Filed: 2010-11-18 EB-2010-0008 J10.1 Page 1 of 1

UNDERTAKING J10.1 (NON-CONFIDENTIAL)

Undertaking

5 6 To provide presentations to the Ministry, and to the board of directors, in confidential 7 form.

8

1

2 3 4

9

10 <u>Response</u> 11

12 See attachments:

13 14

15

16

- Attachment 1 (non-confidential version) 2010-2014 Business Plan Financial Overview, November 19, 2009
- Attachment 2 (non-confidential version) 2010-2014 Business Plan Financial Outlook, October 23, 2009
- 17 18

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 1 Non-confidential

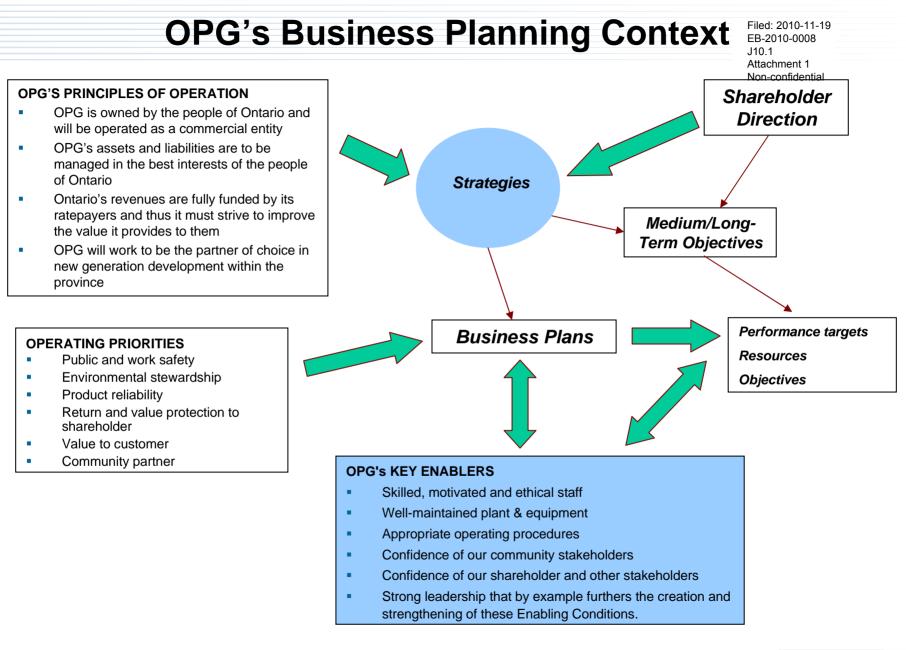


2010-2014 Business Plan Financial Overview

OPG Board of Directors November 19, 2009

Confidential







Presentation Outline

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 1 Non-confidential

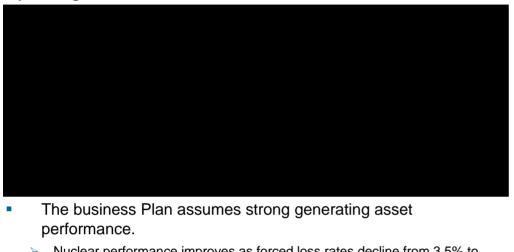
- Business Plan Highlights
- Planning Assumptions
 - Production and Revenue
 - Financial
- OM&A and Capital Expenditures
- Net Income and Financial Performance
 - Financial Outlook
 - Changes in Earnings vs Previous Plan
 - Segmented Financial Outlook EBIT
- Borrowing and Liquidity Outlook
 - Borrowing Requirements
 - Borrowing and Liquidity Plan
- Outlook for Regulated Rates
- Risks and Uncertainties
- Appendices
 - Production and Revenue Outlook
 - OM&A and Capital Expenditure Details
 - Forecast Regular Staff Levels
 - Forecast Statement of Financial Position (Balance Sheet)
 - Payments to the Province



Business Plan Highlights

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 1 Non-confidential

Operating Results



- Nuclear performance improves as forced loss rates decline from 3.5% to 2.5% (fleet average).
- Hydroelectric continues to achieve high reliability and add incremental capacity through its runner upgrade program.
- A strong focus on efficiencies and cost reduction has enabled OPG to reduce planned OM&A expenditures by \$610M over the 2010-2013 period, compared to last year's plan.
 - These savings are comprised of cost reductions of \$549M related to efficiencies and program changes, partly offset by increased costs of \$279M related to New Build, Pickering B Continued Operations, and the same set of the same set of
 - > Corporately-held costs are forecast to decline by \$68 million over the period, primarily due to reduced contingencies
 - > In addition, Pension and OPEB expenses are forecast to decrease by \$272M.

Strategic Focus

4

- Continued Operations plan at Pickering B assumed to extend station life through 2018-2020.
- Preparation for Darlington refurbishment, presently scheduled to commence in 2016.



Key Planning Assumptions - Production and Revenue

 Fluctuations in nuclear production reflect vacuum building outages in 2009 and 2010, outages related to Pickering B Continued Operations, and other significant outages in 2013 and 2014.



- Increased production in 2014 reflects completion of development projects including the Niagara Tunnel.
- The reduction in forecast regulated hydroelectric production after 2011 compared to the previous plan reflects the delayed in-service of the Niagara Tunnel.

	Attachment 1 Non-confidential					
	2009	2010	2011	2012	2013	2014
Production - TWh						
Nuclear	47.1	46.2	48.9	50.0	48.1	49.3
% Change from BP 2009-2013	(1%)	(1%)	(3%)	(2%)	(0%)	
Regulated Hydrelectric	19.3	19.2	19.3	19.0	19.6	20.3
% Change from BP 2009-2013	3%	(1%)	(2%)	(10%)	(7%)	
Unregulated Hydroelectric						
% Change from BP 2009-2013						
Fossil						
% Change from BP 2009-2013						
Total OPG Production						
% Change from BP 2009-2013						
Average Revenue \$/MWh						
Regulated Nuclear	55.0	55.0	61	61		
Regulated Hydro	36.7	36.7	38	38		
Unregulated OPG						
HOEP						
% Change HOEP from BP 2009-2013						
Natural Gas - US\$/mmBTU						
% Change from BP 2009-2013						
FX \$Cdn/\$US	1.11	1.07	1.1	1.07	1.07	1.09



2010 – 2014 Business Plan

5

Key Planning Assumptions - Financial^{Filed: 2010-11-19}_{J10.1}

Regulated Revenues

EB-2010-0008 J10.1 Attachment 1 Non-confidential

- Regulated revenues for 2009-2010 reflect current rates as approved by the OEB, as well as amounts related to the treatment of tax loss carry forwards.
- Regulated revenues for 2011-2012 and 2013-2014 reflect assumed recovery of costs and return on equity through two-year rate terms, consistent with the current regulatory framework. Regulated revenues incorporate ROE of 8.39% and deemed capital structure of 53% debt / 47% equity, and riders for approved deferral accounts.



