

**IN THE MATTER OF** the *Ontario Energy Board Act, 1998*,  
S.O. 1998, c.15, (Schedule B);

**AND IN THE MATTER OF** an application by Ontario  
Power Generation Inc. pursuant to section 78.1 of the *Ontario  
Energy Board Act, 1998* for an Order or Orders determining  
payment amounts for the output of certain of its generating  
facilities;

**OPG SUPPLEMENTAL COMPENDIUM OF EVIDENCE**

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## **VIII. REVENUE DEFICIENCY**

### **A. Regulatory Tax Loss, Carry-Forwards and Mitigation**

198. We support OPG's use of regulatory tax loss carry-forwards to eliminate income taxes in 2008 and 2009, and to provide a further mitigation amount of \$228M. We agree that the "Stand-Alone" principle does not oblige OPG to allocate the benefit of these prior period tax loss carry-forwards relating to the regulated operations of OPG to ratepayers. However, without these mitigation measures, the revenue deficiency OPG seeks to recover would be \$367M higher.<sup>90</sup> As well, we submit that even with these mitigation measures, the impact on consumers of the revenue OPG seeks is incompatible with the cost containment, rate stability, and competitiveness objectives which accompanied the Government's February 23, 2005 announcement of its establishment of OPG's current rates.

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<sup>90</sup> See footnote 27

**B. Summary of Recommended Revenue Deficiency Reductions**

199. The revenue deficiency reductions recommended in this Argument can be summarized as follows:

• Excluding ARC from capital structure for the purposes of calculating OPG's costs of debt and equity - \$334M reduction – offset by adding \$181M of ARC costs to Cost of Service <sup>91</sup>	(\$ 153M)
• Reducing ROE to between 5.85% and 8.57% on a 45% equity ratio of average capital structure for 2008 and 2009 of about \$5,100M, which excludes the value of unfunded nuclear liabilities recorded in the ARC fixed asset account calculation provided for a ROE of 7.21%, being the mid-point of the range	(\$ 107)
• Reducing cost of debt	(\$ 9M)
• Adjustment for OPG's understatement of Bruce revenues in excess of costs	(\$ 171M)
• OM&A cost disallowance <sup>92</sup>	(\$ 98M)
• Allocation of Corporate Costs reduction <sup>93</sup>	(\$ 40M)
• Nuclear Liability Deferral Account reductions <sup>94</sup>	(\$ 53M)
TOTAL:	(\$ 631M)

**IX. DEFERRAL & VARIANCE ACCOUNTS**

**A. Nuclear Fuel Costs**

200. Commodity price risks may now be sufficient to justify the establishment of a nuclear fuel cost variance account. Accordingly, we do not object to the establishment of a nuclear fuel cost variance account.

<sup>91</sup> Section III of this Argument

<sup>92</sup> Section V of this Argument

<sup>93</sup> Section VI of this Argument

<sup>94</sup> Section VII of this Argument



*The financial profile has improved since 2004, following the announcement of the interim regulated rate structure that came into effect on April 1, 2005.*

*Credit metrics for the 12 months ending September 30, 2007, were 35.6% debt to capital, 20% cash flow to total debt, and 3.27 x EBIT gross interest coverage were well within the range that one would expect for the ratings."*

27. All of the financial performance positives emanating from the regulated rate regime which the Government established for OPG on February 23, 2005, creates an expectation that any increases in OPG's current rates will be based upon an Application by OPG of the criteria which the Government applied to establish current rates. Regrettably, this expectation has not materialized. The relief OPG seeks in its Application is entirely incompatible with the cost constraint rate-setting criteria which the Government applied at the outset.
28. Excluding one time tax loss carry-forwards for determining 2008 and 2009 utility income, and a further tax loss carry-forward mitigation amount of \$228M, the total revenue deficiency OPG asserts for the 21 month test period is \$1,456M, being a 26.9% increase over the 21 month revenue deficiency of \$5,406M embedded in OPG's current Government approved rates.<sup>27</sup>
29. Components of the overall revenue deficiency, which OPG asks the Board to approve, which are particularly incompatible with discipline the Government sought to impose upon OPG to contain the costs and to earn, rather than have a regulatory authority impose, increases in its profitability, are the profit or equity return-related revenue requirement increases in excess of \$400M<sup>28</sup> and the Operating Maintenance and Administration ("OM&A") cost increases in excess of \$620M.<sup>29</sup>

<sup>27</sup> Revenue deficiency of \$1,029B plus 75% of 2008 taxes and 100% of 2009 taxes derived from Ex.F3, Tab 2, Schedule 1, Table 7 of \$38.5M and \$100.4M respectively, for a total of about \$139M plus the further mitigation amount of \$228M equals \$1,456M.

<sup>28</sup> See Footnote 11

<sup>29</sup> Ex.L-3-49 – Hydro-electric OM&A increase of \$64M plus nuclear OM&A increase of \$559M equals \$623M.



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247. In SEC's submission, if the Board approves this variance account, it should be on the same basis as applies to distributors.

***iv.) Interest Rate on Deferral Accounts***

248. OPG proposes to apply interest rate on its deferral accounts as follows:

- Interest at the long-term debt rate for all deferral accounts except the Pickering A Return to Service ("PARTS") Deferral Account;
- Interest equivalent to the weighted average cost of capital on the PARTS Deferral Account.

[J1-3-1, pg. 2]

249. In both cases, the proposed rate is significantly higher than the interest rate allowed on deferral accounts of all other utilities in the Legislature.

250. The only justification provided by OPG is that its accounts will be paid out over a longer period than most other accounts held by other distributors; and, its account balances are larger, on an absolute basis, than most other deferral accounts.

251. OPG provided no evidence to substantiate either claim. In SEC's submission, both points are speculative and irrelevant. As pointed out by Board Staff [at pg. 45 of the Board Staff Submission] other utilities have recorded large balances accumulated over several years in their deferral and variance accounts. These utilities have all applied the Board's prescribed interest rate for deferral and variance accounts. In addition, of course, the size of the account balance should be considered relative to the size of the utility, not in absolute terms as is suggested by OPG. OPG's deferral account balances, as a proportion of its size, are much smaller than the balances carried by many electricity distributors.

