grade credit rating and providing long-term value to the Shareholder. This policy will outline expectations on how the Company's capital will be deployed between its existing asset base and potential expansion opportunities, and develop a framework for a future dividend policy. A balance needs to be struck among these available uses of capital to ensure deployment is targeted in the areas that provide the best path forward for sustained growth and returns in the longer term.

Regulated Rates

The plan reflects the impact of the OEB's decision on OPG's 2017-2021 rate application issued on December 28, 2017. On January 17, 2018, OPG filed a proposed payment amounts order with the OEB implementing the decision's findings in a manner that would result in consistent annual increases of 0.4% or $0.65 on a typical residential customer's monthly bill during the 2017 to 2021 period. The plan reflects this proposal.

For the nuclear operations, the OEB determined the level of costs and return on rate base allowed for recovery as part of each year's revenue requirement, net of an accumulating annual efficiency stretch factor of 0.6%. In the payment amounts order submission, OPG included a rate smoothing proposal based on the allowed revenue requirements and production levels, consistent with O. Reg. 53/05 as amended in March 2017. The objective of rate smoothing is to make the total OPG weighted average payment amounts more stable during the Darlington refurbishment and Pickering closure period by adjusting the nuclear regulated rate within the weighted average payment amount calculation. These adjustments to the nuclear rates determine the annual amounts of nuclear revenue to be recorded in a deferral account for recovery in the post-refurbishment period. Amounts deferred under rate smoothing in a given period are recognized by OPG as income of that period, with the deferral account recorded as a regulatory asset on the balance sheet. Under OPG's proposal, the deferral account balance would reach ~$750 million by the end of 2021, inclusive of interest at approximately 4.5% per annum authorized by the OEB pursuant to the regulation. The regulation requires the total accumulated deferred balance to be recovered over a period of up to 10 years beginning at the end of the Darlington refurbishment project.

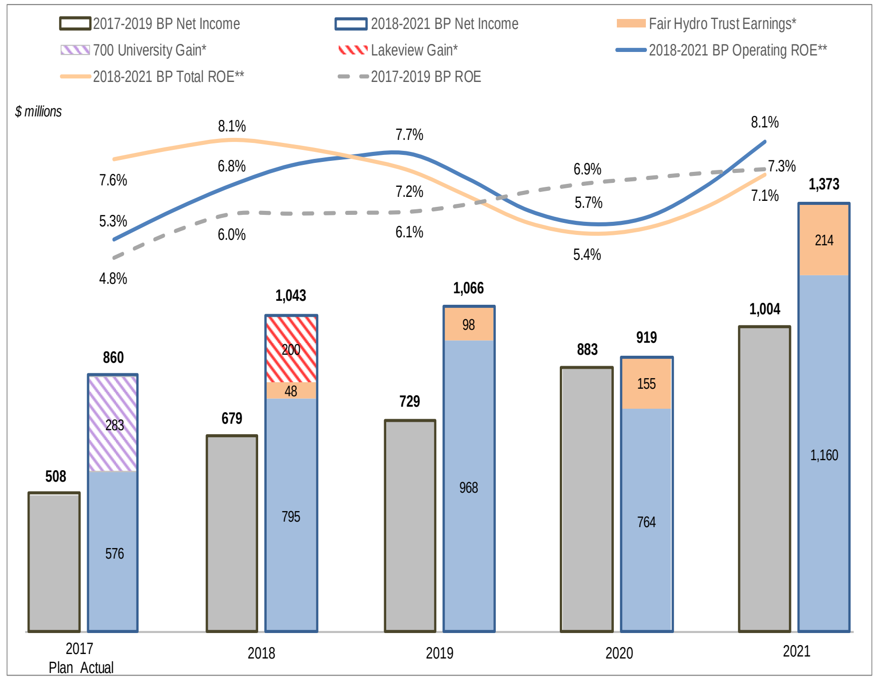
For the hydroelectric operations, the OEB's decision approved an inflation-based formula net of a 0.3% efficiency stretch factor to establish rates for each year. The results of the formula for 2017 and 2018 are known based on inflationary inputs published by the OEB for use in incentive regulation formulas, yielding hydroelectric rate increases of 1.4% in 2017 and 0.9% in 2018. The 2019-2021 hydroelectric rates will be set annually before the beginning of each year based on inputs published by the OEB, and are assumed in the plan to increase by 1.0% in 2019 and 1.5% in each of 2020 and 2021.

Approved regulated rates and rate smoothing deferral amounts for the 2017-2021 period will be determined by the OEB's issuance of the final payment amounts order. OPG expects to start receiving revenue under approved new rates in the first half of 2018. In the payment amounts order submission, OPG has proposed to delay the collection of the retrospective revenue shortfall for the period between the June 1, 2017 effective date of the new rates and their implementation date to the three-year period beginning January 1, 2019, in order to mitigate the impact on customer bills in 2018. The retrospective revenue shortfall will be recorded as income in the period to which the revenue shortfall relates. The revenue shortfall recorded in net income in 2017 is ~$480 million.

Consistent with OEB's expectations, the plan assumes an OEB application in 2018 for clearance of deferral and variance account balances recorded over 2016 and 2017 as well as the balance recorded in the pension and OPEB cash-to-accrual deferral account since November 2014. The regulatory treatment of pension and OPEB costs is discussed under the Operational Excellence section.

Net Income and Return on Equity

Net income attributable to the Shareholder is forecast to increase from $860 million in 2017 to $1,373 million in 2021, with Total ROE decreasing from 7.6% to 7.1% as the effect of higher earnings is more than offset by a forecast increase in the equity base reflecting the Province's equity contributions funding 44% of the Fair Hydro Trust financing.



* Net of Tax
** Total ROE = Operating ROE + Fair Hydro Trust Earnings + Gains on sale of the 700 University Ave. property and Lakeview site

Operating net income attributable to the Shareholder increases from $576 million in 2017 to $1,160 million in 2021, as Operating ROE increases from 5.3% in 2017 to 8.1% in 2021. Cumulatively for the 2018-2021 period, forecast operating net income levels are a plan-over-plan improvement of ~$390 million. The improvement in net income and ROE is highly dependent on achieving substantial reductions in OM&A costs and increases in production targeted in the plan, and ability to deliver the Darlington refurbishment on time and on budget.

The major drivers of plan-over-plan changes in 2018-2021 Operating net income are as follows:

- Revenue from higher production at Pickering reflecting lowering of forced loss rate target, outage cycle and other optimization initiatives, and current performance expectations (+$345 million);
- Higher revenue from regulated hydroelectric production primarily due to higher operating efficiency, lower assumed market constraints and an assumed one-year deferral in the start of planned execution of the Sir Adam Beck I GS power canal outage from 2020 to 2021 (+$130 million);
- Company-wide reductions in OM&A costs not subject to true up with customers through OEB-authorized regulatory accounts, as further detailed in the Operational Excellence section (+$600 million);
- Lower interest expense, primarily due to lower OPG borrowing requirements (+$75 million);
- Lower regulated revenue and other impacts reflecting disallowances and other adjustments from the OEB's 2017-2021 rate decision, and updated inputs into the approved hydroelectric incentive regulation rate-setting formula (-$665 million);
- Increases in depreciation expense as a result of investments in the accelerated digital transformation strategy and sustaining nuclear capital projects and timing of in-service asset additions over the period (-$165 million), partly offset by higher capitalized interest (+$40 million);
- Updated forecast of Global Adjustment costs for OPG's electricity grid withdrawals based on non-OPG renewable generation cost information published by the IESO (-$125 million); and
- Net change in income tax expense related to above items (+$130 million).

The planned 2018 Operating net income attributable to the Shareholder of $795 million is an improvement over the results for 2017 of $576 million, with a further improvement to $968 million forecast in 2019. The earnings in 2017 are negatively impacted by a partial-year effective date of June 1, 2017 for new regulated rates, which resulted in forgone net income of ~$325 million. Other factors underpinning the year-over-year increases in 2018 and 2019 include:

- Higher nuclear production in 2017 and 2019 reflecting outage optimization initiatives;
- Lower OM&A expenses in 2019 due to fewer major planned outages at Pickering and cost efficiency improvements;
- Write-off of previously incurred developmental capital expenditures and higher expenses associated with inventory obsolescence costs in 2017;
- Annual regulated hydroelectric rate increases under the incentive regulation formula;
- Year-over-year increases in capitalized interest for the Darlington refurbishment capital expenditures; and
- Earnings from the Nanticoke solar facility upon completion in 2019.
- The year-over-year favourable factors in 2018 are partially offset by higher depreciation expense in 2018 as a result of increased investments in the accelerated digital transformation strategy and timing of in-service asset additions, and higher detritiation services revenue in 2017 reflecting increased demand and stronger performance of the Tritium Removal Facility.

Operating net income attributable to the Shareholder is forecast to temporarily decrease to $764 million in 2020, with Operating ROE declining to 5.7%, mainly due to a larger planned outage program at Pickering, including advancement of the six-unit VBO from 2021, that significantly decreases production and increases OM&A expenses. Other factors impacting the year-over-year Operating net income change in 2020 include:

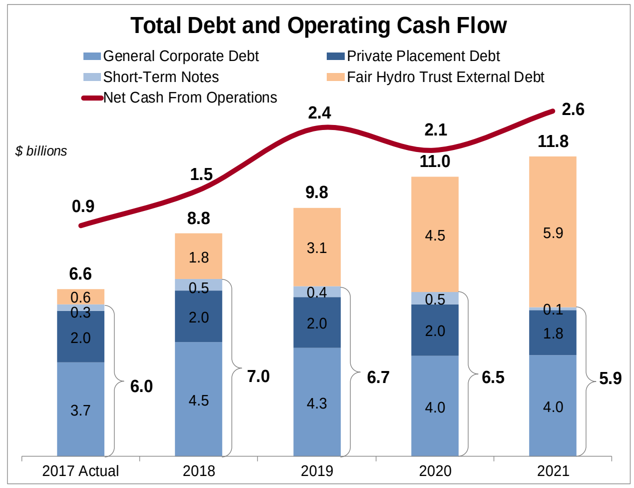
- Lower hydroelectric production due to the planned forebay and crossover canal outage at the Sir Adam Beck I GS in 2020;
- Lower capitalized interest for the Darlington refurbishment capital expenditures as the first refurbished unit returns to service in February 2020; and
- Expiry of the Thunder Bay biomass energy supply agreement in January 2020.
- These factors are partially offset by the impact of the first refurbished Darlington unit entering rate base and regulated hydroelectric rate increases under the incentive regulation formula.

Planned Operating net income attributable to the Shareholder increases to $1,160 million in 2021, compared to 2020, reflecting an increase in nuclear production and lower outage OM&A expenses due to multiple planned outages at Pickering in 2020, no major planned outages at Darlington in 2021 and continued efficiency improvements, and higher capitalized interest for the Darlington refurbishment capital expenditures. These factors are partially offset by the impact of lower regulated hydroelectric generation in 2021.

Net income contribution from the Fair Hydro Trust increases from $48 million in 2018 to $214 million in 2021, predominantly on account of the spread earned on the Province's equity injections into OPG to fund 44% of the Trust financing requirement. The net income contribution from the Trust is net of interest costs on OPG's debt to fund 5% of the Trust financing requirement. OPG's management fees represent a small fraction of the Trust's net income contribution and range from $1 million to $9 million annually between 2017 and 2021, before taxes.

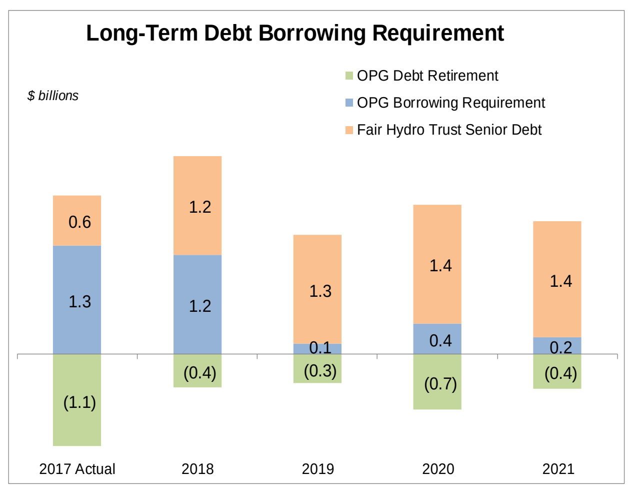
The plan includes a forecast after-tax gain of $200 million on the Lakeview sale in 2018, which temporarily increases Total ROE to 8.1% in 2018. The sale was not included in the previous plan.

Financing and Liquidity



Forecast operating cash flow, inclusive of Fair Hydro Trust impacts, increases from $0.9 billion in 2017 to $2.6 billion in 2021. The increase in 2018 over 2017 is due to the implementation of regulated rate increases in 2018, partially offset by lower nuclear production in 2018. The increase in 2019 is due to higher nuclear production, lower OM&A costs, assumed commencement of collection of retrospective revenue for the period between June 1, 2017 and the implementation date of new regulated rates in 2018, and rate riders assumed to result from the 2018 deferral and variance account application to the OEB. A ~5 TWh decline in nuclear production in 2020, compared to 2019, and higher nuclear outage OM&A costs result in a year-over-year decrease in operating cash flow. Higher operating cash flow in 2021 is mainly due to a year-over-year increase in nuclear production and decrease in OM&A costs. The Fair Hydro Trust contribution to operating cash flow grows over the period commensurate with increased earnings from the Trust.

In aggregate, operating cash flow inclusive of Fair Hydro Trust impact is sufficient to fund capital expenditures over the planning period, with OPG's total debt (i.e. excluding the Fair Hydro Trust external senior debt) forecast to decrease from $6.0 billion in 2017 to $5.9 billion in 2021. This assumes no capital is deployed on non-organic expansion such as acquisitions. The assumed effective interest rate for new general corporate debt during the planning period is an average of 5.0%. OPG's sources of general corporate debt include credit facilities with the Ontario Electricity Financial Corporation and the public debt platform. The Fair Hydro Trust external senior debt is forecast to increase to $5.9 billion by 2021, based on forecast cumulative investment interest acquired of $11.8 billion. The assumed effective interest rate for new Fair Hydro Trust external senior debt over the planning period is 4.25%, on average.

