

K8.1

EB-2007-0905

AMPCO Cross-Examination

Document Brief

**OPG Panel # 9:
Corporate And Other Operating Costs**

Ontario Energy Board
FILE No. <u>EB-2007-0905</u>
EXHIBIT No. <u>K8.1</u>
DATE <u>June 9/08</u>
08/99

① 9②20

Numbers may not add due to rounding.

Table 1
Corporate Support Groups & Centrally Held Costs (\$M)
OPG

Line No.	Corporate Costs	2005 Actual (a)	2006 Actual (b)	2007 Actual (c)	2008 Plan (d)	2009 Plan (e)
1	Finance	56.2	57.0	62.6	67.1	68.5
2	Corporate Affairs	16.5	16.7	19.8	31.0	31.0
3	CIO	149.5	146.4	168.2	192.3	190.3
4	Corporate Centre ¹	20.4	19.3	21.0	21.6	21.6
5	Energy Markets	23.1	21.0	20.6	26.1	26.6
6	Human Resources	42.7	45.7	47.7	48.9	50.7
7	Real Estate	47.2	37.6	42.2	43.2	42.9
8	Sub-Total	355.6	343.7	382.1	430.2	431.6
	Centrally Held Costs:					
9	Pension/OPEB Related	97.3	208.7	178.8	147.9	117.4
10	Insurance	26.7	26.6	26.7	26.5	27.5
11	Performance Incentives	33.6	40.9	40.8	41.8	42.7
12	IESO Non-Energy Charges	25.9	22.4	20.5	35.9	35.2
13	Other	28.0	17.2	31.1	42.6	37.7
14	Sub-Total	211.5	315.8	297.9	294.7	260.5
15	Total	567.1	659.5	680.0	724.9	692.1

¹ Corporate Centre includes Executive Office, Corporate Secretary, and Law.

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Numbers may not add due to rounding.

Updated: 2008-03-14
EB-2007-0905
Exhibit F3
Tab 1
Schedule 1
Table 2

Table 2
Allocation of Corporate Support & Administrative Costs (\$M)
Nuclear

Line No.	Corporate Group	2005 Actual (a)	2006 Actual (b)	2007 Actual (c)	2008 Plan (d)	2009 Plan (e)
1	Finance	31.3	32.6	34.3	37.9	37.9
2	Corporate Affairs	9.2	11.0	10.6	20.1	19.8
3	CIO	98.8	95.9	111.5	124.6	123.3
4	Corporate Centre ¹	11.9	10.2	11.8	12.0	11.6
5	Energy Markets	2.8	1.3	2.5	4.2	4.1
6	Human Resources	28.0	30.7	32.8	32.6	33.6
7	Real Estate	36.1	28.6	33.1	32.3	32.1
8	Sub-Total	218.1	210.3	236.6	263.7	262.4
	Centrally Held Costs:					
9	Pension/OPEB Related	72.8	157.9	134.8	111.4	88.5
10	Insurance	11.8	11.8	11.5	11.7	12.2
11	Performance Incentives	24.6	28.9	29.0	28.9	29.5
12	IESO Non-Energy Charges	10.8	10.1	9.8	18.5	18.5
13	Other	18.1	4.2	25.1	22.8	19.1
14	Sub-Total	138.1	212.9	210.2	193.3	167.8
15	Total	356.2	423.2	446.8	457.0	430.2

1 Corporate Centre includes Executive Office, Corporate Secretary, and Law.

(W)

Numbers may not add due to rounding.

Updated: 2008-03-14
EB-2007-0905
Exhibit F3
Tab 1
Schedule 1
Table 3

Table 3
Allocation of Corporate Support & Administrative Costs (\$M)
Regulated Hydroelectric