**10.2 Is the proposed treatment of OPG's loss carry forwards for the regulated business appropriate? (K1/T1/S2)**

252. SEC supports the use of loss carry forwards to mitigate the payment amount increases during the test years. SEC notes, however, that absent the, temporary, mitigating effect of the loss carry forwards, the increase in payment amounts would be substantially higher than they appear to be in this application. SEC submits that the true impact the Board should look at is the increase in payment amounts that will result once the loss carry forwards are used up; this is the actual amount consumers will pay in the long run.

253. In addition, SEC questions the way in which the previous year tax losses have been allocated as between the regulated and unregulated businesses. In particular, OPG has used losses generated by the regulated business to shelter income tax payable on income earned by the unregulated businesses [Tr9:78-79]

254. SEC recognizes that OPG files income tax as a single corporate entity for both regulated and unregulated business units. For regulatory purposes, however, OPG should have to separate both income and losses generated by the two sides of the business. That means that losses generated by the regulated business should not be used to decrease income tax payable by the unregulated business. In SEC's submission, the losses applied against the unregulated business income should be carried forward, for regulatory purposes, and be used to offset the income tax component of OPG's revenue requirement in the next rate period following 2009.

### **Implementation Date**

255. Though not on the Issues List, the order making OPG's payment amounts interim as of April 1, 2008 has raised the issue of what the effective date of the new payment amounts should be. OPG has addressed this issue in its Argument in Chief [at p.110-111].

256. The Regulation establishing interim payment amounts, which went into force in 2005, specifically contemplated that the Board would set new payment amounts effective April 1, 2008.

257. The Filing Guidelines for Ontario Power Generation were not issued, however, until July 27, 2007. In SEC's submission, OPG moved with reasonable diligence to file its application within a reasonable time after the Board issued its Filing Guidelines. Could OPG have filed

OPG was first subject to rate regulation by the Board. The Council submits that the Board has established regulatory precedent in approving tax variance accounts.

148. Issue 10.2: **Is the proposed treatment of OPG's loss carry forwards for the regulated business appropriate?**

149. With the contribution made to the Nuclear Liabilities segregated funds during the interim period, the associated expense and tax deduction created tax losses for the Corporation.

150. As the tax losses occurred during the interim period when rates were set for OPG's prescribed assets, the tax loss accordingly flowed through to the Corporation. As the tax losses were generated mainly due to the regulated assets, OPG proposes to apply the tax losses to 2008 and 2009 thereby eliminating the projected regulated taxable income and mitigate the bill impact of the proposed payment amounts in the test years (AIC, p. 109).

151. The Council accepts OPG's proposal and commends its management for making the proposal to reduce regulated rates in the test years. The Council notes that the tax loss carry forward masks the rate impact OPG's 2008 and 2009 revenue requirement, delaying the full impact to future test years.

#### IV CONCLUSION

152. As noted at various points in this Written Argument, the Board is constrained in two ways in dealing with OPG's application. The first are the constraints imposed by the Regulation. The second are the practical constraints imposed by the fact that this is the first application for OPG and there are no Board decisions establishing regulatory benchmarks against which the Board can measure the prudence of OPG's expenditures or the reasonableness of its forecasts.

153. How the Board deals with these constraints has important implications for OPG's next application. The Council submits that it was not the intention of the government to limit the discretion of the Board to set just and reasonable rates beyond OPG's first application. To do otherwise would amount to amending section 78.1 of the Act, something which only the legislature can do. The Council submits that the Board should allow the constraints imposed by

the Regulation to affect the decision in this case only to the minimum extent required to give effect to that limited intention. The Board should not allow the constraints imposed by the Regulation to limit or constrain the Board's consideration of OPG's next application.

154. The MOA requires that OPG undertake benchmarking. The evidence filed in this case indicates that OPG has undertaken benchmarking in some areas of its activities. However, benchmarking will not be a meaningful exercise if the Intervenor or the Board do not accept the terms or the scope of the benchmarking, or how it is carried out.

155. The Council submits that, to the extent possible, all benchmarking should be undertaken by external experts, and be based on terms of reference which are acceptable to the Intervenor. Doing so would reduce the risk of material disagreements over the application of the results of the benchmarking in OPG's next application.

## V COSTS

156. The Council asks that it be awarded 100 per cent of its reasonably-incurred costs for its participation in this application.

157. The Council submits that it has behaved responsibly in its participation in the proceeding. Recognizing the constraints on what the Board could decide, the Council has limited its participation in the hearing to those issues on which the Board has an unconstrained discretion. In addition, the Council cooperated with the Vulnerable Energy Consumers Coalition to jointly sponsor the expert evidence of Dr. Laurence Booth.

158. Finally, so as to avoid undue hardship because of extended delays in the payment of cost awards, the Council asks that the Board issue its decision on cost claims now and not wait for the issuance of its decision on the merits of OPG's application.

159. The Council submits that the Board's decision-making process is enhanced, particularly in an important case, like this, of first instance, by the participation of the Intervenor and their experts. That participation is made more difficult if there are extended delays in the payment of cost awards. OPG and its experts do not operate under that constraint, and neither should the Intervenor.

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**Board Staff Interrogatory #117**

**Ref:** Ex. K

**Issue Number:** 10.1

**Issue:** Are regulatory income and capital taxes appropriately determined in accordance with regulatory and tax legislation requirements?