Pension and OPEB Expense

- > 2009 year-end value of pension fund assets is assumed to be equal to its value as of August 31, 2009.
- > Pension fund investments are assumed to earn 7% annually in subsequent years, compared to 6.5% used in BP 2009-2013.
- > Discount rates used for valuing pension and OPEB liabilities assumed to be 6.8% and 7% respectively.
- > Actual discount rates for 2010 expense will be established based on December 31, 2009 closing market rates.

Depreciation Lives

- > Darlington service life will be extended to 2051 consistent with planned refurbishment.
- No other significant changes to nuclear or hydroelectric service lives.
- Other

6

- After experiencing a strong recovery during 2009 which partially recovered 2008's losses, OPG's nuclear funds are assumed to earn 5.15% annually over the plan period.
- Regulated rates and financial statements prepared on Canadian GAAP basis for all years; an updated plan reflecting IFRS implementation effective 2011 will be finalized in December.

OM&A Expenses

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 1 Non-confidential



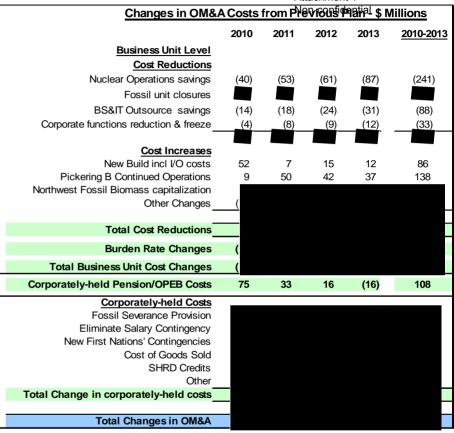
- On a <u>plan over plan</u> basis, OM&A expenses have decreased by a cumulative total of \$610M over the 2010-2013 period.
 - These savings are comprised of cost reductions of and and another partly offset by increased costs of \$279 million relating to New Build, Pickering B Continued Operations, and another partly offset by
 - In addition, forecast corporately-held costs have declined by \$68M, and lower Pension and OPEB expenses have reduced costs by \$272M.
- Planned OM&A Costs \$ Millions 2009 2010 2011 2013 2014 2012 Operations Nuclear Operations 1618 1604 1535 1549 1666 1673 Nuclear Refurbishment & New Build 22 70 71 38 57 44 Fossil Hvdroelectric Support **Business Services &IT** 216 219 220 219 219 217 Finance 88 87 86 86 91 88 Human Resources 54 54 56 54 55 55 57 Corporate Affairs/Energy Markets 43 56 52 55 54 12 12 10 11 10 11 Law 17 Executive & Corp Secretary 16 15 16 17 17 442 431 438 443 444 445 **Total Business Unit Expenditures Corporate Costs & Adjustments** Pension & OPEB (23)118 145 213 266 252 Cost of Goods Sold. Subsidiaries & **Corporately Held Costs** Variance Accounts 25 36 Total OM&A
- The reductions reflect the achievement of aggressive cost reduction targets established in the 2010 business planning process. Cost reductions in the business plan are in addition to cost savings from the Support Function Review of \$37M in 2009 and \$46M in 2010 from previous plans.
- - Details of submitted plans, and changes from the current plan, are provided in the Appendix.



Changes in OM&A Expense from Previous Plan

Attachment 1

- The proposed business plan has reduced OM&A expenditures by \$610M over the 2010-2013 period, compared to plan presented to the OPG Board in December 2008.
- Business units are planning to reduce their expenses by \$549M, including:
 - Savings in nuclear operations of \$40M in 2010, growing to \$87M by 2013
 - Reductions in BS&IT costs of \$14M in 2010, growing to \$31M by 2013, due primarily to renegotiation of the IT outsourcing contract
- These savings have been partially offset by cost increases in other program areas totaling \$279M, including:
 - Increased expenditures on Pickering B Continued Operations, and Nuclear New Build.



These costs also include

- Increased Costs of Goods Sold due to IMCS's delay in exiting its Bruce business.
- Reduced pension and OPEB expense forecasts have contributed an additional \$272M in cost savings --\$380M savings at the business unit level, offset by increased costs \$108M held corporately.



2010 – 2014 Business Plan

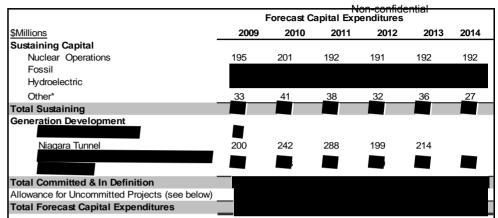
8

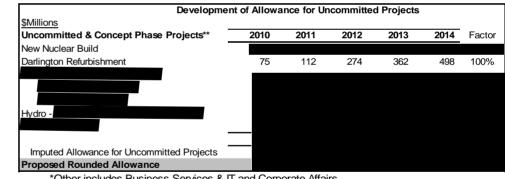
>

Capital Expenditures

Filed: 2010-11-19 EB-2010-0008 .110 1 Attachment 1

- Sustaining capital expenditures decline moderately over the plan period, decreasing from near to by 2014.
- Proposed expenditures for committed generation development projects, and those in definition phase, are forecast to be annually for 2010/2011, increasing to in each of 2012 and 2013.
- This represents an increase of approximately over the 2009-2013 period compared to last year's plan, and reflects:
 - A two year delay and \$600M increase in the Niagara Tunnel project.





*Other includes Business Services & IT and Corporate Affairs

** Conceptual estimates - for planning purposes only

- Indicated expenditures on uncommitted projects -- New Nuclear, Darlington Refurbishment and are highly conceptual.
 - As in previous years, given the uncertain nature of these expenditures, a corporate capital \geq allowance has been included to represent major uncommitted projects.



