

# TREASURY BOARD / MANAGEMENT BOARD OF CABINET REQUEST ASSESSMENT NOTE



|                                                  |                                                 |
|--------------------------------------------------|-------------------------------------------------|
| <b>Ministry:</b>                                 | Energy                                          |
| <b>Meeting Date:</b>                             | April 10, 2018                                  |
| <b>Agenda Class:</b>                             | Discussion (In Camera)                          |
| <b>Last reviewed by:</b><br>TB/MBC (May 9, 2017) | <b>Tracking to:</b><br>Cabinet (April 18, 2018) |

**SUBMISSION TITLE:** 2018-2021 Business Plan for Ontario Power Generation

## I. DECISION BEFORE THE BOARD

- Receive Ontario Power Generation's (OPG) 2018-2021 Business Plan

## II. RECOMMENDATIONS:

- |                                                                           |         |
|---------------------------------------------------------------------------|---------|
| Receive the 2018-2021 business plan for Ontario Power Generation          | Receive |
| Note Minister of Energy will provide concurrence with OPG's Business Plan | Note    |

## III. FINANCIAL SUMMARY

| \$ Millions                                   | 2018-19 | 2019-20 | 2020-21 |
|-----------------------------------------------|---------|---------|---------|
| Initiative cost requested                     | 0.0     | 0.0     | 0.0     |
| Initiative cost recommended                   | 0.0     | 0.0     | 0.0     |
| Recommended program base                      | 0.0     | 0.0     | 0.0     |
| Offset Recommended (Specify Ministry/Program) | 0.0     | 0.0     | 0.0     |
| Total Fiscal Impact                           | 0.0     | 0.0     | 0.0     |

## IV. KEY COMMENTS AND CONSIDERATIONS

As stipulated as part of the 2013-14 Results-based Planning process, the Ministry of Energy is submitting OPG's annual business plans for review by Treasury Board to facilitate incorporating implications into the Province's fiscal plan.

It is under the responsibility of the Minister of Energy on whether or not to provide the Minister's concurrence of OPG's annual multi-year business plan. The Treasury Board submission provides the Minister of Energy with an opportunity to highlight why concurrence is being given and any conditions placed on it. Appendix C provides more information on the concurrence process and the 2013-14 minute.

Under the memorandum of agreement (MOA, July 2015) between the Province (as sole shareholder and the Ministry of Energy as representative of the shareholder) and OPG, the company is required to annually submit its board-approved multi-year business plan to the Minister of Energy for concurrence. The concurrence letter from the Minister to the company will note key elements of the business plan, how these elements relate to the policy direction and priorities of the Province, and the government's expectation for the performance of the company including indicating any elements of the business plan the government does not concur.

In February 2018, OPG submitted its Board approved 2018-2021 Business Plan to the Ministry.

Ontario's Fair Hydro Plan (OFHP) is reflected in OPG's latest Business Plan. The Ministry notes the following OFHP implications for OPG:

- As part of supporting the financing and administration of the global adjustment refinancing, OPG's Special Purpose Vehicle (OPG Trust) uses 100 per cent debt financing to purchase the right to future cash flows from IESO. The OPG Trust raises 51% of required funding directly from capital markets while OPG provides 49% of the financing requirements. The latter is financed by OPG raising up to 5% from capital markets, with the remaining 44-49% equity injection [and/or debt financing] from the Province (Estimates provides for a Ministry of Energy operating asset to make the equity injection).
  - o Provincial borrowing for an equity injection is be offset by an increase in an investment asset in OPG, the Province's net debt position would remain unchanged.
  - o Changes are expected to be fiscally neutral as they result in an increase in Provincial interest on debt, offset by increases in OPG net income.

The Ministry of Energy indicates it is supportive of the fiscal, financial and operational strategies laid out in the business plan, and that the Minister of Energy intends to provide concurrence.

Financial figures from the OPG Business Plan are included and supplemented with more recent forecast adjustments from the Ontario Financing Authority, MOF, for more recent OPG in-year forecast updates, and for estimated OFHP implications, as part of Province's finalized fiscal plan for the 2018 Budget.

The earnings before tax (net income and income tax payments in lieu – PILs) of OPG are consolidated on the Province's financial statements and have a one-for-one impact on the Province's surplus/deficit position, excluding adjustments that the Province make upon consolidation of OPG's financials (e.g., unrealized gains or losses in the nuclear funds). OPG is expected to submit its next multi-year business plan later this year for the period starting January 1, 2019.

### **Overview of Current Business Plan**

OPG's 2018-21 Business Plan details key company undertakings such as business transformation and nuclear refurbishment that will have a substantial electricity system benefit, ratepayer and shareholder impacts. These items were flagged in the previous year's multi-year business plan as well.

