TAB 3
TREASURY BOARD / MANAGEMENT BOARD OF CABINET
REQUEST ASSESSMENT NOTE

Ministry:	Energy
Meeting Date:	May 9, 2017
Agenda Class:	Discussion (In Camera)
Last reviewed by: TB/MBC March 24, 2015	**Tracking to: Fast Track** Cabinet (May 10, 2017)

SUBMISSION TITLE:	2017-2019 Business Plan for Ontario Power Generation

I. DECISION BEFORE THE BOARD

- Receive Ontario Power Generation's (OPG) 2017-2019 Business Plan

II. RECOMMENDATIONS:

• Receive the 2016-2018 business plan for Ontario Power Generation	*Receive*
• Note Minister of Energy will provide concurrence with OPG's Business Plan	*Note*
• Approval giving special status to OPG under Section 5.3 of the MBC Travel, Meal and Hospitality Expenses Directive, giving it the authority to approve international travel for its employees.	*tbd*

III. FINANCIAL SUMMARY

$ Millions	**2014-15**	**2015-16**	**2016-17**
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 November 2016, OPG submitted its Board approved 2017-2019 Business Plan to the Ministry.

Ontario's Fair Hydro Plan (OFHP) is not 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 smoothing mechanism, OPG would develop a Special Purpose Vehicle (OPG Trust) which would use 100 per cent debt financing to purchase the right to future cash flows from IESO. It is proposed that the OPG Trust would raise 51% of required funding directly from capital markets while OPG would provide 49% of the financing requirements. The latter would be financed by OPG raising a targeted 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 an equity injection).
    - Provincial borrowing for an equity injection would be offset by an increase in an investment asset in OPG, so the Province's net debt position would remain unchanged.
    - These changes are expected to be fiscally neutral as they would result in an increase in Provincial interest on debt, offset by increases in OPG net income.

The Ministry of Energy indicates it is generally supportive of the fiscal, financial and operational strategies laid out in the business plan while noting also that OFHP is not reflected in the current business plan.

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 2017 Budget. Also identified are risks related to the Auditor General recommendation that Ontario include Hydro One and OPG financial information in the consolidated financial statements using the International Financial Reporting System (IFRS) reporting framework as required by PSAB standards.

Commented [BA1]: Also added MoF changes for IFRS risk

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, 2018.

Overview of Current Business Plan

OPG's 2017-19 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:
    - 2017 Budget projections were based on the figures in the OPG Board approved 2017-2019 Business Plan, with adjustments made by OFA/MOF, and show a decrease in earnings before tax of $291M in 2016-17 and $556M in 2017-18 compared to the 2016 Budget projections [with $75M and $400M of the declines in 2016-17 and 2017-18 due to IFRS-related consolidation risks], primarily due to estimated impact of nuclear asset retirement obligations-related IFRS risks, followed by an increase of $12M in 2018-19 versus the estimates in the 2016 Budget. The 2019-20 decrease also largely reflects an

Commented [JK2]: Still being checked.

IFRS-related consolidation risk of $200M) as described above.

OPG is forecasting net income attributable to the Shareholder to reach $1B in 2021, from $463M in 2016. Net income in 2017 is forecast to increase as a result of new regulated rates, a gain on sale of OPG's head office, higher capitalized interest for the Darlington Refurbishment expenditures partially offset by reduced production as a result of planned outages at Sir Adam Beck I and DeCew II hydro stations

Net income in 2018 and 2019, before OFA and MOF adjustments, is projected to increase, primarily due to higher production, and earnings from oncoming stations including Nanticoke solar in 2019. Return-on-equity (ROE) is estimated to increase from 4.2% in 2016 to 7.3% by 2021.

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.

Also, in early January 2017, subsequent to the OPG Board's approval of the 2017-2019 Business Plan, OPG reached an agreement with KingSett Canadian Real Estate Income Fund LP for the purchase of OPG's head office property. The net gain is estimated to be $285M and will be distributed to the Trillium Trust.

Commented [JK3]: There is a delta in the latest information used for the fiscal plan.

The first table in Appendix E shows the OPG 2017-19 Business Plan fiscal impact changes to the Province's Budget 2016 fiscal plan.