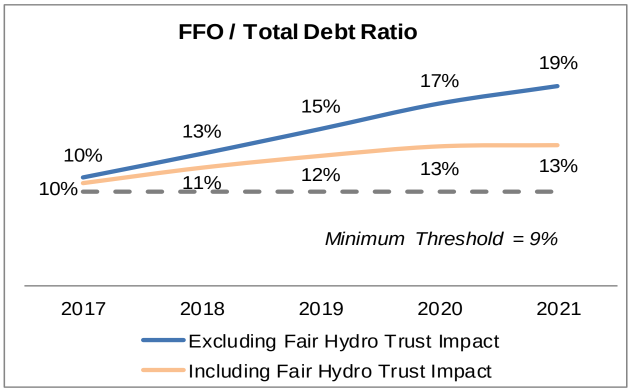


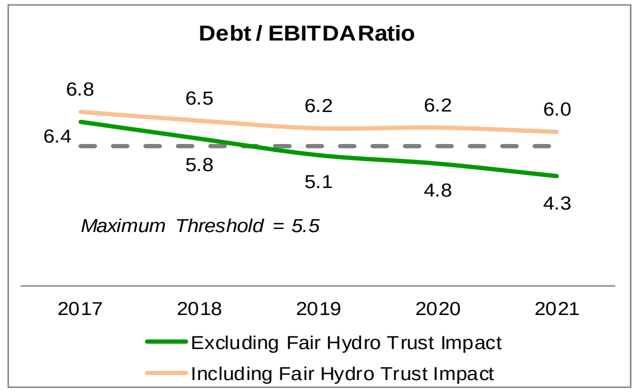
OPG's debt ratio excluding the Fair Hydro Trust external senior debt is forecast to decline from 36% in 2018 to 26% in 2021, absent any major non-organic growth investments. This is below the 55% level reflected in the OEB deemed capital structure used to set regulated rates, which results in a lower value of the Shareholder's investment in the Company. In setting OPG's 2017-2021 regulated rates, the OEB rejected OPG's request to decrease the debt portion of the deemed capital structure from 55% to 51% and increase the equity portion from 45% to 49%. A higher debt portion of the deemed capital structure contributes to lower regulated revenues. Management continues to examine the optimization of the Company's corporate capital structure and approach to capital allocation.

OPG's strategy to expand its business portfolio through organic development and non-organic investments will help to optimize the corporate capital structure by increasing net income while gradually reducing equity and increasing debt. Although non-organic investments are not specifically assumed in the plan, OPG forecasts that up to $3 billion would be available for such investments over the business plan term through increased leverage. OPG recognizes that the amount and timing of external investments will depend on market opportunities and Shareholder's expectations, and will take into account the need for continued excellence in core operations and Darlington refurbishment execution and the need to maintain OPG's credit metrics. Based on these factors, OPG would take a measured, paced approach to external investments.

Credit Metrics

Maintaining an investment grade credit rating is critical to OPG's continued ability to access cost effective financing. To support this objective, OPG monitors the Funds From Operations (FFO) to Total Debt ratio and the Debt to Earnings Before Interest, Taxes and Depreciation and Amortization (EBITDA) ratio, which are the core measures used in Standard & Poor's credit rating methodology. Total Debt, as defined by Standard & Poor's, includes pension and OPEB liabilities. The forecast credit metrics and forecast operating cash flow levels for the planning period are expected to continue to support OPG's current investment grade credit rating.





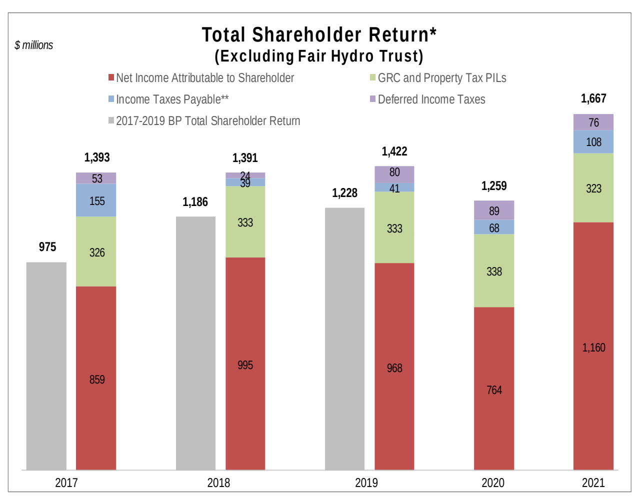
The FFO/Total Debt ratio, both with and without the impact of the Fair Hydro Trust, will remain within threshold over the planning period. The ratio without the Fair Hydro Trust improves steadily over the 2017 to 2021 period as FFO increases. FFO increases in 2018 due to the full-year impact of new regulated rates compared to seven months in 2017, in 2019 due to higher nuclear production and commencement of rate riders for recovery of deferral variance accounts, in 2020 due to an increase in revenue from the return to service of Darlington Unit 2, and in 2021 due to higher nuclear production and lower OM&A costs. With the Fair Hydro Trust, the ratio is somewhat lower and more stable than without the Fair Hydro Trust, as a result of the Trust's external senior debt, partially offset by incremental income from the spread earned on the Province's equity injections.

Excluding the impact of the Fair Hydro Trust, the Debt/EBITDA ratio is at or below the threshold during the business plan term. As EBITDA increases over the business plan term, the ratio improves. The upward trend in EBITDA is consistent with the drivers of increasing FFO. As anticipated, when the impact of the Fair Hydro Trust is included, the Debt/EBITDA ratio exceeds the threshold in all years of the plan, largely due to the Trust's external senior debt.

Delivering Shareholder Value

OPG's Total Shareholder Return consists of net income, income taxes, hydroelectric gross revenue charge payments, and payments in lieu (PILs) of property taxes to the OEFC. OPG plans to contribute $5.7 billion in Total Shareholder Return over the 2018-2021 period, not including the impact of the Fair Hydro Trust. Total Shareholder Return on OPG's fiscal basis is projected to increase over the period as net income increases.

Over the 2017-2019 period, OPG expects to contribute $4.2 billion in Total Shareholder Return not including the impact of the Fair Hydro Trust, which represents an increase of ~$800 million over the 2017-2019 commitments made to the Province based on the previous plan, primarily due to higher net income across all three years.



* On OPG's fiscal basis
** Includes income tax PILs and amounts recoverable from, or payable to ratepayers

The Fair Hydro Trust is forecast to contribute an additional $685 million to the Province, predominantly through the spread earned on the Province's equity injection to fund 44% of the Trust's financing.

In 2017, OPG received proceeds from the sale of OPG's 700 University Ave. property. The forecast for 2018 includes proceeds from the sale of the Lakeview site. In 2018, OPG expects to make dividend payments of over $475 million to the Shareholder in respect of these transactions. Both of these properties are non-core assets of OPG's unregulated business.

Operational Excellence

The plan recognizes that strong core operational and cost performance is foundational to OPG's continued success and longer term strategy. Continuous improvement in performance is expected by the Shareholder, customers and the OEB. In addition to directly affecting output and cost levels, operational and cost performance is a critical driver of rate application outcomes. Benchmarking is a key tool used by the OEB to assess regulated assets' performance as part of rate applications, including as the basis for determining efficiency stretch factors for nuclear and regulated hydroelectric businesses. Continuous improvement in performance and associated benchmarking should support more favourable outcomes of future OEB decisions.

OPG remains focused on improving asset reliability, increasing output and safely generating electricity at a low cost, with performance targets over the planning period set to drive excellence in these areas. The plan builds on OPG's improved performance in a number of areas in 2017, seeking to maximize the value of existing assets and further improve fleet performance during a period of relative regulatory certainty provided by the OEB's 2017-2021 rate decision. This includes implementing initiatives aimed at maximizing generation revenue and improving reliability performance at Pickering based on continued operations to 2024, positioning Darlington for industry-leading operational and cost performance post refurbishment, and maintaining and improving strong reliability and cost effectiveness of the hydroelectric fleet. These initiatives complement an enterprise-wide set of initiatives to improve productivity and realign the Company's cost structure and operating model, discussed under the Operations, Maintenance & Administration Expenses section. In driving these improvements, OPG remains committed to achieving the highest standards of workplace and public safety across its operations and will continue to invest in maintaining and enhancing the safety and security of its generating facilities.

Nuclear Operations

OPG is focused on improving reliability performance and increasing output from the nuclear fleet. This includes initiatives aimed at executing optimized planned outages along with improving equipment reliability, implementing integrated asset management planning, and enhancing maintenance programs. A key driver of improved equipment reliability and station performance is the development and implementation of the Monitoring and Diagnostic Centre. The Centre will facilitate collection and analysis of data to improve early detection of equipment degradation, reduce unplanned maintenance and optimize performance of major components. Improved station performance also will be supported by a greater focus on asset management planning aimed at early identification of project requirements and development of an optimized investment strategy. Maintenance and outage programs over the planning period will continue to focus on improved work planning, preparation and execution.

These and other initiatives will support a reduction to Pickering's forced loss rate target to 3.5% from 5.0% starting in 2018 as well as achievement of Darlington's top-quartile forced loss rate target of 1.0%. A temporarily higher forced loss rate is assumed for Darlington Unit 2 upon return to service following refurbishment, based on industry experience. OPG will continue to target top-quartile forced loss rate performance for the station as refurbished units achieve steady-state operations post refurbishment.

OPG benchmarks the costs of the Pickering and Darlington stations against other nuclear stations using indicators that measure performance on a per MWh basis. With a combination of the smaller size Pickering units relative to the majority of industry peers and impacts of moving through refurbishment of the Darlington units, the benchmarking of units on a per MWh basis will continue to pose some challenges in light of the OEB's 2017-2021 regulated rate decision that emphasized benchmarking results. As discussed further in the Operations, Maintenance & Administration Expenses section, the OEB used benchmarking to support a more aggressive efficiency stretch factor in setting OPG's 2017-2021 nuclear regulated rates. In order to achieve an appropriate rate of return and position itself for more favourable future rate application outcomes, OPG will seek to implement commensurate productivity improvements and maximize production output over the business plan period.

Although Pickering is expected to continue to benchmark in the fourth quartile for unit energy cost due to its smaller unit size, the station's 2017 actual results and forward targets demonstrate an improvement of ~$10/MWh in the Total Generating Cost (TGC) measure, on average, compared to the previous plan. As anticipated, Darlington's cost performance continues to be temporarily impacted by higher project costs associated with asset life cycle and plant life extension work and increased outage costs to address the aging management program, with resulting third quartile target performance over the 2018-2020 period expected to improve to the second quartile by 2021. On a per unit basis, OPG's all-in operating and capital expenditures for the nuclear stations continue to be amongst the lowest in the industry. In addition to Pickering's forced loss rate performance, plan-over-plan improvement is observed at both stations in several operational targets including All Injury Rate, Collective Radiation Exposure, and On-line Corrective Maintenance Backlogs. The operational targets for the Nuclear business unit are further detailed in Appendix 4.

Hydroelectric Operations

OPG continues to focus on increasing the utilization of existing hydroelectric assets through increases in energy output and, where economic, increases in capacity, as well as identifying opportunities for cost efficiencies in line with the incentive regulation model. Operational performance initiatives over the business planning period will aim to increase water to wire efficiency, improve operational flexibility and optimize outage planning to maximize availability and returns during high demand periods, subject to water conditions. The forecast fleet-wide availability for hydroelectric assets averages 87% during the business plan period, with a target equivalent forced outage rate of 1.8% on average. The availability of the contracted hydroelectric assets is projected to reach 92% by 2021 as major work including overhauls, upgrades and sluicegate replacements at the Lower Mattagami stations is completed. The availability of the regulated hydroelectric assets temporarily declines from an average of 88% over the 2018-2021 period to 85% in 2021 reflecting a Sir Adam Beck I GS power canal outage assumed in the summer of 2021. OPG will add approximately 170 MW of incremental capacity to its renewable generation fleet over the plan term, including through completion of the Ranney Falls GS and Nanticoke solar facility projects, frequency conversion of Sir Adam Beck I GS Units 1 and 2, runner upgrade program and other value enhancing projects.

OPG is pursuing innovation and technology-based improvements in asset management and equipment maintenance strategies in order to reduce costs and increase reliability of the hydroelectric stations. This includes expanding the Monitoring and Diagnostic Centre concept beyond nuclear operations and transitioning to digital work management. Objectives of the Monitoring and Diagnostic Centre for Renewable Generation operations include developing a common data historian and a data architecture strategy that will optimize asset management, facilitate a move from preventative maintenance to condition-based maintenance and reduce forced outage costs through predictive failure modelling capability. In addition to improving work flow efficiency, digital work management is expected to improve staff engagement in line with OPG's cultural shift.

OPG's hydroelectric operations are regularly benchmarked against peer utilities in North America. Based on 2016 data, 19 out of OPG's 25 large regulated hydroelectric facilities benchmarked in the top two quartiles for unit energy costs. This group of 19 facilities represents 94% of the energy delivered from the regulated hydroelectric fleet. Eighteen out of the 25 large regulated hydroelectric facilities benchmarked in the top two quartiles for availability. The operational and cost improvement initiatives identified in the plan will help support OPG's hydroelectric benchmarking standing. An integrated strategy is being developed in 2018 to assess hydroelectric benchmarking performance, taking into account incentive regulation implications. The operational targets for the Renewable Generation business unit are further detailed in Appendix 5.

Key enterprise level and business unit initiatives that will support achievement of strategic objectives and business plan goals are detailed in Appendix 6.

Safety

OPG is committed to high standards of public and workplace safety and will continue to operate all of its facilities in a safe, secure and reliable manner, while making investments to maintain and enhance the safety of its generating assets. This includes continuing to operate with nuclear safety and waterways safety as overriding priorities by maintaining a strong focus on nuclear safety programs, continuing to invest in nuclear safety systems and dam and other waterway safety upgrades, and further strengthening public awareness regarding water safety.

In the past five years, as a result of lessons learned from the Fukushima accident, OPG has strengthened the nuclear safety program at its stations by installing multiple portable emergency mitigating equipment units, enhancing emergency preparedness and response capability, and improving protocols and procedures in response to potential adverse events. Probabilistic safety assessment results have confirmed that these initiatives have further strengthened the safety of OPG's nuclear plants. Through its annual evaluation of the safety performance of Canada's nuclear plants, the CNSC has concluded that both Pickering and Darlington operate at the highest level of nuclear safety.