9

Financial Outlook

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 1 Non-confidential

	~	
	>	Lower nuclear and production
		Lower rates of return on Nuclear Funds compared to the high returns experienced during 2009.
	≻	
•	Ne	et income is expected to recover to the
	≻	Nuclear earnings remain fairly stable.
	≻	Regulated hydro earnings increase once Niagara tunnel enters the rate base in 2013.
	Th	nese results are a forecast and as such remain dependent on a number
		assumptions. Factors that could impact future results include:
	≻	The performance of capital markets which affects Nuclear Funds results, as well as

- OPG's pension and OPEB expense levels, The performance of OPG's nuclear generating stations,
- > Changes in forecast market prices, and

≻

≻



Summarized Operating Statement

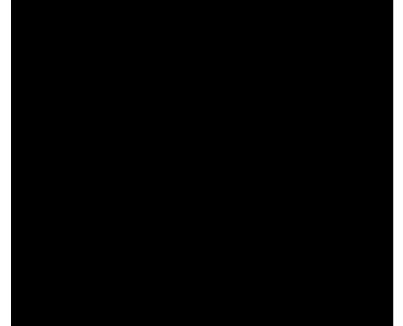
Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 1 Non-confidential

\$ Millions	2009	2010	2011	2012	2013	2014 Non-con
Revenues						
Regulated Electricity Sales	3342	3447	3710	3765	3693	3797
Unregulated Electricity Sales	_					
Other Revenues	_					
Costs						
OM&A						
Fuel	_					
Operating Profit						
Accretion on Nuclear Funds	637	671	698	728	755	777
Earnings on Nuclear Funds	(620)	(530)	(565)	(607)	(648)	(680)
Depreciation and Amortization Financing & Other	_					
Earnings before Tax						
Income Taxes						
Net Income						
Net Income - Previous Plan						
Electricity Sales - TW.h						
ROE -%						
FFO Coverage						
Debt Ratio						
Average Generation Revenue - \$/MWh						
Average PUEC - \$/MWh						



Changes in Earnings from Previous Plan

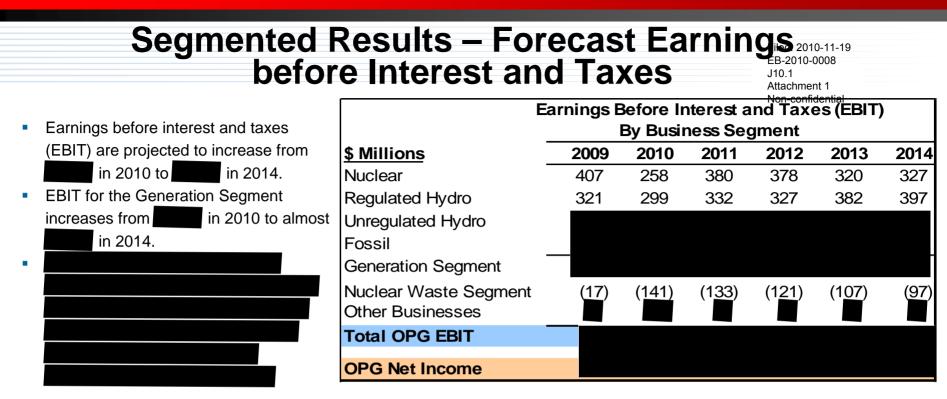
J10.1 Attachment 1 Non-confidential



- Nuclear and hydroelectric regulated rates are forecast to be lower than previously planned due to reductions in OM&A and other costs, including depreciation and income taxes.
- Changes in depreciation reflect the increase in service life assumptions for Darlington, as well as changes in regulatory amortizations.
- Higher earnings on Nuclear Funds reflect higher current fund values compared to last year's forecast.

			Non-con	fidential	
\$ Millions	2009	2010	2011	2012	201
FACTORS IMPACTING EBT FAV	OURABL	E/(UNFAV	OURABL	E)	
Changes in Sales Volumes	(00)	(4)	(74)	(40)	14
Nuclear Hydro	(23)	(4)	(74)	(49)	(1-
Fossil					
	-				
Changes in Electricity Prices					
Nuclear	241	155	(14)	(17)	
Regulated Hydro	27	(7)	(22)	(15)	
Unregulated		()	()	()	
Other Factors Affecting Sales Margins					
Changes in Fuel Prices					
Changes in Trading & Other Revenues					
Change in OEFC Payment	_				
Total Change in Margins					
Changes in OM&A Costs					
-					
Other Changes Depreciation and amortization					
Earnings on nuclear fixed asset removal & NW	119	16	17	22	3
Accretion on fixed asset removal & NWM	(0)	(9)	(10)	(10)	(
Property and capital Tax	(8)	(8)	(10)	(10)	(
Net Interest Expense					
Changes in Other Costs					
Other					
Total Change in Earnings before Tax (EBT)					





 Nuclear and regulated hydroelectric EBIT increase over the plan horizon reflecting assumed increases in regulated rates. Other fluctuations in EBIT are due to changes in production levels as well as increases in the hydroelectric rate base as the Niagara Tunnel is placed into service in 2014, which also impacts 2013 due to the assumption of a two-year rate term.

•	

CONFIDENTIAL

• The Nuclear Waste segment represents accretion expense, less earnings on the nuclear funds.



Liquidity and Borrowing Challenges

J10.1 Attachment 1 Non-confidential

- By 2014, outstanding debt will increase from
 billion to similar billion, due to financing requirements related to generation development projects, both currently underway and planned.
- Approximately **\$** billion in new borrowing will be required over the planning period.
 - \$1.1 billion of committed project financing to complete generation development projects currently under way, including the Niagara Tunnel and ______
 - Another billion of new financing will be required for both general corporate requirements and currently uncommitted projects
- Over the planning period OPG plans to retire \$1.7 billion of maturing OEFC debt and will refinance \$0.5 billion with a net effect of reducing total corporate borrowing for operations by \$1.2 billion.
- The new borrowing requirements are partially offset by the continuing suspension of the dividend. However, the cash flow metrics are still deemed to be generally weak from a Credit Rating perspective as FFO coverage drops to

Cash/Borrowing Requirements 2010-2014

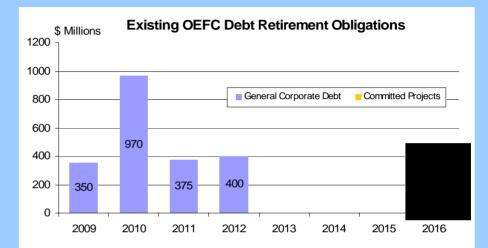
\$Millions	2010	2011	2012	2013	2014
Opening Cash Balance					
Operating Cash InFlows					
Operating Cash Outflows					
Interest					
Nuclear Funds Contribution					
Pension Fund Contribution					
Reimbursement of ONPA (excl GST)					
Net Cash from Operations					
Capital Expenditures:					
Capital Expenditures (sustaining)					
Niagara Tunnel (NTP)					
Portlands					
Upper Mattagami					
New Development Hydro					
Allowance for Development (incl new nuclear)					
Net Cash from Investment					
Financing Activities					
OEFC Debt -					
Debt Retirement					
Debt Refinancing					
Committed Projects Public Debt/Project Financing -					
, , , , , , , , , , , , , , , , , , ,					
Net Cash From Financing Securitization Financing (Repayment)					
Realized ABCP					
Net CashFlow for Period					
Ending Cash Position					
Gross Debt Issue	2010	2011	2012	2013	201
Cumulative Debt Position Opening					
Cumulative Debt Position Closing					
FFO X Interest Coverage					
Debt to Capitalization Ratio					