- Key Operational Metrics:
  - Annual Operations, Maintenance & Administration (OM&A) expenses from ongoing operations are expected to stay consistent over the plan period, averaging $2.9B per year.
  - The cost of OPG generated electricity to customers is projected to remain ~40% below the average non-OPG cost of electricity to 2018, and over ~30% 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 9,009 in 2016 while GWh per headcount has increased from 7.6 to 9.3.

    OPG continues ramping up recruitment in 2017 to fill key vacancies in certain areas (particularly in the nuclear business unit) due to high levels of attrition, as well as continued Pickering operations beyond 2020. OPG is forecasting regular headcount to show a net increase of ~300 by the end of 2017 before gradually decreasing to 4% lower than 2017 levels in 2021.

    OPG has hired ~95 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 (including assumed inflation escalation and interest), is now under way. 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 commencing immediately thereafter and the third unit refurbishment

starting in July 2021, assuming necessary concurrence from the Province is obtained.

  - Sustaining capital expenditures average $570M per year include nuclear expenditures unrelated to Darlington refurbishment and costs for continued operation of Pickering (e.g., upgrades at Sir Adam Beck and upgrades to DeCew II, and investments in current and emerging generation technologies including solar and energy storage including construction and operation of the Nanticoke solar facility).

- Rate Application to the OEB:
  - OPG's 2017-19 Business Plan is dependent on the outcome of its rate filing with the OEB for the five-year period from 2017-2021, submitted in [month] 2016. Oral hearings began February 2017, decision expected in Q3 2017.
    - OPG 2017-2019 BP assumes new rates effective January 1, 2017. The OEB setting a later effective date would negatively impact OPG's 2017-18 fiscal year net income by ~$50-60M per month of delay.
  - On March 2, 2017 the Province filed an amendment to O.Reg.53/05, which enables OPG to smooth its rates based on OPG's total bill impact, rather than on the basis of nuclear rates only.
  - On March 8, 2017 OPG filed a revised rate smoothing proposal with the OEB, which is expected to decrease the average annual impact on the monthly customer bill for an average consumption of 750 KWh/month from about $1.05 to 65 cents per month per year

- OPG Request – Special Stats for OPG to Approve International Travel (Appendix F provides more information):
  - OPG has placed a request with the Ministry for authority to approve international travel for its employees. OPG has asked that this application be included with its BP submission to TB/MBC.
    - Section 5.3 of the Management Board of Cabinet's Travel, Meal and Hospitality Expenses Directive allows agencies/organizations, for which international travel may be integral to their business, to seek TB/MBC approval for special status to ensure that the approval process does not have an undue negative effect on its ability to conduct business.
    - OPG cites the importance of enabling its engagement with the international community (in particular in regards to nuclear safety), procurement activities, and investment and due diligence processes for its pension fund and nuclear funds.
    - OPG requires a high level of international business travel at approximately 90-100 trips annually, while Darlington accounts for 45% and is expected see increases.
    - OPG indicated that the approval process, which took 23 days on average in 2016, delays flight bookings which results in higher costs as airlines raise fares closer to the travel date.

Other Key Fiscal Risks:

Regulatory risks: OPG's multi-year rate application to the Ontario Energy Board for the period starting January 1, 2017, is currently in process. Potential OEB decisions providing for lower rates, including disallowance of recovery of OPG's operating costs, current or future deferral and variance account balances (including for the proposed nuclear rate smoothing) and unfavourable future treatment of pension costs would adversely affect OPG's results, resulting in negative fiscal impacts.

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.

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.

Name of analyst:	James Strang	**Phone number:**	7-2071
Date:	May 1, 2017	**Log number:**	
Branch / Division:	General Government, Planning and Resources Branch, PEM, TBS		

APPENDIX A: PROPOSED MINUTE (UNDER DEVELOPMENT)

Note receipt of a Business Plan for Ontario Power Generation.

In this regard,

i.) Note the Minister of Energy will provide Ontario Power Generation (OPG) with a concurrence letter for its Business Plan.

ii.) …..request for special status…international travel

iii.) 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.

Commented [RK4]: Could contemplate removing this requirement going forward, say replacing it with a direction for the Ministry to continue to consult with the MOF and OFA on OPG's draft and approved business plans and in-year financial updates.

