BRIEFING NOTE
ONTARIO POWER GENERATION (OPG) PAYMENT AMOUNTS 2017-2021

ISSUE: On December 28, 2017, the Ontario Energy Board (OEB) released its Decision on OPG 2017-2021 payment amounts for its nuclear and regulated hydroelectric facilities.

- OPG is reviewing the Decision in detail and will calculate new rates and bill impacts consistent with the OEB's decision.
- OPG must file the draft payment amounts with the OEB by January 17, 2018.

HIGHLIGHTS

- **Effective Date:** The effective date for all payment amounts is June 1, 2017. OPG requested an effective date of January 1, 2017.
- **Operations, Maintenance and Administration (OM&A)** for nuclear reduced by $100 million per year due largely to compensation costs that benchmark higher than comparators. The reduction is not targeted towards a specific group and, thus, impacts both executives and unionized employees.
- **Darlington Capital Additions:** Approval of OPG's requested $4.8 billion of in-service amounts associated with the Unit 2 refurbishment along with $377 million of other in-service additions for Darlington Refurbishment Project (DRP) within the five-year test period (June 1, 2017 to December 31, 2021).
- **Capital Additions (non-DRP):** Reduction of $33 million in rate base additions for two projects due to anticipated productivity improvements and excessive costs.
- **Debt-to-equity ratio:** Rejected OPG's proposal of a 51% debt to 49% equity ratio. Equity level will remain at the current 45%.
- **Pickering Extension:** Approval of OPG's proposal to spend $292 million from 2017-2020 to pursue technical assessments related to extending operation of Pickering beyond 2020.
- **Nuclear production:** Approved OPG's nuclear production forecast.

PAYMENTS AND BILL IMPACT

- OPG is required to file a draft payment amounts order that reflects the OEB's findings by January 17, 2018.
- The final implementation date will be subject to the completion of the payment amount order process that includes an opportunity for intervenors to comment on OPG's draft payment amounts.
- The rate smoothing methodology will be determined as part of the payment amount order process. Note that OEB has approved the Rate Smoothing Deferral Account to record the difference between (i) the total annual nuclear revenue requirement approved by the OEB, and (ii) an smoothed amount until completion of the DRP (the deferral period)

- Ministry staff will engage with OPG on estimates for payment amounts and bill impacts.
- Residential consumers, small businesses and farms eligible for Ontario's Fair Hydro Plan (OFHP) will not be impacted by the Decision in the short term, as OFHP includes a commitment to hold bill increases to the rate of inflation for four years.
    - The Decision impacts the forecasted debt levels under OFHP. Specifically, the Decision is favourable to OFHP-eligible consumers compared to 2017 Long Term Energy Plan (LTEP) assumptions, and is expected to put downward pressure on OFHP debt.
- Electricity prices will increase for Class A and non-RPP Class B consumers as a result of the Decision. Since the Decision is favourable to these consumers relative to 2017 LTEP assumptions, it is expected to put slight downward pressure on industrial electricity prices in the period from 2018-2021 compared to the 2017 LTEP outlook.

FISCAL IMPACT

- Reductions in OPG's revenue requirement impacts the company's net income. There may be impacts to the fiscal plan as OPG's net income is consolidated as revenue to the Province. The 2017 Budget assumed net income as:

	2017/18	2018/19	2019/20
OPG Net Income[1] (Millions)	97	732	625

- The fiscal impact cannot be estimated at this time. OPG will be recalculating their revised net income projection to include the changes identified in the OEB's Decision and Order.
- The Ministry will continue to work with OPG to understand the fiscal impact of the Decision.

DECISION DETAILS

- There are several items that staff have identified that may have substantial impacts on OPG's revenue requirement.

Effective Date

- The OEB changed the effective date of all payment amounts to June 1, 2017. OPG had requested an effective date of January 1, 2017.
- OPG previously flagged a later effective date as a significant risk. OPG estimates the impact of a later effective date is a loss of ~$50 million to $60 million in net income per month.

[1] Provided by Ontario Financing Authority

- OEB's rationale for the later effective date was the complexity of the submission and that OPG filed significant updates after its initial submission in May 2016.

OPG is able to recover the shortfall in payment amounts from June 1 2017 to the implementation date. The implementation date will be March 1, April 1 or May 1 2018. *OM&A*

- The OEB is disallowing $100 million per year. Disallowances were recommended to the nuclear Base and Corporate OM&A, as well as compensation across the OM&A budget.