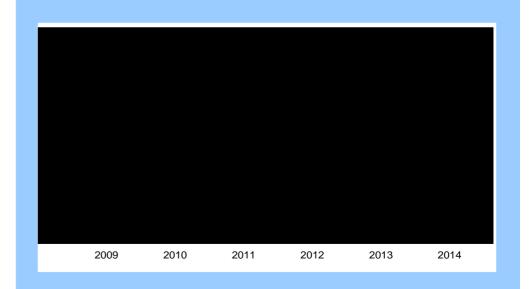


Liquidity and Borrowing Strategy 2010-11-19 DID-0008

J10.1 Attachment 1 Non-confidential

- OPG has maturing debt totaling almost \$1.0 billion in the first and third quarter of 2010.
 - OPG anticipates refinancing \$0.5 billion of maturing debt with the OEFC in the first quarter of 2009.
 - The remaining \$0.4 billion of debt maturing in the third quarter of 2010 is expected to be financed in the external public debt markets as required.
 - of new development projects will need additional sources of financing, which would include a combination of OEFC debt financing for nuclear, and third party financing for non-nuclear projects such as the project.







CONFIDENTIAL

15 2010 – 2014 Business Plan

Outlook for Regulated Rates

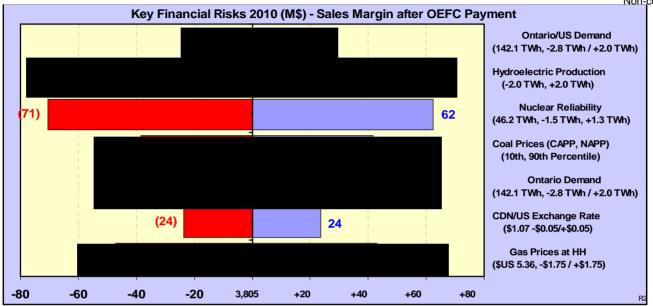
Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 1 Non-confidential

- OPG's forecast of future payment amounts for regulated facilities is calculated based on the most recent regulatory parameters –the OEB ruling in November 2008 setting 2008 and 2009 payment amounts:
 - > Return on Equity of 8.39% based on formula specified by the OEB
 - > a 53% debt / 47% equity deemed capital structure, and
 - recovery of nuclear liability costs
- Forecast rate increase requirements for 2011-2012 have moderated from previous forecasts and are expected to be in the 10% range for nuclear, and less than 5% for hydroelectric. Major factors contributing to this reduction, compared to previous outlooks, include:
 - Reduced OM&A costs reflecting targeted cost reductions as well as lower burden rates
 - > Lower depreciation due to the extension of Darlington's service life
 - Lower regulatory income taxes due to changes in a number of factors, including lower earnings before taxes and higher contributions to nuclear funds
- However, this rate outlook is preliminary and represents a "mechanical" application of the current regulatory framework. This outlook should be considered indicative as it will be updated for a number of factors before being finalized for purposes of OPG's 2011-2012 rate submission. Pending updates include:
 - > Impacts of converting the current Canadian GAAP-based outlook to one that reflects the implementation of IFRS
 - > Decisions yet to be made on regulatory options and alternatives, including:
 - Potential changes in the methodology for recovering costs associated with OPG's nuclear liabilities
 - Potential inclusion of construction work in progress (CWIP) in the rate base for the Darlington Refurbishment project
 - Amortization periods for new deferral and variance accounts
- An updated rate outlook will be provided to OPG's Board in December, which will include the estimated impacts of IFRS implementation as well as decisions on the regulatory options noted. Potential options relating to regulated rate strategies will be reviewed at that time.



Risks and Uncertainties

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 1 Non-confidential



- Forecast financial results are by nature uncertain, given their reliance on numerous assumptions -ranging from industrial demand to commodity prices to equipment performance.
- Two primary sources of earnings volatility for OPG are:
 - \triangleright
 - Impact of capital markets performance on Nuclear Funds, and to a lesser extent, pension and OPEB expenses.
- The chart above indicates the potential impacts on forecast 2010 gross margins of variations in key assumptions underlying the forecast production and revenue forecasts.

Nuclear reliability, availability of water, and factors affecting market electricity prices are the largest risks.

- \succ
- Other risks to 2010 net income include lower than planned earnings on Nuclear Funds. A reduction in assumed earnings of 1% (eg. from 5.15% to 4.15%) would reduce fund earnings by \$5 million, net of the impact of the Bruce variance account.



Appendix

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 1 Non-confidential

- 1. Production and Sales Key Assumptions
- 2. Production and Sales Forecast Results
- 3. OM&A Expenditures with comparison to previous plan
- 4. Capital Expenditures with comparison to previous plan
- 5. Forecast Regular Staff Levels
- 6. Forecast Balance Sheet
- 7. Payments to the Province



Production and Revenue Outlook: Key Assumptions

Attachment 1



19 2010 - 2014 Business Plan

BP2010: Price, Production and Sales Margin Key Res

2010

2011

Attachment 1 Non-confidential 2014

Price	
Spot Price Forecast (7x24)	C\$/MWh
Ontario Demand Weighted MCP	C\$/MWh
OPG Unregulated Price	C\$/MWh
Emission Adder on OPG Coal	(C\$/Tonne)

2010	2011	2012	2013	2014
	1	ł		

2012

2013

		- 1	
Ontario Primary Demand	TVVh	[
Interconnected Market Demand	TVVh	[
Total Demand	TWh	[
OPG Generation	TVVh	[
Non-OPG Total	TVVh	[

	2010	2011	2012	2013	2014
L					
	94.2	94.8	95.3	95.2	95.8
[

OPG Production By	y Fuel Type
-------------------	-------------

Production

Hydroelectric Total (Net of Spill)	TWh
Fossil Total	TWh
Biomass Total	TWh
Nuclear Total	TWh