**Interrogatory**

**Ref:** F3/T2/S1/Table 8

Please provide a copy of the actual 2006 T2 and CT 23 tax returns and supporting schedules for Ontario Power Generation Inc. From the 2006 tax returns, provide the following information:

- a) Please identify any non-rate regulated corporate activities within OPG.
- b) Please provide an Excel spreadsheet that shows OPG's 2006 tax return data from the T2 federal Sch1 allocated between regulated and non-regulated business segments. The first section should show the total OPG tax return data and then the split between regulated and non-regulated (please see schedule below).
- c) Please provide a schedule for the calculation of Ontario 2006 CT 23 taxable income and income tax PILs allocated between regulated and non-regulated as described above for the T2 return (please see schedule below).
- d) Please allocate the federal T2 Sch8 (Undepreciated Capital Cost and Capital Cost Allowance) amounts between regulated and non-regulated for each column, and for each tax class shown on the Sch8.
- e) Please provide an Excel spreadsheet that allocates the Ontario capital tax as filed in the 2006 CT 23 return between regulated and non-regulated.
- f) Please provide an analysis for the 2006 Cumulative Eligible Capital (CEC) and the deductions claimed.

No.	Per tax return	Non-Rate Regulated	Rate Regulated

**Response**

Witness Panel: Corporate and Other Operating Costs

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As explained further below, OPG declines to provide the requested tax returns because it does not consider them to be relevant to the determination of payment amounts for the test period and the returns themselves are currently the subject of amendment. OPG does not believe that reviewing the requested information in hearing context would be a good use of the Board's time given the complexity of the information. If the Board was to determine that the information is relevant, then OPG would request that the information be treated as confidential.

A review of the income tax returns would not be very helpful to the setting of payment amounts for the regulated assets because these returns are prepared on a corporate basis that does not distinguish between regulated and unregulated operations. The work to allocate the data in the returns between regulated and unregulated businesses would be involved and would produce a result that would still require a complex reconciliation to make it comparable to the stand-alone tax information filed in the Application. Secondly, OPG files a number of T2 and CT23 tax returns because it is comprised of several legal entities (not established on the basis of whether they form part of regulated or unregulated operations). This additional complexity would further diminish the usefulness of the information.

The requested information is not needed because OPG has already provided the relevant tax information, including a detailed computation of regulatory taxable income/loss for 2005 - 2009 for its regulated operations on a stand-alone basis specifically for the purposes of establishing payment amounts, as shown in Ex. F3-T2-S1, Tables 7 and 8. OPG has also provided evidence on the significant tax adjustments to regulatory earnings before tax presented in these tables (e.g., depreciation, pension and OPEB/SPP accrual, contributions to nuclear segregated funds), including audited consolidated financial statements appended in Appendix A of Ex. A2-T1-S1. In addition, support for the CCA deduction for regulatory tax purposes is provided in part (d) below. In order to support the amount of regulatory earnings before tax used in the computation of regulatory taxable income/loss, OPG also provides a reconciliation of regulatory earnings before tax for 2005 - 2007 to earnings for the regulated operations per OPG's annual audited consolidated financial statements in Table 1, Ex. C1-T2-S1.

Further, as discussed in Section 4.0 of Ex. F3-T2-S1, OPG is undergoing a tax audit for the 1999 taxation year by the Provincial Tax Auditors (the "auditors"). A number of issues identified by the auditors are now expected to be resolved and this will result in the amendment of OPG's tax returns for all years back to 1999. Therefore, the review of OPG's T2 and CT23 tax returns as currently filed would not be useful. The expected audit adjustments have already been incorporated in the calculation of regulatory income taxes for the purposes of this Application. OPG also notes that the remaining uncertainty surrounding the 1999 tax audit and the audits of future years is one of the reasons underlying OPG's proposal for the Changes in Taxation Rate or Rules Variance Account (Ex. J1-T3-S1).

Unregulated operations represent a significant portion of OPG's total operations and financial results. Therefore, OPG is concerned that the financial information for the

Witness Panel: Corporate and Other Operating Costs



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1  
2 company as a whole found in its T2 and CT23 tax returns and supporting schedules  
3 should remain confidential, if they are found to be relevant. OPG is particularly  
4 concerned in this regard because OPG's unregulated operations operate in a single line  
5 of business (i.e., not as a portfolio of different lines of business) and they operate in the  
6 same line of business as OPG's regulated operations.

7  
8 (a) A discussion of non-rate regulated corporate activities within OPG is provided at Ex.  
9 A1-T4-S1 and in the OPG Annual Reports provided at Ex. A2-T1-S1.

10  
11 (b) Please refer to the discussion above.

12  
13 (c) Please refer to the discussion above.

14  
15 (d) Please refer to the discussion above. OPG's CCA deduction is presented in Ex. F3-  
16 T2-S1, Table 8. Attached is a schedule that details the UCC balances and CCA  
17 claims, by CCA class, for each of the years 2005 - 2009 (refer to Appendix A to this  
18 response).

19  
20 (e) OPG has calculated Ontario capital taxes using a regulatory approach for the  
21 purposes of the calculating the revenue requirement (refer to Ex. F3-T2-S1, Tables 2  
22 and 5 and Ex. G2-T2-S1, Table 4). The calculation is based on capital tax rates  
23 applied to the rate base in excess of the general capital tax deduction, as noted in  
24 Section 5.0 of Ex. F3-T2-S1. The amount of capital tax calculated per actual CT23  
25 returns is done on a different basis and is therefore not relevant to the determination  
26 of OPG's payment amounts.

27  
28 (f) The calculations of regulatory taxable income/loss for 2005 - 2009 for OPG's  
29 regulatory operations provided in Ex. F3-T2-S1, Tables 7 and 8 do not include any  
30 deductions related to CEC. Therefore, the analysis requested is not relevant to the  
31 determination of OPG's payment amounts for its regulated operations.  
32