Line No.	Corporate Group	2005 Actual (a)	2006 Actual (b)	2007 Actual (c)	2008 Plan (d)	2009 Plan (e)
1	Finance	2.3	4.0	5.1	5.7	6.1
2	Corporate Affairs	0.3	1.2	2.9	3.9	4.0
3	CIO	5.7	6.5	6.6	9.1	9.0
4	Corporate Centre ¹	1.9	2.5	2.1	2.1	2.3
5	Energy Markets	1.4	1.7	1.6	2.8	2.8
6	Human Resources	1.7	2.1	2.2	2.4	2.5
7	Real Estate	1.3	1.5	1.4	2.2	2.1
8	Sub-Total	14.6	19.5	21.9	28.2	28.8
	Centrally Held Costs:					
9	Pension/OPEB Related	3.3	7.7	6.1	5.2	4.1
10	Insurance	3.5	3.2	3.3	3.2	3.3
11	Performance Incentives	1.2	1.8	2.1	2.5	2.5
12	IESO Non-Energy Charges	4.5	4.4	3.4	6.1	6.1
13	Other	0.5	2.0	1.2	2.3	2.0
14	Sub-Total	13.0	19.1	16.1	19.3	18.0
15	Total	27.6	38.6	38.0	47.5	46.8

1 Corporate Centre includes Executive Office, Corporate Secretary, and Law.

OPG Corporate Support & Central O&M Costs

Year	total regulated (\$M)	growth rate relative to '05	absolute increase (\$M)	nuclear (\$M)	growth rate relative to '05	absolute increase (\$M)	regulated hydraulic (\$M)	growth rate relative to '05	absolute increase (\$M)	Regulated Corp. Cost (\$M)	growth rate relative to '05	absolute increase (\$M)	unregulated O&M (\$M)	growth rate relative to '05	absolute increase (\$M)
2005	567.1			356.2			27.6			383.8			183.3		
2006	659.5			423.2			38.6			461.8			197.7		
2007	680	19.9%	112.9	446.8	25.4%	90.6	38	37.7%	10.4	484.8	26.3%	101.0	195.2	6.5%	11.9
2008	724.9			457			47.5			504.5			220.4		
2009	692.1	22%	125.0	430.2	21%	74.0	46.8	70%	19.2	477	24%	93.2	215.1	17%	31.8
reference	F3/1/1 T1			F3/1/1 T2			F3/1/1 T3								

Ampco Table From Information Contained in:

F3, T1, Sch 1, Table 1,

F3, T1, Sch 1, Table 2,

F3, T1, Sch 1, Table 3.

Ex. A2, Tab 1, Sch. 1, App. A

CONSOLIDATED STATEMENTS OF INCOME

Years Ended December 31

(millions of dollars except where noted)

Revenue (Note 19)

Revenue before revenue limit rebate

Revenue limit rebate (Note 16)

Fuel expense

Gross margin

Expenses (Note 19)

Operations, maintenance and administration

Depreciation and amortization (Note 5)

Accretion on fixed asset removal and nuclear waste management liabilities (Note 10)

Earnings on nuclear fixed asset removal and nuclear waste management funds (Note 10)

Property and capital taxes

Income before the following:

Other (gains) and losses (Note 17)

Income before interest and income taxes

Net interest expense

Income before income taxes

Income tax (recovery) expense (Note 11)

Current

Future

Net income

Basic and diluted income per common share (dollars)

Common shares outstanding (millions)

See accompanying notes to the consolidated financial statements

	2007	2006
Revenue before revenue limit rebate	5,887	5,725
Revenue limit rebate (Note 16)	(227)	(161)
	5,660	5,564
Fuel expense	1,270	1,098
Gross margin	4,390	4,466
Operations, maintenance and administration	2,974	2,752
Depreciation and amortization (Note 5)	695	689
Accretion on fixed asset removal and nuclear waste management liabilities (Note 10)	507	499
Earnings on nuclear fixed asset removal and nuclear waste management funds (Note 10)	(481)	(371)
Property and capital taxes	85	106
	610	791
Other (gains) and losses (Note 17)	(10)	22
Income before interest and income taxes	620	769
Net interest expense	143	193
Income before income taxes	477	576
Income tax (recovery) expense (Note 11)		
Current	1	60
Future	(52)	26
	(51)	86
Net income	528	490
Basic and diluted income per common share (dollars)	2.06	1.91
Common shares outstanding (millions)	256.3	256.3

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Numbers may not add due to rounding.