Table 1: Nuclear Operating costs (Source: Exh F2-1-1 Table 1)

OPG Proposed OM&A and OEB disallowances ($-Million)	**2017**	**2018**	**2019**	**2020**	**2021**
Base OM&A	1,210.6	1,226.0	1,248.5	1,264.7	1,276.3
Project OM&A	113.7	109.1	100.1	100.2	86.8
Outage OM&A	394.6	393.8	415.3	394.4	308.5
Corporate Costs	448.9	437.2	442.7	445	454.1
Centrally Held Costs	80.2	118.2	108.3	91.1	81.3
Asset Service Fee	27.9	27.9	28.3	22.9	20.7
Darlington OM&A	42.7	15	4.7	49.7	21
Total OM&A	**2,318.6**	**2,327.1**	**2,347.9**	**2,368.0**	**2,248.7**

$25 million Disallowance: Due to past under spending on non-labour costs

$45 million *Disallowance: Due largely to Executive and Corporate Services benchmarking higher than comparators*

$30 million *Disallowance: Due to compensation benchmarking higher than comparators. Reduction is to total OM&A, not one area.*

- Base OM&A: Reduction of $25 million per year based on historical underspending. Base OM&A includes costs for normal operations of the nuclear stations. While labour is the largest driver of Base OM&A this disallowance is for non-labour items including combined overtime, augmented staff and purchased services.
- Corporate OM&A: Reduction of $45 million per year driven largely by Executive and Corporate costs benchmarking higher than comparators. Corporate includes a number of support functions such as Executive and Corporate services, IT, Human Resources and Finance.
- Compensation: Reduction of $30 million per year due to direct compensation, pension and benefit costs benchmarking higher than comparators. The disallowance is applied across OPG's total OM&A budget, not to a specific group. The combined reduction of $75 million in compensation and corporate costs addresses any overlap between categories i.e., compensation, pensions and benefits also part of disallowance in corporate costs.

- The OEB requires a higher productivity stretch factor (0.6% compared to OPG's proposed 0.3%) applied to base, outage, project and corporate OM&A. A stretch factor is applied to the revenue requirement as part of the rate setting process to assume a certain level of productivity.
- More details on OM&A and compensation are in Appendix 1.

Nuclear Benchmarking

- As part of the rate application, OPG benchmarks itself annually against other North American nuclear operators on 20 measures related to safety and performance.[2]
- The OEB found OPG's benchmarking performance to be below expectations, often ranking near the bottom relative to comparators. The OEB also found that OPG's performance is not improving and that it failed to meet performance targets.
- The benchmarking performance was one of the factors in OEB's decision to reduce OM&A.

Debt to Equity Ratio

- OEB rejected OPG's proposal to change its debt/equity ratio from 55:45 to 51:49
- OPG's proposed 49% equity thickness reflected a material increase in business and financial risk associated with the nuclear business making up a larger share of OPG's revenue requirement.
- The OEB rejected this argument because the MWh generated by nuclear during the test period will not increase, meaning the relative contributions of revenue from nuclear will not increase relative to hydroelectric.
- The OEB also rejected the increase because O.Reg 53/05 allows OPG to recover unexpected and unforeseen costs.

Mid-Term Review

- The OEB denied OPG's proposal for a mid-term nuclear production review.
- The midterm application would have sought an update of the nuclear production forecast and related nuclear fuel expense for the period July 1, 2019 to December 31, 2021 and disposal of 2018 year-end deferral and variance account balances.
- The OEB denied the request because the Custom IR rate-setting process only allows for re-assessment of rates in exceptional circumstances.

NEXT STEPS

- **January 17, 2018:** OPG to file a draft payment amounts order, including a smoothing proposal that reflects the OEB's findings in its Decision.
- **January 26, 2018:** Intervenors and OEB staff to file comments on OPG's draft payment amounts order.
- **February 5, 2018:** OPG files a response to any intervenor comments on the draft payment amounts order.

[2] The benchmarking studies for the rate application differ from the benchmarking OPG prepares under the *Broader Public Sector Executive Compensation Act, 2014.* For example, the rate application benchmarking for Corporate Costs compares business units (e.g., HR, Finance) whereas OPG's Executive Compensation framework makes comparison for specific roles (e.g., CEO, VP's). OPG's executive compensation benchmarking also used a broader peer group than the study used in the rate application.