## APPENDIX A

### Undepreciated Capital Cost and Capital Cost Allowance Schedule for OPG's Regulated Operations (2005)

Class	Undepreciated capital cost at beginning of year	Cost of Acquisitions	Net Adjustments	Proceeds of dispositions	50% rule	Reduced undepreciated capital cost	CCA rate	Recapture/ Terminal loss	Capital cost allowance	Undepreciated capital cost at end of year
1	1,059,412,477	235,581,914	-	11,260,548	112,160,683	1,171,573,160	4%	-	46,862,926	1,236,870,917
2	1,944,010,195	-	-	-	-	1,944,010,195	6%	-	116,640,612	1,827,369,584
3	1,212,718	-	-	1,212,718	-	-	5%	-	-	-
8	345,199,432	73,575,446	-	610,530	36,482,458	381,681,890	20%	-	76,336,378	341,827,970
10	63,327,098	24,811,645	-	20,836,970	11,670,769	55,631,004	30%	-	16,689,301	50,612,472
12	3,187,565	1,835,974	-	-	917,987	4,105,552	100%	-	4,105,552	917,987
17	386,541,028	234,441,392	-	13,736	117,213,828	503,754,856	8%	-	40,300,388	580,668,295
42	576,268	-	-	-	-	576,268	12%	-	69,152	507,115
45	3,684,090	8,395,838	-	-	4,197,919	7,882,009	45%	-	3,546,904	8,533,024
	3,807,150,871	578,642,209	-	33,934,502	282,643,644	4,069,214,934		-	304,551,214	4,047,307,363
						CCA adjustment			12,000,000 *	
									<u>316,551,214</u>	

\* Represents the difference between CCA claim estimated for evidence filing on March 14, 2008 and CCA claim after finalization of tax audit adjustments

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### Undepreciated Capital Cost and Capital Cost Allowance Schedule for OPG's Regulated Operations (2006)

Class	Undepreciated capital cost at beginning of year	Cost of Acquisitions	Net Adjustments	Proceeds of dispositions	50% rule	Reduced undepreciated capital cost	CCA rate	Recapture/ Terminal loss	Capital cost allowance	Undepreciated capital cost at end of year
1	1,236,870,917	66,173,401	1,928,966	-	33,086,701	1,271,886,583	4%	-	50,875,463	1,254,097,820
2	1,827,369,584	-	-	74,401	-	1,827,295,183	6%	-	109,637,711	1,717,657,472
3	-	-	-	133,968	-	(133,968)	5%	-	(6,698)	(127,270)
8	341,827,970	54,668,739	(1,779,289)	1,873,230	26,398,053	366,446,137	20%	-	73,289,227	319,554,963
10	50,612,472	4,911,628	1,950,279	155,586	2,394,253	54,924,540	30%	-	16,477,362	40,841,431
12	917,987	255,703	-	-	127,852	1,045,839	100%	-	1,045,839	127,852
17	580,668,295	13,865,367	(1,928,966)	576,096	7,132,966	584,895,635	8%	-	46,791,651	545,236,950
38	-	70,418,223	-	-	35,209,112	35,209,112	30%	-	10,562,733	59,855,490
42	507,115	-	-	-	-	507,115	12%	-	60,854	446,262
45	8,533,024	1,950,831	(170,990)	-	975,416	9,337,449	45%	-	4,201,852	6,111,013
	4,047,307,363	212,243,892	-	2,813,281	105,324,350	4,151,413,624		-	312,935,994	3,943,801,980
						CCA adjustment			5,000,000 *	
									<u>317,935,994</u>	

\* Represents the difference between CCA claim estimated for evidence filing on March 14, 2008 and CCA claim after finalization of tax audit adjustments

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### Undepreciated Capital Cost and Capital Cost Allowance Schedule for OPG's Regulated Operations (2007)

Class	Undepreciated capital cost at beginning of year	Cost of Acquisitions	Net Adjustments	Proceeds of dispositions	50% rule	Reduced undepreciated capital cost	CCA rate	Recapture/ Terminal loss	Capital cost allowance	Undepreciated capital cost at end of year
1	1,254,097,820	134,706,834	98,914	3,599	36,851,618	1,352,048,352	4%	-	54,081,934	1,334,818,035
1.1	-	906,624	-	-	453,312	453,312	6%	-	27,199	879,425
2	1,717,657,472	-	-	34,530	-	1,717,622,942	6%	-	103,057,376	1,614,565,565
3	(127,270)	-	-	-	-	(127,270)	5%	-	(6,363)	(120,906)
8	319,554,963	23,877,828	(126,570)	755,656	11,561,086	330,989,479	20%	-	66,197,896	276,352,669
10	40,841,431	3,436,439	275,807	106,450	1,664,995	42,782,232	30%	-	12,834,670	31,612,557
12	127,852	12,479,362	-	-	6,239,681	6,367,533	100%	-	6,367,533	6,239,681
17	545,236,950	110,941,671	-	14,845	55,463,413	600,700,363	8%	-	48,056,029	608,107,747
38	59,855,490	-	-	-	-	59,855,490	30%	-	17,956,647	41,898,843
42	446,262	-	-	-	-	446,262	12%	-	53,551	392,710
45	6,111,013	324,299	4,795	-	162,150	6,277,957	45%	-	2,825,081	3,615,026
45.1	-	1,274,247	-	-	637,124	637,124	55%	-	350,418	923,829
	3,943,801,980	287,947,304	252,946	915,080	113,033,377	4,118,053,773		-	311,801,970	3,919,285,181
						CCA adjustment			4,000,000 *	
									<u>315,801,970</u>	

\* Represents the difference between CCA claim estimated for evidence filing on March 14, 2008 and CCA claim after finalization of tax audit adjustments

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### Undepreciated Capital Cost and Capital Cost Allowance Schedule for OPG's Regulated Operations (2008)

Class	Undepreciated capital cost at beginning of year	Cost of Acquisitions	Net Adjustments	Proceeds of dispositions	50% rule	Reduced undepreciated capital cost	CCA rate	Recapture/ Terminal loss	Capital cost allowance	Undepreciated capital cost at end of year
1	1,334,818,035	186,098,000			93,049,000	1,427,867,035	4%	-	57,114,681	1,463,801,354
1-rolling start	-	129,000,000				129,000,000	4%	-	5,160,000	123,840,000
1.1	879,425	-	-	-	-	879,425	6%	-	52,766	826,660
2	1,614,565,565	-			-	1,614,565,565	6%	-	96,873,934	1,517,691,631
3	(120,906)	-			-	(120,906)	5%	-	(6,045)	(114,861)
8	276,352,669	44,568,000			22,284,000	298,636,669	20%	-	59,727,334	261,193,335
10	31,612,557	17,862,000			8,931,000	40,543,557	30%	-	12,163,067	37,311,490
12	6,239,681	9,388,000			4,694,000	10,933,681	100%	-	10,933,681	4,694,000
17	608,107,747	60,084,000			30,042,000	638,149,747	8%	-	51,051,980	617,139,767
38	41,898,843				-	41,898,843	30%	-	12,569,653	29,329,190
42	392,710				-	392,710	12%	-	47,125	345,585
45	3,615,026	14,000,000			7,000,000	10,615,026	45%	-	4,776,762	12,838,264
45.1	923,829	-	-	-	-	923,829	55%		508,106	415,723
	3,919,285,181	461,000,000	-	-	166,000,000	4,214,285,181		-	310,973,043	4,069,312,138
						CCA adjustment			- *	
									<u>310,973,043</u>	