OPG continues to demonstrate strong industry leadership with its hydroelectric Dam and Public Safety Program, which encompasses public safety and emergency management over the Company's 241 dams and 66 hydroelectric facilities. The program is considered to be international best practice in a number of areas. During the planning period, OPG will continue to make investments in dam safety, with planned project work at hydroelectric sites totalling ~$120 million over period, in addition to the $300 million Little Long Dam Safety project discussed under the Project Excellence section. OPG will also continue to maintain a strong water safety education and outreach program.

OPG has consistently achieved top quartile workplace safety performance compared to the Canadian Electricity Association benchmark and although it did not meet the internal target, 2017 safety performance was the third-best year in the Company's history. OPG will continue to set aggressive but achievable internal targets to drive continuous improvement in safety performance. Achievement of safety goals will be supported through continued branding and integration of the "iCare Enough to Act" initiative aimed at renewing employees' personal commitment to safety, strengthening of an enterprise wide "values-based" safety culture through peer coaching, information sharing and work planning, and a focus on the use of human performance tools such as increased field supervisory oversight, situational awareness, communication, and procedural use and adherence.

Additionally, business unit specific initiatives are being implemented to target improved safety performance over the planning period. Renewable Generation will execute on a broad-based safety improvement plan targeting significant cultural and work program improvements in the safety management system. Objectives include strengthening proactive reporting, enhancing linkage of the embedded health and safety advisors with local senior management, modifying human performance practices based on internal and external benchmarking and reinforcing a culture of personal leadership in safety. In the Nuclear organization, safety programs are being implemented to re-energize the safety culture through communication, recognition, human performance coaching and risk management. Leveraging consistent best quartile performance at both Pickering and Darlington, business plan targets for safety at the nuclear stations have been set to drive further improvement over the previous plan, toward the ultimate goal of zero injuries.

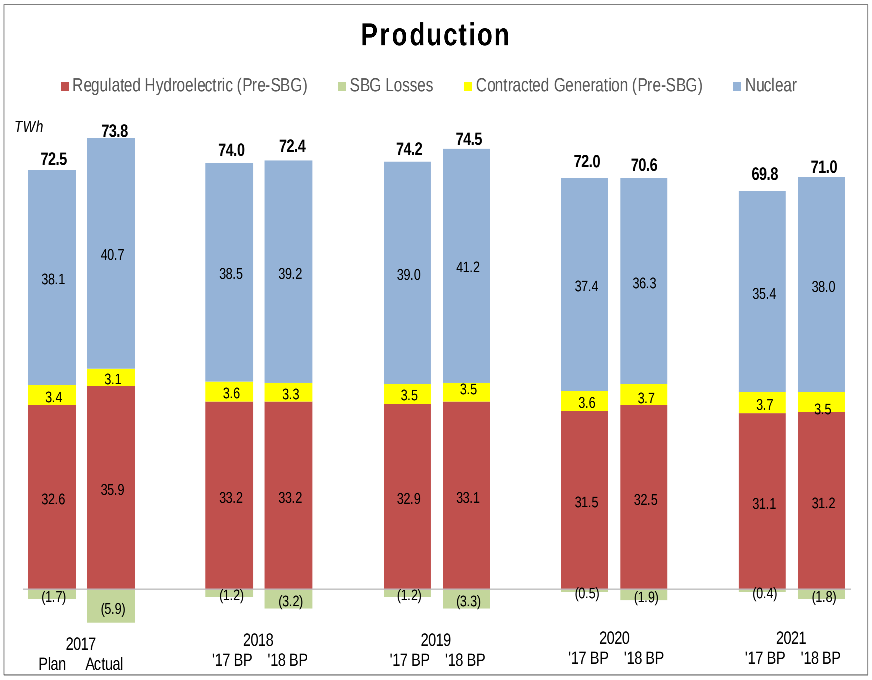
Environment

OPG remains committed to meeting its environmental compliance obligations, including any commitments it makes, with the objective of surpassing these compliance obligations where it makes business sense. In keeping with the business plan, OPG will continue to manage its operations to minimize environmental risks and seek opportunities for environmental leadership. OPG's priorities over the planning period include keeping radiological emissions as low as reasonably achievable, preventing significant environmental events, and implementing a transportation electrification strategy discussed in the Social Licence section as well as initiatives to enhance biodiversity.

In 2017, OPG met or outperformed its targets for spills, environmental infractions, carbon-14 emissions to air and radioactive waste, with no significant environmental events. Performance for tritium emissions to air and water during 2017 remained less than one percent of the regulatory limit. The Company will pursue further improvement in environmental performance through setting of more stringent targets in this plan, including in the area of spills and infractions for Renewable Generation and radioactive waste, infractions and tritium emissions for the nuclear operations.

To maximize the benefits of its biodiversity initiatives, OPG has developed biodiversity management plans that identify priority natural areas, conservation goals, risks and proposed actions. In 2017, OPG's continued efforts to protect and restore habitat, promote biodiversity education and awareness, and help the recovery of species were recognized by the Canadian Electricity Association with the 2017 Sustainable Electricity award for Commitment to Continuous Performance Improvement. OPG will continue to advance its biodiversity efforts during the business plan period.

Production



Total planned OPG production net of SBG impacts is 288.5 TWh over the period. Adjusted for SBG impacts, total planned production is 298.7 TWh, which is 5.4 TWh higher than in the previous plan.

The plan-over-plan increase is primarily driven by higher nuclear production of 4.4 TWh, mainly at Pickering. The increase in Pickering production includes lowering of the forced loss rate from 5.0% to 3.5% (1.4 TWh increase) reflecting reliability improvements and current performance expectations, outage frequency optimization through transition from a 24-month to 30-month outage cycle (1.6 TWh increase) and outage scope and duration optimization initiatives (1.4 TWh increase). The changes in outage frequency include the deferral of a Pickering Unit 6 planned outage from the fall of 2017 to 2018, a major driver of the year-over-year decrease in nuclear production in 2018, and result in fewer major planned outages at Pickering in 2019.

The Pickering production plan includes advancement of the Pickering VBO to 2020 from 2021, consistent with current CNSC license requirements, which reduces generation by 1.5 TWh in 2020, with a corresponding increase in 2021. The Pickering VBO is assumed to require a 30-day outage for all six operating units at the station.

The Darlington production plan is virtually unchanged from the previous business plan, including an assumed temporary increase in the forced loss rate and number of planned outage days as the first refurbished unit returns to service in early 2020 and a partial overlap of the second and third unit refurbishments in 2021. No major outages are scheduled at Darlington in 2021 as two units undergo refurbishment.

With the return to service of Darlington Unit 2, the start of Darlington Unit 3 refurbishment, the Pickering VBO and four major planned outages across both plants, the 2020 nuclear outage program is extensive and complex. OPG continues to assess mitigating actions taking into account the impact on resources and execution capability, while ensuring that regulatory and other work program requirements continue to be met and support improved station performance.

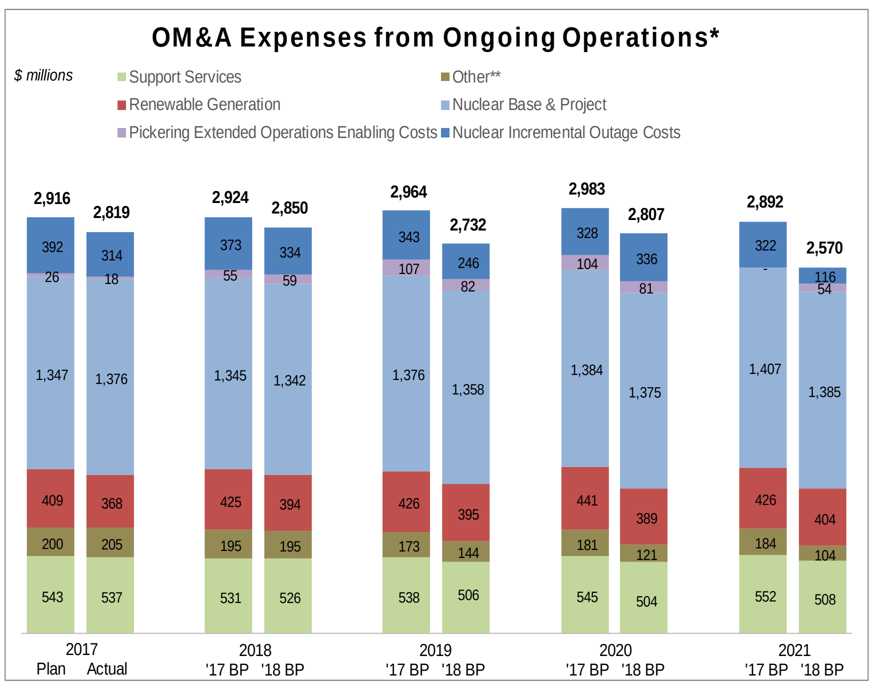
The hydroelectric production plan reflects a return to median water flows following extremely high water flows and resulting SBG conditions in 2017. SBG-adjusted regulated hydroelectric and contracted fleet production over the business plan term is 1.0 TWh higher compared to the previous plan, primarily due to an assumed one-year deferral of a Sir Adam Beck I GS power canal rehabilitation outage from the summer of 2020 to the summer of 2021. The outage reduces hydroelectric production by ~1.2 TWh in 2021. OPG will continue to optimize major project work sequencing in Renewable Generation, with the final timing of the power canal outages being determined as part of the planning phase of the project. The plan also continues to reflect a series of outages at the Sir Adam Beck units to accommodate Hydro One's planned work in the Beck switchyard over the planning period, and an outage at the Sir Adam Beck I GS in 2020 for work to rehabilitate the forebay and crossover canal. Planned contracted fleet production peaks in 2020 due to increased production at the Lennox GS reflecting anticipated increased operation to support IESO system reliability requirements.

SBG conditions are projected to result in forgone hydroelectric production of 10.2 TWh during the 2018-2021 period, an increase of 6.9 TWh compared to the previous plan, primarily as a result of an updated, lower OPG forecast of Ontario grid demand. SBG conditions are expected to be lower in 2020 and 2021 than in earlier years owing mainly to lower OPG nuclear production and commencement of Bruce unit refurbishments.

OPG's three wholly-owned thermal stations with a total capacity of close to 2,500 MW will continue to provide the electricity system with the flexibility to meet system demand and capacity requirements during the business plan term under their respective energy supply agreements. The current Thunder Bay biomass energy supply agreement expires in January 2020, with agreements for Lennox and Atikokan stations expiring within several years of the business plan period. These assets are unique in their operational flexibility and in the world-leading biomass innovation. The economics of these assets post existing contracts may be impacted by structural changes to Ontario's electricity market being contemplated through the IESO Market Renewal Program. OPG continues to be an active participant in the IESO's Market Renewal engagement process to ensure that the impacts of a redesigned electricity market are understood, the unique flexibility of OPG's assets is appropriately valued and the Company's operations are optimized under the new market rules.

Operations, Maintenance & Administration Expenses

The plan is targeting reductions of ~$600 million in OM&A expenses from ongoing operations over the 2018-2021 period compared to the previous plan, excluding ~$200 million in lower pension and OPEB costs the majority of which are subject to true up with customers through OEB-authorized deferral and variance accounts. These reductions reflect steps being taken to improve efficiency and align OPG's organizational structure and operating model with post-Pickering operations. The reductions of ~$600 million will be primarily enabled through optimization of resources, processes and technology and other business optimization initiatives across the organization, including nuclear outage optimization. Business optimization and organizational design work is currently underway as part of the OPG25 strategic initiative



* Excludes Darlington refurbishment OM&A expenses and all OEB variance and deferrral account offsets
** Includes centrally held pension / OPEB costs, insurance and other corporate level costs

to identify opportunities for reductions in operating costs, mainly in corporate Support Services and nuclear base OM&A programs. In addition to delivering improved financial results through increased net income during the business plan term and supporting more favourable outcomes of future OEB decisions, these changes will benefit customers by helping to position Darlington for industry-leading performance post refurbishment, further improve the cost effectiveness of the hydroelectric fleet and mitigate the Pickering closure downsizing costs. The major sources of cost reductions reflected in the plan are nuclear outage costs (~$255 million), Support Services costs (~$125 million), Nuclear base OM&A programs (~$85 million), Renewable Generation base OM&A programs (~$60 million) and Renewable Generation project costs (~$75 million).

The plan's cost reduction targets recognize that OPG's regulated rates for the business plan term have been set under an incentive based regulation methodology that is informed by the OEB's Renewed Regulatory Framework (RRF). Achieving operational effectiveness through meaningful efficiency incentives is a main focus of the RRF. In setting incentive regulation rates for OPG, the OEB applied efficiency stretch factors that reduced OPG's recoverable OM&A costs by an increasing amount each year over the business plan term, in addition to disallowing recovery of certain OM&A costs. Taking into account these adjustments, OM&A cost levels allowed by the OEB are ~$800 million lower than the OM&A cost levels reflected in the previous business plan. Therefore, while the plan-over-plan cost reductions of ~$600 million committed in this business plan are substantial, they do not fully offset, by ~$200 million, the shortfall in OM&A cost recoveries based on the OEB's decision. This negatively impacts OPG's ability to achieve the Regulated ROE target. Future business plans are expected to target additional cost improvement opportunities to close this gap by 2021. The OEB used OPG's external benchmarking of OPG's regulated operations' historical operational and cost performance to support the majority of cost reductions applied in setting the regulated rates. Benchmarking results are expected to continue to form a material part of OEB's assessment of OPG's cost levels in future rate applications.

Compared to the previous plan, the major changes to OM&A expenses from ongoing operations for the 2018-2021 period are as follows:

- Reductions in nuclear outage costs reflecting outage frequency optimization at Pickering, in addition to ~$45 million in savings realized in 2017 (-$140 million);
- Reductions in nuclear outage costs reflecting outage scope, duration and vendor scheduling optimization savings at Pickering and Darlington (-$115 million);
- Savings in Nuclear base OM&A costs from lower nuclear staffing levels reflecting strategies to leverage attrition and increase resource flexibility, optimization of operator training, and maintenance and other work program efficiencies (-$120 million), partially offset by higher materials requirements for the stations based on current experience compared to plan (+$35 million);
- Savings in Renewable Generation base OM&A costs, including from regionalization initiatives such as the integration of Central Operations, control room consolidation, and work management and organizational realignment efficiencies (-$60 million);
- Savings in corporate Support Services costs reflecting business optimization initiatives and organizational changes in support of the OPG25 initiative (-$125 million), including the following:
    - Reductions in Real Estate and Supply Chain costs from advancement of OPG's planned lease exit strategy, facilities staffing and maintenance efficiencies and automation, and organizational redesign initiatives;
    - Lower People & Culture function costs reflecting a decrease in staffing levels and other costs, including simplifying human resource support processes, leveraging digital solutions and streamlining training qualifications;
    - Lower Finance costs reflecting amalgamation of functions and other organizational design initiatives, rationalization of processes, and implementation of a corporate-wide shared services model. The corporate-wide shared services model is expected to be expanded to other shared services functions currently performed throughout the Company; and
    - Savings in Chief Information Office costs reflecting redesign of functions and processes including greater emphasis on automation, robotic processing and enhanced self-serve capability, software cost optimization, and digitization and other cost elimination initiatives.