- Key Income Statement Forecasts (*Confirmation pending from Ontario Financing Authority*):
  - 2018 Budget projections were based on the figures in the OPG Board approved 2018-2021 Business Plan, with adjustments made by OFA/MOF, and show an increase in earnings before tax of \$528M in 2018 (includes gain on sale of 700 University Ave and an estimate of the sale of Lakeview), \$4M in 2019, \$307M in 2020, above projections in the previous 2017-2019 OPG Business Plan (last year's plan). These figures exclude earnings before taxes from Fair Hydro Plan.

OPG continues to forecast net income attributable to the Shareholder (excluding Fair Hydro Trust) to reach \$1B in 2021, from \$463M in 2016. Net income is forecast to grow from \$860M in 2017 to \$1,373M 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.

- The Trust is forecast to contribute over \$500M in net income over the planning period, reflecting the spread earned on the equity contributions from the Province to

fund 44% of OPG's financing of the Trust).

Although net income is projected to grow, return-on-equity (ROE) is estimated to decrease from 7.6% in 2017 to 7.1% by 2021 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).

These estimates are highly dependent on electricity and financial market conditions, regulatory decisions by the Ontario Energy Board (OEB), potential changes to accounting standards or the basis of consolidation in Public Accounts, operational performance, and/or government policy, which can change materially.

- Key Operational Metrics:

- Annual Operations, Maintenance & Administration (OM&A) expenses from ongoing operations over the planning period 2018-2021 is targeting reductions of about \$600M compared to last year's plan.
- The cost of OPG generated electricity to customers is projected to remain ~45% below the average non-OPG cost of electricity to 2018, and over ~43% by 2021. Note: OPG provides predominantly, lower-cost baseload generating capability, rather than more expensive peaking generating capability.
- Headcount Efficiencies – Headcount has fallen from 11,686 in 2010 to a forecasted 9,434 in 2018.

Actual year-end 2017 headcount was about 590 lower than expected in the previous plan. This trend continues over the 2018-2021 planning period as forecast headcount is lower by about 410 employees, on average, in each year.

OPG's plan reflects the addition of about 300 Term Employees, a new category of non-regular staff negotiated with the Power Workers' Union (PWU) through collective bargaining in 2015. OPG intends to add fewer regular staff in circumstances where they are likely to be laid off as a result of the end of Pickering commercial operations.

- Key Projects:

- The plan assumes ongoing operations at Pickering for about four years beyond 2020, and, as approved by Cabinet, the execution of the Darlington refurbishment consistent with an approved budget of \$12.8 billion is now under way.
  - (OPG indicates it is approaching the midpoint in the schedule for refurbishment of Unit 2 and the project is tracking on time and on budget. First unit refurbishment, Unit 2, began in October 2016 and is assumed to be returned to service in February 2020, with the second unit refurbishment, Unit 3, commencing immediately thereafter and the third unit refurbishment starting in July 2021, assuming necessary concurrence from the Province is obtained (The Province recently agreed with OPG's assessment on Unit 2 progress and is not exercising and "off ramp" before Unit 3).
- Total capital expenditures planned for the Darlington refurbishment, sustaining investments in existing assets, and organic development project \$7.5B over the 2018-2021 planning period, this represents an increase of about \$570M compared to the previous plan.

- Rate Application to the OEB (Update from previous OPG Business Plan):

- The OEB decision on revenue requirements was released December 28, 2017. OPG filed its reply to a draft Payment Amounts Order on February 5, 2018 and includes a rate smoothing proposal that aims to make smoother customer bills as, for example,

refurbished nuclear units at Darlington are brought back into production, triggering recovery of refurbishment costs from ratepayers.

- Final revenues for OPG are still to be finalized (OEB decision expected in the first half of 2018)
- OPG indicates the OEB decision disallowed a variety of revenue requirement items, and that it has taken proactive steps to mitigate a large portion of disallowances.

#### *Key Risks:*

Capital project completion – Led by Darlington Refurbishment, the plan includes extensive capital spending. Failure to meet project timelines and budgets reduces income due to lower production revenues and higher costs.

- OPG improved its project management planning in recent years.
- In the 2017-21 regulated payments Decision, the OEB stated it was satisfied with OPG's planning approach to Darlington and approved all project costs.
- OPG executive compensation is tied to milestone achievement on Darlington Refurbishment, and completion of other capital projects such as Ranney Falls and Nanticoke Solar.

Efficiency Improvements – The plan forecasts higher production and lower costs due to efficiency improvements. Targets may not be achieved if these measures do not materialize as planned.

- Investments at Pickering contribute to efficiency targets. Some efficiency strategies have already been implemented.
- OPG is implementing its "OPG25" strategy aimed at preparing the organization for a post Pickering / post Refurbishment future where company operations and support functions are sized appropriately. Implementing strategies on staffing plans, use of non regular staff and use of "term" employees will help achieve efficiencies targeted in the plan and mitigate future staff downsizing costs associated with Pickering closure in the future.

Collective Bargaining – Many of OPG's strategies to reduce OM&A costs are dependent on successful outcomes of 2018 collective bargaining with PWU and Society.