Updated: 2008-03-14
EB-2007-0905
Exhibit F1
Tab 1
Schedule 1
Table 1

Table 1
Operating Costs Summary - Regulated Hydroelectric (\$M)

Line No.	Cost Item	2005 Actual (a)	2006 Actual (b)	2007 Actual (c)	2008 Plan (d)	2009 Plan (e)
	OM&A:					
1	Base OM&A	47.3	47.8	78.6	56.1	57.9
2	Project OM&A	6.6	9.4	7.0	12.9	12.1
3	Allocation of Corporate Costs	27.6	38.6	38.0	47.5	46.8
4	Asset Service Fee	1.2	2.5	2.3	2.5	2.1
5	Total OM&A	82.7	98.2	125.9	119.0	119.0
6	Gross Revenue Charge	251.2	245.5	242.0	228.2	244.1
	Other Operating Cost Items:					
7	Depreciation	67.1	66.2	68.5	62.7	63.2
8	Income Tax	7.0	0.0	0.0	0.0	0.0
9	Capital Tax	12.0	11.9	8.8	8.7	8.7
10	Property Tax	0.0	0.0	0.0	0.0	0.0
11	Total Operating Costs	419.9	421.7	445.2	418.6	435.0

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Table 1
Operating Costs Summary - Nuclear (\$M)

Line No.	Cost Item	2005 Actual (a)	2006 Actual (b)	2007 Actual (c)	2008 Plan (d)	2009 Plan (e)
	OM&A:					
1	Base OM&A	1,036.4	1,133.8	1,216.6	1,360.8	1,368.0
2	Project OM&A	155.9	142.0	111.6	144.6	137.1
3	Outage OM&A	163.0	187.7	215.6	192.2	207.9
4	Allocation of Corporate Costs	356.2	423.2	446.8	457.0	430.2
5	Asset Service Fee	14.7	30.8	33.2	29.9	25.5
6	P2/3 Impairment Charges and Write-Offs ¹	120.0	0.0	0.0	0.0	0.0
7	Total OM&A	1,846.2	1,917.5	2,023.8	2,184.6	2,168.7
8	Nuclear Fuel Costs	100.5	104.9	113.0	162.4	204.2
	Other Operating Cost Items:					
9	Depreciation ²	259.6	242.8	300.7	294.4	316.4
10	Income Tax	5.7	0.0	0.0	0.0	0.0
11	Capital Tax	8.6	9.0	7.9	7.9	7.8
12	Property Tax	7.5	16.8	8.2	13.9	14.2
13	Total Operating Costs	2,228.1	2,291.0	2,453.5	2,663.1	2,711.3
14	Total Regular Staff FTEs	7,311.7	7,484.7	7,542.0	8,109.1	7,933.8
15	Non-Regular Staff FTEs	787.2	624.5	736.8	379.3	250.9
16	Total Staff FTEs	8,098.9	8,109.2	8,278.8	8,488.4	8,184.7

1 Impairment charge (\$63M) associated with construction work in progress and fixed assets for Pickering A Units 2 & 3; and write-off of inventory (\$57M) for Pickering A Units 2 & 3.

2 Includes nuclear waste management variable expenses (2005 Actual - \$4.0M, 2006 Actual - \$3.6M, 2007 Actual - \$1.6M, 2008 Plan - \$1.7M, 2009 Plan - \$1.8M)

Filed: 2007-11-30
EB-2007-0905
Exhibit F4
Tab 1
Schedule 1

Report to
Ontario Power Generation Inc.
Regarding
Corporate Allocation Methodology Review

