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.

ARGUMENT OF
CANADIAN MANUFACTURERS & EXPORTERS ("CME")
(Corrected Version)

Corrected: August 11, 2008

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Schedule A – Summary of Major Findings CME Requests the Board to Make

I. INTRODUCTION & OVERVIEW

1. Electricity consumers were encouraged by the February 23, 2005 announcement by the Ontario Government's (the "Government") of the cost containment, efficiency and competitiveness criteria being applied to establish the rates Ontario Power Generation Inc. ("OPG") could charge between April 1, 2005, and March 31, 2008, for the electricity it generated with its regulated nuclear and hydro-electric assets.[1] The Government's announcement signalled an end to its tolerance for the profligate levels of spending that bankrupted OPG's predecessor, Ontario Hydro.

2. In its Backgrounder announcing its determination of OPG's prices for hydro-electric generation of $33.00/MWh and nuclear generation of $49.50/MWh/hr, the Government, as the regulatory authority then responsible for determining OPG's regulated rates, described the criteria it applied as follows:

> ***"These prices are designed to:***
>
> - ***Better reflect the true cost of producing electricity***
> - ***Ensure reliable, sustainable and diverse supply of power in Ontario***
> - ***Protect Ontario's medium and large businesses by ensuring rates are <u>stable</u> and <u>competitive</u>***
> - ***Provide an incentive for OPG <u>to contain costs and to maximize efficiency</u>***
> - ***Allow OPG to better service its debt <u>while earning a rate of return which balances the needs of customers and ensures a fair return for taxpayers."</u>*** (emphasis added) [2]

3. In elaborating upon its rationale for determining OPG's rates using a 5% return on a 45% deemed equity ratio for the capital structure supporting OPG's regulated assets, the Government stated:

> ***"… five percent ROE will generate revenue to service the OPG debt held by the Ontario Electricity Financial Corporation, while putting***

[1] Ex.J1.1
[2] Ex.J1.1, page 1

> ***significant discipline on OPG to contain costs and improve overall operating efficiencies."*** [3]

4. It needs to be recognized, at the outset, that the source of the "equity" the Government holds in OPG, as its sole shareholder, was acquired as a result of its assumption of OPG debt owed to the Ontario Electricity Financial Corporation ("OEFC").[4] In this context, the real cost of "equity" OPG's shareholder holds in OPG is the cost of the OPG debt owing to OEFC which the Government assumed to acquire its equity position in OPG. We understand that the interest rate on the OPG debt, which the Government assumed, is about 5.85%.

5. Another factor relevant to an appreciation of the Government's characterization, in its February 23, 2005 Backgrounder, of the prices it established for OPG, as "earning a rate of return which balances the needs of customers and insures a fair return for taxpayers" is the reality that, in addition to the equity return electricity consumers pay OPG, they also pay a Debt Retirement Charge ("DRC") which the Government has imposed on them in order to help it pay down and retire additional "stranded" debt costs arising as a result of the insolvency of OPG's predecessor, Ontario Hydro.[5] These debt retirement charges would not be recoverable from ratepayers if OPG and its insolvent predecessor, Ontario Hydro, had been, throughout, privately owned stand-alone electricity generation companies rather than companies wholly owned by the Government.

6. A privately owned successor to a bankrupt would not be required to pay debt incurred by the bankrupt giving rise to the insolvency. Stated another way, while the Government's long term goals are to establish electricity prices which "better reflect the true cost of producing electricity" and to "take politics … out of electricity pricing in the Province",[6] the reality is that the cost consequences of

[3] Ex.J1.1, page 2
[4] AMPCO Ex.M, Tab 2, pp. 2 to 5
[5] AMPCO Ex.M, Tab 2, pp. 4 and 5
[6] Ex.J1.1, page 2

the actions by OPG's predecessor, Ontario Hydro, will continue to be charged to electricity consumers until the stranded debt has been retired or forgiven.

7. It is also important to remember that the Government terminated the Market Power Mitigation Agreement ("MPMA") in conjunction with establishing OPG's current regulated rates. This measure materially increased the prices consumers had to be pay for electricity in order to enhance OPG's ability to strengthen its financial performance.[7]

8. These factors, in combination, constitute support for the statement contained in the Government's February 23, 2005 announcement to the effect that OPG's prices are designed to "allow OPG to better service its debt while earning a rate of return which balances the needs of customers and ensures a fair return for taxpayers".

9. What the Government seeks to recover and expects to recover by way of return on the equity portion of its investment in OPG is the cost of carrying the OPG debt it assumed to obtain its equity position in OPG. This conclusion is supported by the excerpts from the Ontario 2004 Budget Paper quoted in AMPCO's evidence, Ex.M2, Tab 2, page 6, and by the contents of the Annual Review presented by OPG to DBRS on April 25, 2007,[8] reiterating its cost efficiency mandate and recognizing that "the ROE of 5% in its Government-approved current rates is 'sufficient to maintain investment grade credit ratings'".

10. The evidence reveals that the Government's determination of a 55% debt and 45% deemed equity ratio was a considered conclusion based on recommendations provided by CIBC World Markets Inc.[9] The Government's considered determination of the Cost of Capital components of OPG's current

[7] Ex.J1.1, pp. 3 and 4
[8] Ex.L3-1, Attachment 2, page 15
[9] Ex.L2-10, Attachment 1

rates was based on cost and output data developed by the Ministry of Energy, Ministry of Finance and CIBC World Markets working with OPG.[10]

11. Accordingly, the starting point for a consideration of the reasonableness of the Costs of Capital OPG now seeks to recover in rates, effective April 1, 2008, is a recognition that the Cost of Capital components of OPG's current rates, based on a 55%/45% debt/equity ratio and a 5% ROE on a Rate Base, including undepreciated ARC, are components of rates determined by the Government, acting as both OPG's regulator and its owner, to be just and reasonable.

12. There is nothing in the Government's February 23, 2005, determination of OPG's current rates which suggests that the criteria it applied were to be regarded merely as interim "placeholders". There is nothing in the Government's determination of OPG's current rates to suggest that the cost containment, efficiency, rate stability and competitiveness criteria are to be disregarded and ignored by the Ontario Energy Board ("OEB" or the "Board") when it exercises its authority to set the regulated rates for OPG effective April 1, 2008, and beyond.

13. In fact, in its August 15, 2005, Memorandum of Agreement (the "Agreement") with the Government, OPG acknowledges and agrees to be judged by the cost containment and overall operating efficiency challenges of its mandate, and agrees that its response to the challenges should be measured, *inter alia*, by performance benchmarks.[11] In particular, OPG agrees as follows:

> ***"It will operate its existing nuclear hydro-electric and fossil generating assets as efficiently and cost effectively as possible …"***
>
> ***"OPG will seek continuous improvement in its nuclear generation business and internal services.***
>
> ***"OPG will benchmark its performance in these areas against CANDU Nuclear Plants worldwide, as well as the top quartile of private and publicly owned nuclear electricity generators in North America .."***

[10] Ex.J1.4, Attachment page 7 stating "*Ministry of Energy, Ministry of Finance, CIBC World Markets developed cost and output data working with OPG in setting the regulated prices.*"
[11] Ex.A-1-4, Appendix II

14. With respect to its Governance, OPG agrees:

> ***"OPG's regulated assets will be subject to public review and assessment by the Ontario Energy Board."***

15. With respect to "Financial Framework", OPG agrees that:

> ***"… it will operate on a financially sustainable basis and <u>maintain</u> the value of its assets for its shareholder, the Province of Ontario."*** **(emphasis added)**

16. There is nothing in the Agreement which justifies OPG's attempt, in these proceedings, to enhance the value of its assets by means of a mandated Board increase in its profit of more than $400M.[12], which more than doubles the profit embedded in OPG's current Government-approved rates.

17. Rating agency reports issued in 2005 and subsequently confirm that the framework the Government used to establish OPG's current rates materially strengthened OPG's ability to operate on a financially sustainable basis. In its December 2005 Report,[13] Standard & Poors ("S&P") stated:

> ***"Although OPG's financial profile has been weak in the past several years, it has shown improvement in 2005 and is expected to continue to strengthen in 2006."***

18. OPG's situation was described by S&P as a "marked improvement to cash flow adequacy", which in turn, prompted S&P to rate OPG's outlook as "positive" in the following terms:

> ***"The positive outlook reflects the expectation of a significant improvement to OPG's cash flow and credit metrics in 2006 due to increased nuclear output and a full year of higher regulated prices."***[14]

19. In its "Annual Review" presentation to S&P on April 25, 2006, OPG referred to its cost efficiency mandate, its "enhanced financial position" and "delivered strong

---

[12] Ex.L-3-49, page 2 – OPG seeks to increase the profit of $360M embedded in current rates by $418M to $778M.
[13] Ex.A2-3-1, Attachment B, page 3
[14] Ex.A2-3-1, Attachment C, page 3

results".[15] In this presentation, OPG recognized that the level of profitability in the Government approved rates was based on a ROE of 5%. The possibility of obtaining a ROE higher than 5%, following the commencement of OEB hearings was only then regarded by OPG as a potential possibility.[16]

20. OPG's strengthening performance was reflected in a Material Change Report dated May 25, 2006, citing to an announcement by S&P recognizing OPG's improving performance and raising OPG's short-term Canadian scale commercial paper debt rating to A-1 (low) from A-2.[17] The Material Change Form states, *inter alia*:

> ***"The announcement follows S&P's decision on September 27, 2005, to affirm OPG's long term corporate credit rating at BBB+ and revise its outlook to "positive" from "developing"."***

21. OPG's substantial improvement is reflected in the August 3, 2006, Rating Report of Dominion Bond Rating Service ("DBRS") stating, *inter alia*:

> ***"The financial profile of Ontario Power Generation Inc. ("OPG" or the "Company") has improved substantially since 2004 following the new interim regulated rate structure that came into effect on April 1, 2005."*** [18]

22. In confirming its ratings of R-1 (low) for commercial paper and A-1 (low) for unsecured debt, DBRS states:

> ***"The current rating, however, is more reflective of OPG's improved financial profile on the stand-alone basis which has been driven by a more favourable regulatory framework."*** [19]

23. In a Report issued on September 29, 2006, S&P confirmed OPG's positive outlook by citing OPG's strengthening financial profile in the following terms:

> ***"OPG's financial profile showed significant improvement in 2005 with Funds From Operation ("FFO") interest coverage of 6.2 x FFO –***

---

15 Ex.L-3-1, Attachment 3, page 5
16 Ex.L-3-1, Attachment 3, page 14
17 Ex.L-3-1, Attachment 6
18 Ex.A2-3-1, Attachment A, page 1
19 Ex.A2-3-1, Attachment A, page 1

to average total debt of 30% compared with 2.5% and 9% respectively in 2004." [20]

24. S&P regarded OPG's outlook as "positive" and stated that:

> ***"The positive outlook is an indication that the rating will likely move a notch higher if OPG can manage its expenses and operational performance within the bounds of its current licence agreement and maintain its satisfactory financial profile in 2006 with a similar outlook for 2007 and beyond."*** [21]

25. In presenting its Annual Review to DBRS on April 25, 2007,[22] OPG, once again, recognized its cost efficiency mandate and that the ROE of 5% reflected in its current rates is "sufficient to maintain current investment grade credit ratings".[23] (emphasis added) While advising DBRS of its plan to seek an increase in ROE for regulated assets in its first OEB rate hearing, OPG developed its 2007 Business Plan and Financial Outlook for 2008 to 2011 on the basis of an assumption that its new regulated rates, effective April 2008, would provide a 5% ROE on regulated assets.[24] These actions constitute an unequivocal acknowledgement by OPG that the criteria that the Government applied to determine the profitability component of its current rates, including the 55%/45% Debt/Equity ratio and the 5% ROE operated to allow OPG to "better service its debt while earning a rate of return that balances the needs of customers and assures a fair return for taxpayers"(emphasis added) as stated in the Government's February 23, 2005 announcement of its determination of OPG's rates.[25]

26. OPG's strengthened financial profile was again noted in the DBRS Rating Report of November 30, 2007,[26] which stated as follows:

> ***"While provincial ownership and financial support limited downward movement in OPG's ratings during earlier periods of weak financial performance by the Company, the current ratings***

20 Ex.A2-3-4, Attachment C, page 2
21 Ex.A2-3-1, Attachment C, page 3
22 Ex.L-3-1, Attachment 2
23 See Footnote 8
24 Ex.L-3-1, Attachment 2, page 50
25 Ex.J1.1
26 Ex.A2-3-1, Attachment A, page 2

> ***take into account OPG's improved financial profile on a stand-alone basis which has improved due to a more favourable regulatory framework.***
>
> ***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.[27]

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[28] and the

[27] 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.

[28] See Footnote 11

Operating Maintenance and Administration ("OM&A") cost increases in excess of $620M.[29]

30. Despite OPG's acknowledgement in the Agreement that its "regulated assets will be subject to public review and assessment (emphasis added) by the Ontario Energy Board", and its repeated recognition of its cost containment and efficiency mandate, OPG's position, now is that the Board, in several instances, has no jurisdiction to constrain its spending plans. For these categories of expenditures, OPG contends that the Board's review power is limited to applying a "rubber stamp" to its spending plans.[30]

31. The Agreement stating that "OPG's regulated assets will be subject to public review and assessment by the Ontario Energy Board" supports a conclusion that the provisions of O.Reg. 53/05 were not intended to grant OPG substantial blanket immunity from regulatory scrutiny. The provisions of O.Reg. 53/05 should be interpreted in a manner which is compatible with the Government's stated objective of transferring to the OEB "the authority to set prices" for electricity generated from OPG and to ensure that politics are taken out of electricity pricing in the Province.[31]

32. Despite the financial performance positives arising from the Government's establishment of its current rates, and despite its actions acknowledging that the 5% ROE in its current rates is "sufficient to maintain current investment grade credit ratings" and is a ROE "which balances the needs of customers and assures a fair return for taxpayers", OPG now asserts that the profit component of its current Government approved rates is "clearly inappropriate"[32] and asks the

[29] Ex.L-3-49 – Hydro-electric OM&A increase of $64M plus nuclear OM&A increase of $559M equals $623M.
[30] Ex.J14.1, Attachment
[31] Ex.J1.1, page 2
[32] OPG Argument-in-Chief, page 7

Board to more than double the profit component of its current rates by increasing from about $360M to $778M, being an increase of about $418M.[33]

33. Further, despite acknowledging and agreeing to have its response to the cost containment and overall operating efficiency challenges of its mandate judged by reference to performance benchmarks, the $620M of OM&A cost increases OPG asks the Board to approve materially exceed the benchmarks which OPG agreed should be applied to evaluate its performance.

34. For reasons which are outlined in further detail in sections of this Written Argument which follow, CME urges the Board to find that the revenue deficiency OPG seeks to recover in rates for the 21 month test period ending December 31, 2009, is excessive by an amount of at about $631M.

35. The revenue deficiency OPG seeks to recover, effective April 1, 2008, leads to a 5.10% increase in the Energy Charge of bills to residential customers.[34] Since the implementation date for increases in rates is likely to be on or about November 1, 2007, some 7 months after April 1, 2008, the recovery of the revenue deficiency over the remaining 14 months of the test period will cause the energy component of current bills to residential customers will increase on November 1, 2008, by about 7.65%. Collecting a 21 month test period revenue deficiency over 14 months increases the percentage impact of the revenue deficiency on current rates by a factor of 1.5. The rate impact of the revenue deficiency on consumers is incompatible with the rate stability and competitiveness criteria which the Board should continue to apply when evaluating the relief requested by OPG.

36. Preserving and, if possible, enhancing the competitiveness of the prices for electricity which CME's 1,400 Ontario member companies pay, compared to the electricity prices which their competitors, located elsewhere, are paying, is a

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[33] See Footnote 12
[34] Ex.J15.8

matter of the highest priority for CME. It is well documented that Ontario manufacturers are suffering greatly as a result of the combination of skyrocketing energy prices, the strong Canadian dollar, and other unfavourable economic conditions in Ontario. As a result, it is critical that the OEB continue to apply the cost containment criteria upon which the Government based its determination of OPG's current rates.

37. The sections of this Written Argument which follow are arranged to deal, firstly, with matters CME regards as threshold issues. One threshold issue is the interpretation to be ascribed to those parts of O.Reg. 53/05 which OPG says limit the Board's jurisdiction to "rubber stamping" its spending plans. Another is the appropriate regulatory treatment for Nuclear Asset Retirement Costs ("ARC"). This is a threshold issue because it has material impact on the capital structure the Board uses for the purposes of determining OPG's debt and equity costs of capital. Thereafter, the sections of this Written Argument are organized under the following major topic headings:

- Rate Base
- Cost of Capital
- Revenues
- Cost of Service
- Revenue Deficiency
- Deferral and Variance Accounts
- Payment Amounts
- Conclusions and Cost Award Request

38. A brief description of the findings CME urges the Board to make on each of the major topics in the Board's Issues List which are addressed in this Written Argument is attached as Schedule A.

II. ONTARIO REGULATION 53.05 ("O.REG. 53/05" OR THE "REGULATION")

39. We are indebted to counsel for Board Staff for her thorough and careful analysis of issues regarding the interpretation of O.Reg. 53/05.[35] With one exception, we concur with the advice counsel for Board Staff has provided regarding the interpretation of the provisions of the Regulation which are in issue in these proceedings.

40. The only submissions of counsel for Board Staff with respect to O.Reg. 53/05 which we question relate to the submissions pertaining to the "Nuclear Liability Transition Deferral Account" which counsel for Board Staff discusses at pages 22 and 23 of Board Staff Submissions.

41. At page 22, counsel for Board Staff states:

> ***"In making its first order, the Board must accept the amounts recorded in this Deferral Account as set out in OPG's most recently audited financial statements that were approved by the Board of Directors of OPG before the effective date of that order."***

42. Subject to the exclusion of Bruce-related revenues from the Deferral Account, which Board Staff supports, on the grounds that Bruce assets are not "Prescribed Assets",[36] the above submission implies that the Board must accept the amount OPG has recorded in the Deferral Account, as producing the correct revenue requirement impact of increases in nuclear liabilities caused by the Reference Plan effective December 31, 2006. This submission implies that the Board cannot assess the appropriateness of the method OPG has used to calculate the amount of the revenue requirement impact to be recorded in the Deferral Account. We disagree with this submission.