    - These reductions are partially offset by an increase in project costs in 2018 in support of the digital transformation strategy and incremental costs over the planning period in support of the transportation electrification strategy.
- Changes in timing and accounting classification of certain planned Renewable Generation projects reflecting portfolio re-prioritization and more advanced scope definition (-$75 million); and
- Lower insurance costs reflecting savings achieved in the nuclear liability insurance program (-$25 million) and elimination of the annual fee for the Province's financial guarantee to the CNSC due to the fully funded status of the nuclear segregated funds (-$15 million).

In addition to varied levels of Pickering extended operations enabling costs that have been reflowed from the previous plan in line with the revised outage schedule, year-over-year changes in OM&A expenses from ongoing operations over the 2018-2021 period include:

- Variability in nuclear outage costs reflecting timing of planned outages, including fewer planned outages at Pickering in 2019 and 2021 under the optimized outage cycle, the Pickering VBO in 2020 and no major planned outages at Darlington in 2021. The movement of the Pickering VBO from 2021 in the previous plan shifted ~$40 million in OM&A costs to 2020 in this plan;
- Reductions in staffing levels and other cost drivers reflecting continued focus on productivity improvement and business optimization initiatives, net of assumed labour escalation and other inflationary impacts;
- Write-off of previously incurred development capital expenditures and higher expenses associated with nuclear inventory obsolescence costs in 2017; and
- Higher nuclear base OM&A costs of ~$15 million in 2019 related to the CNSC's Fitness for Duty program, compared to 2018. Consistent with the previous plan, total program costs over the planning period are estimated at ~$40 million.

The Darlington Refurbishment project expenses vary over the planning period with the expected timing of pressure tube and feeder removal activities and other work programs not eligible for capitalization.

The regulatory variance and deferral account impacts to OM&A expenses increase to 2020 due to lower pension and OPEB costs and then decline in 2021 reflecting timing changes in Pickering extended operations enabling costs compared to the OEB-approved levels.

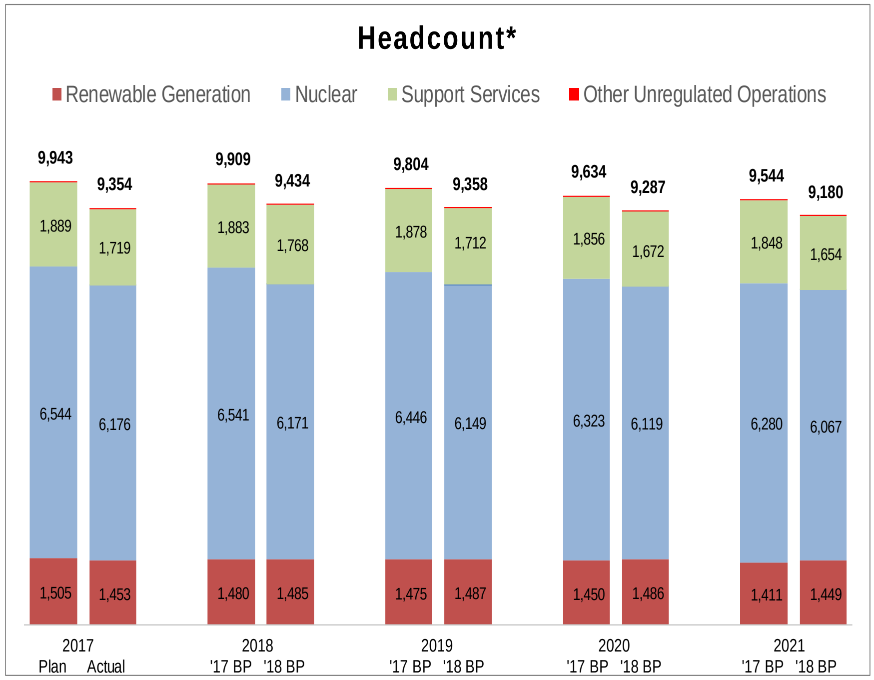
Pension and OPEB Costs

Lower pension and OPEB costs compared to the previous plan are due to higher discount rates, better than expected pension asset performance, lower headcount and updated actuarial inputs. As in the previous plan, projected pension and OPEB costs are decreasing year over year during the planning period, mainly reflecting projected pension asset returns and lower amortization of net historical actuarial losses. The regulated business portion of the plan-over-plan and year-over-year changes in pension and OPEB costs is offset by corresponding changes in the cash-to-accrual deferral account, discussed below.

The 2017-2021 regulated rates limit the recovery of OPG's pension and OPEB costs to cash amounts, with the difference between accrual and cash amounts continuing to be recorded in an OEB authorized deferral account in place since 2014. In 2017, the OEB issued its final report on the regulatory treatment of pension and OPEB costs, establishing the accrual basis of accounting as the default rate-setting method for regulated utilities in Ontario. As required by the report, OPG will seek the OEB's approval to resume the accrual basis of recovery and begin to collect the balance accumulated in the deferral account, through a deferral and variance account application planned later in 2018. OPG must begin to collect the account balance by November 2019 in order to avoid writing off a portion of the balance against net income as would be required by US GAAP. The deferral account balance stood at ~$600 million at the end of 2017.

Headcount

Significant staffing reductions are being realized across the organization, compared to the previous plan, as part of efforts to realign the corporate cost structure and drive productivity improvement and operational efficiencies. These ongoing efforts will support the OPG25 initiative in implementing operating model and organizational design strategies to ensure cost effectiveness of post-Pickering operations, and will help to mitigate downsizing costs related to the Pickering closure.



* 2017-2019 BP and 2017 Actuals have been restated for 2018 organizational changes. Includes PWU Term employees.

Actual year-end 2017 headcount was ~590 lower than expected in the previous plan, with ~370 fewer employees in the Nuclear organization, ~170 fewer employees in Support Services organizations and ~50 fewer employees in Renewable Generation. This overall trend continues over the 2018-2021 period as forecast headcount is lower by ~410 employees, on average, in each year. Nuclear organization headcount includes employees working on the Darlington refurbishment.

Nuclear headcount is lower by ~270 employees on average over the period, compared to the previous plan. The reduction leverages attrition opportunities and a move towards a more flexible staffing strategy to fulfil short-term operating needs while considering long-term staffing goals in support of the OPG25 initiative. Headcount for Support Services organizations decreases by ~165 on average over the period, compared to the previous plan. The decrease includes ~95 employees in Finance, ~35 employees in People & Culture and ~35 employees in Chief Administrative Office and is expected to be achieved through work elimination, technology advances and organizational redesign. Renewable Generation headcount increases by ~20 employees on average, compared to the previous plan, primarily adding staff in support of project planning, management and execution.

Notwithstanding plan-over-plan reductions, high levels of attrition reflecting employee demographics and a commitment to increase work execution will necessitate some replacement hiring to fill key vacancies in certain areas over the planning period. Through filling of existing vacancies, headcount is expected to increase by 80 employees year over year in 2018, before beginning to decline thereafter.

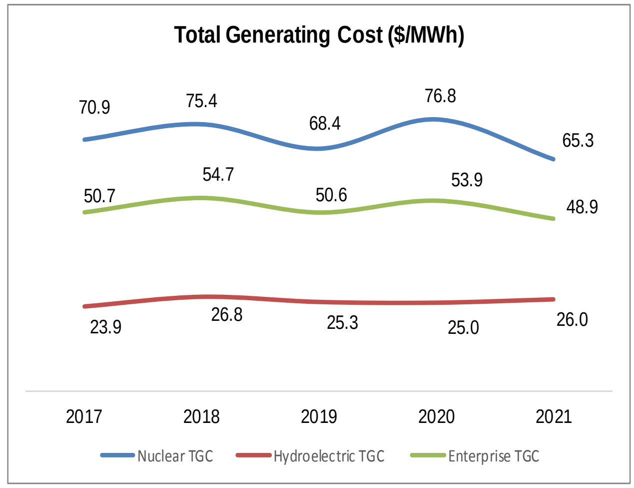
By the end of 2021, headcount is expected to be ~255 lower than at the end of 2018, reflecting efficiency improvement and organizational redesign initiatives and the impact on work programs from the approaching Pickering end of life. These reductions are expected to be realized by leveraging attrition and through selective use of temporary resources in line with collective agreement provisions. The decline in future staffing levels also reflects the expiry of the current Thunder Bay biomass energy supply agreement in 2020.

Staffing levels discussed above include PWU Term Employees. The plan assumes continued utilization of this category of non-regular employees negotiated in the 2015 round of collective bargaining with a view to adding fewer regular staff in circumstances where they are likely to be laid off as a result of the end of Pickering commercial operations. Term Employees attract a lower termination cost than regular PWU employees, do not receive pension or benefits from OPG and represent a key strategy to mitigate downsizing costs upon retirement of Pickering. The plan reflects an addition of ~300 PWU Term Employees over the period, primarily in the Nuclear organization, bringing the total number of PWU Term Employees to ~440 by 2021. Continued use of Term Employees requires renegotiation as part of the 2018 round of collective bargaining.

Collective bargaining results will also continue to impact future OEB rate application outcomes, as OEB cost disallowances have been historically based, in part, on OPG's compensation benchmarking including wages, pension and benefits. While OPG has made progress in containing unionized employee wage costs and implementing pension reform in the last round of bargaining, it must seek to continue to make further gains in this area in order to improve its cost structure.

Total Generating Cost

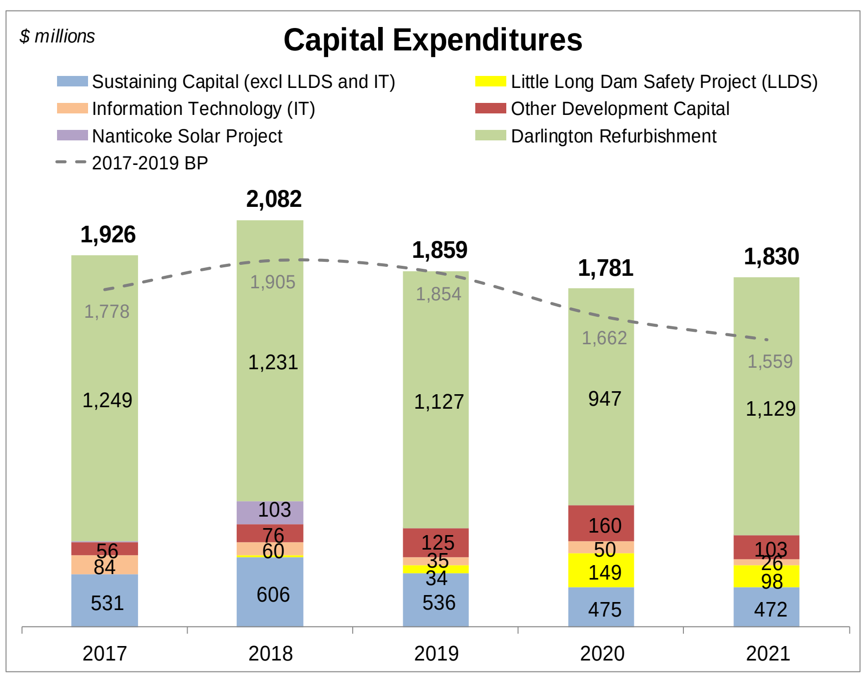
Total Generating Cost (TGC) per MWh is OPG's enterprise-wide measure of operational cost effectiveness. The measure includes OM&A expenses from ongoing operations, fuel expense (including gross revenue charge and other water rental costs) and sustaining capital expenditures, and is calculated on SBG-adjusted production volumes. In addition to continuing to exclude development capital expenditures, the measure also excludes expenditures on two planned large hydroelectric projects, the $200 million Sir Adam Beck I GS Water Conveyance System project and the $300 million Little Long Dam Safety project, starting with this planning cycle.



Targets for Enterprise TGC per MWh over the period range from a low of $48.9 (in 2021) to a high of $54.7 (in 2018), compared to $50.7 in 2017. The fluctuations in the measure over the period reflect the nuclear outage profile, including the Pickering VBO and Darlington refurbishment-related outage impacts, initiatives to reduce OM&A costs, variability in sustaining capital expenditure levels and, in 2017, high SBG-adjusted hydroelectric production due to extremely high water levels. If Darlington units were not undergoing refurbishment and would continue to operate consistent with targeted performance for the station's un-refurbished units and if the Pickering units would continue to operate in lieu of the VBO, the plan would yield Enterprise TGC per MWh targets of ~$5 lower, on average. The 2017 metric on this basis would have been similarly lower.

Project Excellence

Asset base growth through investment in existing assets, organic development and acquisition is a key element of OPG's strategy to achieve sustainable increases in profitability and ROE levels and to maintain appropriate scale in the longer term.



In addition to refurbishing the Darlington station, OPG's planned capital program will continue to make investments in sustaining and improving the performance of existing assets and will continue to execute the organic growth element of the corporate strategy, including through relatively modest expansion of hydroelectric generating capacity, completion of the Nanticoke solar facility and investments in nuclear and other low-carbon technology innovation complementary to OPG's core competencies. The planned capital program is aligned with the 2017 LTEP.

Total capital expenditures planned for the Darlington refurbishment, sustaining investments in existing assets and organic development projects are $7.5 billion over the 2018-2021 period, ranging from $1.8 billion to $2.1 billion per year. Over the period, this represents an increase of ~$570 million compared to the previous plan. The major drivers of the increase are timing of Darlington refurbishment expenditures (~$105 million), incremental investment in Darlington sustaining capital (~$120 million), accelerated digital transformation strategy (~$40 million), and incremental funding for potential organic growth opportunities (~$200 million). As discussed under the Financial Strength section, non-organic growth investments are not assumed in the plan and will need to be aligned with market opportunities and Shareholder's expectations.