April 30, 2006



9

OPG CENTRALIZED SUPPORT AND ADMINISTRATIVE COSTS
COST ALLOCATION METHODOLOGY REVIEW

SUMMARY OF DISTRIBUTIONS

DEPARTMENT / Activities	Activity % of Dept.	DISTRIBUTION TO BUSINESS UNITS				HYDROELECTRIC Regulated / Unregulated
		Direct Assignment		Allocation		
		Method	BU Direct Assign %	Cost Driver	BU Alloc- ation %	
FINANCE GROUP- CFO OFFICE						
Pension Fund Reviews	36.6%					
External Purchase Service	100.0%		0.0%	FTEs	36.6%	
					100.0%	
CORPORATE AFFAIRS GROUP- PUBLIC AFFAIRS						
Public Awareness	25.6%	Estimates		Blend- OM&A / CapEx	25.6%	Estimates to Stations
Corporate Citizenship Program- Site Specific Initiatives	10.4%	Specific	10.4%			Specific to Stations
Community Research Programs	2.3%			Blend- OM&A / CapEx	2.3%	
Water Safety Awareness	1.7%	Specific	1.7%			MWh Generation
	100.0%		65.4%		34.6%	
CORPORATE AFFAIRS GROUP- REGULATORY AFFAIRS / STRATEGIC PLANNING						
Regulatory Affairs- External Purchase Services	8.8%	Specific / Estimates	5.2%	Blend- OM&A / CapEx	3.6%	Blend- OM&A / CapEx
Strategic Planning	29.2%	Specific	1.8%	Blend- OM&A / CapEx	27.4%	N/A
Regulatory Affairs- External Purchase Services	8.8%	Specific / Estimates	5.2%	Blend- OM&A / CapEx	3.6%	Blend- OM&A / CapEx
	100.0%		38.1%		61.9%	
CORPORATE AFFAIRS GROUP- SVP OFFICE						
Regulatory Affairs- External Purchase Services	8.8%	Specific / Estimates	5.2%	Blend- OM&A / CapEx	3.6%	Blend- OM&A / CapEx
	100.0%		0.0%		100.0%	

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OPG 2007 Annual Report

Discussion of Operating Results by Business Segment

This section summarizes OPG's key results by segment for the years ended December 31, 2007 and 2006. The following table provides a summary of revenue, earnings and key generation and financial performance indicators by business segment:

(millions of dollars)

	2007	2006
Revenue, net of revenue limit rebate		
Regulated – Nuclear	2,581	2,665
Regulated – Hydroelectric	695	685
Unregulated – Hydroelectric	699	736
Unregulated – Fossil-Fuelled	1,550	1,313
Other	135	165
	5,660	5,564
(Loss) income before interest and income taxes		
Regulated – Nuclear	(84)	70
Regulated – Hydroelectric	249	264
Unregulated – Hydroelectric	329	375
Unregulated – Fossil-Fuelled	74	(37)
Other	52	97
	620	769
Electricity Generation (TWh)		
Regulated – Nuclear	44.2	46.9
Regulated – Hydroelectric	18.1	18.3
Unregulated – Hydroelectric	13.8	15.0
Unregulated – Fossil-Fuelled	29.0	25.0
Total electricity generation	105.1	105.2
Nuclear unit capability factor (per cent)		
Darlington	89.5	88.7
Pickering A	41.3	72.0
Pickering B	75.0	75.2
Equivalent forced outage rate (per cent)		
Regulated – Hydroelectric	1.8	1.5
Unregulated – Hydroelectric	1.5	1.9
Unregulated – Fossil-Fuelled	11.5	14.1
Availability (per cent)		
Regulated – Hydroelectric	94.1	94.2
Unregulated – Hydroelectric	93.9	92.4
Nuclear PUEC (\$/MWh)	47.18	42.87
Regulated – Hydroelectric OM&A expense per MWh (\$/MWh)	5.30	5.03
Unregulated – Hydroelectric OM&A expense per MWh (\$/MWh)	13.33	11.27
Unregulated – Fossil-Fuelled OM&A expense per MW (\$000/MW)	66.8	61.1

11

Board Staff Interrogatory #58

Ref: Ex. F3-T1-S1

Issue Number: 5.4

Issue: Are the corporate costs allocated to the regulated hydroelectric and nuclear businesses appropriate?

Interrogatory

The application states "Approximately 70 percent of OPG's total corporate function and centrally held costs are either directly assigned or allocated to regulated operations." Has the regulated allocation increased or decreased relative to the historic years? If the allocations have changed, please explain why. Please support your explanation by replicating Table 1 in the application (F3-T1-S1) and include two columns for each year showing the total \$ amounts allocated to: (1) non-prescribed assets; and (2) prescribed assets.