43. For reasons which follow, we take the view that a determination of the correct amount to be recorded in the Deferral Account depends upon a determination by

[35] Board Staff Submission, pp. 2 to 25
[36] Board Staff Submission, pp. 14, 15, and 23

the Board of whether the Cost of Capital approach, OPG applies to determine recoverable Asset Retirement Costs, results in a correct estimate of the revenue requirement impact of the changes in nuclear liabilities caused by the December 31, 2006 Reference Plan. We submit that the phrase in paragraph 7 of Section 6(2) of the Regulation, which reads "<u>to the extent that the Board is satisfied that revenue requirement impacts are accurately recorded in the accounts</u>" (emphasis added) is intended to and operates to vest the Board with the power to determine whether the recorded amount, produced by applying the method OPG proposes, results in an accurate recording of the revenue requirement impact.[37] For the amount recorded in the Deferral Account to be accurate, it needs to reflect an application of the method which the Board has determined to be the appropriate method to apply, for determining how nuclear liability decommissioning costs are to be recoverable in rates.

44. We also take issue with OPG's contention that the Regulation requires the Board to include a return component in the costs attributable to the Bruce Nuclear Generating Stations ("Bruce") when determining, under paragraph 9 and 10 of Section 6(2) of the Regulation, the extent to which Bruce revenues exceed Bruce costs.[38] The question of whether a return amount on Bruce assets falls within the ambit of the word "costs" used in paragraphs 9 and 10 of Section 6(2) of the Regulation is a matter for the Board to decide.

45. The rationale upon which we rely to support an interpretation of the Regulation which excludes profit and/or return from the ambit of the word "costs" in paragraphs 9 and 10 of Section 6(2) of the Regulation pertaining to Bruce is described below.

A. <u>Costs of Nuclear Liabilities</u>

46. The sections of the Regulation relevant to this topic include:

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37 Transcript Vol. 9, June 10, 2008, pp. 2 to 6
38 OPG Argument-in-Chief, pp. 77 to 79, 85 to 87 and 98; Ex.J14.1, page 2

- Section 5.1 entitled "Nuclear Liability Deferral Account, Transition",
- Section 5.2 entitled "Nuclear Liability Deferral Account", and
- Paragraphs 5, 6, 7 and 8 of Section 6(2),

47. pertaining to the "Rules Governing Determination of Payment Amounts by Board".

48. We understand OPG to be contending that the provisions of paragraphs 6 and 7 of Section 6(2)5 operate, in combination, to empower OPG and its auditors to establish the regulatory approach to be applied to determine how costs associated with nuclear liabilities are to be recovered in OPG's Deferral Accounts and its test period revenue requirement.[39]

49. CME submits that the Regulation does not empower OPG and its auditors to make the "regulatory policy" determination with respect to the recovery of costs associated with the nuclear liabilities.

50. We agree that the Board's obligation is to accept the amounts of assets and liabilities recorded in OPG's audited Statements as stated in Section 6(2), paras. 5 and 6. However, the "revenue requirement" impact of costs associated with nuclear liabilities is, we submit, an item of <u>regulatory policy</u> and not an item of accounting or tax policy. If the recovery of costs associated with nuclear liabilities is an item of accounting policy, then the Generally Accepted Accounting Principles ("GAPP") provisions relating to the expensing of nuclear liability costs should apply. Yet, OPG disregards and does not apply the provisions of GAPP to determine the nuclear liability cost to be charged as an expense in the test period Cost of Service.

51. That the Board's power to determine the manner in which nuclear liability costs should be recoverable in rates is not constrained and limited to adopting the approach OPG advocates is, we submit, reinforced by the language of

[39] OPG Argument-in-Chief, p.87

paragraph 7 of Section 6(2), which includes the phrase "to the extent that the Board is satisfied that revenue requirement impacts are accurately recorded in the accounts".(emphasis added) That phrase, we submit, establishes the Board as the final arbiter of whether OPG's Cost of Capital approach, or the Cost of Service type of approach, we advocate, as outlined in detailed in Section III of this Argument, is the appropriate way to determine the revenue requirement impact of OPG's nuclear liabilities.

52. That the Regulation empowers the Board, and not OPG and its auditors, to make the regulatory policy decision with respect to the appropriate way to recover nuclear liability costs in OPG's revenue requirement is, we submit, reinforced by the language of paragraph 8 of Section 6(2) of the Regulation. That provision of the Regulation clearly empowers the Board, and not OPG and its auditors, to determine the revenue requirement impact of OPG's nuclear liabilities.

53. The strained interpretation of the Regulation which OPG urges upon the Board is, we submit, incompatible with the Technical Briefing on OPG's Pricing Announcement provided by the Ministry of Energy on February 23, 2005, stating "Variance accounts treatment will be reviewed by OEB before recoverable".[40]

54. As well, OPG's contention that the provisions of O.Reg. 53.05 operate to require the Board to accept its Cost of Capital approach to nuclear liabilities for the 21 month test period is inconsistent with the provisions of the Agreement in which the Government and OPG acknowledged that "OPG's regulated assets will be subject to public review and assessment by the Ontario Energy Board."[41] "Public review and assessment" involves more than merely applying a stamp of approval.

55. OPG's contention that the Board must adopt OPG's "Cost of Capital" approach to determine the accuracy of amounts recorded in the Nuclear Liability Transition

40 Ex.J1.4, Attachment page 9
41 Ex.A-1-4, page 2, paragraph B1

Deferral Account and, as well, to determine the costs recoverable in OPG's 21 month test period revenue requirement for nuclear liability costs is without merit and should be rejected.

B. Bruce Nuclear Generating Station ("Bruce") Costs

56. The concept reflected in the Regulation with respect to OPG's costs and revenues associated with Bruce is that ratepayers are responsible for the extent to which Bruce costs exceed Bruce revenues costs, and that ratepayers benefit from the extent to which Bruce revenues exceed Bruce costs. This, we submit, is the only reasonable way to interpret paragraphs 9 and 10 of Section 6(2) of the Regulation. Paragraph 9 of Section 6(2) of the Regulation makes ratepayers responsible for Bruce costs and paragraph 10 gives them the benefit of Bruce revenues in excess of costs "If … revenues … exceed … costs …". Accordingly, under the Regulation, nuclear liability costs attributable to Bruce are only recoverable to the extent that Bruce costs exceed Bruce revenues.

57. The Bruce nuclear liability costs, which OPG has recorded in the Nuclear Liability Transition Deferral Account, constitute an inaccurate recording of the revenue requirement impact because they are an item of costs which should be charged against Bruce revenues.

58. The question of whether the word "costs" in paragraphs 9 and 10 of Section 6(2) should be construed to include a return on Bruce assets is a question for the Board to resolve. OPG's contention that the Board has no choice and that it must interpret the word "costs" to include a return because that is the way its initial rates established and the way its auditors proceeded is a contention which lacks merit. The Board's power to interpret the word is unconstrained and unfettered.

59. This Regulation distinguishes between “costs” and “return”; so there is nothing in the Regulation which supports OPG’s contention that the word “costs” includes “profit” and/or “return”.

60. In construing the ambit of the word “costs”, the Board should consider a scenario when Bruce costs exceeds Bruce revenues. Such a situation might arise in the event that there is a prolonged shut-down of Bruce or the nuclear liabilities, attributable to Bruce, materially increase. In such a scenario, would ratepayers be responsible to pay OPG the amount by which Bruce costs exceeded Bruce revenues and an additional return on OPG’s investment in Bruce? We submit that the answer to that question is clearly no. The Regulation does not provide OPG with a guaranteed return on its investment in Bruce. Yet, that is the way OPG would have the Board interpret the Regulation. We submit that the word “costs” in paragraphs 9 and 10 of Section 6(2) of the Regulation does not include a return on Bruce assets.

61. In making ratepayers responsible for the extent to which Bruce costs exceed Bruce revenues, the Regulation precludes the Board from applying its traditional regulatory practice of imputing revenue to an ancillary business to prevent it from being a burden on ratepayers. To off-set the subsidy burden implicit in the Regulation, the Government, as OPG’s owner, obviously decided to waive its right to require electricity ratepayers to pay the Government a utility return on OPG’s investment in Bruce.

62. We submit that the Bruce nuclear liability costs incorrectly recorded in the Nuclear Liability Transition Deferral Account are at least $62M, consisting of the $54M return and $8M of depreciation described by OPG’s witnesses at Transcript Volume 15, June 20, 2008, at page 86. This amount is somewhat less than the total of $68.1M of return component for Bruce which appears in Ex.J8.1, Attachment 2 for 2007 consisting of deemed interest of $37.6M, return on equity $27.7M and deemed capital taxes $2.8M, for a total of $68.1M. The amount

shown in Ex.J8.1, Attachment 2, does not specifically identify the nuclear liability depreciation attributable to Bruce which has been recorded in the Deferral Account. Removing $54M of Bruce-related return leaves $21M of return attributable to Prescribed Assets.

63. We submit that the revenue deficiency adjustment for OPG's understatement of the extent to which Bruce revenues exceed Bruce costs in the test period (because it includes a utility return on its investment in Bruce in the calculation), is 75% of $101.2M for 2008, being an amount of $75.9M and 100% of $96.3M, being the sum of the amounts shown in Ex.J8.1, Attachment 2 and in Ex.G2, Tab 2, Schedule 1, Table 3 for 2009 for capital tax, interest and return on equity. We estimate the total adjustment to the 21 month revenue deficiency related to OPG's understatement of the extent to which Bruce revenues exceed Bruce costs during the test period is $172.2M.