\* Represents the difference between CCA claim estimated for evidence filing on March 14, 2008 and CCA claim after finalization of tax audit adjustments

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### Undepreciated Capital Cost and Capital Cost Allowance Schedule for OPG's Regulated Operations (2009)

Class	Undepreciated capital cost at beginning of year	Cost of Acquisitions	Net Adjustments	Proceeds of dispositions	50% rule	Reduced undepreciated capital cost	CCA rate	Recapture/ Terminal loss	Capital cost allowance	Undepreciated capital cost at end of year
1	1,463,801,354	141,367,000			70,683,500	1,534,484,854	4%	-	61,379,394	1,543,788,960
1-rolling start	123,840,000	61,000,000				184,840,000	4%	-	7,393,600	177,446,400
1.1	826,660	-	-	-	-	826,660	6%	-	49,600	777,060
2	1,517,691,631	-			-	1,517,691,631	6%	-	91,061,498	1,426,630,133
3	(114,861)	-			-	(114,861)	5%	-	(5,743)	(109,118)
8	261,193,335	46,152,000			23,076,000	284,269,335	20%	-	56,853,867	250,491,468
10	37,311,490	13,983,000			6,991,500	44,302,990	30%	-	13,290,897	38,003,593
12	4,694,000	15,642,000			7,821,000	12,515,000	100%	-	12,515,000	7,821,000
17	617,139,767	62,856,000			31,428,000	648,567,767	8%	-	51,885,421	628,110,346
38	29,329,190	-			-	29,329,190	30%	-	8,798,757	20,530,433
42	345,585	-			-	345,585	12%	-	41,470	304,115
45	12,838,264	14,000,000			7,000,000	19,838,264	45%	-	8,927,219	17,911,045
45.1	415,723	-	-	-	-	415,723	55%		228,648	187,075
	4,069,312,138	355,000,000	-	-	147,000,000	4,277,312,138		-	312,419,628	4,111,892,510
						CCA adjustment			2,000,000 *	
									<u>314,419,628</u>	

\* Represents the difference between CCA claim estimated for evidence filing on March 14, 2008 and CCA claim after finalization of tax audit adjustments

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## **CAPITALIZATION, RETURN ON EQUITY AND COST OF CAPITAL**

### **1.0 PURPOSE**

This evidence provides OPG's capital structure and its return on common equity for fiscal years ended 2005 - 2009 inclusive.

This evidence also summarizes the capitalization and cost of capital for fiscal years ended 2005 - 2009 inclusive. The summary reflects the capital structure and return on common equity discussed in this evidence, the long-term debt costs described in Ex. C1-T2-S2 and the short-term debt costs described in Ex. C1-T2-S3.

### **2.0 CAPITAL STRUCTURE**

For the 2008 and 2009 fiscal years OPG has applied the capital structure (57.5 percent equity and 42.5 percent debt) recommended by Foster Associates, Inc., as provided in Ex. C2-T1-S1. OPG's 2008 and 2009 proposed capital structure is determined pursuant to the methodology outlined in Ex. C1-T1-S1.

For the 2005 - 2007 fiscal years OPG has applied the capital structure (45 percent equity and 55 percent debt) that was reflected in information provided by OPG to the Province for the purpose of establishing interim payment amounts.

The debt component of OPG's capital structure is determined using the methodologies described in Ex. C1-T1-S2 and Ex. C1-T1-S3 for long-term and short-term debt respectively.

### **3.0 RETURN ON EQUITY**

For the 2008 and 2009 fiscal years OPG has applied the 10.5 percent return on equity recommendation of Foster Associates, Inc., as provided in Ex. C2-T1-S1.

OPG has determined a return on equity for its regulated operations for each of 2005, 2006 and 2007 using a reconciliation approach. OPG's audited financial statements report its accounting earnings before interest and income taxes ("accounting EBIT") for both OPG's

1 regulated hydroelectric business segment and OPG's nuclear business segment. The  
2 audited accounting EBIT amounts are amended to include interest, taxes, and other  
3 adjustments required to reflect the impact of regulation (discussed below). This approach to  
4 determining return on equity effectively addresses the filing guidelines issued by the OEB  
5 related to the reconciliation of OPG's evidence to its audited financial statements.

6  
7 Return on equity information for regulated operations has not been used by OPG for the  
8 purpose of operating its business, nor is this information required to support OPG's business  
9 or financial planning, financial reporting, or income tax return filings. OPG has determined  
10 and presented 2005, 2006 and 2007 return on equity information to provide:

- 11 • A general context to assess the adequacy of OPG's interim payment amounts  
12 determined prior to regulation by the OEB.
- 13 • A level of independent validation of OPG's financial position prior to regulation by the  
14 OEB (i.e., the starting point for OPG's return on equity is OPG's audited financial  
15 information).

16  
17 OPG does not expect this information will be necessary to support future payment  
18 applications as the regulatory proceeding to establish the initial payment amounts by the  
19 OEB will provide:

- 20 • Suitable context for assessing the adequacy of payment amounts established by the  
21 OEB.
- 22 • Sufficient public information to understand OPG's regulated operations and OPG's  
23 expected financial position prior to subsequent proceedings.