- OPG hopes to build on successful 2015 agreement where it made progress on managing staff costs, reduced pension liability and introduced the use of term employees that carry reduced pension and severance obligations. .
- The Minister of Energy wrote to OPG in March 2018 signalling support for continued progress in managing costs through collective bargaining.

Pickering License Extension – The plan assumes the federal government will approve the extension of the Pickering Station's license without conditions in summer 2018. Production revenues and costs will be impacted if Pickering cannot operate beyond 2020.

- OPG has met filing requirements for the Pickering license extension.
- In its rate application, OEB approved costs for OPG to move forward with enabling work on Pickering.
- In March 2018 CNSC staff recommended a 10-year license extension.

Attracting talent & leadership – Inability to retain and attract leadership talent and qualified management employees could impact the execution of Darlington refurbishment, Pickering operations and other priorities.

- OPG plans to strengthen its leadership pipeline and increase diversity through the recruitment / selection process, and employee and leadership development programs.
- OPG's executive compensation program allow OPG to benchmark against private sector and international comparators, helping it to attract and retain executive talent

Performance risks: OPG's financial performance could be subjected to nuclear reliability issues such as

unplanned outages and financial market risk on the performance of the nuclear funds, for which the Province consolidates on a realized [gains or losses] basis.

Accounting risks: A change in the basis of accounting used for consolidation of OPG results from U.S. GAAP to International Financial Reporting Standards (IFRS) on the Province's financial statements is expected to result in potentially significant fiscal impacts.

- OPG cites a risk of not extending Ontario Securities Commission exemption that Allows OPG to prepare consolidated financial statements under U.S. GAAP. Adoption of IFRS expected to cause significant net income volatility compared to U.S. GAAP.

Financing Costs: Higher cost public capital market borrowing (vs the Province's borrowing cost for OEFC to lend to OPG) would have a negative fiscal impact.

|                           |                                                             |                      |        |
|---------------------------|-------------------------------------------------------------|----------------------|--------|
| <b>Name of analyst:</b>   | James Strang                                                | <b>Phone number:</b> | 7-2071 |
| <b>Date:</b>              | April 3, 2018                                               | <b>Log number:</b>   |        |
| <b>Branch / Division:</b> | General Government, Planning and Resources Branch, PEM, TBS |                      |        |

## **APPENDIX A: PROPOSED MINUTE**

Note receipt of Ontario Power Generation's 2018-2021 Business Plan.

In this regard,

- i) Note the Minister of Energy will provide Ontario Power Generation (OPG) with a concurrence letter for its Business Plan.
- ii) Direct the Ministry, in consultation with the Ministry of Finance / Ontario Financing Authority, to report back to the Board in early January each year with the approved or latest draft business plans for Ontario Power Generation for fiscal planning purposes.

**FINANCIAL IMPACTS: CHANGES TO EXPENSE AND REVENUE**
**TABLE B1**  
*Appropriations*  
*Basis*

| <b>\$ Millions</b>                             |      | <b>Fiscal Plan Basis</b> |                |                | <b>2014-15</b> |
|------------------------------------------------|------|--------------------------|----------------|----------------|----------------|
|                                                |      | <b>2014-15</b>           | <b>2015-16</b> | <b>2016-17</b> |                |
| Initiative cost recommended                    |      | 0.0000                   | 0.0000         | 0.0000         |                |
| <i>Expense changes:</i>                        |      |                          |                |                |                |
| Operating item                                 | Oper | 0.0000                   | 0.0000         | 0.0000         | 0.0000         |
| Capital item                                   | Cap  | 0.0000                   | 0.0000         | 0.0000         | 00000          |
| <i>Revenue changes:</i>                        |      |                          |                |                |                |
| Revenue increase/offset                        |      | 0.0000                   | 0.0000         | 0.0000         |                |
| Revenue decrease                               |      | 0.0000                   | 0.0000         | 0.0000         |                |
| <b>Total Fiscal Impact (draw from c-funds)</b> |      | <b>0.0000</b>            | <b>0.0000</b>  | <b>0.0000</b>  | <b>0.0000</b>  |



## APPENDIX C: CONCURRENCE OVERVIEW

Under agreements between the Province (as sole shareholder) and OPG, the company is required to annually submit its multi-year business plan to the Minister of Energy for concurrence. Review of the business plan by Treasury Board prior to concurrence was stipulated as part of the 2013-14 Results-based Planning process (see below).

Concurrence is typically provided to OPG via a letter from the Minister of Energy. The letter will note key elements of the business plan, how these elements relate to the policy direction and priorities of the Province, and the government's expectation for the performance of the company. The letter may also indicate any elements of the business plan of which the government does not concur and/or provide additional guidance on expectations going forward.

The current submission looks at the multi-year business plan for OPG covering 2016-2018. Concurrence with the plan is still pending.