III. NUCLEAR ASSET RETIREMENT COSTS

64. Under GAPP,[42] OPG is required to record its unfunded nuclear Asset Retirement Costs ("ARC") in an asset account. Funded Asset Retirement Obligations ("ARO") are recorded in segregated fund accounts. ARC is a point in time estimate of the net present value of its unfunded nuclear ARO.[43] In Ex.J15.1 Addendum, OPG advises that unfunded nuclear ARO is defined as the difference, at a given point in time, between the present value of the full nuclear ARO liability, as recorded in OPG's Balance Sheet, and the value of the nuclear segregated funds, as recorded in OPG's Balance Sheet.

65. The point which needs to be emphasized is that unfunded ARO is not an amount which is recorded in any fixed asset account. ARC is the <u>fixed asset account</u>

42 The application GAPP provision is reproduced at page 44 of Board Staff Submission
43 Transcript Volume 7, June 3, 2008, page 43

statement of the amount of unfunded nuclear liabilities.(emphasis added) The phrase "unfunded ARO" does not refer to ARC but to a difference between amounts recorded in two accounts, namely, the amount recorded in the ARO liability account and the amounts recorded in the segregated funds asset accounts.

66. ARC is determined periodically by means of a Reference Plan. OPG's undepreciated ARC at December 31, 2007, of $2,429M[44] is based on a Reference Plan with an effective date of December 31, 2006. This Reference Plan determined the undiscounted value of OPG's total ARO to be about $24B, which is about a $3.5B increase from the previously determined undiscounted value of OPG's total ARO of about $20.5B.[45]

67. OPG's response to our request that it provide a reasonable estimate of the portion of the total ARO of $24B which is unfunded[46] and to allocate that amount between the various nuclear plants is complicated. We think OPG is telling us that a percentage of 21% can be used to estimate the portion of the $24B obligation that is unfunded at December 31, 2006, and that the allocations to each plant can be made by using an allocation factor derived from the percentage amounts for each plant shown in Ex.J15.1, Addendum 2. If the percentage of 21% can be used to estimate the portion of the $24B of undiscounted total ARO of liability which is unfunded, then the unfunded portion of the undiscounted total liability is about $5B at December 31, 2006.

68. In paragraphs 92 and 93 below, we provide an illustration of how to apply the "Cost of Service Supplement to ARC Depreciation" method which we submit is the appropriate approach to follow. Using the information in Ex.J15.1, Addendum 2, which shows an allocation of year-end ARC into two pools of assets, namely to Pickering Darlington and to Bruce A and B, and the

44 Ex.J15.1, Addendum 2
45 Transcript Volume 7, June 3, 2008, pp. 68 to 71
46 J15.1, Addendum 2

depreciation amounts of $120M for Pickering Darlington and $400M for Bruce, one can derive the implicit average remaining economic life for each pool of nuclear assets. With this information and the allocation factors derived from the allocations of ARC to each pool of assets of 46% to Bruce and 56% to Pickering Darlington, we can, with an appropriate discount rate, calculate the amount that would need to be provided by ratepayers, as a supplement to ARC depreciation, to provide OPG with the undiscounted value of unfunded nuclear liabilities on the end-life dates derived from the depreciation amount provided in Ex.J15.1, Addendum 2.

69. The "Cost of Service Supplement to ARC Depreciation" approach we illustrate later can be applied to each plant once OPG provides sufficient information to permit the calculation of the amount that would need to be provided by ratepayers, as a supplement to ARC depreciation, to provide OPG with the undiscounted value of ARC for each plant on the end-life dates specified in Ex.J15.1, Addendum.

70. Since ARC is, by definition, the present value of an unfunded amount, OPG witnesses acknowledge that the creation of ARC is not supported by any borrowed funds or shareholders' equity.[47] When being questioned by Mr. Rupert, OPG witnesses acknowledged that the creation of ARC is merely an accounting entry.[48] This conclusion, we submit, is corroborated by an examination of OPG's December 31, 2006 Balance Sheet which shows OPG's net fixed assets, including ARC, at a value of $12,671M or about $10,000M excluding ARC. The total of OPG's Balance Sheet debt and shareholders' equity, at December 31, 2006, is about $9,108M, being an amount materially less than the December 31, 2006, net book value of fixed assets, excluding ARC, of about $10,000M.[49]

47 Transcript Volume 1, May 22, 2008, page 70, line 24 to page 74, line 1
48 Transcript Volume 7, June 3, 2008, pp. 159 to 160
49 Ex.A2-1-1, Appendix A

71. Unlike physical plant assets, ARC is not an acquired asset, funded through the raising of debt or equity capital. ARC, as a fixed asset, is not supported by any underlying debt or equity capital. There are no costs of capital associated with the creation and entry of ARC as a fixed asset on OPG's books. The accounting entry recording of ARC, as a fixed asset, allows for the collection of an ARC depreciation amount over the economic life of the nuclear plant assets giving rise to the ARC.

72. In this context, it is important to recognize that ARC depreciation is not depreciation in the traditional sense of being the return OF capital actually spent to acquire a depreciable fixed asset over the economic life of that asset. ARC depreciation is not a return of invested capital, but the recovery of an amount, over the economic life of assets giving rise to the account, to produce a fund, at the end of the economic life of the assets, which will be sufficient to cover the cost of retiring and/or decommissioning the assets ARC depreciation is not the recovery, over the economic life of an acquired asset, of an amount which has been spent.[50] Rather, it is recovery of an amount to be spent at the end of the economic life of asset, giving rise to the unfunded fixed asset account.

73. In a rate-making context, it is important to recognize that ARC depreciation is, in and of itself, a material source of the funds which need to be set aside in segregated fund accounts, over the economic lifetime of the nuclear assets, to pay for the decommissioning of those assets at the end of their economic life.

74. Because ARC is a net present value amount pertaining to larger future liability amount, the recovery of ARC depreciation, in and of itself, over the remaining life of the nuclear assets, will be insufficient to provide the total fund that is needed,

[50] Ex.J1.3, OPG, in its "simple analogy", suggests that $100 is spent on the creation of ARC is incorrect. ARC is, by definition, an unfunded fixed asset account.

at the end of the economic life of the asset, to discharge undiscounted and unfunded ARO that gave rise to ARC.[51]

75. To illustrate this point, consider a simplified case where the undiscounted total ARO for nuclear assets, as of the effective date of a Reference Plan, is $24B, with the estimated unfunded portion thereof about $4B. Assume that the remaining economic life of the assets is about 30 years, and that, at a discount rate of 4.6%, money will approximately double every 15 years. Under these assumptions, we estimate that the NPV of the $4B of unfunded and undiscounted ARO, being the value of ARC to be about $1.0B. Using straight line depreciation over 30 years, ARC depreciation will be about $33M per year.

76. Setting aside ARC depreciation of $33M in each and every year over 30 years, at an interest rate of 4.6% per annum, will produce an amount at the end of 30 years in excess of $1.0B. We estimate that $33M per year at 4.6% per annum will generate a fund of about $2.25B at the end of 30 years.[52] This leaves a shortfall of about $1.75B as the amount to be recovered, in addition to ARC depreciation, to produce the $4B needed to decommission the assets at the end of 30 years. The annual amount to be invested, at 4.6%, to produce a fund of $1.75B at the end of 30 years will be about 78% of $33M, or about $26M per year over and above the ARC depreciation amount.

77. From the foregoing illustration, it can be seen that the rate-making issue which this case raises, pertaining to the appropriate regulatory treatment of nuclear Asset Retirement Costs, is to determine the extent to which the investment by OPG of the annual ARC depreciation amount, over the remaining economic life of the nuclear assets which gave rise to the ARC, will be insufficient to produce

[51] Transcript Volume 7, June 3, 2008, page 44, lines 5 to 10

[52] We have not done precise calculations and provide these numbers to illustrate the concept that should be applied to determine the amount, over and above ARC depreciation, which, in combination with accumulated ARC depreciation and interest thereon, will produce the fund needed at the end of the economic life of the nuclear assets to decommission and retire them.

the fund, at the end of the economic life of those assets, which equals the unfunded portion of the total undiscounted ARO liability which gave rise to ARC.

78. The issue of the appropriate regulatory approach for recovering Asset Retirement Costs is complex. It is currently being studied by the National Energy Board ("NEB") in the context of retirement costs associated with pipeline abandonment.[53] In the Consultation initiative that the NEB is managing with respect to this complex subject matter, the NEB relies on a 1985 Staff Discussion Paper pertaining to Terminal Negative Salvage ("TNS") costs. The NEB also refers to a preliminary view it expressed in a letter dated February 19, 1996,[54] to the effect that such retirement costs should be separated from depreciation and treated as an element of cost of service. The alternative approaches the NEB identifies for recovering Asset Retirement Costs from ratepayers include what are described as cumulative savings, insurance, and enhanced depreciation approaches. The NEB notes that other approaches may emerge through the Consultation it has initiated.[55]

79. The criteria the NEB identifies for considering the pros and cons of different methodologies include certainty of fund availability, <u>taxation</u> <u>efficiency</u>, governance investment policies, reporting and transparency.[56](emphasis added) The NEB notes that if an insurance approach is used, there may be clear implications for tax treatment and that "if an enhanced depreciation approach were used, there may be implications for no-cost capital on the Balance Sheet of the regulated entity." [57]

80. From the foregoing, it is evident that there is not yet any "traditional" approach to the recovery of Asset Retirement Costs in regulated utility rates as OPG

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53 NEB Discussion Paper, March 2008, entitled "*Financial Issues Related to Pipeline Abandonment*"
54 NEB Discussion Paper, supra, at page 12
55 NEB Discussion Paper, supra, at page 21
56 NEB Discussion Paper, supra, at page 41
57 NEB Discussion Paper, supra, at page 41

suggests in its evidence.[58] There was no Consultative or Settlement Conference discussion in this case pertaining to the appropriate regulatory approach for recovering nuclear Asset Retirement Costs. The very significant profit enhancement features of the approach OPG proposes first became apparent to counsel for CME during the course of the Technical Conference.[59] We only discovered that the NEB is currently leading a Consultative to study the issue after the oral hearing of evidence had concluded. In these circumstances, we urge the Board to consider whether it should characterize any determination of the issue, in these proceedings, as interim only so that the implications of the different regulatory approaches can be more fully considered in a Board-sponsored Consultative which can take into account, *inter alia*, the results of the NEB's study of the issue. A process of this nature could lead to a more permanent solution in the Application OPG plans to file for approval of payment amounts for the 2010-2011 test period.