2010	2010 2011		2013	2014		
				-		
				-		
				-		
46.2	48.9	50.0	48.1	49.3		

Sales Margin	
Total Revenue	M\$
Total Fuel Cost	M\$
OPG Net Revenue	M\$
OEFC Annual Payment	M\$
OPG Net Revenue + OEFC Payments	M\$

2010	2011	2012	2013	2014

_	Regulated Rates		2010	2011	2012	2013	2014
[OPG Nuclear	\$/MWh					
[OPG Hydroelectric	\$/MWh					

With spot prices staying in a narrow band just over the main impacts on OPG Sales Margins are the increase in regulated rates in 2011, the financial treatment of

per year,

November

and OPG production of about

Planned OM&A Expenditures

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 1 Non-confidential

\$Millions	2010	Change*	2011	Change*	2012	Change*	2013	Change*	2014
Operations									
Nuclear Operations	1604	(75)	1535	(43)	1549	(68)	1666	(98)	1673
Nuclear Refurbishment & New Build	71	52	22	7	38	15	44	12	57
Fossil									
Hydroelectric									
Total Production Units									
<u>Support</u>									
Business Services &IT	216	(16)	219	(25)	219	(32)	219	(40)	217
Finance	86	(7)	91	(4)	88	(11)	87	(13)	88
Human Resources	54	(4)	55	(5)	55	(7)	54	(9)	54
Corporate Affairs/Energy Markets	56	2	52	0	55	4	54	0	57
Law	11	(0)	10	(2)	12	(0)	11	(2)	12
Executive & Corp Secretary	15	3	16	4	17	4	17	4	17
Total Support Unit Costs	438	(21)	443	(31)	444	(42)	442	(59)	445
Total Business Unit costs									
Pension & OPEB	118	75	145	33	213	16	266	(16)	252
Cost of Goods Sold, Subsidiaries									
Corporately Held Costs	112	16	69	(28)	40	(48)	67	(59)	67
Total OM&A									

* Change from the 2009 Business Plan presented to the OPG Board on December 12, 2008



Submitted Capital Expenditures

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 1 Non-confidential

\$ Millions	20	09	20	10	20	11	20	12	20	13	2014
Sustaining Capital	Submitted	Change*	Submitted	Change*	Submitted	Change*	Submitted	Change*	Submitted	Change*	Submitted
Nuclear Operations	195	(13)	201	10	192	14	191	14	192	15	192
Fossil											
Hydroelectric											
Business Services and IT	31	(4)	40	1	38	1	32	(1)	31	4	31
Corporate Affairs	2		1	0	0		0		0		0
Development - Committed & in Definition											
Niagara Tunnel Hydro -	200	26	242	7	288	145	199	197	218	218	
Uncommitted Development Capital											
Nuclear New Build											
Darlington Refurbishment Pickering Refurbishment		(31) (117)	75	45 (223)	112	27 (363)	274	133 (488)	362	143 (743)	498
Hydro -							I		I		
Total Uncommitted											
Total Development Capital Submitted											
Total Sustaining & Development Submitted											

* Change from previous plan



Forecast Staff Levels

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 1 Non-confidential

	Projected	Planned				
	2009	2010	2011	2012	2013	2014
Nuclear*	7 170	7 407	7 001	6 092	6 902	6 910
	7,178	7,427	7,091	6,983	6,893	6,810
New Build & Refurbishment	137	189	358	633	704	777
Fossil						
Hydroelectric						
Total Operating Groups						
Corporate Support Groups						
Corporate Affairs	209	201	193	193	192	187
Business Services & IT	436	434	428	422	413	400
Finance	399	376	366	354	342	330
Human Resources	359	364	359	344	330	319
Law	36	36	36	36	36	36
Executive Offices	8	15	15	15	15	15
Corporate Secretary	17	17	17	17	17	17
Total Corporate Functions	1,464	1,443	1,414	1,381	1,345	1,304
Total OPG						-

Excludes security staff due to confidentiality



Forecast Balance Sheet

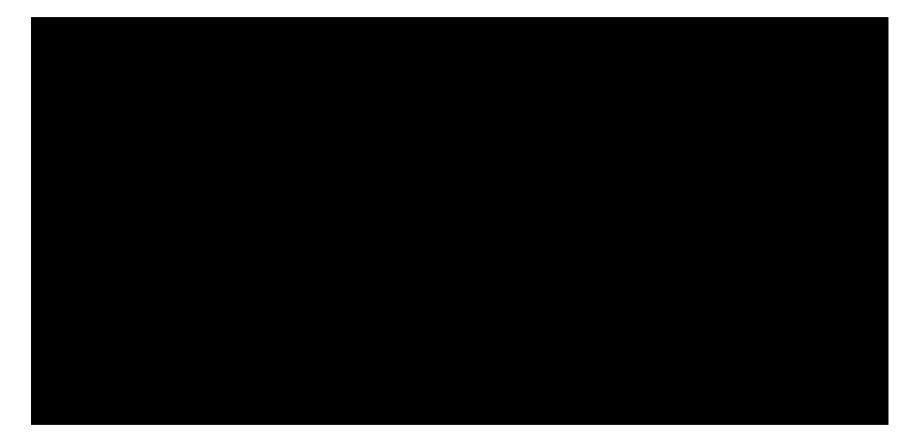
Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 1



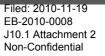


Forecast Payments to the Province

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 1 Non-confidential









2010-2014 Business Plan Financial Outlook

Shareholder Briefing October 23, 2009

Confidential



OPG's Business Planning Context

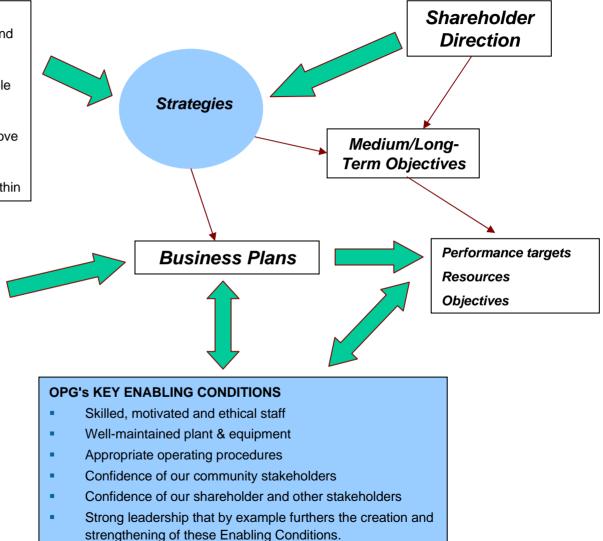
Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 2 Non-Confidential