FINANCIAL IMPACTS: CHANGES TO EXPENSE AND REVENUE					**TABLE B1**
			Fiscal Plan Basis		***Appropriations Basis***
$ Millions		**2014-15**	**2015-16**	**2016-17**	**2014-15**
Initiative cost recommended		0.0000	0.0000	0.0000	
Expense changes:					
Operating item	Oper	0.0000	0.0000	0.0000	0.0000
Capital item	Cap	0.0000	0.0000	0.0000	00000
Revenue changes:					
Revenue increase/offset		0.0000	0.0000	0.0000	
Revenue decrease		0.0000	0.0000	0.0000	
Total Fiscal Impact (draw from c-funds)		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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:
>
> - 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.
> - 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.

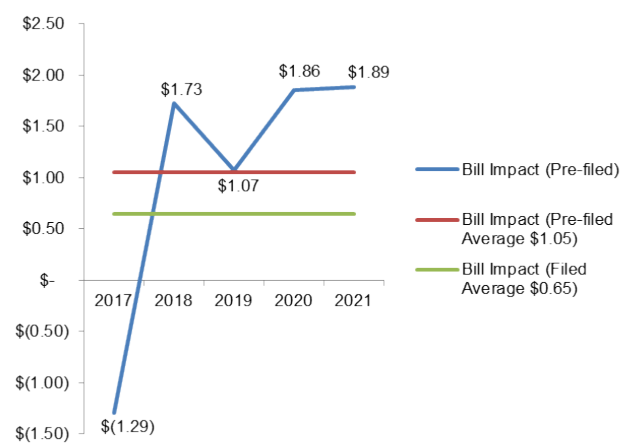
APPENDIX D: SUMMARY OF KEY HIGHLIGHTS FROM OPG BUSINESS PLAN

The Ministry indicates OPG financial and ratepayer forecasts show some changes from last year's business plan projections, as reviewed by Treasury Board in September 2016.

This is in part because 2017 net income is forecast to increase as a result of new regulated rates, higher capitalized interest for the Darlington Refurbishment expenditures partially offset by reduced production as a result of planned outages at Sir Adam Beck I and DeCew II hydro stations.

Also, actions taken by the Province and OPG in early 2017 to enable OPG to smooth its rates based on OPG's weighted average hydroelectric and nuclear all-in rates (which approximates total bill impact), rather than on the basis of nuclear base rates only. OPG filed a revised rate smoothing proposal with the OEB, which is expected to decrease the average year-over-year annual impact on the monthly customer bill for an average consumption of 750 KWh/month from about $1.05 to 65 cents per month per year.

Comparison of Annual Bill Impact ($/Month per year)



Production and Total Cost of Generation

OPG's production is expected to fall to 69.8 TWh by 2021 from 77.6 TWh in 2016. This reflects a declining trend in the Darlington production due to refurbishment outages starting in October 2016 and overlaps between unit refurbishments, as well as, the Pickering Vacuum Building Outage (VBO) in 2021 requiring the shutdown of all units for the duration of the outage.

Total generating cost shows an increasing trend over the planning period relative to 2016, reflecting Lower nuclear production due to Darlington refurbishment outages, increased sustaining capital spending on two large hydroelectric projects (The Lower Mattagami dam safety upgrade and the Sir Adam Beck I GS power canal liner rehabilitation).

Operations, Maintenance and Administration (OM&A) Expenses

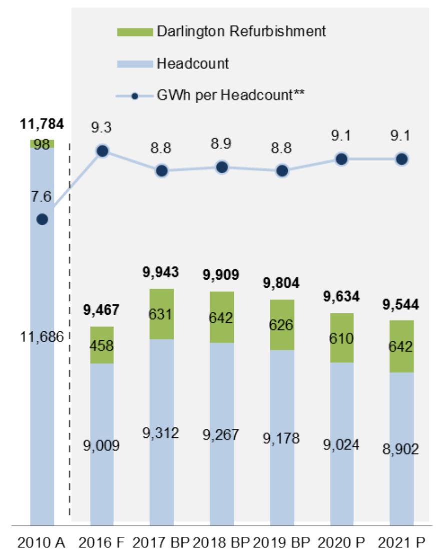
Annual OM&A expenses (excluding Darlington refurbishment OM&A) from ongoing operations are expected to stay consistent over the plan period, averaging $2.9B per year. Increases related to changes in nuclear outage scope at Darlington and planned hiring to fill staffing gaps, and enabling Pickering continued operations, offset by declining pension related costs, due to projected pension asset returns, increases employee contributions, and new method for dermining interest components of pension costs.