81. There is no precedent to support the "Rate Base approach" OPG advocates[60] and, for reasons which follow, it is an approach which the Board should reject. The approach which the Board adopts should be the one which, in its view, is fair to OPG but the least cost and most tax effective alternative for ratepayers.

82. In its Application, OPG asks the Board to treat ARC as if it were a fixed utility asset acquired with debt and equity capital raised in the capital markets. In effect, OPG asks the Board to treat ARC (which, by definition, is an unfunded asset) as if it were a funded asset. The Board should decline to treat ARC as if it were a funded asset. The reality is that if the unfunded portion of OPG's undiscounted ARO, which gives rise to its current ARC, was funded, there would be no ARC to include in Rate Base.

58 Ex.J1.3, page 8
59 Technical Conference Transcript, May 13, 2008, pp. 134 to 141
60 Ex.J1.3; Transcript Volume 11, June 13, 2008, pp. 128 and 129

83. ARO segregated funds are excluded from Rate Base. OPG's Application acknowledges this. Invested funds are not depreciable assets. The income earned on invested funds, in theory, should equal or exceed any Costs of Capital the investor incurs to raise the funds. All funds set aside in ARO segregated fund balances prior to April 1, 2008, being the effective commencement date for the OEB's rate-making jurisdiction over OPG should not form part of and should be excluded from Rate Base. Any deposits that have been made into ARO segregated fund accounts subsequent to the December 31, 2006, effective date of the current Reference Plan do not form part of the ARC fixed asset account. On the asset side of the Balance Sheet, it is the undepreciated ARC amount, in the fixed asset accounts, which constitutes OPG's "unfunded nuclear liabilities".

84. OPG's exclusion of ARO segregated fund balances from Rate Base prompted inquiries from counsel for CME during the hearing with respect to the extent to which ARC, based on the Reference Plan effective December 31, 2006, would likely be reduced as of April 1, 2008, being the commencement date for OEB regulatory supervision of OPG. It was initially perceived that further payments of amounts into the segregated fund balances, after the effective date of the Reference Plan, would likely produce an ARC value, as of April 1, 2008, in an amount less than the ARC value recorded on OPG's books based on the December 31, 2006 Reference Plan.[61]

85. OPG responds to this line of inquiry by stating, in Ex.J15.1, that "it is not meaningful to consider whether ARC is fully funded at a point in time." After considerable reflection, we conclude that this comment has merit in that it implies that, without a new Reference Plan, such as a Reference Plan effective April 1, 2008, the extent to which ARC, on April 1, 2008, might be higher or lower than the April 1, 2008 undepreciated ARC amount recorded in the fixed assets accounts is an unknown.

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[61] Transcript Volume 15, June 20, 2008, pp. 2 to 4

86. We now recognize and accept that the undepreciated amount in the ARC fixed asset account represents the auditor's expression of the <u>fixed asset account amount</u> of OPG's <u>unfunded</u> nuclear liabilities and that, until there is a new Reference Plan, the undepreciated ARC amount on the financial reporting date will be the fixed asset account value for OPG's unfunded nuclear liabilities. As a consequence, no part of the ARC fixed asset account should be treated as if it were "funded". Any amounts set aside for the ARO funding are found in the segregated fund accounts, which OPG acknowledges, are to be excluded from capital structure for the purposes of determining the cost of debt and equity in OPG's regulated revenue requirement.

87. At noted above, the question to be determined is the extent to which the investment by OPG of the annual ARC depreciation amount, over the remaining economic life of the nuclear assets which gave rise to the ARC, will be insufficient to produce the fund, at the end of the economic life of those assets, which equals the unfunded portion of the total undiscounted ARO liability which gave rise to the ARC. In this context, the first item to be determined is the extent to which the fund will fall short of the unfunded portion of the total undiscounted ARO that gave rise to the ARC. Once that shortfall amount has been determined, the Board can then proceed to determine the additional amount that needs to be recovered from ratepayers year-by-year, over and above ARC depreciation, to produce a fund at the end of the economic life of the assets in an amount which equals the shortfall. The annual amount required to produce the fund shortfall at the end of the economic life of the assets should be recovered from ratepayers on a "straight line" basis in the same manner that ARC depreciation is being collected from ratepayers on a "straight line" basis.

88. The fact that OPG has agreed with its owner, the Province of Ontario, to make payments into its nuclear Asset Removal and Waste Management funds pursuant to a payment schedule that is heavily front-end loaded, should not have

any influence on the rate-making approach the Board applies to recover Asset Retirement Costs from ratepayers. The heavy front-end loading in the payment schedule is acknowledged by OPG's witnesses and is evident from the information provided in Ex.J15.11 Attachments 1 and 2.[62]

89. Why way of analogy, consider the purchase by OPG of an insurance policy covering the undiscounted value of its ARO payable 30 years hence, with the cost of the insurance to be paid in equal annual amounts over the period of 30 years. OPG's agreement to pay the insurer the full amount of these premiums in the first 10 years would not justify a front end load recovery, over those 10 years, of the full amounts paid. The recovery from ratepayers would be based on an amortization of the insurance premium amount over 30 years in order to preserve inter-generational equity.

90. Based on the foregoing, the approach which CME submits is appropriate for recovering from ratepayers the unfunded nuclear Asset Retirement Costs, recorded in the ARC fixed asset account, is to include ARC in Rate Base for the limited purposes of determining ARC depreciation. Because ARC, by definition, is unfunded, and, as a result, is not financed by either debt or equity capital, the entire value of ARC must be excluded from capital structure for the purposes of determining the utility costs of debt and equity capital. Any approach which treats a portion of ARC as if it were funded by debt and equity capital is incompatible with the facts and illogical since ARC, by definition, is an unfunded fixed asset account. As already noted, OPG concedes that <u>funded</u> ARO, being amounts recorded on the asset side of its Balance Sheet in ARO segregated funds, are amounts which are to be excluded from Rate Base. ARO funds are non-depreciable assets and the income earned thereon should equal or exceed

[62] Ex.J15.11, page 3, Attachment 2 shows the contributions to be paid over the next 29 years to be $2,556M, or on average, about $88M per year. The 2008 and 2009 payment amounts of $454M and $339M respectively are more than 5 times and almost 4 times the average payment amount. The test year payment amounts are heavily front-end loaded.

any costs incurred to finance the acquisition of the cash. In these circumstances, including any funded ARO in Rate Base is inappropriate.

91. Rather than treating ARC as if it were financed by a combination of debt and equity capital, as OPG proposes, the Board should determine a separate and transparent cost of service line item reflecting the estimated annual amount needed, over and above the ARC depreciation amount, to produce, at the end of the economic life of the nuclear assets, the portion of the fund needed to retire and decommission the assets which will not be funded by ARC depreciation and interest accruals thereon.

92. A very high level estimate of the annual amount, over and above ARC depreciation, which will produce the unfunded portion of the undiscounted ARO at the end of the economic life of the assets can be developed from information OPG has provided in Ex.J15.1, Addendum 2. The amount is derived from the following information which we have extracted from Ex.J15.1, Addendum 2:

(a) The unfunded portion of the undiscounted ARO is about $5B,

(b) As of December 31, 2007, about 46% of ARC is allocated to Bruce A and B, and about 54% to Pickering Darlington,

(c) From the straight line depreciation for Bruce A and B amount of $48M, and the ARC December 31, 2007 amount for Bruce A and B of $1,128M, the estimated remaining economic life of Bruce A and B is about 24 years, and

(d) From the depreciation amount of $120B for Pickering Darlington and the ARC balance for Pickering Darlington of $1,301M, the estimated remaining economic life of those plants on average is about 11 years.