OPG'S PRINCIPLES OF OPERATION

- OPG is owned by the people of Ontario and will be operated as a commercial entity
- OPG's assets and liabilities are to be managed in the best interests of the people of Ontario
- Ontario's revenues are fully funded by its ratepayers and thus it must strive to improve the value it provides to them
- OPG will focus to become the partner of choice in new generation development within the province

OPERATING PRIORITIES

- Public and work safety
- Environmental stewardship
- Product reliability
- Return and value protection to shareholder
- Value to customer
- Community partner





Presentation Outline

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 2 Non-Confidential

- Business Plan Highlights
- Planning Assumptions
 - Production and Revenue
 - Financial
- OM&A and Capital Expenditures
- Net Income and Financial Performance
 - Financial Outlook
 - Segmented Financial Outlook EBIT
- Borrowing and Liquidity Outlook
 - Borrowing Requirements
 - Borrowing and Liquidity Plan
- Payments to the Province
- Outlook for Regulated Rates
- Appendices
 - > OM&A and Capital Expenditure Details
 - Forecast Statement of Financial Position (Balance Sheet)

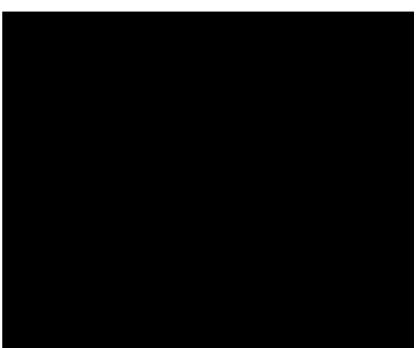


Business Plan Highlights

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 2 Non-Confidential

Operating Results Business Plan reflects strong generating asset performance Nuclear performance improves over the plan period as forced loss rates decline from 2 5% to 2 5% (floot)

- Nuclear performance improves over the plan period as forced loss rates decline from 3.5% to 2.5% (fleet average)
- Hydroelectric continues to achieve high reliability and added incremental capacity through its runner upgrade program



Strategic Focus

- Continued Operations plan at Pickering B expected to extend station life through 2018-2020
- Preparation for Darlington refurbishment which would commence in 2016

Key Planning Assumptions - Production and BR Contential Non-Confidential

 Fluctuations in nuclear production reflect vacuum building outages in 2009 and 2010, outages related to Pickering B Continued Operations, and other significant outages in 2013 and 2014

 Increased production in 2014 reflects completion of development projects -- the <u>Niagara Tunnel</u> and

The reduction in forecast regulated hydroelectric production after 2011 compared to the previous plan reflects the delayed in-service of the Niagara Tunnel

	2009	2010	2011	2012	2013	2014
Production - TWh	2009	2010	2011	2012	2013	2014
Nuclear	47.1	46.2	48.9	50.0	48.1	49.3
% Change from BP 2009-2013	(1%)	(1%)	(3%)	(2%)	(0%)	
Regulated Hydrelectric	19.3	19.2	19.3	19.0	19.6	20.3
% Change from BP 2009-2013	3%	(1%)	(2%)	(10%)	(7%)	
Unregulated Hydroelectric						
% Change from BP 2009-2013						
Fossil						
% Change from BP 2009-2013						
Total OPG Production						
% Change from BP 2009-2013						
Average Revenue \$/MWh						
Regulated Nuclear	55.0	55.0	57	57		
Regulated Hydro	36.7	36.7	37	37		
Unregulated OPG						
HOEP						
% Change HOEP from BP 2009-2013						
Natural Gas - US\$/mmBTU						
% Change from BP 2009-2013						
FX \$Cdn/\$US	1.11	1.07	1.1	1.07	1.07	1.09

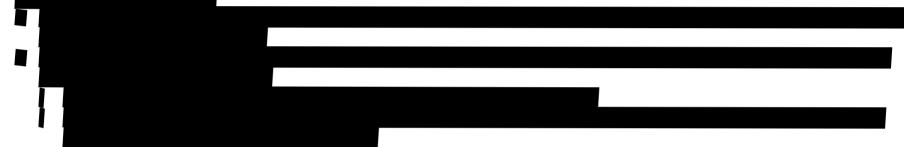


5

Key Planning Assumptions - Financia

Regulated Revenues

- Regulated revenues for 2009-2010 reflect current rates as approved by the OEB. The regulated revenues also include amounts related to the treatment of tax loss carry forwards
- Regulated revenues for 2011-2012 and 2013-2014 reflect assumed recovery of costs and return on equity through two-year rate terms, consistent with the current regulatory framework. Regulated revenues incorporate ROE of 8.65% and deemed capital structure of 53% debt/47% equity, and riders for approved deferral accounts



Pension and OPEB expense assumptions

- > 2009 year-end value of pension fund assets is assumed to be equal to its value as of August 31, 2009
- > Pension fund investments are assumed to earn 7% annually in subsequent years
- > Discount rate used for valuing pension & OPEB liabilities assumed to be 6.8% and 7% respectively
- > Actual discount rates for 2010 expense will be established based on Dec 31, 2009 closing market rates

Depreciation Lives

- > Darlington service life will be extended to 2051 consistent with planned refurbishment.
- No other significant changes to nuclear or hydroelectric service lives
- Other

6

- OPG's nuclear funds are assumed to earn 5.15% annually over the plan period
- Regulated rates and financial statements prepared on Canadian GAAP basis for all years; an updated plan reflecting IFRS implementation effective 2011 will be finalized in December



Filed: 2010-11-19

OM&A Expenses

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 2 Non-Confidential

•			

- On a <u>plan over plan</u> basis, total business unit OM&A expenses have decreased by
 - Lower burden rates have contributed million, and cost savings and program reductions have contributed million.
- The reductions reflect the achievement of aggressive cost reduction targets established in the 2010 business planning process.