Below is the 2013-14 Results-based Plan Minute:

Directed the Ministry of Energy and its agencies, Ontario Power Generation Inc. and Hydro One Inc., in consultation with the Ontario Financing Authority, to report back:

- o Annually each autumn with the respective multi-year business plans of the agencies as approved by the Boards of the companies, for review by Treasury Board/Management Board of Cabinet.
  - In this regard, the report should include the following, on a calendar and government fiscal year basis:
  - Multi-year financial and operational targets, including net income and earnings-before-tax.
  - Projected revenues and cash flows to the Province, including the Ontario Electricity Financial Corporation.
  - Planned financings from the Ontario Electricity Financial Corporation.
- o Quarterly with financial projection updates and progress reports on the agencies' respective business plan targets and any other new developments, initiatives or risks that may have a material fiscal impact on the Province including variance analysis of last quarter and year-to-date against the annual business plan reviewed by Treasury Board/Management Board of Cabinet.



## APPENDIX D: SUMMARY OF KEY HIGHLIGHTS FROM OPG BUSINESS PLAN

### Financials

The 2018-2021 Plan forecasts total net income attributable to the Shareholder to reach \$1.37B in 2021, from \$860M in 2017.

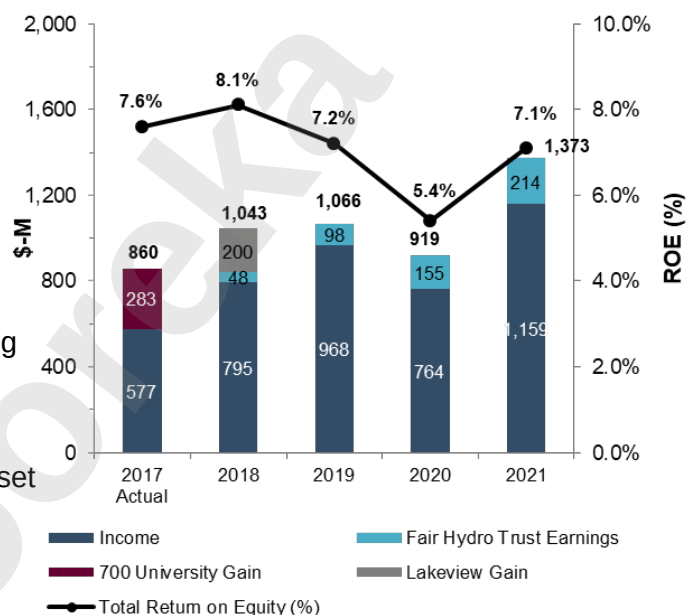
The plan reflects the OEB's December 2017 Decision on OPG's regulated rates through 2021, providing stability in the planning period.

The chart on the right shows Total Return on Equity (ROE). OPG also reports Operating ROE, which excludes impact of Fair Hydro Trust and one-time real estate gains. Operating ROE, a performance metric for executive compensation, is forecasted to increase from 5.3% in 2017 to 8.1% in 2021

Should OPG fail to meet targets for production, operating cost reductions or capital expenditures, net income improvements may not materialize.

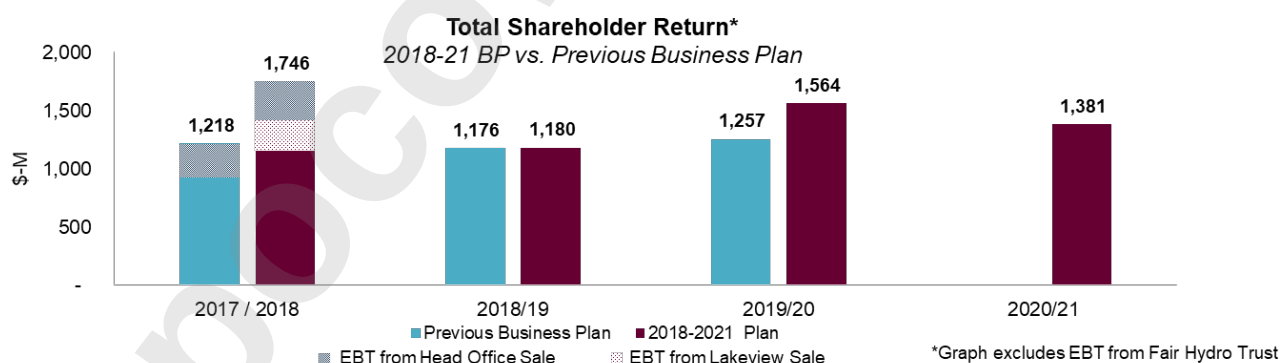
Total net income in 2017/18 is impacted by one-time asset sales (Head Office and Lakeview), with net proceeds credited to the Trillium Trust.

### Net Income and Total Return on Equity



Above graph is on Dec.31 year-end

OPG reports on Total ROE and Operating ROE. Operating ROE removes impact of FHP, and Head Office & Lakeview sales.



The plan's total shareholder return (See graphic above) is higher than last year's 2017-19 business plan.

The financial performance reflects increased efficiency leading to revenue increases from higher production and lower operating costs. Head Office and Lakeview sales lead to higher than normal return in 2017/18:

- Head Office sale generates \$283M in net income and approximately \$93M in PILS. The return is about \$80M higher than assumed in previous business plan.