93. Using this data, we calculate the following:

(a) The portion of undiscounted and unfunded ARO of $5B allocable to Bruce A and B, being 46% of $5,000M is $2,400M,

(b) The investment of ARC depreciation for Bruce A and B of $48M per year at 5% per year will produce an amount of about $1,804M at the end of 24 years[63],

(c) The shortfall at the end of 24 years is $596M, being the difference between $2,400M and $1,804M,

(d) The amount to be invested at 5% for 24 years to produce $596M is $596M ÷ $1,804M, or about 33% of $48M, being an amount of $16M,

(e) The proportion of undiscounted and unfunded ARO allocable to Pickering Darlington is 56% of $5B, or $2,800M,

(f) The total fund produced at the end of 11 years by investing ARC depreciation of $120M per year at 5% for 11 years will be about $1,561M,

(g) The shortfall at the end of the economic life of the plant is $1,239M, being the difference between $2,800M and $1,561M,

(h) The amount invested at 5% over 11 years to produce $1,239M at the end of 11 years is $1,239M ÷ by $1.561M, or about 80% of $120M, or $96M, and

(i) The total annual amount over and above ARC depreciation required to produce the requisite funds at the end of the economic lives of the plants is $16M plus $96M, or about $112M.

94. OPG’s response in Ex.J15.1, Addendum 2 to our request to provide an estimate of the portion of the undiscounted ARO liability which is unfunded and the allocation of that amount to the various plants listed by OPG in Ex.J15.1 is untested. There will be an opportunity, in the Application OPG plans to submit in 2009, for a 2010 and 2011 test period, for parties to explore with OPG how the calculation of the annual amount, over and above ARC depreciation, which is

63 These are our estimates, which others can check. They are made to illustrate the concept upon which our submission is based.

needed to produce the portion of the ARO liability which is unfunded on the expiry dates of each plant can be estimated. In the meantime, what is needed is a reasonable surrogate for the approach which we submit should be applied. There will be an opportunity, in the Application OPG plans to submit in 2009, for a 2010 and 2011 test period,[64] for parties to explore with OPG how the calculation of the annual amount, over and above ARC depreciation, which is needed to produce the portion of the ARO liability which is unfunded on the expiry dates of each plant can be estimated. In the meantime, what is needed is a reasonable "interim" surrogate for the approach which we submit should be applied.

95. The evidence does provide an estimate of the amount of ARC depreciation which will be recovered in the 21 month test period. That amount is $295M and with the Used Fuel Storage and Disposal Provisions and Low Level and Intermediate Level Waste Provisions, the depreciation amounts total about $369M for the 21 month test period[65]. Since ARC depreciation is designed to recover, on a "straight line" basis, the principal amount of undepreciated ARC, it is reasonable to conclude that the test period ARC depreciation amount of $369M will, together with ARC depreciation over the remaining economic life of the assets, from January 1, 2010 onwards, recover the current 21 month test period undepreciated value of ARC which we calculate to be an average of about $2,251.5M.[66]

96. Even though the amount by which the investment of ARC depreciation over the remaining economic life of the assets will operate to contribute to the unfunded portion of the total undiscounted ARO liability which gave rise to the ARC has not been explored in any detail, we do know that accreting the test period ARC of about $2,251M at 4.6% per annum will produce the unfunded portion of the $24B

[64] Ex.J8.14
[65] Ex.H1, Tab 3, Schedule 3, page 2
[66] Ex.H1, Tab 1, Schedule 3, page 2 - $2,325M plus $2,178M = $4,503M ÷ 2 = $2,251.5M

unfunded ARO liability which gave rise to ARC, since ARC is the net present value of the unfunded portion of the $24B undiscounted ARO liability.

97. Stated another way, recovering from ratepayers the ARC depreciation amount, plus an additional amount of 4.6% per annum of $2,151.5M for 21 months or an amount of about $181M[67] should be more than sufficient to produce, at the end of the economic life of the nuclear assets, the unfunded portion of the total undiscounted ARO liability which gave rise to ARC. Our high level estimate of the amount actually required of $112M suggests that an interim allowance of $181M, as a decommissioning line item in the cost of service, is more than generous to OPG.

98. Accordingly, allowing OPG to recover about $181M as the “interim” separate decommissioning line item in the cost of service, over and above the amount of $369M of ARC depreciation for the test period, is the “interim” regulatory approach to the recovery of ARC which we submit will more than adequately protect OPG and be a far less expensive alternative for ratepayers than the approach OPG proposes.

99. Accordingly, we submit that the “interim” regulatory approach to follow is to include ARC in Rate Base for the limited purpose of determining ARC depreciation but exclude the ARC value in its entirely from the capital structure used to determine OPG’s Cost of Capital, and instead allow OPG to recover, in Cost of Service, a transparent line item for decommissioning costs of about $181M for the 21 month test period. Excluding ARC from capital structure for the purposes of determining OPG’s Cost of Capital reduces revenue deficiency by about $334M.[68] Allowing OPG to recover, through Cost of Service,

[67] 4.6% x $2,151.5M x 1.75 = $181M
[68] Ex.L-2-58; Ex.J1.3; Ex.J1.3 Addendum; Ex.J7.1; Ex.J12.1

decommissioning costs of $181M over and above ARC depreciation leads, to an overall revenue deficiency reduction of about $153M.[69]

100. In considering the appropriate regulatory approach to follow, it must be emphasized that the unfunded nuclear liability amount in OPG's fixed assets accounts is undepreciated ARC. Until such time as there is a new Reference Plan, the unfunded nuclear liability recorded in OPG's fixed asset accounts will be undepreciated ARC. This amount differs from a point in time determination of the extent to which the net present value of ARO exceeds the current balances in segregated funds. What needs to be recognized is that the net value of unfunded nuclear liabilities is not the value of nuclear unfunded liabilities recorded in the ARC fixed asset account, which is the account OPG includes in Rate Base and its proposed capital structure.

101. There is no fixed asset account which quantifies the unfunded liabilities in Rate Base in the amounts of $1,231M for 2008 and $878M for 2009, which is what OPG appears to represent in the various exhibits filed during the hearing arising out of the options described as Option 2, Method 3 and Method 3B.[70] Undepreciated ARC for the 21 month test period is, on average, $2,151.5M. This amount is the fixed asset account statement of unfunded nuclear liabilities and the amount in Rate Base upon which OPG bases its proposed capital structure. Accordingly, when we talk about removing the "unfunded nuclear liabilities" from Rate Base, we are talking about removing the undepreciated amount recorded in the ARC fixed asset account and not some lesser amounts derived from deducting segregated account balances from the present value of total ARO obligations.

102. The "unfunded nuclear liabilities" in the capital structure OPG proposes are not the amounts of $1,231M and $878M presented by OPG in the various exhibits

69 $334M - $181M = $153M
70 Ex.L2-58; Ex.J1.3; Ex.J1.3 Addendum; Ex.J.7.1; Ex.J12.1

filed during the hearing pertaining to the options described as Option 2, Method 3 and Method 3B.[71] The unfunded nuclear liability in the capital structure OPG proposes is average undepreciated ARC for 2008 and 2009 being the amount of $2,151.5M.

103. Deducting the lesser amounts of $1,281M for 2008 and $878M for 2009; or on average, about $1,080M leaves about $1071M of the undepreciated ARC account in Rate Base. This implies that, on average, about one half of the ARC account is funded with debt and equity capital. This implication is contradicted by OPG's acknowledgement that "it is not meaningful to speculate on the extent to which ARC may or may not be funded".[72]

104. Without a new Reference Plan, the extent to which amounts currently recorded in ARC are funded cannot be determined. Without a new Reference Plan, no one knows the extent to which fund deposits have operated to change the value of the undepreciated amount of ARC. The unfunded liability amount in Rate Base is the ARC amount and not some lesser amount. To exclude the unfunded liability amount from capital structure, one must exclude the value of ARC. The Rate Base value of ARC to be used in the approach described as CIBC's Option 2, and in any other variance thereof, must be the value in OPG's Financial Statements for undepreciated ARC.

105. If any amount of undepreciated ARC is left in capital structure, then it must be "funded" ARC. Funds earn income and are not depreciable. If $1B in Rate Base is "funded" ARC, then the amount of ARC depreciation being recovered from ratepayers must be reduced and income on the $1B of "funded" ARC must be brought into account in determining the revenue requirement. We believe that if these adjustments are made, the result will approximate the result that ensues by excluding the entire $1B from capital structure.

[71] Ex.L2-58; Ex.J1.3; Ex.J1.3 Addendum; Ex.J.7.1; Ex.J12.1
[72] Ex.J15.1 Addendum 2

106. Stated another way, if OPG had done an internal update of the Reference Plan as of April 1, 2008, for the purposes of this proceeding, which demonstrated that the value of its unfunded liabilities in the ARC fixed asset account was, on average, $1,000M less than the $2,251.5M average amount recorded therein, then the value of its Rate Base effective April 1, 2008, and the capital structure amount based thereon would be $1,000M less because funded ARO recorded in the segregated funds are not fixed asset accounts which are included in Rate Base.

107. The results of applying the "interim" cost of service supplement to ARC depreciation approach are entirely compatible with the results of applying GAPP where the nuclear liability expenses OPG charges against its corporate income include ARC depreciation and the difference between ARO accretion on total ARO liabilities and forecasted earned income on total nuclear Asset Removal Waste Management funds. The information in Ex.K7.1 indicates that, for the 21 month test period, the accretion amounts exceeds the segregated fund earnings amount by about $186.6M. Applying the discount rate of 4.6% to ARC (which is a net present value calculation of the difference between total undiscounted ARO, and total unfunded and undiscounted ARO), will produce an amount that approximates the amount that results from applying the same interest rate to each of:

(a) The present value of total ARO – the Accretion amount; and

(b) The total value of the segregated funds supporting a total ARO, being "Fund Income";

and then subtracting Fund Income from Accretion.