	2009	2010	2011	2012	2013	2014
Operations						
Nuclear Operations	1618	1604	1535	1549	1666	1673
Nuclear Refurbishment & New Build	70	71	22	38	44	57
Fossil						
Hydroelectric						
						-
Support						
Business Services &IT	220	216	219	219	219	217
Finance	86	86	91	88	87	88
Human Resources	56	54	55	55	54	54
Corporate Affairs/Energy Markets	43	56	52	55	54	57
Law	10	11	10	12	11	12
Executive & Corp Secretary	16	15	16	17	17	17
	431	438	443	444	442	445
Total Business Unit Expenditures						
Corporate Costs & Adjustments						
Pension & OPEB	(23)	118	145	213	266	252
Cost of Goods Sold, Subsidiaries &	()					
Corporately Held Costs						
Total OM&A						

- \$40M annual reductions in nuclear operations expenditures (before consideration of additional costs associated with Pickering B Continued Operations)
- \succ

 \geq

A plan to maintain expenses for corporate support functions at the 2010 level, over the plan period

 Cost reductions in the business plan are in addition to cost savings from the Support Function <u>Review of \$37 million in 2009 and \$46 million in 2010 from previous plans</u>

Details of submitted plans, and changes from the current plan, are provided in Appendix 1.

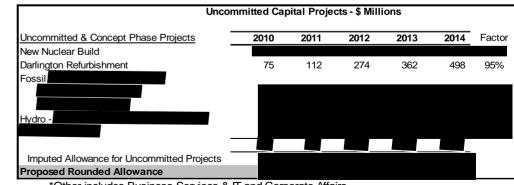


Capital Expenditures

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 2 Non-Confidential

- Sustaining Capital Expenditures range between and and per year, largely consistent with last year's plan
- Proposed expenditures for committed generation development projects, and those in definition phase, are forecast to be annually for 2010/2011, increasing to the in each of 2012 and 2013.
- This represents an increase of approximately over the 2009-2013 period compared to last year's plan, and reflects:
 - A 2 year delay and \$600M increase in the Niagara Tunnel project
- Indicated expenditures on uncommitted projects -- New Nuclear Darlington refurbishment and are highly conceptual
 - As in previous years, given the uncertain nature of these expenditures, a corporate capital allowance will be included to represent major uncommitted projects

		Forecast Capital Expenditures -Millions						
	2009	2010	2011	2012	2013	2014		
Sustaining Capital								
Nuclear Operations	195	206	197	196	195	196		
Fossil								
Hydroelectric								
Other*	33	39	35	30	29	28		
Total Sustaining								
Generation Development								
Portlands Energy Centre								
Niagara Tunnel	200	242	288	199	218			
Total Committed & In Definition	388	745	786	<u>1018</u>	<u>1051</u>	<u>533</u>		
Total submitted capital								
Uncommitted Projects - Potential Expenditure	€S**							
Nuclear New Build								
Darlington Refurbishment		75	112	274	362	498		
Hydro Development (see below)								
Fossil Repowering (See Below)								
Total Identified Potential Uncommitted Devel	opment							
Projects								
Proposed Allowance for Uncommitted Projects								
(see below)								



*Other includes Business Services & IT and Corporate Affairs

** Conceptual estimates - for planning purposes only



CONFIDENTIAL

>

8

Financial Outlook

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 2 Non-Confidential

•			
_			
•			
	\succ		
	_		

These results are a forecast and as such remain dependent on a number of assumptions. Factors that could impact future results include:

- The performance of capital markets which affects Nuclear Funds results as well as \geq OPG's pension and OPEB expense levels,
- The performance of OPG's nuclear generating stations, and
- Changes in forecast market prices, and

2010 - 2014 Business Plan



CONFIDENTIAL

Summarized Operating Statement

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 2 Non-Confidential

\$ Millions	2009	2010	2011	2012	2013	2014
Revenues						
Regulated Electricity Sales	3342	3447	3524	3576	3882	3991
Unregulated Electricity Sales						
Other Revenues						
						ľ
Costs						
OM&A						
Fuel						
Operating Profit						
Accretion on Nuclear Funds	637	671	698	728	755	775
Earnings on Nuclear Funds	(620)	(528)	(564)	(605)	(645)	(676)
Depreciation						
Financing & Other						
	_					
Earnings before Tax						
Income Taxes						
Net Income						
Net Income - Previous Plan						
Electricity Sales - TW.h						
ROE -%						
FFO Coverage						
Debt Ratio						
Average Generation Revenue - \$/MWh						
Average PUEC - \$/MWh						



Segmented Results – Forecast Earnin 50-0008 before Interest and Taxes

- Earnings before interest and taxes Earnings Before Interest and Taxes (EBIT) **By Business Segment** (EBIT) is projected to increase from in 2010 to in 2014. \$ Millions 2009 2010 2011 2012 2013 **EBIT** for the Generation Segment Nuclear 407 226 306 319 299 increases from in 2010 to **Regulated Hydro** 321 298 336 331 396 in 2014. **Unregulated Hydro** Fossil **Generation Segment** Nuclear Waste Segment (17)(143)(135)(123)(110)Other Businesses **Total OPG EBIT** Nuclear and regulated hydroelectric EBIT increase over the **OPG Net Income**
- Other fluctuations in EBIT are due to changes in production levels as well as increases in the hydroelectric rate base as the Niagara tunnel is placed into service in 2014, which also impacts 2013 due to the <u>assumption of a two-year rate term</u>

The Nuclear Waste segment represents accretion expense less earnings on the nuclear funds.



2014

312

412

(99)

regulated rates.

plan horizon due to an increase in

Liquidity and Borrowing Challen

- By 2014, outstanding debt will increase from billion to billion, due to financing requirements related to generation development projects, both currently underway and planned.
- Approximately **\$600** billion in new borrowing will be required over the planning period.
 - billion of committed project financing to complete generation development projects currently under way, including the Niagara Tunnel and Upper Mattagami.
 - Another billion of new financing will be required for both general corporate requirement and currently uncommitted projects
- Over the planning period OPG plans to retire \$1.7 billion of maturing OEFC debt and will refinance \$0.5 billion with a net effect of reducing total corporate borrowing for operations by \$1.2 billion.
- The new borrowing requirements are partially offset by the continuing suspension of the dividend. However, the cash flow metrics are still deemed to be generally weak from a Credit Rating perspective as FFO coverage drops below