Darlington Refurbishment

Darlington refurbishment expenditures total $4.4 billion over the period, an increase of ~$105 million from the previous plan due to timing of expenditures. Consistent with previous business plans and OEB approvals, the plan continues to reflect the high confidence budget and schedule for the Darlington refurbishment, with total cost flow through Unit 2 return to service consistent with Board-approved levels. This includes the D2O Project, which is expected to be completed in the first half of 2019 within the funds already released to the Darlington refurbishment program.

Planned Darlington refurbishment in-service amounts are consistent with amounts approved by the OEB in setting the 2017-2021 regulated rates. In particular, the OEB has allowed inclusion of a total of $5.5 billion in Darlington refurbishment in-service additions through 2021, including pre-requisite projects other than the D2O Project. The plan reflects Unit 2 returning to service in February 2020, with Unit 3 refurbishment commencing immediately thereafter and the third unit refurbishment beginning in 2021. Pre-execution expenditures incurred for the Unit 3 refurbishment, including acquisition of long lead-time materials and components, are $93 million as of 2017 year-end, with a further ~$540 million reflected in the plan over 2018 to February 2020.

Sustaining Capital

Total sustaining capital expenditures for nuclear operations are $1.3 billion over the period, declining from ~$385 million in 2018 to ~$245 million in 2021. This represents a total increase of ~$120 million from the previous plan, primarily on account of the Darlington capital program in 2018 and 2019. The program is focused on ensuring Darlington is well positioned to transition to steady-state operations and achieve and maintain industry-leading performance as soon as possible following refurbishment. The increase in expenditures reflects continued optimization of the capital program recognizing historical under-investment relative to peers, with significant plant investments targeted to be completed before multiple Darlington units are under refurbishment later in the plan. These investments include life cycle management projects, upgrades and additions of facilities, and work in support regulatory commitments. The Darlington capital program is expected to decline toward the end of the planning period and during the remainder of the refurbishment period. Consistent with the previous plan, the Pickering capital program declines over the period in line with the planned end of life in 2024.

OPG remains focused on delivering all projects safely, on time, on budget and with high quality and is committed to executing its capital plan. In 2017, OPG delivered on its capital program commitments with aggregate spending on sustaining capital projects meeting internal targets. To improve consistency of project outcomes across the organization, OPG has implemented common enterprise-wide project governance and a scalable project delivery model, as well as project management system and tools, leveraging industry standards. OPG is also focused on strengthening internal project management capability, with project management proficiency development programs launched in 2017 for existing and new project managers. In 2018, OPG will transition to an enterprise wide Project Management Centre of Excellence that will provide portfolio and project management standards and services for all projects across OPG.

In setting OPG's nuclear regulated rates for 2017-2021, the OEB disallowed certain capital project costs based on an assessment of OPG's performance on the projects, reduced OPG's forecast of 2017-2021 non-Darlington refurbishment capital in-service additions based on an assessment of OPG's ability to deliver on the capital plan, and applied an accumulating annual efficiency stretch factor of 0.6% to reduce revenues earned by OPG from an allowed level of forecast in-service additions. Continuing to execute the capital program as planned and delivering on efforts to improve project performance will support improved outcomes of OEB's future assessments of OPG's capital costs.

Excluding the Sir Adam Beck I GS Water Conveyance System project, regulated hydroelectric sustaining capital expenditures total ~$510 million over the 2018-2021 period, an average ~$125 million per year, consistent with the previous plan. This includes a number of projects to maintain and enhance availability when needed and reliability as well as increase capacity of OPG's renewable fleet, including:

- Unit overhauls and upgrades across the fleet, including Sir Adam Beck 1, Sir Adam Beck Pump, R.H. Saunders, Otto Holden, Barrett Chute and Silver Falls generating stations.
- Flow control equipment replacements in Northwest Operations including automatic sluicegate system replacements at Whitedog Falls GS and Caribou Falls GS scheduled for completion in 2019 and 2020 respectively; and
- Electrical equipment, headgate and sluicegate replacements in Eastern Operations including generator breaker replacements at Des Joachims GS, to be completed in 2020 and 2021;

Planning work on the $200 million Water Conveyance System project to rehabilitate the Sir Adam Beck I GS power canal and associated structures has commenced. The project will repair concrete deterioration and restore the original flow capacity of the power canal, ensuring reliable operations for the next 50 years. The project is expected to come into service over two years following the start of execution.

Contracted hydroelectric sustaining expenditures include the $300 million Little Long Dam Safety project (formerly the Lower Mattagami Dam Safety project), planned to be completed by 2022. The project will address dam safety requirements on the Lower Mattagami River in line with OPG's commitment to dam safety excellence, earning a return under the Lower Mattagami hydroelectric energy supply agreement once in service. Total project expenditures are consistent with the previous plan, but have been deferred to start later in the planning period.

Sustaining expenditures include ~$170 million for information technology projects, including an increase of ~$40 million over the previous plan for investments in OPG's accelerated digital transformation strategy, largely over 2018 and 2019. The digital transformation strategy will serve as an enabler to productivity improvements and business optimization opportunities, by modernizing OPG's information technology infrastructure and by providing the technology foundation and tools aimed at maximizing workforce and field productivity and efficiency across the organization. Projects are focused on four key strategic areas: Digital Modernization; Generation Support; OPG25 Support; and Infrastructure Improvement. More than half of the projects are to be invested directly in the generation business units. OPG will also continue to make investments in maintaining a reliable, cyber-safe information technology environment and reducing cyber-related operational risks.

Business Development Capital

Organic development expenditures over the planning period total ~$570 million. This includes previously planned projects as well as incremental funding of ~$200 million for organic business development opportunities. Previously planned projects include completion of the Ranney Falls GS redevelopment, construction of the Nanticoke solar facility, frequency conversion of Sir Adam Beck GS Units 1 and 2 to 60 Hz to increase capacity, and potential redevelopment of the Calabogie GS. The Ranney Falls GS project is tracking on schedule and on budget, construction of the Nanticoke facility is scheduled to begin in the first quarter of 2018, the Sir Adam Beck frequency conversion is planned to begin execution in 2019, and the Calabogie GS redevelopment is being assessed as part of the definition phase. The Ranney Falls GS and the Nanticoke solar facility are scheduled to come into service during 2019.

Incremental funding for potential organic business development investments included in the plan contemplates such additional opportunities as expansion of nuclear isotopes sales and nuclear services, future regulation procurement projects and an investment in a disruptive innovation venture fund. OPG will continue to strategically assess investment opportunities for decarbonising, disruptive energy sector technologies beyond the Company's core generation portfolio, with the goal of building a competitive advantage in this area.

OPG has been successful with the organic growth element of its strategy, including through recent completion of the 28 MW Peter Sutherland Sr. GS, and will continue to explore broader business expansion opportunities as described above. Nevertheless, organic growth opportunities in Ontario's electricity sector remain limited including due to uncertain future electricity demand levels, and OPG's current asset portfolio continues to be heavily weighted on Ontario-centric regulated nuclear and hydroelectric generation. The non-organic element of OPG's corporate strategy, executed in a paced manner with due consideration of core operational and financial impacts, is therefore essential to ensuring that OPG is ultimately able to deliver appropriate Shareholder value and improve its risk profile.

Provision Expenditures

Planned expenditures against a previously established provision for nuclear station decommissioning and waste management average ~$350 million per year over the 2018-2021 period. The expenditures include costs for ongoing used fuel and low & intermediate level waste interim storage operations and projects, the planning phase of the Pickering Safstor project, Nuclear Waste Management Organization's siting process activities for the Adaptive Phased Management used fuel disposal program, and continuing activities in support of obtaining a preparation and construction licence for the L&ILW DGR. The plan supports OPG's ongoing commitment to continued engagement with the Saugeen Ojibway Nation toward securing support for the L&ILW DGR, including developing a response to the federal Minister of Environment and Climate Change request for OPG to update its analysis of potential cumulative effects of the project on the Saugeen Ojibway Nation's physical and cultural heritage, taking into account the results of the Saugeen Ojibway Nation Community Process. In recognition of inherent uncertainty in the ultimate impact of the Environmental Assessment decision on the timing of project construction, planned expenditures on the L&ILW DGR project over the 2018-2021 period are ~$400 million lower than in the previous plan. Nuclear provision expenditures are funded from the nuclear segregated funds for decommissioning and long-term management of fuel and waste and from operating cash flow for interim storage operations.

The plan also includes provision expenditures of ~$75 million and ~$85 million over the period to 2021 for decommissioning of the former Nanticoke GS by 2020 and the former Lambton GS by 2021, respectively. Projected decommissioning expenditures for these sites reflect more advanced planning and contract scope details.

Social Licence

As the largest electricity generator in Ontario with diverse operations across the province, OPG holds itself accountable to the public and its employees, and continues to focus on maintaining public trust and building the Company's brand. OPG works to maintain public trust through community engagement, transparency, corporate citizenship initiatives and Indigenous relations. OPG focuses on building and maintaining its social licence through safe, reliable, environmentally-responsible operations that continue to mitigate Ontario's electricity prices, support climate change initiatives and foster diversity and inclusion in the workplace.

Supporting Decarbonisation and Climate Change Goals

OPG is proud of its transition to a low-carbon electricity generation portfolio and is helping the Province meet its climate change and greenhouse gas reduction commitments. With a generating fleet that is 99% emission-free, OPG avoids over 30 million tonnes of greenhouse gas emissions annually in comparison to a fleet of gas generators. To ensure a supply of clean power for generations to come, OPG's operational and organic growth strategies are focused on innovation, technology, and energy and storage development. This includes maintaining the nuclear portion of OPG's generation portfolio, participating in the development of new nuclear technologies, evaluating and implementing plans to increase hydroelectric generation, and investing in other low-carbon technologies. Through investment in these areas, OPG seeks to support Ontario's climate change goals while building momentum for new business opportunities. OPG's business plan supports Ontario's climate change goals through a transportation electrification strategy, participation in Ontario's cap and trade program, organic expansion of the renewable generating fleet and the supply of safe, reliable and clean power to homes, businesses and industry throughout the province.

The goal of OPG's transportation electrification strategy is to position the Company as a leader in the electrification of Ontario's transportation sector. As part of the strategy, OPG is implementing fleet-wide electric vehicle adoption goals and charging station infrastructure across the Company's work locations, and is assessing vehicle-grid integration and hydrogen applications for the transportation sector. This strategy is intended to leverage OPG's clean, reliable and cost-effective electricity to support action on climate change, create growth opportunities for OPG, and enhance OPG's brand and social licence.

OPG has been a participant in Ontario's cap and trade program since it came into effect on January 1, 2017. This market-based program sets an annual cap for greenhouse gas emissions, with targets becoming more stringent over time. Compliance with these requirements does not have a significant financial cost impact on OPG's business plan given OPG's virtually emission-free generating fleet and the contractual arrangements in place for the greenhouse gas emitting assets in OPG's fleet.

Looking ahead, climate change and the extreme weather associated with it could pose strategic risks for OPG. Longer term changes in precipitation patterns and amounts, water temperatures, and ambient air temperatures can impact the availability and quality of water resources for OPG's operations. These changes could potentially affect electricity production at hydroelectric stations, and cooling water efficiency at nuclear and thermal stations. To date, OPG has not experienced significant impacts attributable to climate change or extreme weather, but the Company is assessing the short and long-term risks and identifying climate change adaptation requirements. OPG continues to participate in climate change adaptation initiatives with municipal and regional governments, the Ontario Ministry of the Environment and Climate Change, the Ontario Ministry of Energy, and Natural Resources Canada. OPG is also monitoring developments in climate science, adaptation activities, and potential changes to policy and regulatory requirements.

New guidance is expected shortly for North American listed public companies that will see a stronger emphasis on climate-related disclosures and reporting requirements as part of the financial reporting framework. Given OPG's commitment to climate change mitigation, the Company will position itself to move toward a leadership position in this area and will increase disclosures in regulatory filings during 2018.

Pursuing Clean Energy Business Development Opportunities

Expanding clean generation from the Company's renewable generation fleet is a key focus of OPG's organic business development plans. As detailed in the Operational Excellence and Project Excellence sections, OPG expects to add approximately 170 MW of renewable generation capacity to its fleet over the business plan period, including through construction of a 44 MW solar facility at the former Nanticoke GS site in partnership with the Six Nations of the Grand River and investments in developing, re-developing and upgrading of hydroelectric facilities. OPG will continue to optimize electricity production and seek opportunities to further expand capacity from its province-wide hydroelectric fleet by balancing the economic, environmental, social, and legal requirements associated with the affected watersheds.

OPG sees significant socio-economic and commercial potential in the role that nuclear energy can continue to play in a decarbonizing economy. In addition to making significant investments in OPG's existing nuclear fleet to continue to provide Ontario with cost-effective, carbon-free baseload generation, through refurbishment of Darlington and extension of Pickering operations to 2024, OPG plans to strategically participate in the development of potential innovative and advanced nuclear reactor technologies. As Canada's largest nuclear operator with extensive experience, a strong safety record and a commitment to climate change mitigation, OPG is well positioned to be a pan-Canadian driving force in this area. With respect to OPG's existing nuclear operations, it is expected that the refurbished Darlington station will reduce greenhouse gas emissions by an estimated 297 million tonnes over its life, which is the equivalent of removing two million fossil-fuelled cars per year from Ontario's roads.

In addition to being a mainstay of Ontario's baseload electricity supply, OPG's nuclear operations continue to be a source of important isotopes that serve significant needs in society. From the life-saving Cobalt-60 isotope, which sterilizes medical devices and food, to tritium, which can act as a self-powered light source, these innovative nuclear products help millions of people around the world. Isotope production is an example of a good business opportunity for OPG that validates the Company's social licence and Power with Purpose vision.

Partnering with Indigenous Communities

OPG is committed to continuing to build mutually beneficial working relations with Indigenous communities proximate to the Company's current and future operations. The Company believes and takes pride in establishing and maintaining these relationships through dialogue founded in respect and aimed at preserving openness, transparency and trust. These strong partnerships are vital to maintaining OPG's social licence in the communities and are a source of critical competitive advantage while developing clean, renewable power in the province.

Throughout the planning period, OPG will continue to engage proactively with Indigenous communities, people, businesses and organizations through a number of diverse initiatives. This includes pursuing additional generation-related development partnerships, collaborating on capacity building initiatives and projects, and continuing to conduct community outreach efforts. As part of capacity building, OPG will continue to advance its Indigenous Business Engagement initiative that will increase Indigenous access to procurement opportunities, as well as to expand Indigenous recruitment initiatives aimed at increasing employment opportunities, including in the nuclear generation industry. As a member of the Canadian Council of Aboriginal Businesses, OPG is also working towards a new assessment submission in 2018 under the Council's Progressive Aboriginal Relations certification program, with the goal of achieving a Gold certification.