108. The regulatory approach CME urges the Board to adopt is entirely compatible with the manner in which OPG reports to the world at large the impact on its shareholder earnings of the recovery of nuclear decommissioning costs as

expenses. These results contrast starkly to the result of the inappropriate Rate Base approach that OPG proposes, which increases shareholder earnings, reported under GAPP, by an after-tax amount of almost $147M.[73] This equates to over 200 basis points of return on OPG's total shareholder equity at December 31, 2007, of about $6,800M and over 300 basis points on the equity OPG proposes to allocate to its regulated operations of $4,255M.[74]

109. A regulatory approach to unfunded Asset Retirement Costs which requires ratepayers to pay more than they would under an application of GAPP, in effect, treats the owner of OPG's regulated nuclear assets more generously than an owner of unregulated nuclear assets is treated under GAPP. The Board should readily accept that GAPP and OPG's auditors apply methods which fairly and reasonably state the impact of OPG's unfunded nuclear liabilities on its shareholder earnings. The Board should reject a proposed regulatory approach to the recovery of unfunded nuclear liability decommissioning costs which materially enhances the returns of OPG's shareholder at the expense of ratepayers.

110. The regulatory approach CME urges the Board to adopt is entirely compatible with the approach the Federal Energy Regulatory Commission ("FERC") requires the utilities it regulates to follow. Those utilities must exclude ARC from Rate Base when presenting their proposals for recovering Asset Retirement Costs in rates.[75]

111. The suggestion that a regulatory approach dealing with nuclear decommissioning costs as a combination of unfunded nuclear liability asset account depreciation and a separate line item in the Cost of Service for additional decommissioning costs offends the "streaming" principle is untenable. There is no principle which

[73] Ex.L-2-58; Ex.J1.3; Ex.J1.3 Addendum; Ex.J7.1; Ex.J12.1
[74] Transcript Volume 7, June 3, 2008, pp. 91 to 94
[75] Ex.K11.7 – FERC Rule 631 comprises convincing evidence in support of the proposition that, for regulatory purposes, nuclear liability decommissioning costs are not to be treated as if they are cost of utility debt and equity capital used to acquire fixed assets.

requires a regulator to include in rates an alleged Cost for Capital which the utility does not incur. There is no principle which precludes a regulator from transparently determining the extent to which depreciation relating to the present value of unfunded nuclear liabilities recorded in fixed asset accounts needs to be supplemented to produce, at the end of the economic life of the nuclear assets, the amount needed to retire and decommission those assets.

112. OPG's argument that the provisions of O.Reg. 53/05 <u>requires</u> the Board to approve its approach for recovering unfunded decommissioning costs from ratepayers is untenable for the reasons outlined earlier in this Argument.

113. For all of these reasons, it is submitted that the appropriate regulatory approach to the recovery in rates of ARC is the "Cost of Service Supplement to ARC Depreciation" approach described herein. By way of summary, the steps to follow in applying the approach, on an interim basis, are as follows:

(a) Exclude the amount recorded in the ARC fixed asset account from capital structure used to derive OPG's test period costs of debt and equity; and not the lesser amounts which represent the 2008 and 2009 estimates of the extent to which the total net present value of OPG's ARO liabilities will exceed segregated fund balances;

(b) Calculate the amount to be recovered for Asset Retirement Costs as a separate Cost of Service line item over and above ARC depreciation by applying the prevailing discount rate of 4.6% to the average undepreciated value of ARC recorded in the ARC fixed asset account; and

(c) Direct that the implications of the different regulatory approaches for recovering Asset Retirement Costs in rates be more fully considered in a Board-sponsored consultative which can take into account the results of the NEB Study of the issue. The results of such a process can be used to determine the nuclear decommissioning cost components of the revenue requirement OPG asks the Board to approve in its Application for approval of payment amounts for the 2010-2011 test period.

114. We submit that the advantages of these interim and permanent approaches are as follows:

(a) Their transparency,

(b) Their compatibility with the GAPP rules,

(c) Their tax effectiveness once all OPG's regulatory tax loss carry-forwards have been used up,

(d) Their flexibility in that changes will be made as new Reference Plans are completed and/or the economic lives of the various nuclear plants change,

(e) Their lack of volatility in that it is based on the same economic life calculations which are used for ARC depreciation, and

(f) Their fairness to ratepayers in preventing OPG from recovering $147M more than it could charge as an expense under GAPP.

115. For the 21 month test period, a reasonable interim estimate of the decommissioning costs to be recovered as a cost of service line item in rates, in addition to ARC depreciation, is about $181M.

116. The additional amount of $181M recovered in Cost of Service, over and above ARC depreciation, will constitute "no cost capital" on OPG's Balance Sheet at the NEB notes in its Report. The implications of this for ratepayers should be considered in OPG's next case.

117. Throughout these proceedings, ratepayer representatives have been debating the question of the most appropriate regulatory approach to apply to determine how costs associated with unfunded nuclear liabilities should be recoverable from ratepayers on a basis which is fair to OPG and the least cost alternative for ratepayers.

118. We have seen drafts of the submissions VECC and SEC will be making with respect to this issue. At a conceptual level, we all agree that OPG's proposal to recover costs associated with its nuclear liabilities, as if they were Costs of Capital, is inappropriate. There are some differences between the methods that VECC and SEC suggest for deriving the recoverable amount, as a Cost of Service line item, and the method we advocate for deriving that amount. We understand that VECC will be urging the adoption of a 'sinking fund' type of approach and that SEC suggests the adoption of a 'time value of money' approach. SEC's suggested approach appears to us to be analogous to the solution that we propose be adopted as an "interim" measure.

119. The permanent solution we are advocating is the Cost of Service Supplement to ARC Depreciation approach, under which the derivation of the recoverable amount is linked to the factors which give rise to ARC, namely:

(a) The unfunded portion of the total undiscounted ARO,

(b) The economic lives of the various nuclear plants,

(c) The plant-specific ARC depreciation amounts, and

(d) The income that can be earned over the economic life of the assets by investing ARC depreciation.

120. We submit that a consideration of these factors leads to a proper determination of the amount that needs to be recovered in rates to fairly protect OPG and provide the least cost alternative to ratepayers.

IV. RATE BASE

A. <u>ARC</u>

121. We agree that ARC is to be included in Rate Base; but not in capital structure for the purposes of determining OPG's Costs of Debt and Equity for the reasons we

have already described. This approach allows ARC depreciation to be collected in the Cost of Service but rejects OPG's proposal to collect ARC retirement costs as if they were Costs of Debt and Equity.

B. Capital Expenditures and Budgets

122. The capital costs OPG incurs to operate its prescribed assets are overwhelming. In this case, being the initial stage of the Board's regulatory supervision over OPG, we find it difficult to question the reasonableness of OPG's planned capital expenditures.

123. The level of OPG's capital budgeting does not appear to constitute an extraordinary departure from past practice of the type which prompted the Board to reject the test year capital budget proposed by Enbridge Gas Distribution Inc. ("EGD") for 2007, and instead, to approve a reduced capital budget in an amount representing an average of prior five years of EGD's capital spending.[76]

124. In future cases, there will be more historical information available to enable intervenors to evaluate whether OPG's planned capital budgeting is excessive.

V. COST OF CAPITAL

A. Separate Capital Structures for Hydro-Electric and Nuclear Divisions are Unnecessary

125. Some intervenors argue that the Board needs to establish separate capital structures for OPG's nuclear and hydro-electric operating divisions before it determines the Costs of Capital which OPG should be permitted to recover in its regulated revenue requirement. It is argued that Board-determined capital

[76] EB-2005-0001 Reasons for Decision, February 9, 2006, at pp. 6 to 13

structures for each operating division will prompt OPG to engage in more appropriate economic decision-making practices.[77]

126. CME fails to see why it is necessary for the Board to establish separate capital structures for its nuclear and hydro-electric lines of businesses in order to derive Cost of Capital recoverable in OPG rates, when the nuclear and hydro-electric business lines are being operated by a single business entity. What needs to be determined is the appropriate capital structure for OPG's prescribed assets. The risks which these prescribed assets face can be identified and considered without first establishing separate capital structures for the nuclear and hydro-electric generation divisions.

127. A Board finding that establishing separate capital structures for the hydro-electric and nuclear electricity generation divisions is unnecessary, does not preclude those who wish to postulate separate capital structures, when formulating a suggested equity return, from proceeding accordingly. There is, however, no need to mandate separate capital structures for each line of business and the request for that relief ought to be rejected.

B. <u>Appropriate Capital Structure</u>

(i) <u>Exclusion of ARC</u>

128. For reasons we have detailed in Section III of this Argument, OPG's fixed asset ARC account, on the asset side of its Balance Sheet, is not supported by debt or equity capital. The creation of ARC, as a fixed asset account, does not cause OPG to incur any costs of debt or equity capital. In these circumstances, we submit that ARC must be excluded from the capital structure used to determine OPG's cost of debt and equity for the test period.

129. If ARC is not removed from the capital structure used to calculate the test period costs of debt and equity capital, then it must be recognized that treating the ARC

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component of Rate Base, as if it had been funded with debt and equity capital, produces an "effective ROE" which materially exceeds the ROE the Board approves. This phenomenon can be illustrated by examining OPG's current Government-approved rates for a capital structure consisting of 55% debt and 45% equity, a debt cost of 6%, a ROE of 5%, with the capital structure amount equal to a Rate Base value which includes OPG's fixed asset account for ARC. Effective rate of return calculations were done regularly years ago in rate applications made by Union Gas Limited ("Union") involving accumulated deferred taxes as an item in Rate Base which was not funded by debt or equity capital.[78] The calculations below apply the methods used in those cases to estimate effective ROE.