24  
25 To determine a return on equity for OPG's regulated operations that is consistent with the  
26 return on equity proposed for its test period, the accounting EBIT for OPG's regulated  
27 operations reported in OPG's audited financial statements is adjusted to reflect: interest and  
28 taxes; certain revenues or expenses included in accounting EBIT that are not included in  
29 regulatory income; and differences between the accounting and regulatory methodology  
30 used to determine certain revenues or expenses included in both accounting EBIT and  
31 regulatory income.



The reconciliation between OPG's accounting EBIT as reported in OPG's 2006 and 2007 audited financial statements and the return on equity for OPG's regulated operations is provided in Ex. C1-T2-S1 Table 1. OPG has provided an explanation for each adjustment to accounting EBIT and the approach OPG has used to determine the adjustment in section 3.1 below. The footnotes to Ex. C1-T2-S1 Table 1b support the derivation of the specific adjustment included in the reconciliation.

The reconciliation is divided into two sections. The first section provides the reconciliation between accounting EBIT and regulatory EBT. OPG uses regulatory EBT as basis for determining the regulatory income tax expense as presented in Exhibit F3-2-1 Table 7 (for 2005 and 2006) and Table 8 (for 2007). The second section provides the reconciliation between regulatory EBT and the return on equity for OPG's regulated operations.

### **3.1 Adjustment to Accounting 2005/2006/2007 Earnings Before Interest and Taxes to Determine Regulatory Earnings Before Tax**

The reconciliation between accounting EBIT and regulatory EBT is based on three adjustments:

- removal of accounting expenses and revenues not included in regulatory EBT
- differences between accounting and regulatory treatment of certain revenues and expenses
- interest expense

#### **3.1.1 Removal of Accounting Expenses and Revenues Not Included in Regulatory EBT**

The only revenues or expenses included in accounting EBIT that are not included in regulatory income are accretion expense associated with OPG's fixed asset removal and nuclear waste management obligations and the revenues earned on OPG's segregated funds established to finance these same fixed asset removal and nuclear waste management obligations. Together these two items are considered a "closed system"<sup>1</sup> that are not included in revenue requirement. Only the period expenses associated with OPG's

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<sup>1</sup> As characterized by the OEB in RP-1999-0001 Decision for Ontario Hydro Services Corporation

nuclear waste management liabilities as described in Ex. H1-T1-S2 are included in regulatory EBIT.

3.1.2 Differences in Accounting and Regulatory Treatment of Certain Revenues and Expenses

To the extent OPG's accounting treatment and regulatory treatment differ, the accounting numbers are removed (i.e., removing revenue reduces income, removing expenses increases income), and the regulatory amounts are included. OPG has made three adjustments<sup>2</sup> as described below:

- Production in excess of 1900 MW/h: O. Reg. 53/05 provides that OPG earns the difference between the spot market price and the interim payment amount for production in excess of 1900 MW in any hour commencing April 1, 2005. Accounting EBIT reflects these spot market revenues. An adjustment is required to deduct this difference between OPG's interim payment amount and the spot market price. OPG's proposed return on equity and revenue requirement did not include incremental revenue associated with the proposed hydroelectric incentive mechanism; therefore its achieved return on equity will be reported on a consistent basis.
- Capital taxes: Capital taxes included in accounting EBIT are based on an allocation of capital taxes determined on a corporate basis. Capital taxes for regulatory purposes are determined by applying the capital tax rate to OPG's nuclear and regulated hydroelectric rate base
- Unrealized exchange rate adjustments: As a result of a change in Generally Accepted Accounting Principles, OPG is required to include unrealized gains/ (losses) in accounting net income on certain embedded derivative financial instruments commencing January 1, 2007. OPG has a uranium concentrate purchase contract that includes a fixed U.S. dollar rate for these purchases. As a result, this contract is affected by the change in

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<sup>2</sup> In December 2006, OPG's nuclear liabilities increased by \$1.386B as described in Ex. H1-T1-S1. As presented in the evidence, certain 2007 expenses related to nuclear liabilities, e.g., capital and income tax, return on equity for Bruce Lease Assets, include the impact of this increase. The 2007 expenses in this Ex. C1-T2-S1 remove the impact of the increase of nuclear liabilities from the calculation of Regulatory EBT as detailed in Ex. C1-T2-S1 Table 1b.

GAAP. Consistent with the regulatory treatment of the other financial derivatives (Ex. C1-2-2), unrealized gains/ (losses) are not included in either the ROE for OPG's regulated operations or the regulatory EBT for income tax purposes.

### 3.1.3 Interest Expense

Interest expense is determined using the capital structure, long-term debt, and short-term debt expense and allocation methodologies provided throughout Exhibit C.<sup>3</sup>

## 3.2 **Adjustments to Regulatory Earnings Before Taxes to Determine ROE**

The reconciliation between regulatory EBT and ROE is based on three adjustments:

- income taxes on regulated assets
- approved return on equity for Bruce leased assets
- deferral of 2007 expenses related to the December 31, 2006 increase in ARO

### 3.2.1 Income Taxes on Regulated Assets

Income taxes are usually determined using the stand-alone utility methodology described in Ex. F3-T2-S1; however OPG has losses for income tax purposes in 2005, 2006 and 2007. OPG's tax expense for 2005 reflects the last year that the large corporation tax was in effect. As the large corporation tax associated with OPG's regulated assets is an after tax cost (i.e., not deductible for tax purposes), the large corporation tax has been deducted from regulatory earnings before tax in determining OPG's 2005 return on equity.

### 3.2.2 Approved ROE for Bruce Leased Assets<sup>4</sup>

Regulatory EBT includes all earnings associated with Bruce leased assets. The only "cost" not reflected in regulatory EBT is the return on equity OPG is allowed to earn on its Bruce leased Assets. The adjustment is made after the regulatory EBT as OPG's return on equity is an after tax return. To determine the income tax expense on the ROE associated with the

<sup>3</sup> For 2007, interest expense does not include the portion associated with the December 31, 2006 increase in ARO (see footnote 3)

<sup>4</sup> The return on equity costs to OPG's regulated operations does not include the portion associated with the December 31, 2006 increase in ARO (see footnote 3)

Bruce leased assets, OPG has applied the income tax rate as provided in Ex F3-T2-S1, Table 8 for 2005, 2006 and Table 9 for 2007 to the return on equity.