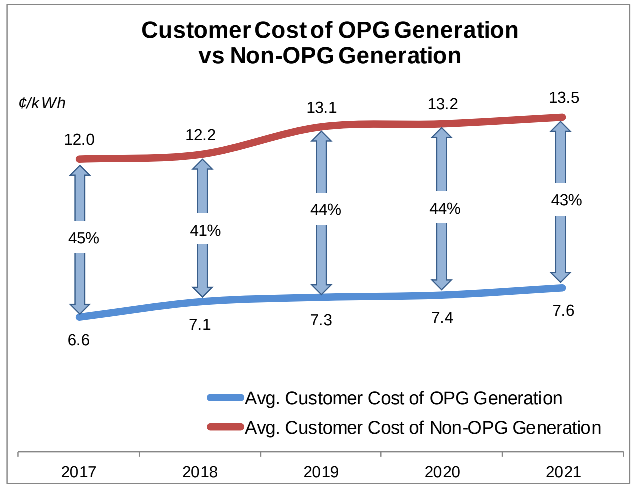
OPG continues its engagement with Indigenous communities regarding the Company's nuclear operations, including collaboration with the Saugeen Ojibway Nation in respect of the proposed L&ILW DGR. OPG has previously committed that the project would not proceed without Saugeen Ojibway Nation's support. OPG is also proactively engaging with Indigenous communities proximate to the Pickering station regarding the station's relicensing and collaborated with the CNSC to ensure access to participant funding in the hearing process.

Expanding the OPG Brand and Creating a Diverse, Progressive Workforce

In support of its strategic direction, OPG continues to expand its branding efforts to reinforce the Company's social licence, increase stakeholder awareness and build a stronger presence amongst the public. Power with Purpose remains the platform for the Company's key outreach and branding initiatives. OPG will continue to use Power with Purpose to emphasize the Company's role as a leader in clean energy generation and innovation, as a cost-effective moderator of electricity prices, and as a driver of economic and community well-being. Additionally, a new "Be the Generation" recruitment campaign to appeal to both prospective and current employees is being developed. Be the Generation aims to present the opportunities to make a difference when working for OPG as a forward-looking company that takes pride in caring about people, the environment, the economy and the future. Likewise, OPG's "Made in Ontario" campaign will continue to capture OPG's efforts to secure a clean energy future for the province.

OPG is focused on building a workforce that is representative of the communities and customers it serves and is committed to provide a diverse and equitable workplace where all employees can realize their full potential with equal access to opportunities. In support of this, OPG has developed a long-term Diversity and Inclusion strategy into 2020, reflected its commitment in the performance contracts of all Company's executives, and strives to hire diverse candidates by reaching out to designated groups and including diversity in succession plans. Leveraging the unique perspectives, talents and experiences of a diverse workforce will enable OPG to grow and compete well into the future.

Moderating Electricity Prices and Contributing to the Economy



The plan reflects the OEB's decision on OPG's 2017-2021 rate application, which, based on OPG's proposed payment amounts order, will result in a consistent annual increase of 0.4% or $0.65 on the typical residential customer's monthly bill during the 2017 to 2021 period. Taking into the account this impact, the average cost to customers of electricity generated by OPG will continue to track approximately 40% below the average of non-OPG cost of electricity in Ontario over the period to 2021.

The forecast trajectory of OPG's average cost reflects nuclear regulated rates under rate smoothing proposed in OPG's payment amounts order submission, as well as a forecast of regulated hydroelectric rates under the OEB-approved incentive regulation formula. The increase in the non-OPG cost of electricity in 2019 reflects the terms of the refurbishment agreement between Bruce Power and IESO, whereby Bruce Power begins to receive a higher price commencing one year before the first unit is scheduled to commence refurbishment in 2020.

The average non-OPG cost of electricity trajectory over the business plan term is higher than OPG's forecast in the previous plan. This is primarily due to an updated OPG forecast of wind and solar electricity system costs based on updated non-OPG renewable generation cost information published by the IESO, and a reduction in the annual Ontario grid demand forecast averaging 2.5 TWh. Lower grid demand decreases the need for gas generation that is used to spread the fixed portion of non-OPG generator costs, thereby increasing the average non-OPG cost.

OPG will continue to make a significant contribution to the Ontario economy and job creation, including through the refurbishment and continued operation of the Darlington station and extending the operating life of the Pickering station to 2024. In addition to continuing to powering one in every five homes in Ontario, the Darlington station's refurbishment and subsequent operation are estimated to boost Ontario's Gross Domestic Product by $90 billion and create and sustain over 14,000 jobs annually over the station's life.

Engaging Electricity Consumers

Customer engagement is a priority for OPG, both because of its social license strategic imperative and because of its largely regulated operations. OPG routinely engages customers and opinion leaders through provincial and host community surveys, community liaison groups, focus groups, and ongoing contact with key industry associations. Engagement topics cover areas of critical importance to OPG's business, including safety, reliability and environmental protection. The OEB increasingly expects regulated utilities' business plans to be shaped by customer engagement. The OEB has confirmed that, although OPG does not have a direct transactional relationship with electricity consumers, it expects OPG's business plans to be informed by customer engagement. OPG has committed to more formally incorporate customer engagement into its business planning process over time and will build on its existing customer engagement activities as it prepares subsequent business plans.

Appendix 1: Key Planning Assumptions

Operational and Project Assumptions

- Refurbishment of Darlington Unit 2 is completed by February 2020, with Unit 3 refurbishment starting immediately after Unit 2 is returned to service and Unit 1 refurbishment starting in 2021. D2O Project is in service in the first half of 2019
- Pickering station operates until 2024. The plan includes additional costs and outage days to enable Pickering operations beyond 2020, in line with the business case approved by the Board
- A station-wide Vacuum Building Outage takes place at Pickering in 2020
- The plan reflects currently approved accounting station service lives for Pickering Units 1 & 4 to 2022, Pickering Units 5-8 to 2024, Darlington to 2052, Bruce Units 1-4 to 2052 and Bruce Units 5-8 to 2061
- Employee termination costs related to the Pickering closure are not included in the plan. Accounting criteria requiring recognition of a liability for these costs are assumed to be met in 2022 at the earliest
- Site preparation and construction licence is received for the proposed L&ILW DGR
- Incremental funding is allocated in the plan for potential initial planning and preparation activities related to the study of new nuclear facilities. The new nuclear Darlington site preparation licence is maintained
- Sir Adam Beck I GS Units 1 & 2 are converted to 60 Hz frequency, with the first unit in service in 2021
- Sir Adam Beck I GS power canal rehabilitation takes place over 2021 and 2022, subject to optimization of major project work sequencing in Renewable Generation
- Ranney Falls GS project is in service in 2019 and Little Long Dam Safety project is completed by 2022
- Nanticoke solar facility is in service in the first quarter of 2019. Former Nanticoke GS and Lambton GS are decommissioned, with demolition and site brownfield completed by 2020 and 2021, respectively
- Thunder Bay GS operates until the end of current biomass energy supply agreement in January 2020
- First Bruce unit refurbishment starts in 2020, as per the Bruce Power refurbishment agreement
- Assumed Ontario grid demand growth rate is approximately 0% on average over the planning period

Financial and Rate Regulation Assumptions

- OEB approves nuclear base rates and rate smoothing deferrals to 2021 as proposed in OPG's January 2018 draft payment amounts order. Hydroelectric base rates increase by 1% in 2019 and by 1.5% in each of 2020 and 2021 under the OEB-approved incentive regulation formula
- OPG's next deferral and variance account application is filed in 2018, with OEB approving clearance of the pension and OPEB cash-to-accrual deferral account as part of the application
- Lakeview site sale takes place in the first quarter of 2018, with a corresponding dividend paid in 2018, in addition to the dividend related to the sale of the 700 University Ave. property. No other dividends are assumed pending review and formalization of a capital allocation policy
- Acquisitions are not included in the plan as opportunities are evaluated as they arise
- Nuclear Fund investments earn 5.15%/yr
- Pension fund investments earn 6%/yr. Accounting discount rates for valuing the benefit obligation for pension and other post-retirement benefits are 3.8% and 3.9%, respectively
- The plan reflects the January 1, 2017 actuarial funding valuation of OPG's registered pension plan as filed with the regulator and assumes a subsequent valuation as of January 1, 2020
- Pending the outcome of 2018 round of bargaining, inflationary impacts on salary costs are assumed post current collective agreements. Ability to utilize PWU Term Employees is assumed to continue
- Both OEFC credit facilities and public debt platform are used for long-term corporate debt purposes. Effective interest rate for new OPG debt over the planning period is 5.0%, on average
- The plan reflects OPG's role as the Financial Services Manager of the Fair Hydro Plan, including consolidation of the Fair Hydro Trust. Effective interest rate for Fair Hydro Trust senior debt over the planning period is 4.25%, on average
- OPG continues to prepare its consolidated financial statements and report its financial results in accordance with US GAAP

APPENDIX 2: KEY RISKS

The key risks associated with the 2018-2021 Business Plan are outlined below.

Operational and Project Risks

- Failure to maintain the Darlington refurbishment cost and schedule commitments per the approved project budget and schedule
- Inability to meet the objectives of the first unit refurbishment, resulting in sub-optimal post-refurbishment performance
- Risk of the Province not concurring with the refurbishment of subsequent Darlington units
- Inability to achieve production targets, including risks associated with unit capability factors, planned nuclear outage performance, nuclear station lifecycle management, and human performance
- Risk of increased operating costs as a result of greater-than-planned deterioration of station components and systems, discovery of unexpected conditions, and/or equipment failures
- Risk of technical challenges in confirming ability to operate Pickering beyond 2020, and/or failure to obtain regulatory assurance from the CNSC in support of the station's continued operations, including inability to renew the operating licence without conditions
- Inability to progress realignment of the Company's cost structure and operating model in line with the OPG25 plan
- Inability to retain and attract leadership talent and qualified management employees during the Darlington refurbishment and continued Pickering operations, and/or inability of management and staff to adapt to OPG's evolving corporate culture and higher level of commercial discipline
- Failure to appropriately staff operational and support groups in critical skill areas given ongoing demographic challenges and strategies aimed at mitigating Pickering closure downsizing impacts

Financial and Rate Regulation Risks

- Risk of unfavourable outcomes of the 2018 round of collective bargaining, which could impact operating costs, Pickering closure employee termination costs and future OEB rate application outcomes
- Risk of requirement to recognize employee termination costs associated with the Pickering end of commercial operations prior to 2022, which would require assurance over the costs' future recovery in order to avoid a significant charge against net income
- Lack of material growth investments and eventual loss of scale leading to increased risk of inability to withstand unplanned events, diminished ability to support de-carbonisation goals and erosion of Shareholder value
- Risk of federal approval process for L&ILW DGR resulting in significant changes to OPG's nuclear waste management strategies and associated financial obligations, impacting net income and future required contributions to the nuclear segregated funds
- Risk of lower than planned returns on nuclear segregated and pension fund assets as a result of market factors, including equity prices, interest rates, inflation and commodity prices, which would lower net income and potentially increase future funding requirements
- Risk of lower discount rates and other changes in assumptions for future pension and OPEB valuations
- Risk of adoption of IFRS for financial reporting purposes due to inability to extend the Ontario Securities Commission exemption that allows OPG to prepare consolidated financial statements under US GAAP. Adoption of IFRS would be expected to cause significant net income volatility compared to US GAAP

APPENDIX 3: Financial and Headcount Plan Information

Key Financial Metrics *(in millions of dollars unless otherwise noted)*	**Actual 2017**	**Business Plan 2018**	**2019**	**2020**	**2021**
Financial Performance Metrics					
Net Income Attributable to Shareholder	860	1,043	1,066	919	1,373
Operating Net Income Attributable to Shareholder	576	795	968	764	1,160
Earnings Before Tax	1,090	1,140	1,239	1,147	1,649
Total Return on Equity*	7.6%	8.1%	7.2%	5.4%	7.1%
Operating Return on Equity*	5.3%	6.8%	7.7%	5.7%	8.1%
Debt Ratio, excl. Fair Hydro Trust****	34%	36%	33%	30%	26%
FFO / Total Debt Ratio, including Fair Hydro Trust Impact *(Minimum threshold of 9%)*	10%	11%	12%	13%	13%
FFO / Total Debt Ratio, excluding Fair Hydro Trust Impact	10%	13%	15%	17%	19%
Debt / EBITDA Ratio, including Fair Hydro Trust Impact (times) *(Maximum threshold of 5.5)*	6.8	6.5	6.2	6.2	6.0
Debt / EBITDA Ratio, excluding Fair Hydro Trust Impact (times)	6.4	5.8	5.1	4.8	4.3
Total Debt at Year-End	6,579	8,757	9,768	10,978	11,777
Net Cash from Operations	944	1,460	2,384	2,067	2,642
Total Return to Shareholder, excluding Fair Hydro Trust Earnings***	1,393	1,391	1,422	1,259	1,667
Cost Performance Metrics					
Nuclear Total Generating Cost** *($/MWh)*	70.9	75.4	68.4	76.8	65.3
Hydroelectric Total Generating Cost** *($/MWh)*	23.9	26.8	25.3	25.0	26.0
Enterprise Total Generating Cost** *($/MWh)*	50.7	54.7	50.6	53.9	48.9
OM&A Expenses from Ongoing Operations	2,819	2,850	2,732	2,807	2,570
Darlington Refurbishment Capital Expenditures	1,249	1,231	1,127	947	1,129
Darlington Refurbishment In-Service Additions	305	24	335	4,698	-
Capital Expenditures excluding Darlington Refurbishment	677	851	731	834	700
In-Service Additions excluding Darlington Refurbishment	968	719	876	527	804
Nuclear Waste and Thermal Decom. Provision Expenditures	313	373	411	435	377

* Calculated using the methodology per OPG's external financial filings

** Total Generating Cost is calculated as: (OM&A expenses from ongoing operations + fuel and Gross Revenue Charge expenses for OPG-operated stations + sustaining capital expenditures)/OPG generation adjusted for surplus baseload generation losses. Sustaining capital expenditures exclude the Little Long Dam Safety project and the Sir Adam Beck 1 GS Water Conveyance System Project. Absent Darlington refurbishment and Pickering VBO, Enterprise TGC would be ~$5/MWh lower on average each year