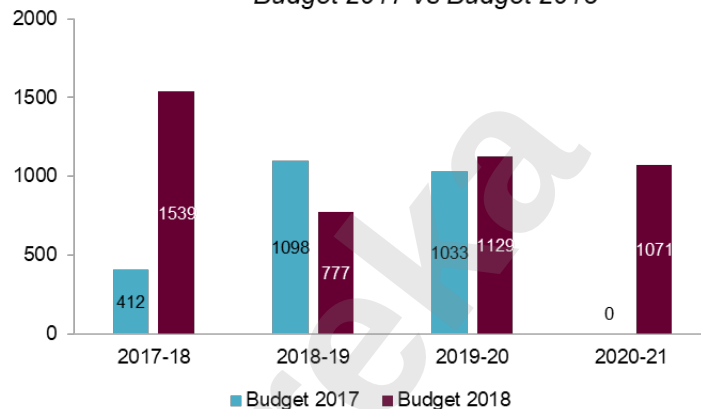
- Lakeview sale generates \$200 million in net income and about \$70M in PILS. The Lakeview sale was not included in the previous business plan.

The 2018 Ontario Budget reflects the impacts of OPG's 2018-2021 Business Plan.

When OPG's planning projections and financial results are consolidated into the Province's Budget and Public Accounts, some adjustments are required

- **IFRS:** OPG uses US GAAP accounting standards for financial reporting. The Province consolidates OPG's results adjusted to an International Financial Reporting Standards (IFRS) basis.
- **Nuclear Funds:** For the operating statement for Public Accounts, an adjustment is made to a realised gains basis, vs a fair value basis on OPG's statements.
- **Fair Hydro Income:** While OPG separates out this income in its Business Plan, OPG's Financial Services Manager revenue is added to OPG net income when consolidated.

**Total OPG Revenues to the Province**  
Budget 2017 vs Budget 2018



2017/18 positive variance due to:

- \$646M for real estate sales included as OPG revenue in Budget 2018. In Budget 2017, projected OPG real estate revenues were included in the Sales and Rentals line.
- Positive ONFA Adjustments included in Budget 2018 not in Budget 2017
- Lower IFRS adjustment in Budget 2018 than Budget 2017

2018/19 negative variance due to:

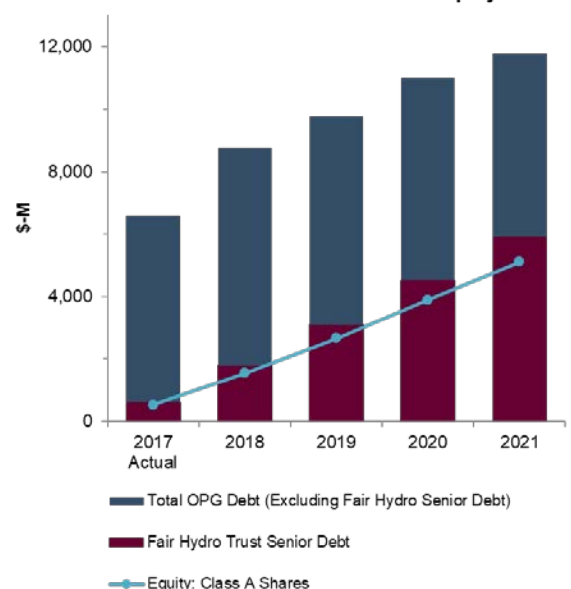
- Negative IFRS adjustment included in Budget 2018