#### **3.2.3 Deferral of 2007 Expenses Related to the December 31, 2006 Increase in ARO**

As required by the Regulation, OPG recorded 2007 expenses associated with the December 31, 2006 increase in the Nuclear Liability Deferral Account, Transition as described in Ex J1-1-1. OPG will incur a significantly higher level of expenses as a result of the December 31, 2006 increase in ARO on an on-going basis over the life of its nuclear assets. OPG's 2007 deferred cost amount of \$127M<sup>5</sup> is representative of the increased expenses OPG will incur in the test period. As these are significant on-going costs, they have been included in 2007 ROE to provide a more relevant context within which to assess the adequacy of OPG's current payment amount.

#### **4.0 SUMMARY OF CAPITALIZATION AND COST OF CAPITAL: 2005 - 2009**

OPG's capitalization and cost of equity reflects the capital structure and return on equity discussed above. The cost of the debt components of OPG's capital structure is discussed in Ex. C1-T2-S2 for long-term debt and Ex. C1-T2-S3 for its short-term debt. OPG has applied this capitalization to rate base as described in Exhibit B. The resulting capitalization and cost of capital for OPG's 2005 to 2009 fiscal years is summarized in Ex. C1-T2-S1 Tables 2 - 6 for 2005 - 2009.

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<sup>5</sup> OPG recorded expenses of \$130.5M in its Nuclear Liability Deferral Account, Transition for 2007. This includes \$3.5M in interest expenses related to the deferred recovery of these costs. Interest expense was not included in the adjustment, as it is not an ongoing cost. All other expenses are reflected in OPG's 2008 revenue requirement

Numbers may not add due to rounding

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Table 1

Table 1  
Capitalization and Cost of Capital  
Return on Equity - Reconciliation to Audited Financial Statements (\$M)

Line No.	Description	Rate	Regulated Hydroelectric 2006	Nuclear 2006	Total 2006	Regulated Hydroelectric 2007	Nuclear 2007	Total 2007	Regulated Hydroelectric 2007	Nuclear 2007	Total 2007
			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	Accounting EBIT (includes rounding)	1	374.8	(10.0)	364.8	264.0	70.0	334.0	249.0	(84.0)	165.0
<b>Accounting Expenses/Revenues not included in Regulatory EBT</b>											
2	Add: Fixed Asset Removal and Nuclear Waste Management - Accretion of Liabilities	2	0.0	467.0	467.0	0.0	489.9	489.9	0.0	498.8	498.8
3	Deduct: Fixed Asset Removal and Nuclear Waste Management - Fund Earnings	2	0.0	381.1	381.1	0.0	370.5	370.5	0.0	480.7	480.7
<b>Differences Between Accounting and Regulatory Treatment</b>											
<b>(1) PRODUCTION ABOVE 1900 MW/Hr:</b>											
4	Deduct: Revenue at Market Price included in Accounting EBIT	3	210.0	0.0	210.0	169.0	0.0	169.0	158.0	0.0	158.0
5	Add: Revenue at Current Payment Amount	4	88.5	0.0	88.5	122.9	0.0	122.9	107.2	0.0	107.2
<b>(2) CAPITAL TAXES:</b>											
6	Add: Accounting Capital Tax on Regulated Assets	5	18.5	10.3	28.8	18.0	11.6	29.6	11.2	7.9	19.1
7	Deduct: Regulatory Capital Tax on Regulated Assets	6, 9	12.0	8.6	20.6	11.9	9.0	20.9	8.8	6.8	15.6
8	Add: Accounting Capital Tax on Bruce Leased Assets	5	0.0	2.7	2.7	0.0	2.3	2.3	0.0	1.1	1.1
9	Deduct: Regulatory Capital Tax on Bruce Leased Assets	6, 9	0.0	1.6	1.6	0.0	1.3	1.3	0.0	0.8	0.8
<b>(3) UNREALIZED EXCHANGE RATE ADJUSTMENTS:</b>											
10	Add Back: Losses included in Accounting EBIT	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8
11	Regulatory EBIT (line 1+2-3-4+5+6+7-8-9+10)		259.8	78.7	338.5	224.0	193.0	417.0	200.6	(62.6)	138.0
<b>Interest Expense:</b>											
12	Deduct: Bruce Leased Assets	9	0.0	16.9	16.9	0.0	13.3	13.3	0.0	10.9	10.9
13	Deduct: Regulated Assets	8, 9	125.7	90.0	215.7	119.3	90.6	209.9	119.2	91.9	211.1
14	Regulatory EBT (line 11-12-13)	10	134.1	(28.1)	106.0	104.8	89.1	193.8	81.4	(165.4)	(84.0)
<b>(1) INCOME TAXES ON REGULATED ASSETS:</b>											
15	Deduct: Income Taxes on Regulated Assets	10	7.0	5.7	12.7	0.0	0.0	0.0	0.0	0.0	0.0
<b>(2) APPROVED ROE FOR BRUCE LEASED ASSETS:</b>											
16	Deduct: Bruce ROE After Tax	9, 11	0.0	12.1	12.1	0.0	9.9	9.9	0.0	8.1	8.1
17	Deduct: Income Tax on Bruce ROE	11	0.0	6.3	6.3	0.0	5.2	5.2	0.0	4.2	4.2
<b>(3) DEFERRAL OF 2007 EXPENSES RELATED TO THE DECEMBER 31, 2006 INCREASE IN ARO:</b>											
18	Deduct: 2007 Expenses Recorded in Nuclear Liability Deferral Account - Transition	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	127.0	127.0
19	Return on Equity (line 14-15-16-17-18)	13	127.2	(52.2)	75.0	104.8	73.9	178.7	81.4	(304.8)	(223.3)

See Ex C1-T2-S1 Table 1b for notes

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Numbers may not add due to rounding.