Response

The table replicating Table 1 Ex. F3-T1-S1 is attached in the requested format. The table shows that the share (approximately 70%) of total corporate function and centrally held costs are either directly assigned or allocated to regulated operations during the historic (2005 - 2007) and forecast periods (2008 - 2009) has been stable. Percentages allocated to regulated operations per the attached tables are as follows: 2005 Actual – 67.7%, 2006 Actual – 70.0%, 2007 Actual – 71.3%, 2008 Plan – 69.6%, 2009 Plan – 68.9%.

In comparing the historic period to the forecast period, several categories of corporate costs did experience notable fluctuations in the percentage allocated to prescribed assets. These fluctuations are explained below.

- The percentage of Corporate Affairs costs allocated to regulated facilities increased relative to the historic period mainly due to activities associated with the OEB payment amounts hearing, water safety initiatives undertaken on behalf of the hydroelectric business, community engagement initiatives and initiatives related to community and sponsorship advertising.
- The percentage of Energy Markets costs allocated to regulated facilities increased relative to the historic period mainly due to the organizational transfer of the Sustainable Development (SD) group from Corporate Centre to Energy Markets in 2008 (A higher percentage of the SD group's costs is attributable to the regulated operations than that of the other activities of Energy Markets). The corresponding decrease in the amount of Corporate Centre costs allocated to regulated facilities

1 following the transfer of the SD group has been offset by an increase in legal costs
2 associated with the OEB payment amounts proceeding.
3

- 4 • The percentage of IESO Non-Energy Charges allocated to regulated facilities
5 increased relative to the historic period mainly as a result of the addition of the
6 Global Adjustment and OPG rebate. This change is discussed in L-1-60.
7

- 8 • The percentage of other centrally held costs allocated to regulated facilities
9 generally decreased relative to the historic period. The decrease is due mainly to
10 the lower ONFA guarantee fee in 2008 and 2009 and non-recurring nuclear
11 environmental charges incurred in 2007. In general, OPG notes that the percentage
12 of other centrally held costs allocated to regulated facilities is subject to greater
13 variability year-over-year because on the non-recurring nature of certain costs
14 charged to this category.
15

16 Please refer to Ex. F3-T1-S2 for additional detail relating to year-over-year fluctuations in
17 corporate costs allocated to regulated operations.

6.4 Incentive Programs

6.4.1 Goalsharing

Goalsharing is an annual incentive plan for unionized staff to share in the gains realized when OPG meets or exceeds its business targets. This program does not operate like a profit sharing plan but rather is based on achieving business unit objectives such as decreased costs, increased productivity and reliability and environmental and safety targets. The objectives of the goalsharing program are:

- To contribute to OPG's business success.
- To share OPG's business success with all represented employees.
- To engage employees in OPG's business.
- To enhance employees' understanding of OPG's business.
- To foster a productive relationship and sense of partnership between OPG Management, the Society and the PWU.

Awards are distributed following the end of the calendar year (typically within the first quarter of the following year). Goalsharing payments are considered to be income and are subject to statutory deductions; however, they are non-pensionable and do not form part of base salary for any other purpose. Management establishes the mandatory performance measures and target performance levels for the site scorecards, and determines the year-end results and performance score. Measures and targets may be adjusted by OPG during the year if there are significant changes to the business direction or priorities. Goalsharing results and awards are audited internally and are approved by the Board of Directors. Refer to Chart 3 for information on recent award levels.

6.4.2 Management Group Annual Incentive Plan

Incentives are a key and normal component of the compensation payable to executives and non-union employees. The AIP was adopted in 1999 to encourage and reward performance, based on the achievement of defined objectives. The plan has evolved over the years and has been adapted in response to changing business requirements. In 2007, the plan was revised to improve the alignment of the measures of the production units and the awards given to the corporate support functions as well as to simplify the plan. The intent of the plan

1 is to deliver a portion of total compensation paid to Management Group employees on a pay-
2 at-risk basis. Under the plan, eligible employees can earn annual cash awards if key cost
3 control and operational objectives of the Corporation, Business Unit and individual are met
4 during the plan year. Refer to Chart 3 for information on recent award levels.