### Ontario Fair Hydro Plan (OFHP)

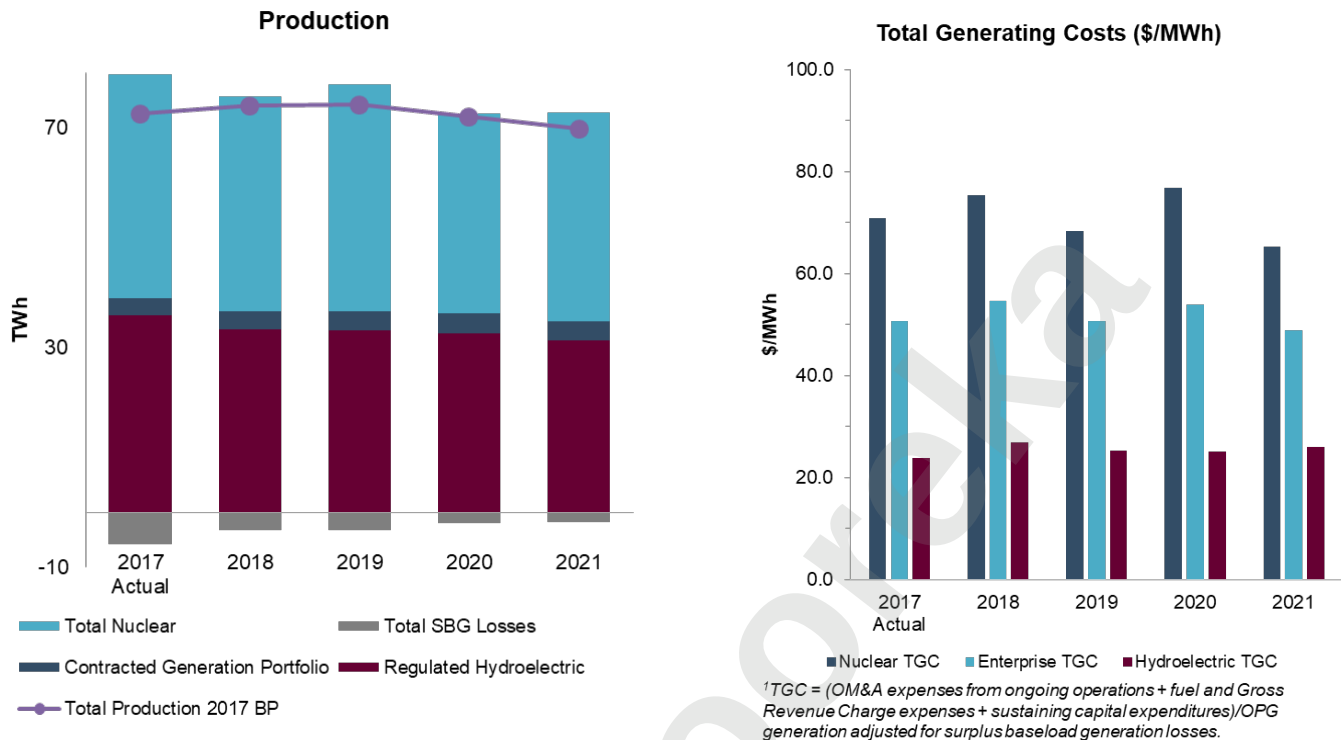
FHP is managing the deferral of a portion of Global Adjustment (GA) costs. OPG earns revenue and incurs debt; Provincial equity in OPG approximately doubles by 2021. While a new source of revenue for OPG, revenue is paid by Ontario ratepayers.

- In 2017, OPG began its role as OFHP Financial Services Manager (FSM).
- The Fair Hydro Trust contributes to increasing amounts of earnings before taxes, growing from \$10M in 2018 to \$225M in 2021 on a fiscal basis.
- This reflects the spread earned on the equity contributions from the Province to fund 44% of OPG's financing of the Trust.
- As the Province provides more funding to facilitate asset purchases in exchange for shares in the company, the government's equity increases, lowering ROE.
- The Fair Hydro Trust external senior debt is projected to increase to \$5.9B by 2021.

**Total Consolidated Debt and Equity<sup>1</sup>**



## Electricity Production and Total Cost of Generation



Production increases improve financial performance through increased revenue.

The 2018-2021 plan forecasts a total increase of 5.4 TWh compared to the last business plan.

Increases are driven by higher production at Pickering Generating Station.

- OPG will increase time between routine outages, allowing units to run longer.
- Other reliability improvements reduce Pickering's 'forced loss rate'- (i.e., losses from unplanned shutdowns.)

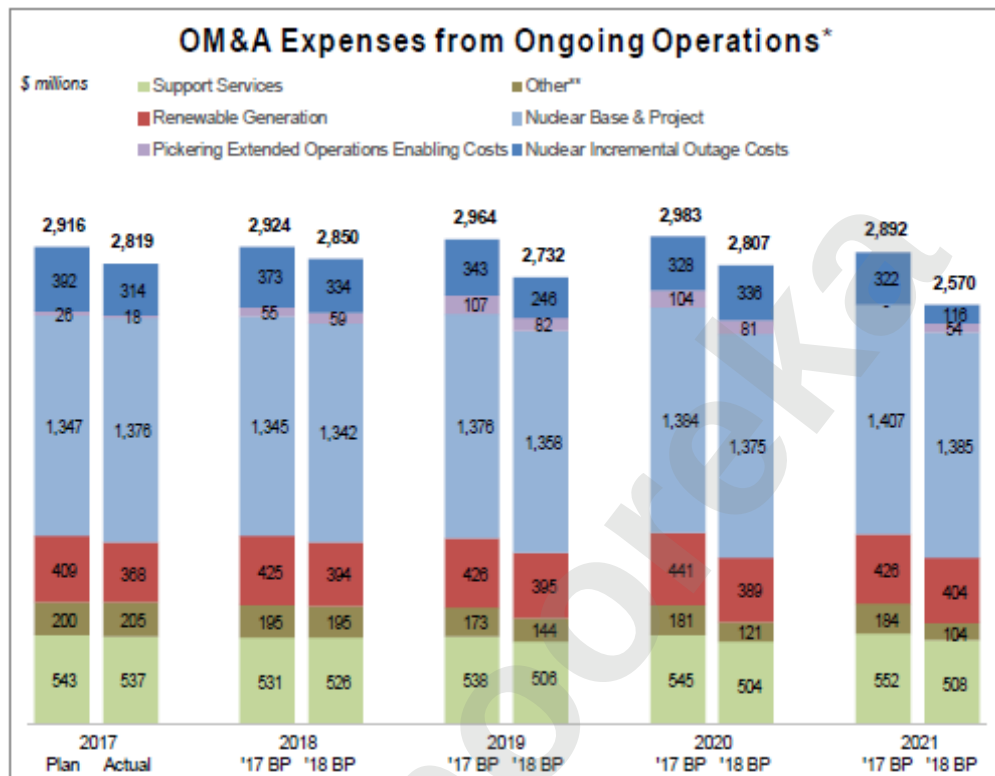
The forecasts assume Canadian Nuclear Safety Commission (CNSC) (federal regulator of nuclear power and materials in Canada) will grant Pickering license extension to 2024.