- **March 1, or April 1 or May 1, 2018:** New rates implemented

Appendix 1- OM&A Costs

Nuclear Operations, Maintenance and Administration (OM&A) are a major driver of OPG's revenue requirement, averaging approximately $2.3 billion per year. OM&A costs include:

Table 2: Nuclear Operating costs (Source: Exh F2-1-1 Table 1)

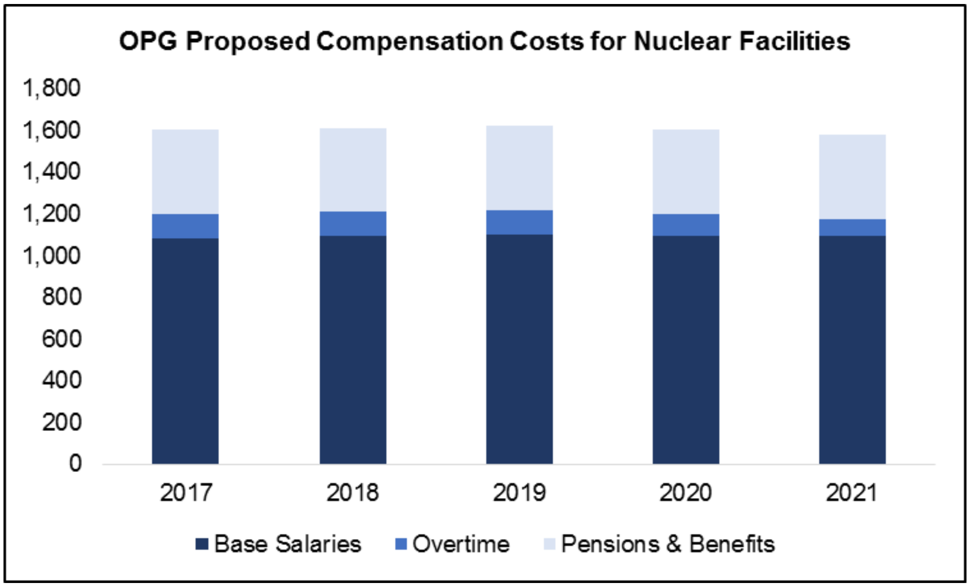
OPG Proposed OM&A with descriptions	2017	2018	2019	2020	2021
Nuclear Operations OM&A The largest OM&A cost, incurred for the normal operations of nuclear stations. Further divided into base, project and outage OM&A.					
Base OM&A Day to day nuclear operations. Includes labour, overtime, augmented staff, materials, licenses and other purchased services.	1,210.6	1,226	1,248.5	1,264.7	1,276.3
Project OM&A Covers temporary, unique endeavours undertaken outside the routine base activities	113.7	109.1	100.1	100.2	86.8
Outage OM&A Incremental labour, services and materials required to complete OPG's planned outages,	394.6	393.8	415.3	394.4	308.5
Total Nuclear Operations OM&A	**1,718.9**	**1,728.9**	**1,763.9**	**1,759.3**	**1,671.6**
Corporate Costs Provides support to the nuclear business. E.g., Executive and Corporate Services, IT, HR, Finance, Supply Chain Management.	**448.9**	**437.2**	**442.7**	**445**	**454.1**
Centrally Held Costs Include pension and OPEB related costs (costs other than current service costs), insurance, performance incentives.	**80.2**	**118.2**	**108.3**	**91.1**	**81.3**
Asset Service Fee Depreciation expense, certain operating costs, property taxes for certain assets (e.g., buildings and IT).	**27.9**	**27.9**	**28.3**	**22.9**	**20.7**
Darlington OM&A Costs directly attributable to Darlington Refurbishment and any costs associated with pursuing new nuclear station at Darlington.	**42.7**	**15**	**4.7**	**49.7**	**21**
Total OM&A	**2,318.6**	**2,327.2**	**2,347.9**	**2,368.0**	**2,248.7**

Compensation

- OPG's total compensation costs represent a significant expense for the company, approaching nearly 50 percent of the requested revenue requirement in 2017.
- There is no "line item" for compensation in OPG's application; rather, compensation costs are incorporated into other areas such as OM&A costs (e.g., base, project, Darlington, Corporate).

- At the end of 2015, almost 80 percent of OPG's regular employees worked directly in or in support of OPG's nuclear facilities.

- Compensation includes wages, overtime, pensions and other benefits.



- OPG's nuclear workforce is approximately 90% unionized. Unionized workers are represented by either the Society of Energy Professionals ("Society") or the Power Workers Union (PWU). Some employees are part of the Electrical Power Systems Construction Association (EPSCA)
- Wages, pensions and benefits all have to be collectively bargained for OPG's unionized employees.