5
6 As with other aspects of Management Group compensation previously discussed, the AIP
7 also undergoes a rigorous review process. After the CEO approves the targets, the
8 scorecards are reviewed and approved by the Compensation and Human Resources
9 Committee. AIP is made up of three components: a corporate scorecard, business unit
10 scorecards, and personal objectives for individual performance. For each performance
11 objective, there are threshold, target, and maximum levels of performance. Once the overall
12 score is established, AIP awards are calculated based on a weighting of the corporate,
13 business unit, and individual elements. There are different weightings for the corporate and
14 business unit elements depending on whether the job functions are production-based or
15 focused on providing corporate support. Awards also vary depending on an employee's level
16 of contribution and salary band level. Refer to Chart 4 for information on target award
17 percentages for each salary band for production-based employees. Once performance levels
18 are assessed, the CEO and the Compensation and Human Resources Committee complete
19 a final review and approval of the payout for the AIP. Results and payouts undergo an
20 internal audit each year.

21 22 6.4.3 Authorization Bonuses and Leadership Allowances

23 Employees in Nuclear who are authorized by the Canadian Nuclear Safety Commission,
24 such as Control Room Shift Supervisors and Control Room Shift Operating Supervisors, and
25 who are required to maintain their licenses as a requirement of their job, receive a license
26 retention bonus between 14 percent - 20 percent of their base salary. The bonus is
27 pensionable. In addition, Authorized Training Supervisors are eligible to receive 50 percent of
28 the Control Room Shift Supervisors and Control Room Shift Operating Supervisors
29 authorization bonus.

1 Management Group employees who are required to work shifts are paid a leadership
2 allowance. This allowance is in lieu of provisions such as shift premiums and on-call
3 payments which are afforded to represented employees who work shifts. The leadership
4 allowance provides for up to 30 percent - 40 percent of base salary, of which 10 percent is
5 pensionable. In addition, Management Group employees who are on call 24 hours a day,
6 seven days a week, are licensed and hold the license authority for plant operations receive
7 the same bonus.

8
9 These allowances and bonuses are necessary to attract and retain staff for the applicable
10 positions and to provide appropriate incentives to staff to keep their licenses current. The
11 staff licensing process is set out by the Canadian Nuclear Safety Commission and
12 represents a challenging and time-consuming task. Not every employee is prepared to
13 devote personal time and effort necessary to obtain and maintain a license. In addition,
14 Management Group employees in these organizational units are significantly more likely to
15 experience salary compression with their unionized subordinates.

16 17 **6.5 Compensation Summary**

18 Operating within a unionized environment can pose significant challenges in terms of cost
19 containment. This challenge becomes even greater when coupled with the requirement for
20 highly skilled workers and an anticipated staff shortfall. Despite all of the above, OPG has
21 made progress toward containing labour costs through the implementation of a number of
22 initiatives, including skill broadening, a new Society compensation plan, and maintaining
23 management salaries at the 75th percentile of the Utility market. Details on compensation
24 benchmarking and wage competitiveness are found in section 9.0.

25 26 **7.0 PENSION AND BENEFITS**

27 OPG's pension and benefit programs consist of post employment benefits as well as health,
28 dental, and other benefits for current employees and their dependants. Post employment
29 benefits programs consist of a registered pension plan ("RPP") and supplementary pension
30 plans, and other post employment benefits ("OPEB"), which include post-retirement benefits,

1 such as group life insurance and health and dental care for pensioners and their dependants,
2 as well as long-term disability benefits for current employees.

3
4 Pension and benefits levels at OPG are determined in two ways. Approximately 90 percent
5 of the employee population is covered by collective agreements that contain pension and
6 benefits clauses. Pension and benefits levels for Management Group employees are
7 determined by the Board of Directors. At Ontario Hydro, all pension plan details and most
8 health and dental benefit items were the same for all employees. In contrast, OPG views
9 pension and benefits as part of the total compensation package that should vary according to
10 the overall compensation for each employee group. As a result, there are differences
11 between the pension and benefits levels for PWU and Society-represented staff and those
12 for the Management Group. These differences also contribute to the ability of OPG to attract,
13 retain, and motivate employees.