Production decreases in 2020 due to heavier cyclical outage work, including a station-wide outage at Pickering. This is also when Darlington Unit 2 returns to service and Unit 3 is taken offline (higher than normal forced loss rates assumed when units initially return to service).

The current Thunder Bay biomass energy supply agreement expires in January 2020.

Total generating cost forecasts fluctuate due to outages, water conditions and efficiency initiatives. Pickering's cost performance expected to improve relative to previous plan.

## Operations, Maintenance and Administration (OM&A) Expenses



\* Excludes Darlington refurbishment OM&A expenses and all OEB variance and deferral account offsets

\*\* Includes centrally held pension / OPEB costs, insurance and other corporate level costs

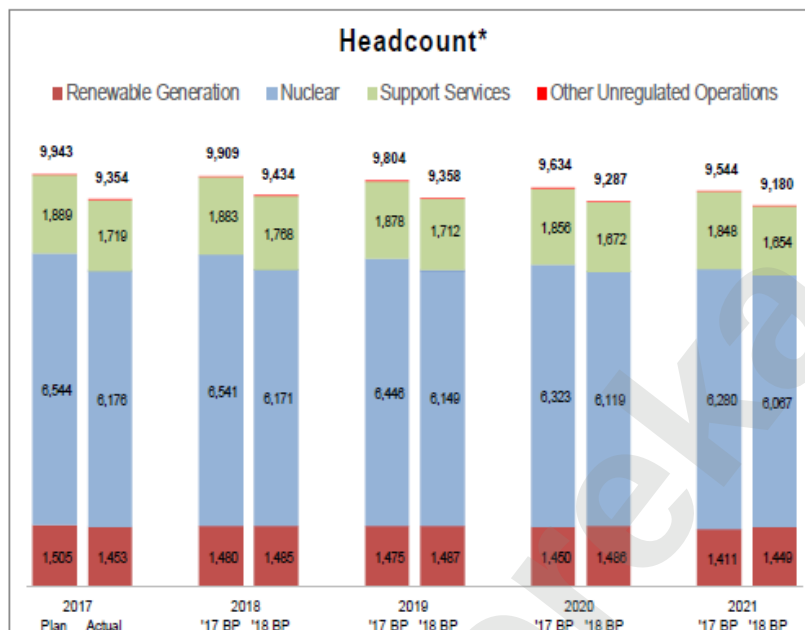
The plan targets a total decrease in OM&A expenditures of \$600 million over four years compared to last year's business plan. Annual spending decreases by \$280 million in 2021 compared to 2018.

The reductions will be achieved through new processes, technology upgrades and optimizing nuclear plant outages.

### OPG25 Initiative

- OPG25 is a plan to restructure OPG due to the closure of Pickering in 2024.
- The objective of OPG25 is to ensure operations remain cost-effective and that OPG is positioned for growth.
- The long-term target for the plan is having Darlington operate in the top-quartile for total generating costs.
- The initiative includes a staffing transition work stream, making interaction with unions critical.
- The 2018-21 business plan's cost reductions will help move OPG towards achieving the total target reductions post Pickering operations.

## Headcount



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

OPG indicates significant staffing reductions across the organization compared to the previous plan, supporting efforts to realign the corporate cost structure and drive productivity improvement and operational efficiencies. These efforts support the OPG25 initiative to ensure cost effectiveness of post-Pickering operations, and help to mitigate downsizing costs related to the Pickering closure.

Actual year-end 2017 headcount was about 590 lower than expected in the previous plan. This trend continues over the 2018-2021 period as forecast headcount is lower by about 410 employees, on average, in each year.

## Compensation

Collective agreements expire in 2018. Results of collective bargaining will impact efficiency and cost-optimization initiatives.

Collective bargaining impacts OPG's ability to reduce OM&A. Most employees belong to either the Power Workers Union (PWU) or Society of Energy Professionals (Society).