*** Calculated as: Net Income Attributable to Shareholder + Income Taxes + Gross Revenue Charge + Property Tax PILs

****Excludes Class A Shares and Fair Hydro Trust Senior Debt

Operating Statement - Years Ended December 31	**Actual**			**Business Plan**	
(in millions of dollars)	**2017**	**2018**	**2019**	**2020**	**2021**
Electricity Generation Revenues	4,823	4,975	5,583	5,788	5,404
Fuel and Gross Revenue Charge	689	674	686	654	626
Generation Sales Gross Margin	**4,134**	**4,301**	**4,898**	**5,134**	**4,778**
Net Trading Margin	15	18	18	18	18
Non-Electricity Generation Gross Margin	302	258	249	253	235
Total Gross Margin	4,450	4,577	5,165	5,406	5,032
OM&A Expenses (excl. Cost of Goods Sold)	2,806	2,827	2,773	2,914	2,596
Depreciation and Amortization	679	743	1,139	1,318	950
Accretion on Nuclear Waste and Other Liabilities	960	991	1,023	1,055	1,091
Earnings on Nuclear Funds	(801)	(855)	(892)	(928)	(965)
Earnings from Fair Hydro Trust	(1)	(64)	(131)	(206)	(285)
Property Taxes	40	37	38	38	40
Restructuring	-	-	10	-	-
Total Expenses	3,683	3,679	3,961	4,191	3,426
Income before Interest and Other Income	**768**	**897**	**1,204**	**1,215**	**1,605**
Net Interest Expense	95	78	5	102	(9)
Other (Income)/Expense*	(417)	(320)	(40)	(35)	(35)
Income before Tax	**1,090**	**1,140**	**1,239**	**1,147**	**1,649**
Income Tax	209	79	154	209	255
Net Income	**881**	**1,061**	**1,085**	**938**	**1,394**
Net Income Attributable to Shareholder	**860**	**1,043**	**1,066**	**919**	**1,373**
Net Income Attributable to Non-Controlling Interests	21	18	19	20	21

* Includes $28M and $10M in 2017, $26M and $12M in 2018, $28M and $13M in 2019, $27M and $11M in 2020, $27M and $10M in 2021, representing OPG's share of equity income from its 50 percent ownership interests in the Portlands Energy Centre and the Brighton Beach GS, respectively. In 2017, a pre-tax gain of $378M on the sale of 700 University Ave. property is included. In 2018, a pre-tax gain of $267M on the sale of the Lakeview site is included.

Balance Sheet - As at December 31	Actual	Business Plan			
(in millions of dollars)	2017	2018	2019	2020	2021
Assets					
Current assets					
Cash and cash equivalents	234	273	354	249	301
Short-term investments	188	167	148	130	112
Accounts receivable	515	579	607	546	567
Fuel inventory	309	297	231	218	183
Materials and supplies	103	103	103	103	103
Other current assets	192	192	192	192	192
	1,541	1,612	1,635	1,438	1,458
Property, plant and equipment and intangible assets					
Fixed and intangible assets (net)	21,455	22,774	23,891	24,781	25,741
Other assets					
Financing Receivables	1,179	3,505	6,062	8,874	11,615
Nuclear fixed asset removal and nuclear waste management funds	16,724	17,473	18,233	19,009	19,811
Long-term materials and supplies	355	301	289	276	262
Regulatory assets (net)*	6,637	6,715	6,299	6,200	6,309
Investments subject to significant influence	309	301	291	278	263
Other long-term assets	28	28	28	28	28
	25,231	28,323	31,202	34,666	38,287
Total Assets	**48,228**	**52,709**	**56,727**	**60,884**	**65,486**
Liabilities					
Current liabilities					
Short-term notes payable	260	460	410	485	100
Accounts payable and accrued charges	1,228	1,140	1,092	1,072	1,238
Deferred revenue due within one year	12	-	-	-	-
Current income taxes payable	80	37	83	39	197
Long-term debt due within one year	398	368	663	413	153
	1,978	2,006	2,248	2,008	1,688
Long-term debt	5,921	7,929	8,695	10,080	11,524
Other liabilities					
Fixed asset removal and nuclear waste management liabilities	20,421	21,167	21,921	22,677	23,521
Pension liabilities (non-current)	3,423	3,353	3,275	3,195	3,098
Other post-employment benefit liabilities (non-current)	3,092	3,183	3,275	3,371	3,461
Long-term accounts payable and accrued charges	252	256	238	248	245
Deferred revenue	351	419	410	401	392
Deferred income taxes	879	904	984	1,073	1,149
	28,417	29,282	30,103	30,964	31,867
Equity					
Class A shares	519	1,540	2,664	3,899	5,105
Common shares	5,126	5,126	5,126	5,126	5,126
Retained earnings	6,396	6,957	8,024	8,942	10,316
Accumulated other comprehensive loss	(295)	(292)	(291)	(290)	(290)
Equity attributable to non-controlling interests	165	161	158	154	151
	11,911	13,493	15,681	17,832	20,407
Total Liabilities and Equity	**48,228**	**52,709**	**56,727**	**60,884**	**65,486**

* Includes accrued revenues for new regulated rates for the period from June 1, 2017 to the implementation date of the OEB's decision. The accrued balance is assumed to be collected beginning January 1, 2019 over 3 years.

OM&A Expenses by Business Unit *(in millions of dollars)*	Actual 2017*	Business Plan 2018	2019	2020	2021
Nuclear Operations	1,709	1,736	1,686	1,792	1,554
Renewable Generation	368	394	395	389	404
Other Unregulated Operations	2	2	2	2	2
Total Operations	**2,079**	**2,132**	**2,083**	**2,184**	**1,960**
Chief Administrative Office	171	177	170	169	172
Finance (incl. Chief Information Officer)	255	246	232	231	231
People & Culture	84	79	79	78	78
Corporate Office (inc. Corporate Affairs)	27	25	25	26	26
Total Support Services	**537**	**526**	**506**	**504**	**508**
Total Business Unit Expenditures	**2,616**	**2,658**	**2,590**	**2,688**	**2,468**
Insurance	36	40	42	45	46
Centrally Held Pension and OPEB	95	73	38	5	(15)
Other (incl. Cost of Goods Sold)	73	80	63	69	71
Total Ongoing Operations	**2,819**	**2,850**	**2,732**	**2,807**	**2,570**
OEB Variance and Deferral Account Offsets	(32)	(34)	49	80	14
Darlington Refurbishment Project	36	23	3	38	23
Nuclear New Build**	0	8	10	12	12
Total OM&A Expenses	**2,824**	**2,847**	**2,794**	**2,936**	**2,618**

* Actual 2017 amounts have been restated for 2018 organizational changes

** Includes expenditures budgeted by Support Services

Production *(TWh)*	Actual 2017	Business Plan 2018	2019	2020	2021
Darlington	*19.3*	*19.3*	*19.7*	*17.8*	*16.6*
Pickering	*21.4*	*19.9*	*21.5*	*18.5*	*21.4*
Total Nuclear	40.7	39.2	41.2	36.3	38.0
Regulated Hydroelectric	30.7	30.5	30.4	31.0	29.9
Contracted Generation Portfolio	2.5	2.7	2.9	3.3	3.1
Total Production (Net of SBG Losses)	**73.8**	**72.4**	**74.5**	**70.6**	**71.0**
Regulated Hydroelectric SBG Losses	5.2	2.7	2.7	1.5	1.3
Contracted Plant SBG Losses	0.7	0.6	0.6	0.4	0.5
Total SBG Losses	**5.9**	**3.2**	**3.3**	**1.9**	**1.8**

Headcount by Business Unit**	**Actual 2017***	**Business Plan 2018**	**2019**	**2020**	**2021**
Nuclear	6,176	6,171	6,149	6,119	6,067
Renewable Generation	1,453	1,485	1,487	1,486	1,449
Other Unregulated Operations	6	10	10	10	10
Total Operations	**7,635**	**7,666**	**7,646**	**7,615**	**7,526**
Chief Administrative Office	572	599	575	558	556
Finance (incl. Chief Information Officer)	690	707	685	670	658
People & Culture	399	394	384	376	372
Corporate Office (incl. Corporate Affairs)	58	68	68	68	68
Total Support Services	**1,719**	**1,768**	**1,712**	**1,672**	**1,654**
Total Headcount	**9,354**	**9,434**	**9,358**	**9,287**	**9,180**

* Actual 2017 amounts have been restated for 2018 organizational changes
** Includes Term employees

Provision Expenditures *(in millions of dollars)*	**Actual 2017**	**Business Plan 2018**	**2019**	**2020**	**2021**
Nuclear Decommissioning and Nuclear Waste Management Expenditures					
Nuclear Operations*	276	330	342	347	342
Support Services	14	14	14	14	14
Total Nuclear Provision Expenditures	**290**	**344**	**355**	**361**	**356**
Nanticoke GS Decommissioning	12	13	21	40	-
Lambton GS Decommissioning	11	15	35	22	14
Other	-	0	-	12	7
Total Thermal Decommissioning Expenditures	**23**	**28**	**56**	**74**	**21**
Total Provision Expenditures	**313**	**373**	**411**	**435**	**377**

* Includes expenditures for the Darlington Refurbishment Project nuclear waste containers

Capital Expenditures *(in millions of dollars)*	Actual 2017	Business Plan 2018	2019	2020	2021
Sustaining					
Nuclear	357	384	353	289	244
Regulated Hydroelectric					
Sir Adam Beck Water Conveyance System Project	3	8	7	20	90
Other Projects	118	144	125	122	117
Total Regulated Hydroelectric	121	152	133	142	207
Contracted Generation Portfolio					
Little Long Dam Safety Project	-	6	34	149	98
Other Projects	37	45	30	14	8
Total Contracted Generation Portfolio	37	51	65	163	106
Support Services					
Information Technology Projects	84	60	35	50	26
Other Projects	16	24	20	29	13
Total Support Services	100	84	56	80	40
Total Sustaining Capital	**615**	**672**	**606**	**674**	**597**
Development Projects*					
Darlington Refurbishment Project***	1,249	1,231	1,127	947	1,129
Ranney Falls GS Redevelopment**	25	35	13	0	-
Sir Adam Beck Units 1 & 2 Conversion	1	9	41	37	36
Nanticoke Solar Project**	6	103	0	0	0
Calabogie GS Redevelopment**	2	3	3	61	18
Other Business Development	28	28	69	62	49
Total Development Projects	**1,311**	**1,410**	**1,253**	**1,107**	**1,233**
Total Capital Expenditures	**1,926**	**2,082**	**1,859**	**1,781**	**1,830**

* While in definition phase, projects are budgeted by Corporate Business Development (within Finance) and, while in execution phase, projects are budgeted by Renewable Generaiton and other Support Services organizations

** Includes expenditures budgeted by Renewable Generation and Support Services

*** Includes expenditures budgeted by the Nuclear organization and Support Services

Financing and Liquidity Outlook - Years Ended Dec 31		**Actual**	**Business Plan**			
(in millions of dollars)		**2017**	**2018**	**2019**	**2020**	**2021**
Opening Cash Balance		**186**	**234**	**273**	**354**	**249**
Net Operating Cash Inflows before the following:		**1,723**	**2,227**	**3,070**	**2,646**	**3,113**
Earnings from Fair Hydro Trust (pre-tax)		1	64	131	206	285
Interest Paid (excl. Fair Hydro Trust)		(251)	(261)	(264)	(250)	(230)
Nuclear Funds Contribution		-	-	-	-	-
Pension Fund Contribution		(212)	(215)	(219)	(213)	(217)
OPEB Payments		(110)	(112)	(116)	(121)	(125)
Internally Funded Nuclear Provision Expenditures		(208)	(235)	(219)	(202)	(184)
Net Cash from Operations		**944**	**1,468**	**2,384**	**2,067**	**2,642**
Investing Activities						
Sustaining Capital Expenditures		(615)	(672)	(606)	(674)	(597)
Darlington Refurbishment		(1,249)	(1,231)	(1,127)	(947)	(1,129)
Ranney Falls GS Redevelopment		(25)	(35)	(13)	(0)	-
Sir Adam Beck Units 1 & 2 Conversion		(1)	(9)	(41)	(37)	(36)
Nanticoke Solar		(6)	(103)	(0)	(0)	(0)
Other Development		(30)	(32)	(72)	(123)	(68)
Capital Expenditures		**(1,926)**	**(2,082)**	**(1,859)**	**(1,781)**	**(1,830)**
Pre-tax Proceeds from Sale of 700 University Ave. Property		484	-	-	-	-
Pre-tax Proceeds from Sale of Lakeview Site		-	267	-	-	-
Acquisition of Fair Hydro Trust Assets		(1,179)	(2,326)	(2,557)	(2,812)	(2,741)
Proceeds from Deposit Note (Peter Sutherland Sr. GS)		70	-	-	-	-
Other		73	16	-	-	-
Net Cash Outflow for Investing Activities		**(2,478)**	**(4,125)**	**(4,416)**	**(4,593)**	**(4,571)**
Financing Activities						
General Corporate Debt	- *Debt Issuance/Refinancing*	1,301	1,191	128	365	200
	- *Debt Retirement*	(900)	(395)	(365)	(660)	(185)
Private Placement Debt	- *Debt Issuance/Refinancing*	-	-	-	-	-
	- *Debt Retirement*	(203)	(3)	(3)	(3)	(228)
Fair Hydro Trust Senior Debt	- *Debt Issuance*	601	1,184	1,302	1,432	1,397
Short-Term Notes	- *Net Issuance (Repayment)*	260	200	(50)	75	(385)
Issuance of Class A Shares		519	1,022	1,123	1,235	1,206
Dividends Paid		-	(482)	-	-	-
Distribution Paid to Non-Controlling Interests		(15)	(22)	(22)	(23)	(25)
Capital Contribution from Non-Controlling Interest		19	-	-	-	-
Net Cash from Financing Activities		**1,582**	**2,695**	**2,113**	**2,422**	**1,980**
Net Cash Inflow (Outflow) for Period		**48**	**39**	**81**	**(105)**	**52**
Ending Cash Balance		***234***	***273***	***354***	***249***	***301***
Total OPG Debt		***5,978***	***6,971***	***6,681***	***6,458***	***5,860***
Fair Hydro Trust Senior Debt		***601***	***1,786***	***3,088***	***4,519***	***5,917***
Total Consolidated Debt		***6,579***	***8,757***	***9,768***	***10,978***	***11,777***

APPENDIX 4: NUCLEAR FINANCIAL PLAN AND OPERATIONAL TARGETS

Financial Plan

Nuclear	**Actual**	**Business Plan**			
(in millions of dollars)	**2017**	**2018**	**2019**	**2020**	**2021**
OM&A					
Base*	1,254	1,251	1,276	1,294	1,298
Outage Incremental	314	334	246	336	116
Project Portfolio	123	91	82	82	87
Pickering Extension Enabling Costs	18	59	82	81	54
Darlington Refurbishment Project	36	23	3	38	23
New Nuclear **	0	1	1	1	1
Total Nuclear OM&A	**1,746**	**1,759**	**1,690**	**1,831**	**1,578**
Capital					
Project Portfolio***	357	384	353	289	244
Darlington Refurbishment Project **	1,223	1,203	1,100	921	1,104
Total Nuclear Capital	**1,580**	**1,588**	**1,453**	**1,211**	**1,348**
Nuclear Waste Provision Expenditures	**276**	**331**	**342**	**348**	**343**
Fuel Expense (Pickering and Darlington)	**225**	**226**	**236**	**202**	**201**

* Includes an estimated $4M to $5M per year for work in support of the Renewable Generation business unit

** Excludes expenditures budgeted by Support Services

*** In 2019, includes $16M related to the load of new fuel bundles into the refurbished Darlington Unit 2

Operational Targets

The key 2018-2020 targets for the Nuclear business unit are set out below. These targets reflect the operating environment of the nuclear fleet, including refurbishment activities at the Darlington station.