Business Transformation and Labour Costs

As part of a company-wide business transformation, OPG saved over $1B in costs from January 2011 to December 2016:

- Headcount has fallen from 11,686 in 2010 to a forecasted 9,009 in 2016 while GWh per headcount has increased from 7.6 to 9.3.
- OPG continues recruitment in 2017 to fill key vacancies in certain areas (particularly in the Nuclear business unit) due to high levels of attrition, as well as continued Pickering operations beyond 2020
  - – OPG is forecasting regular headcount to show a net increase of ~300 by the end of 2017 before gradually decreasing to 4% lower than 2017 levels in 2021
  - – To date in 2017, OPG has hired ~95 Term employees, a new category of non-regular staff negotiated with the Power Workers' Union (PWU) through collective bargaining in 2015
    - Intention is 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, per the terms of the collective agreement

Ongoing Operations Regular Headcount and Productivity



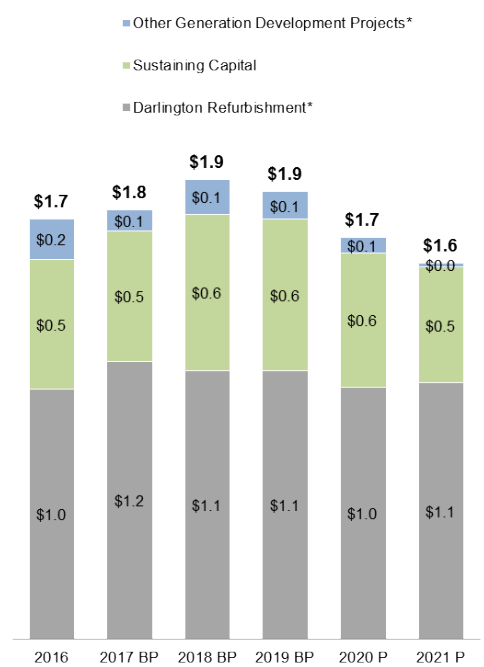
**Production is normalized by adding back hydroelectric surplus baseload generation losses and, in 2017- 2021, the lower production due to the Darlington refurbishment outages

Projects and Capital Expenditures

OPG continues delivery of major projects over the plan period, including:

- Darlington Refurbishment – Unit 2 is assumed to be returned to service in February 2020 with the second unit refurbishment commencing immediately thereafter and the third unit refurbishment starting in July 2021, requiring concurrence from the Province prior to commencement
- Sustaining Capital – Expenditures average $570M, including:
  - – Nuclear expenditures unrelated to refurbishment at Darlington and costs for continued operation of Pickering
  - – Regulated hydro expenditures including upgrades at Sir Adam Beck and upgrades to DeCew II
  - – Lower Mattagami upgrades in 2018 and 2019
- Other Generation Development Projects – Investments in current (e.g., hydroelectric) and emerging generation technologies including solar and energy storage including construction and operation of the Nanticoke solar facility by 2019

Capital Expenditure Estimates ($B)



*Includes expenditures budgeted by Support Services

Sales

The following table summarizes sales recently completed and currently underway (as of April 2017). The fiscal plan implications of the completed OPG Head Office sale is reflected in the 2017 Budget. (TBC).

	OPG Head Office	R.L. Hearn Site	Lakeview Site
Current Status	Completed	Agreement Reached	OPG and Infrastructure Ontario are preparing for marketing
Site Description	700 University Ave. and parking garage at 40 Murray St. in Toronto	~33 acres at the R.L. Hearn site in Toronto	~67 acres to be transferred by the purchaser to the City of Mississauga (Municipal Park Lands) and ~110 acres to be developed for mixed uses (Uplands)
Buyer	KingSett Canadian Real Estate Income Fund LP	Studios of America Limited Partner	TBD
Value	Estimated up-front 2017-18 fiscal impact of ~$375M (includes after-tax gain as well as PILs to OEFC)	TBD	TBD
Other Considerations	N/A	N/A	Negotiations with the City have been lengthy and costs to remediate/prepare site may be significant due to concerns regarding site condition
Timing	The sale closed in April 2017	Anticipated to close in Q3 2017	Marketing is planned to start in April 2017, pending negotiations with the City, with an anticipated closing in 2017