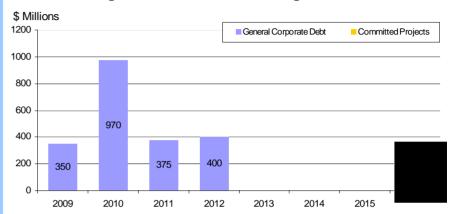
OPG Cash/B	2009	2010		2014	2013	20
•	2003	2010	2011	2012	2013	20
Opening Cash Balance						
Operating Cook InFlows						
Operating Cash InFlows Operating Cash Outflows	,					
Interest	C					
Nuclear Funds Contribution						
Pension Fund Contribution						
Reimbursement of ONPA (excl GST)						
Net Cash from Operations						
Capital Expenditures:						
Capital Expenditures (sustaining)	(
Niagara Tunnel (NTP)	(
Portlands						
Upper Mattagami	(
New Development Hydro						
Allowance for Development (incl new nuclear)						
Net Cash from Investment						
Financing Activities						
General Corp Debt -						
Debt Re irement						
Debt Refinancing						
Public Debt						
Project Financing -						
Committed						
Uncommitted						
Net Cash From Financing						
Securi iza ion Financing (Repayment)						
Realized ABCP						
Net CashFlow for Period						
Ending Cash Position						
	2009	2010	2011	2012	2013	2
Gross Debt Issue						
Cumulative Debt Position Opening Cumulative Debt Position Closing						
Cumulative Debt Foation Gloany						
FFO X Interest Coverage						
Debt to Capitalization Ratio						



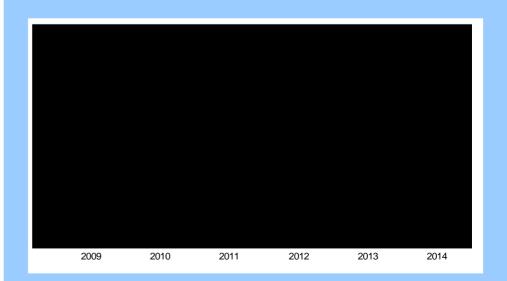
Liquidity and Borrowing Strate 9. Vitachment 2 More confidential

- OPG has maturing debt totaling almost \$1.0 billion in the first and third quarter of 2010.
 - OPG anticipates refinancing \$0.5 billion of maturing debt with the OEFC in the first quarter of 2009.
 - The remaining \$0.4 billion maturing in the third quarter of 2010 is expected to be financed either in the external public debt markets or through OEFC debt financing

of new development projects will need additional sources of financing, which would include a combination of OEFC debt financing for nuclear, and third party financing for non-nuclear projects such as the project.



Existing OEFC Debt Retirement Obligations





Forecast Payments to the Province LB-2010-0008 J10.1 Attachment 2 Non-Confidential

Filed: 2010-11-19

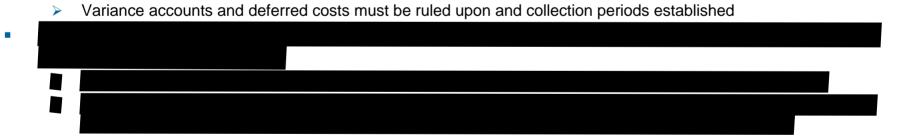




Outlook for Regulated Rates

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 2 Non-Confidential

- OPG's forecast of future payment amounts for regulated facilities is calculated based on the most recent regulatory parameters –the OEB ruling in November 2008 setting 2008 and 2009 payment amounts :
 - Return on Equity of 8.65%
 - > a 47%/53% equity/debt deemed capital structure, and
 - recovery of nuclear liability costs
- Rate increases for 2011-2102 for both regulated segments are expected to be relatively moderate likely in a range of 5 to 10%
 - Expiry of mitigation and increased taxes are the primary factor increasing rates in 2011-2012 for both nuclear and regulated hydroelectric
 - > Aside from income taxes, unit revenue requirements are relatively stable or declining for both nuclear and hydro:
 - OM&A costs decrease due to program reductions and payroll burden reductions
- Despite the moderate rate increase requirements, OPG considers a 2010 hearing critical to it's financial and regulatory objectives



- This outlook is preliminary and remains subject to updates and changes. Continuing changes are expected in some key areas
- An updated and more refined rate outlook will be provided to OPG's Board in December, including the estimated impacts of IFRS.



Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 2 Non-Confidential

- 1. OM&A Expenditures with comparison to previous plan
- 2. Capital Expenditures with comparison to previous plan
- 3. Forecast Balance Sheet



Planned OM&A Expenditures

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 2 Non-Confidential

	2009 Outlook	2010	Change*	2011	Change*	2012	Change*	2013	Change*	2014
Operations										
Nuclear Operations	1618	1604	(75)	1535	(43)	1549	(68)	1666	(98)	1673
Nuclear Refurbishment & New Build	70	71	52	22	7	38	15	44	12	57
Fossil										
Hydroelectric										
Total Production Units										
<u>Support</u>										
Business Services &IT	220	216	(16)	219	(25)	219	(32)	219	(40)	217
Finance	86	86	(7)	91	(4)	88	(11)	87	(13)	88
Human Resources	56	54	(4)	55	(5)	55	(7)	54	(9)	54
Corporate Affairs/Energy Markets	43	56	2	52	0	55	4	54	0	57
Law	10	11	(0)	10	(2)	12	(0)	11	(2)	12
Executive & Corp Secretary	16	15	3	16	4	17	4	17	4	17
Total Support Unit Costs	431	438	<u>(</u> 21)	443	_(31)	444	_(42)	442	(59)	445
Total Business Unit costs										
Pension & OPEB	(23)	1 <u>1</u> 8	75	145	33	2 <u>1</u> 3	16	2 <u>6</u> 6	(16)	252
Cost of Goods Sold, Subsidiaries										
Corporately Held Costs	87	112	16	69	(28)	40	(48)	67	(59)	67
7										
Total OM&A										

CONFIDENTIAL

* Change from the 2009 Business Plan presented to the OPG Board on December 12, 2008



Submitted Capital Expenditures

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 2 Non-Confidential

\$ Millions	2009		2010		2011		2012		2013		2014	
Sustaining Capital	Submitted	Change*	Submitted	Change*	Submitted	Change*	Submitted	Change*	Submitted	Change*	Submitted	
Nuclear Operations	195	(<u>13)</u>	206	<u>16</u>	1 <u>97</u>	<u>19</u>	196	19	195	19	196	
Business Services and IT	31	(4)	37	(2)	35	(2)	29	(4)	29	1	28	
Corporate Affairs	2		1	0	0		0		0		0	
	381	(30)	429	12	371	20	336	18	340	26	336	
Development - Committed & in Definition		_										
Niagara Tunnel	200	26	242	7	288	145	199	197	218	218		
Hydro -		_		_		_		_		_		
Un <u>committed</u> Development Capital								_				
Nuclear New Build												
Darlington Refurbishment		(31)	75	45	112	27	274	133	362	143	498	
Pickering Refurbishment		(117)		(223)		(363)		(488)		(743)		
		_	-	_		_		_	_		_	
Hydro -												

* Change from previous plan



Forecast Balance Sheet

Filed: 2010-11-19 EB-2010-0008 J10.1 Attachment 2 Non-Confidential