			Pickering				**Darlington**			
Metric	**NPI Max**	**Industry Best Quartile**	**Actual 2017**	**2018 Annual Target**	**2019 Annual Target**	**2020 Annual Target**	**Actual 2017**	**2018 Annual Target**	**2019 Annual Target**	**2020 Annual Target**
All Injury Rate (#/200k hrs worked)[1]	N/A	0.64	0.06	0.22	0.19	0.19	0.40	0.22	0.19	0.19
Collective Radiation Exposure (person-rem/unit)	80.00	45.33	74.36	110.30	83.40	126.10	93.56	79.80	80.00	79.00
Unit Capability Factor (%)	92.0	89.41	80.00	74.6	80.5	69.2	85.17	86.0	87.8	79.3
Forced Loss Rate (%)	1.00	1.49	5.18	3.50	3.50	3.50	1.72	1.00	1.00	4.28
On-line Corrective Maintenance Backlog (work orders/unit)	N/A	4	25	20	12	4	13	7	4	4
WANO NPI (Index)	N/A	96.9	76.7	75.5	76.7	75.5	82.0	91.3	91.7	88.1
Human Performance Error Rate (# per 200k ISAR and contractor hrs)	N/A	0.02	0.12	0.06	0.06	0.06	0.05	0.06	0.06	0.06
Total Generating Cost per MWh[2]	N/A	$38.77	66.01	73.17	64.93	76.08	49.93	51.66	53.91	50.13

[1] All Injury Rate (AIR) has been replaced in 2018 with the Total Reportable Injury Frequency (TRIF). TRIF includes restricted work injuries which is expected to be minimal and as a result there is no change in targets set for AIR.

[2] Consistent with industry definition, metrics exclude centrally-held Pension and OPEB costs, asset service fees, and used fuel expenses. Targets may change subject to allocations and assumptions being finalized. Darlington metrics have been normalized for generation forgone during refurbishment. The non-normalized Darlington actual TGC for 2017 is $71.78/MWh, and the target for 2018 is $70.26/MWh, 2019 is $67.04/MWh, and 2020 is $74.26/MWh.

Financial Plan

Renewable Generation *(in millions of dollars)*	Actual 2017	Business Plan 2018	2019	2020	2021
OM&A					
Regulated Hydroelectric	193	184	183	188	190
Contracted Generation	109	114	115	104	106
Other*	11	6	8	8	8
Total Base OM&A	**313**	**305**	**306**	**300**	**304**
Regulated Hydroelectric	42	71	77	73	90
Contracted Generation	14	18	12	15	10
Total Project OM&A	**56**	**89**	**89**	**89**	**99**
Regulated Hydroelectric	235	255	260	261	279
Contracted Generation	122	133	127	120	116
Other	11	6	8	8	8
Total Renewable Generation OM&A	**368**	**394**	**395**	**389**	**404**
Capital					
Little Long Dam Safety Project	-	6	34	149	98
Sir Adam Beck Water Conveyance System Project	3	8	7	20	90
Other Sustaining	155	185	156	136	125
Total Sustaining Capital	**158**	**199**	**197**	**305**	**313**
Nanticoke Solar	0	103	0	-	-
Ranney Falls GS Redevelopment	24	35	13	0	-
Sir Adam Beck Units 1 & 2 Conversion	0	9	41	37	36
Other Development	36	5	-	-	-
Total Development Capital	**61**	**152**	**54**	**38**	**36**
Total Renewable Generation Capital	**219**	**351**	**251**	**343**	**349**
Total Thermal Decommissioning Expenditures	**23**	**28**	**56**	**74**	**21**
Hydroelectric Gross Revenue Charge and Thermal Fuel Expense					
Regulated Hydroelectric (net of SBG losses)**	320	326	325	330	315
Contracted Generation Portfolio	54	54	52	55	56
Total Hydroelectric Gross Revenue Charge and Thermal Fuel Expense	**374**	**380**	**378**	**385**	**370**

*Includes an estimated $4M per year, in 2018-2021, for work in support of the Nuclear Organization

** Regulated hydroelectric GRC expenses assuming no SBG losses are: $320M in 2017, $360M in 2018, $359M in 2019, $349M in 2020, $331M in 2021.

Operational Targets

The key 2018-2021 Renewable Generation targets designed to drive continuous performance are set out below.

Renewable Generation	Actual	Business Plan			
	2017	2018	2019	2020	2021
All Injury Rate* *(#/200k hrs worked)*	2.05	1.23	1.06	1.03	1.03
Environment *(#)*					
Category C Spills	3	8	8	8	8
Environmental Infractions	1	7	6	6	6
Capacity *(MW)*	9,928	9,925	9,999	9,851	9,911
Regulated Hydroelectric	6,426	6,412	6,437	6,443	6,502
Contracted Generation (Hydro, Thermal and Solar)	3,500	3,512	3,560	3,407	3,407
Wind	1.8	1.8	1.8	1.8	1.8
Hydroelectric Availability *(%)*	**86.5%**	**87.3%**	**87.4%**	**88.0%**	**85.6%**
Regulated Hydroelectric	88.3%	89.2%	89.7%	89.4%	84.7%
Contracted Generation	74.9%	75.1%	72.5%	78.7%	91.6%
Hydroelectric Equivalent Forced Outage Rate *(%)*	**3.1%**	**2.0%**	**1.8%**	**1.7%**	**1.7%**
Regulated Hydroelectric	3.0%	1.7%	1.7%	1.7%	1.7%
Contracted Generation	3.9%	3.8%	2.1%	1.5%	1.4%
Thermal Equivalent Forced Outage Rate (Operating) *(%)*	2.4%	5.1%	5.1%	5.1%	5.1%
Total Hydroelectric Generating Cost per MWh** *($/MWh)*	23.9	26.8	25.3	25.0	26.0

* All Injury Rate (AIR) has been replaced in 2018 with the Total Reportable Injury Frequency (TRIF). TRIF includes restricted work injuries which is expected to be minimal and as a result there is no change in targets set for AIR.

Key Enterprise Level Initiatives

Core Initiatives

- **OPG25**: The initiative is intended to address the cost structure implications of Pickering closure through the design and implementation of an optimal, cost effective organization for OPG. The initiative also seeks enterprise wide efficiency improvements and cost saving opportunities that will improve corporate profitability, support a culture of continuous improvement, and assist OPG in achieving industry-leading generation cost targets.
- **Darlington for the Future:** The initiative is closely integrated with the OPG25 initiative and seeks operational excellence to ensure industry-leading performance at Darlington post refurbishment. The initiative focusses on consistent achievement of nuclear generation production targets.
- **Equity Optimization**: The initiative is aimed at making balanced decisions going forward between the use of capital for growth investments and the payment of dividends to gradually transition the overall corporate equity thickness from existing ~65% level toward the OEB deemed level of 45%.
- **Building our Business**: OPG's strives to be a leader in the North American transition toward a low carbon future. This initiative focusses on maintaining and enhancing OPG's scale and energy industry leadership across carbon-friendly generation technologies, including potential extensions to OPG's business, investments in commercial innovation and asset acquisitions.

Enabling Initiatives

- **One OPG Culture:** The initiative aims to foster cultural shifts where employees work together at all levels to achieve a greater sense of ownership, in an environment where information flows more freely. The cultural shift will facilitate building a diverse, well-trained, healthy, and engaged workforce committed to the long-term success of the Company and will drive greater alignment of leaders across the organization to achieve desired performance outcomes and behaviours.
- **Resourcing Strategy:** The initiative includes building a "One Company" approach to hiring by delivering a seamless end-to-end experience for new hires, redesigning existing business processes for talent resourcing, and continuing to enhance the updated leadership model to promote empowerment and personal leadership amongst employees.
- **Project Management Centre of Excellence:** The initiative promotes OPG's goal of being the best in the power industry at delivering all projects safely, with high quality, on time and on budget. With OPG continuing to invest significantly in projects over the next decade, the initiative aims to improve consistency of project outcomes through a common, scalable project delivery model, corporate-wide project management standards and services, and development of project management capability.
- **Digital Strategy:** The initiative seeks to enable OPG to achieve productivity improvements and capitalize on business optimization opportunities through technology investments. The initiative's goals include: increasing worker mobility, enhancing collaboration through people-share and networks, increasing automation to improve efficiency, and leveraging digital innovation to increase equipment reliability and reduce operating costs.
- **Regulatory Effectiveness:** The initiative seeks to continue to build more constructive, transparent, flexible and responsive relationships with the OEB and stakeholders, to improve OPG's culture as a regulated entity and deepen the understanding of the regulatory process across the Company, and to improve regulatory process efficiency by exploring opportunities to simplify the rate application process.
- **Relationships and Outreach:** The initiative focuses on developing and implementing an integrated stakeholder program and stakeholder engagement plans with a view to reinforcing OPG's social licence and strengthening the overall OPG brand, both externally and internally. The initiative recognizes the critical importance of respectful, trust-based relationships with communities, employees, stakeholders, regulators and Indigenous Peoples to OPG's social licence and overall success.

Key Business Unit Initiatives

Nuclear

- **Equipment Reliability:** The initiative aims to improve equipment reliability, improve efficiency of the maintenance program and reduce equipment failures to meet forced loss rate targets. A key driver in driving improved equipment reliability and station performance will be the implementation of the Monitoring and Diagnostic Centre. The collection and analysis of data will facilitate early detection of major/critical equipment degradation with the objective of reducing unplanned maintenance.
- **Outage Planning and Execution:** The initiative focuses on delivering predictable outage performance through improved planning and execution of outage work to meet planned outage duration targets.
- **Project Planning and Execution:** The initiative will drive effort in three key areas in order to improve project planning and execution and optimize investment decisions: Nuclear Project Management Office commitment to front end planning and Engineering Project Controls; stakeholder engagement in setting out the proper scope and clear expectations; and support for integrated asset management.
- **Innovation and Technology:** The initiative focuses on improvements in inspection tooling capability that will help to further operational efficiencies in order to meet outage schedules and generation requirements and reduce radiation exposure.
- **Strategic Asset Management:** The initiative focuses on early identification of project requirements and developing an optimized, integrated investment strategy through improved asset options, standard processes and increased oversight.

Renewable Generation

- **Asset Value Enhancement:** The initiative targets adding 170 MW of incremental renewable generation capacity by 2021, including through the Ranney Falls GS and Nanticoke solar facility projects, frequency conversion of Sir Adam Beck I GS Units 1 & 2, and the runner upgrade program.
- **Innovation and Technology:** The initiative pursues innovation and technology-based improvements in asset management and equipment maintenance strategies. This includes leveraging the Monitoring and Diagnostic Centre concept to facilitate a move from preventative to condition-based maintenance and inform asset management decisions, and implementing digital work management to improve work flow efficiency and provide real-time updates on completed tasks.
- **Efficiency Improvement:** The initiative includes continuing to implement regionalization initiatives, control room consolidation, and work management and organizational realignment efficiencies across the fleet. It also includes developing contract management plans to ensure achievement of contract return on equity levels, as well as an assessment of Thunder Bay GS extension options.
- **Safety Performance Improvement:** The initiative involves a broad-based safety improvement plan that targets significant improvements in the Renewable Generation safety management system, including strengthening proactive reporting, enhancing linkage of embedded health and safety advisors with local senior management, internally and externally benchmarking safety best practices, and fostering a culture of personal leadership in safety.

Corporate Support Services

- **Real Estate Security and Flexibility**: Chief Administrative Office (CAO) will negotiate a lease extension of 5 years at the General Motors building to support Darlington Refurbishment. CAO will also seek the flexibility to release OPG from existing lease obligations prior to the end of term.
- **Supply Chain Efficiencies:** CAO will continue to drive efficiencies through value improvement and inventory optimization, and will leverage the new Nuclear asset management tool across Supply Chain.
- **Generation Support Strategies**: Chief Information Office will support key business initiatives to improve the Company's generation facilities in such areas as the Monitoring and Diagnostic Centre, capital asset lifecycle portfolio management, equipment reliability improvement, field productivity and data integration and visualization.
- **Innovative Financial Strategies**: Finance will leverage the public debt program to provide financial

flexibility and optimize capital structure, facilitate growth through technology innovation and organic development, and pursue achievement of long-term target returns on the pension and nuclear segregated funds. Finance will also implement the Fair Hydro Trust to achieve targeted returns.

- **Talent, Succession, Training and Development**: People & Culture will lead processes and programs to ensure talent attraction, enable succession planning, foster a diverse and inclusive workforce, deliver high quality and cost effective training, build project management capabilities, and promote career development.
- **Brand Awareness:** Corporate Affairs will leverage strategic communications, earned and social media, advertising sponsorships and new Made in Ontario corporate reputation campaign to increase awareness of OPG’s role in clean air/climate change, support of electrical vehicles and biodiversity initiatives. Engagement and awareness of OPG’s site community support and the benefits of the Company’s citizenship activities and Indigenous partnerships will also be strengthened.