APPENDIX E: PROVINCIAL FISCAL PLAN IMPLICATIONS OF BUSINESS PLANS PROCEEDING – (UNDER DEVELOPMENT)

Ontario Power Generation is a Government Business Enterprises (GBE), and consolidated to the Province's financials on a modified equity basis. The Province's Fiscal Plan reflects the entity as Income from Business Enterprises and Electricity Payments-in-Lieu of Taxes (PILs) (As Revenue only). Net Income and PILs contributions from OPG Head Office are included in Sales and Rental under Other Non-Tax Revenue in the 2017 Budget.

OPG Net Income and Income tax ($ Millions)				
	2016-17	2017-18	2018-19	2019-20
2016 Budget[1]				
Net Income	471	586	673	
Income Tax	224	159	182	
2017-2019 OPG Business Plan				
Net Income	349	702	678	726
Income Tax	96	166	135	170
2017 Budget				
Net Income				
OPG 2017-19 Business Plan	349	702	678	726
Adjustments				
OPG Update[2]	30			
IFRS Risk adjustment[3]	-75	-400		-200
related to OPG Head Office Sale[4] (reported under Sales & Rentals)		-222		
GA – OPG Trust Net Inc. Impact (assumed to offset IOD)		17	54	99
Nuclear Funds fair value adjustment[5]	8			
Net Income 2017 Budget	312	97	732	625
Income Tax				
OPG 2017-19 Business Plan	96	166	135	170
Adjustments				
OPG Update[2]	-4			
related to OPG Head Office Sale[4] (reported under Sales & Rentals)		-74		
Income tax 2017 Budget	92	92	135	170
2016 Budget vs. 2017 Budget (including IFRS and sales &rental adjustments)				
Net Income	-167	-489	59	
Income taxes	-132	-67	-47	
2016 Budget vs. 2017 Budget (Before IFRS and sales &rental adjustments)				
Net Income	-84	133	59	200
Income taxes	-132	7	-47	0

1. 2016 Budget fiscal plan was largely based on OPG's 2015 multi-year business plan, as the 2016 multi-year business plan was approved and submitted following the timeframe for locking the numbers for the early 2016 Budget.
2. OPG February 2017 Monthly Update
3. IFRS risk is related to Province's reporting of nuclear asset retirement obligations. The

Commented [RK5]: Can we show it this way too?

Ontario Auditor General recommended (2016 AG Report) that the Province include Hydro One and OPG financial information in the consolidated financial statements using the IFRS reporting framework as required by PSAB standards, versus the companies U.S. GAAP basis of reporting.

4. For public Budget reporting, projected net impacts of Province asset optimization strategy including, OPG Head Office sale, are reported under Sales and Rentals for commercial confidentiality. OPG proceeds estimate updated per 2017 Budget.
5. Provincial consolidation adjustments for unrealized earnings on decommissioning and used fuel segregated funds net of Bruce variance account and change in Due to the Province on the decommissioning and used fuel segregated funds.

OPG's fiscal results are also impacted by Other PILs to the Ontario Electricity Financial Corporation (OEFC) and the Province. The following table reflects these others impacts in addition to the latest net income and income tax PILs from OPG's August update.

Commented [JK6]: Consider deleting that section of the table. It was the format we followed last year but could be confusing people.

Revenue ($millions)	**2016-17**	**2017-18**	**2018-19**	**2019-20**
2016 Ontario Budget				
Combined Other PILs & Other GRC	342	351	359	
Other PILs (GRC to OEFC, Proxy Property Tax)	213	223	232	
Other GRC (to MOF & Niagara Parks Commission)	129	128	137	
2017-19 OPG Business Plan				
Combined Other PILs & Other GRC	329	350	363	362
Other PILs (GRC to OEFC, Proxy Property Tax)[3]	218	232	243	241
Other PILs (GRC to MOF & Niagara Parks Commission)	110	118	120	121

Source: OPG 2017-2019 Business Plan and further details provided by OPG March 14, 2017