14
15 As a successor from the Ontario Hydro pension plan, OPG has a contributory, defined
16 benefit RPP, which follows closely the model used by most public sector pension plans. All
17 OPG employees earn and contribute towards an ample pension package, although the
18 benefit levels are slightly less for non-unionized employees than for union members. In
19 addition, all employees are eligible to receive benefits from the defined benefit
20 supplementary pension plans should their pension promise exceed the limits under the
21 *Income Tax Act* for payment from the RPP. The health and dental benefits have also moved
22 away from a "one size fits all" approach and these now show differences between the
23 unionized and non-unionized groups of employees. OPG monitors benefit payments
24 associated with both pension and health and dental benefits plans closely to ensure that the
25 plans are being administered appropriately.

26 27 **7.1 Pension**

28 The RPP is funded. The fund assets include equity securities and corporate and government
29 debt securities, real estate, and other investments which are managed by professional
30 investment managers. The fund does not invest in equity or debt securities issued by OPG.
31 Independent actuarial valuations are performed at least once every three years to determine

UNDERTAKING J4.10**Undertaking**

Updating K4.1, page 3 with the first quarter results.

Response**Table #5 OPG Nuclear O&M and Production**

<u>Year</u>	<u>Production TWh</u>	<u>Non-Fuel OM&A (\$ M)</u>	<u>Corporate OM&A (\$ M)</u>	<u>Unit Cost (\$/MWh)</u>
2005	45	1370	356.2	38.36
2006	46.9	1494.3	423.2	40.88
2007	44.2	1577	446.8	45.79
Q1 2008 Actual	13.2	384.5	101.7	36.83
2008	51.4	1727.6	457	42.50
2009	49.9	1738.5	430.2	43.46

SOURCES E2-1-1 F2-1-1 F3-1-1 T2

NOTES: 2005 excludes \$120M P2/P3 impairment charge

Update to table from AMPCO Evidence – Ex. M/Tab 2 p. 9 of 23

In developing its response to this undertaking, OPG discovered that the original table from AMPCO's evidence contained a material error.

AMPCO's error resulted in a double counting of the corporate OM&A allocated to nuclear and as a result the unit cost figures shown in AMPCO's evidence are significantly overstated. AMPCO used data from F2-1-1 for "Non-Fuel O&M" that already included allocated corporate costs. The allocated corporate costs were then added again under their column "Corp. O&M (N)", in effect double counting some \$350M - \$450M in costs depending on the year.

OPG has recalculated the figures from the original AMPCO table by removing the allocated corporate OM&A from the "Non-Fuel OM&A" column, which is reflected in the table above. This prevents a double counting. The unit energy costs for each of the years from 2005 to 2009 were then corrected. This results in a Unit Energy Cost that is some \$8 to \$10 per MWh lower than the evidence submitted by AMPCO.

1 As requested in the undertaking, OPG has added a row reflecting its actual Q1, 2008
2 results.

3
4 The increase in the calculated unit energy cost in 2007 is a result of the impact of 2
5 specific events that reduced energy production in that year. Comparing 2005 to 2009,
6 the increase in unit energy costs over that period averages 3.3% per year or 13.3% over
7 the five-year period.

8
9 Note that the Unit Energy costs as calculated above are not the same as Production Unit
10 Energy Cost (PUEC) that is used by OPG in its published financial information and in the
11 application. It is also different than the standard defined total unit energy costs used by
12 EUCG.
13