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Tab 2  
Schedule 1  
Table 1b

**Table 1b**  
**Capitalization and Cost of Capital**  
**Return on Equity - Reconciliation to Audited Financial Statements (\$M)**  
Notes to Ex. C1, Tab 2, Sch. 1, Table 1

**Notes:**

- 1 Accounting EBIT: Per Audited Financial Statements. Regulated Nuclear Segment and Regulated Hydroelectric Segment details provided in Ex. A2-T1-S1 Appendix A.
- 2 Fixed Asset Removal and Nuclear Waste Management: Accretion of Liabilities and Fund Earnings provided in the Regulated Nuclear segment information in Ex. A2-T1-S1 Appendix A.
- 3 Revenue at Market Price: As reflected in management's discussion and analysis accompanying OPG's audited financial statements as provided in Ex. A2-T1-S1 Appendix A.
- 4 Revenue at Interim Payment Amount: Total hourly production over 1900 MWh x \$33/MWh.
- 5 Capital Tax: Accounting EBIT is based on an allocation of capital taxes determined on a corporate basis.
- 6 Capital Tax: Determined for regulatory purposes in Ex. G2-T2-S1 Table 3 for Bruce Leased Assets, Ex. F3-T2-S1 Table 4 for Regulated Assets (Nuclear), and Ex. F3-T2-S1 Table 1 for Regulated Assets (Hydroelectric).
- 7 Effective January 1, 2007 OPG is required to include in its accounting income unrealized gains/(losses) associated with certain financial derivatives. OPG is subject to exchange rate gains/(losses) related to some of its purchase obligations. For regulatory purposes, the actual gain/loss will be included in the cost of the purchase as received.
- 8 Interest Expense: Interest expense is determined by applying the interest rate for OPG's total debt in 2005 and 2006 as summarized in Ex. C1-T2-S1 Table 6 (2005), Table 5 (2006) and Table 4 (2007) to OPG's nuclear and regulated hydroelectric ratebase for 2005, 2006 and 2007 provided in Ex. B1-T1-S1 Table 1 (Regulated Hydroelectric) and Ex. B1-T1-S1 Table 2 (Nuclear).

Table to Note 8 - Interest Expense Calculation (\$M)		Regulated Hydroelectric	Nuclear	Regulated Hydroelectric	Nuclear	Regulated Hydroelectric	Nuclear
Line No.	Item	2005	2005	2006	2006	2007	2007
		(a)	(b)	(c)	(d)	(e)	(f)
1	2005 Interest Rate (from Ex. C1-2-1 Table 6)	5.71%	5.71%				
2	2006 Interest Rate (from Ex. C1-2-1 Table 5)			5.48%	5.48%		
3	2007 Interest Rate (from Ex. C1-2-1 Table 4)					5.54%	5.54%
4	Reg. Hydro. Rate Base (from B1-1-1 Table 1)	4,001.3		3,957.3		3,911.1	
5	Nuclear Rate Base (from B1-1-1 Table 2)		2,865.5		3,005.7		3,500.1
6	Debt Ratio (from Ex. C1-2-1 Tables 4, 5 and 6)	55%	55%	55%	55%	55%	55%
7	Interest Expense	125.7	90.0	119.3	90.6	119.2	106.6
	(Interest Rate x Rate Base x Debt Ratio)						

- 9 December 31, 2006 increase in Asset Retirement Obligation (ARO): A portion of OPG's 2007 expenses as presented in evidence reflect the increase in the ARO (the "ARO Portion"). The ARO Portion is removed for the purpose of determining Regulatory EBT. The following table reflects the 2007 expense presented in evidence and the portion of the expense related to the ARO increase.

Table to Note 9 - ARO Adjustment (\$M)					
Line No.	Evidence Reference	2007 Expense Incl. Increased ARO Portion	ARO Portion of 2007 Expense	2007 Expense Excl. Increased ARO Portion	
	(a)	(b)	(c)	(d)	
1	Capital Taxes on Regulated Assets	F3-T2-S1 Tbl 4	7.9	1.1	6.8
2	Capital Taxes on Bruce Leased Assets	G2-T2-S1 Tbl 3	2.8	2.0	0.8
3	Interest Expense on Regulated Assets	Note 10, col. (f)	106.6	14.7	91.9
4	Interest Expense on Bruce Leased Assets	G2-T2-S1 Tbl 3	37.6	26.7	10.9
5	Bruce ROE After Tax	G2-T2-S1 Tbl 3	27.7	19.6	8.1

- 10 Regulatory EBT used for income tax purposes at Ex. F3-T2-S1. OPG's regulated operations did not incur a tax expense in 2005-2007, however in 2005 OPG's regulated operations were subject to Large Corporations Tax (Ex. F3-T2-S1), which is removed in calculating an after-tax rate of return.

## 11 Income Taxes on Bruce Lease Net Revenues

Table to Note 11 - Income Taxes on Bruce Lease Net Revenues (\$M)				
Line No.	Cost Item	2005 Actual	2006 Actual	2007 Actual
		(a)	(b)	(c)
1	Bruce ROE After Tax*	12.1	9.9	8.1
2	Income Tax on Bruce Lease ROE**	34.12%	34.12%	34.12%
3	Income Tax on Bruce Net Revenue***	6.3	5.2	4.2

\* From Ex. G2-T2-S1 Table 3. Adjusted for the removal of the December 31, 2006 increase in ARO as illustrated in Note 8 line 5 col. (f).

\*\* From Ex. F3-T2-S1 Table 8, line 34 and Ex. F3-T2-S1 Table 7, line 32

\*\*\* Line 1 / (1-line 2) - line 1

- 12 Total 2007 Expenses recorded in Nuclear Liability Deferral Account: Per Ex. J1-T1-S1 127.0 (\$M)

- 13 Adding revenues at market prices for Regulated Hydroelectric production (see Notes 3 and 5 above) to Return on Equity (Ex. C1-T1-S1 Table 1, line 18) equals the following:

Year	\$M	ROE
2005	196.5	6.36%
2006	224.8	7.17%
2007	(172.5)	-5.17%