Collective agreements with Society & PWU expire in 2018. Negotiated outcomes will impact OPG's ability to meet the plan's savings forecasts. Through collective bargaining, OPG hopes to:

- Manage wage increases
- Reduce future workforce costs including pension and benefits
- Ensure future staff capability
- Reduce downsizing costs resulting from Pickering closure

The plan identifies an accounting risk related to Pickering downsizing costs materializing prior to the next OEB rate application. This would affect net income in the year the costs were recognized.

## Executive Compensation

Executive compensation program implemented in January 2017 that is focused performance based pay.

- The program is designed to provide compensation that is no more than the 50<sup>th</sup> percentile of the market and is compliant with the Broader Public Sector Executive Compensation Act.

- In 2017, TB/MBC approved exemptions allowing OPG to compare against private sector and international companies.
- Overall compensation for all management group staff increases at 2% based on assumed inflation each year in the plan.
- Short-term incentives are based on individual performance and the corporate scorecard. Strong performance on the scorecard led to increases in executive incentive payments in 2017.

OPG exceeded many of the measures in its Corporate Scorecard, impacting incentive payments.

- Scorecard is based on a predetermined scale of Threshold/Business Plan/Stretch targets (i.e., low/medium/high) and given a weighting. The scorecard is summarized below.

| Category                    | Performance Measure                                                                                              | Threshold Target (0.5)     | Business Plan Target (1.0) | Stretch Target (1.5)       | 2017 Results                | Score (0 to 1.5) |
|-----------------------------|------------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------------|------------------|
| Social Licence              | All Injury rate (AIR)                                                                                            | 0.49                       | 0.37                       | 0.31                       | 0.48                        | 0.54             |
|                             | Addressing Safety Focus Areas                                                                                    | CEO assessed target        |                            |                            | 1.5                         | 1.46             |
|                             | No significant impacts to OPG's reputation                                                                       |                            |                            |                            |                             |                  |
| Financial Strength          | Earnings Before Taxes, (\$M)                                                                                     | 675                        | 875                        | 1075                       | 1296                        | 1.50             |
|                             | OM&A Expenses (\$M)                                                                                              | 2675                       | 2550                       | 2425                       | 2474                        | 1.30             |
| Operational Excellence      | Production (TWh)                                                                                                 | 70.3                       | 72.4                       | 74.6                       | 78.1                        | 1.50             |
| Project Excellence          | Refurbishment Project Cost – 2017 actual expenditures (\$M) as a percentage of approved 2017 budget <sup>1</sup> | 100%                       | 97.50%                     | 95%                        | 120%                        | 0.00             |
|                             | Refurbishment Unit 2 Critical Path Execution – Commencement of Feeder cabinet removal (Milestone)                | 05-Aug-17                  | 26-Jul-17                  | 28-Jun-17                  | 22-Jun-17                   | 1.50             |
|                             | Refurbishment Unit 2 Critical Path Execution: Progress of Critical path on Dec 31, 2017                          | All Bellows Severed        | 50% End Fitting Removed    | 400 Pressure Tubes Removed | 45% of End Fittings Removed | 0.95             |
|                             | Pump Generating Station: In service                                                                              | 06-01-2017                 | 04-01-2017                 | 03-01-2017                 | 02-04-2017                  | 1.50             |
|                             | Peter Sutherland Generating Station: Both Units in service                                                       | 10-19-2017                 | 06-30-2017                 | 04-30-2017                 | 03-31-2017                  | 1.50             |
|                             | Total In-service Capital -                                                                                       | \$578 (+/- 10% to +/- 15%) | \$578 (+/- 3% to +/- 10%)  | \$578 (to +/- 3%)          | \$625 (+8%)                 | 1.00             |
| <b>Total Weighted Score</b> |                                                                                                                  |                            |                            |                            |                             | <b>1.19</b>      |

1. 2017 expenditures higher than budget due to change in schedule. Overall refurbishment remains on budget.
2. Table is part of OPG's Annual Information Form found here [https://www.opg.com/about/finance/Documents/OPG\\_2017\\_AIF.pdf](https://www.opg.com/about/finance/Documents/OPG_2017_AIF.pdf)

Exceeded Stretch Target  
Exceeded BP Target  
Below BP Target  
Below Threshold

## Projects and Capital Expenditures

The plan includes \$4.4 billion in capital expenditures for the Darlington Refurbishment project (DRP). Unit 2 is planned for return to service in early 2020.

The plan includes \$105 million in capital expenditures for the Heavy Water Storage(D2O) project, an enabling sub-project for the DRP that previously experienced delays and cost overruns (note: overall refurbishment has remained within budget and schedule).

In its rate decision, OEB confirmed it will take a holistic view to assessing DRP costs, evaluating overall project performance against approved budget rather than an individual sub-project basis.

Other capital expenditures include:

- Ranney Falls re-development (2019 completion)
- Nanticoke Solar (2019 completion)
- Beck canal rehabilitation (2022 completion)
- Other sustaining capital (Hydro unit overhauls; equipment upgrades)

The plan accelerates capital expenditures for OPG's digital transformation in support of improved efficiency.

## Total Capital Expenditures