Summary Schedule
Corporate Support Groups & Centrally Held Costs (\$M)
QPG

Line No.	Corporate Costs	2005 Actual					2006 Actual					2007 Actual					2008 Plan				
		Prescribed Assets	Percent Allocated to Prescribed Assets	Non Prescribed Assets	Total	Prescribed Assets	Percent Allocated to Prescribed Assets	Non Prescribed Assets	Total	Prescribed Assets	Percent Allocated to Prescribed Assets	Non Prescribed Assets	Total	Prescribed Assets	Percent Allocated to Prescribed Assets	Non Prescribed Assets	Total	Prescribed Assets	Percent Allocated to Prescribed Assets	Non Prescribed Assets	Total
1	Finance	33.6	59.8%	22.6	56.2	36.8	64.3%	20.4	57.0	39.4	62.9%	23.2	62.6	43.6	65.0%	23.5	67.1	44.0	64.2%	24.5	68.5
2	Corporate Affairs	9.5	57.6%	7.0	16.5	12.2	73.1%	4.5	16.7	13.5	68.2%	6.3	19.8	24.0	77.4%	7.0	31.0	23.8	76.8%	7.2	31.0
3	CIO	104.5	59.9%	45.0	149.5	102.4	69.9%	44.0	146.4	118.1	70.2%	50.1	168.2	133.7	65.5%	56.6	192.3	132.3	69.5%	56.0	190.3
4	Corporate Centre ¹	13.8	67.8%	6.6	20.4	12.7	65.5%	6.6	19.3	13.9	68.2%	7.1	21.0	14.1	65.3%	7.5	21.6	13.9	64.4%	7.7	21.6
5	Energy Markets	4.2	18.4%	18.9	23.1	3.0	14.3%	18.0	21.0	4.1	19.9%	16.5	20.6	7.0	26.8%	19.1	26.1	6.9	25.9%	19.7	26.6
6	Human Resources	29.7	69.6%	13.0	42.7	32.8	71.3%	12.9	45.7	35.0	73.4%	12.7	47.7	35.0	71.6%	13.9	48.9	35.1	71.2%	14.6	50.7
7	Real Estate	37.4	79.2%	9.8	47.2	30.1	80.1%	7.5	37.6	34.5	81.8%	7.7	42.2	34.5	79.9%	8.7	43.2	34.2	79.7%	8.7	42.9
8	Sub-Total	\$ 232.7	65.4%	\$ 122.9	\$ 355.6	\$ 228.0	66.9%	\$ 113.9	\$ 343.7	\$ 258.5	67.7%	\$ 123.6	\$ 382.1	\$ 291.9	67.9%	\$ 135.3	\$ 430.2	\$ 291.2	67.5%	\$ 140.4	\$ 431.6
Centrally Held Costs:																					
9	Pension/OPEB Related	76.1	78.2%	21.2	97.3	165.6	79.3%	43.1	208.7	140.9	78.8%	37.9	178.8	116.6	78.8%	31.3	147.9	92.6	78.9%	24.8	117.4
10	Insurance	15.3	57.3%	11.4	26.7	15.0	56.4%	11.6	26.6	14.8	55.4%	11.9	26.7	14.9	56.2%	11.6	26.5	15.5	56.4%	12.0	27.5
11	Performance Incentives	25.8	76.8%	7.8	33.6	30.7	75.1%	10.2	40.9	31.1	76.2%	9.7	40.8	31.4	75.1%	10.4	41.8	32.0	74.9%	10.7	42.7
12	IESO Non-Energy Charges	15.3	59.1%	10.6	25.9	14.5	64.7%	7.8	22.4	13.2	64.4%	7.3	20.5	24.6	68.5%	11.3	35.9	24.5	69.9%	10.6	35.2
13	Other	18.6	66.4%	9.4	28.0	6.2	35.9%	11.0	17.2	26.3	84.6%	4.8	31.1	25.1	58.9%	17.5	42.6	21.1	56.0%	16.6	37.7
14	Sub-Total	\$ 151.1	71.4%	\$ 60.4	\$ 211.5	\$ 232.0	73.5%	\$ 83.8	\$ 315.8	\$ 226.3	76.0%	\$ 71.6	\$ 297.9	\$ 212.6	72.1%	\$ 82.1	\$ 294.7	\$ 185.6	71.3%	\$ 74.7	\$ 260.5
15	Total	\$ 383.8	67.7%	\$ 183.3	\$ 567.1	\$ 461.8	70.0%	\$ 197.7	\$ 659.5	\$ 484.8	71.3%	\$ 195.2	\$ 680.0	\$ 504.5	69.6%	\$ 220.4	\$ 724.9	\$ 477.0	68.9%	\$ 215.1	\$ 692.1

1 Corporate Centre includes Executive Office, Corporate Secretary, and Law.

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