130. Step 1 in determining effective ROE, in a situation where debt and equity costs are being ascribed to a component of capital structure for which no costs of debt or equity are being incurred, is to identify the "no cost capital" component of the total Rate Base amount reflected in the capital structure.

131. In Table 1 below, we derive OPG's average Rate Base for the period 2005 to 2007 from the information contained in Ex.J15.5, showing the total Rate Base amount in each of the years 2005 to 2007 used to derive OPG's current rates. We calculate the average Rate Base to be $7,269M.

Table 1 – Average Rate Base 2005-2007	
2005	$ 7,013M
2006	$ 7,167M
2007	$ 7,628M
TOTAL:	$ 21,808M
AVERAGE:	$ 7,269M

78 See for example, Ex.K.11.6, Tab 2, pp. 54 and 55

132. From information contained in Ex.H1, Tab 1, Sch.3, page 2, our estimate of the average value of ARC for the period 2005 to 2007 is $1,793M as shown in Table 2 below.

Table 2 – Average ARC – 2005-2007	
2005	$ 1,491M
2006	$ 1,320M
2007	$ 2,568M
TOTAL:	$ 5,379M
AVERAGE:	$ 1,793M

133. The average value of ARC of $1,793M is about 25% of the average Rate Base amount of $7,269M.

134. To determine the "effective ROE" which results from treating the ARC component of Rate Base as if it were a fixed asset acquired with debt and equity capital, one needs to derive the total debt and equity costs attributable to ARC and to then compare that cost to a zero cost. This exercise produces the "effective ROE" in a scenario where there is no additional recovery in the Cost of Service for retirement costs in excess of ARC depreciation. To estimate the ROE that would be reported to the public at large by applying GAPP, the effective ROE in the zero cost scenario needs to be reduced by an estimate of the retirement costs that would be expensed when applying GAPP. This expense estimate is derived by multiplying the ARC component of Rate Base by the prevailing discount rate of 4.6%.

135. Using the capital structure and costs of debt and equity embedded in OPG's current Government-approved rates, the results of proceeding in this manner are shown below for an illustrative Rate Base of $1,000, having an ARC component of 25%.

136. Table 3 below calculates the Cost of Capital for the $1,000 of Rate Base in a scenario where ARC is not recognized as an item of Rate Base for which no costs of debt or equity are incurred.

Table 3 – Cost of Capital including ARC (Debt Equity Ratio: 55/45)				
Type	***Amount***	***Rate***	***Cost***	
Debt	$ 550.00	6%	$ 33.00	$ 33.00
	(55% of $1,000)		($550 @ 6%)	
Equity	$ 450.00	5%	$ 22.50	$ 22.50
	(45% of $1,000)		($450 @ 5%)	
Total Cost:				$ 55.50

137. Table 4 below recognizes the 25% ARC component in Rate Base and that the remaining value of the Rate Base supported by debt equity capital is an amount of $750.

Table 4 – Excludes ARC				
Type	***Amount***	***Rate***	***Cost***	
Debt	$ 412.50	6%	$ 24.75	$ 24.75
	(55% of $750)		($412.50 @ 6%)	
Equity	$ 337.50	5%	$ 16.88	$ 16.88
	(45% of $750)		($337.50 @ 5%)	
Total Cost:				$ 41.63

138. We can see that the difference between the total cost in Table 3 of $55.50 and the total cost in Table 4 is $13.87, which is the amount attributable to ARC under

the “Cost of Capital” approach to nuclear liability costs OPG proposes. If there is no additional recovery in the Cost of Service for retirement costs, in excess of ARC depreciation, then the equity return OPG will realize under this approach will be $30.75 (being the $16.88 attributable equity in Table 4 plus the $13.87 attributable to the ARC component of Rate Base, which, when divided by the equity capital of $337.50, produces an effective ROE of 9.1%.

139. To estimate the financial statement reporting of equity return that will occur under an application of GAPP, the amount to be expensed for Asset Retirement Costs needs to be brought into account. This item can be estimated by applying the prevailing discount rate of 4.6% to the ARC value of Rate Base of $250 which produces an amount of $11.50. This amount will reduce the equity return from $30.75 to $19.25, or to about a ROE of 5.7%.

140. From this illustration, it can be seen that the effective equity return resulting from applying a 5% ROE to a Rate Base value, 25% of which is capital for which no costs of debt or equity have been incurred, produces an effective ROE ranging between 5.7% and 9.1%.

141. These calculations demonstrate why the Government can say in its February 23, 2005 announcement of its determination of OPG’s rates, that a 5% ROE allows OPG to earn “… a rate of return that allows OPG to better service its debt while earning a rate of return which balances the needs of customers and assures a fair return for taxpayers.”

142. When considering whether or not it is appropriate to permit OPG to recover ARC costs, as if they were an asset acquired with debt and equity capital, the Board should be aware of the “effective ROE” which is being masked by OPG’s proposal to have rates set on the basis of a capital structure which includes the ARC component of Rate Base.

143. Following the procedure that we have described for determining effective equity return, we provide, in the Tables below, calculations of the effective ROE implicit in OPG's proposals in both a 55% debt, 45% equity scenario, and the 42.5% debt, 57.5% equity scenario upon which OPG's proposals are based.

144. From Ex.K1, Tab 1, Sch.1, Tables 1 and 2, we estimate the 21 month test period average Rate Base for OPG to be about \$7,371.5M.[79] From Ex.H1, Tab 1, Sch.1, we estimate the average undepreciated ARC balance for the 21 month test period to be about \$2,251.5M or approximately 30% of Rate Base.

145. Tables 5 and 6 below show that at a debt equity ratio of 55% and 45%, and at the 10.5% ROE requested by OPG on a capital structure for a Rate Base of which 30% is ARC, the "effective ROE" ranges between 13.9%, in the GAPP financial Statement reporting scenario, and 18%, in a scenario where no additional amount is recovered in cost of service for ARC retirement costs over and above ARC depreciation.

Table 5
(Debt Equity Ratio: 55/45)

Type	**Amount**	**Rate**	**Cost**	
Debt	\$ 550.00	5.8%	\$ 31.90	\$ 31.90
	(55% of \$1,000)		(\$550 @ 5.8%)	
Equity	\$ 450.00	10.5%	\$ 47.25	\$ 47.25
	(45% of \$1,000)		(\$450 @ 10.5%)	
Total Cost:				\$ 79.15

[79] Average Rate Base = \$7,389.3M + \$7,353.7M = \$14,743M ÷ 2 = \$7,371.5M

Table 6 (Debt Equity Ratio: 55/45)				
Type	***Amount***	***Rate***	***Cost***	
Debt	$ 385.00	5.8%	$ 22.33	$ 22.33
	(55% of $700)		($385 @ 5.8%)	
Equity	$ 315.00	10.5%	$ 33.07	$ 33.07
	(45% of $700)		($315 @ 10.5%)	
Total Cost:				$ 55.40

***Notes*:**

ROE with no ARC in COS(*)	$ 33.07 + [$ 79.15 - $ 55.40]	=
(*) Cost of Service	$ 33.07 + $ 23.75	=
	$ 56.82 ÷ $ 315	=
	18.0%	
ROE with ARC in COS	$ 56.82 - [4.6% of $ 300]	=
	$ 56.82 - $ 13.80	=
	$ 43.02 ÷ $ 315	=
	13.7%	

146. Tables 6 and 7 show that for a capital structure consisting of 42.5% debt and 57.5% equity, as proposed by OPG, and a 10.5% ROE as proposed by OPG, the ROE ranges between 13.8%, in a scenario when GAPP rules are applied, and 16.8%, where there is no additional amount covered in Cost of Service on account of ARC costs over and above ARC depreciation.

Table 7				
Type	***Amount***	***Rate***	***Cost***	
Debt	$ 425.00	5.8%	$ 24.65	$ 24.65
	(42.5% of $1,000)		($425 @ 5.8%)	
Equity	$ 575.00	10.5%	$ 60.38	$ 60.38
	(57.5% of $1,000)		($575 @ 10.5%)	
Total Cost:				$ 85.03

Table 8 (Debt Equity Ratio: 55/45)				
Type	***Amount***	***Rate***	***Cost***	
Debt	$ 297.50	5.8%	$ 17.26	$ 17.26
	(42.5% of $700)		($297.50 @ 5.8%)	
Equity	$ 402.50	10.5%	$ 42.26	$ 42.26
	(57.5% of $700)		($402.50 @ 10.5%)	
Total Cost:				$ 59.52

***Notes*:**

ROE with no ARC in COS(*)	$ 42.26 + [$ 85.03 - $ 59.52]	=
(*) Cost of Service	$ 42.26 + $ 25.51	=
	$ 67.77 ÷ $ 402.50	=
	16.8%	
ROE with ARC in COS	$ 66.77 - [4.6% of $ 300]	=
	$ 66.77 - $ 13.80	=
	$ 53.97 ÷ $ 402.50	=
	13.4%	

147. The point is that OPG's inclusion of ARC in capital structure and its derivation of Costs of Capital, on the basis that ARC has been funded by debt and equity capital, materially masks the effective equity return its proposals will produce. With a capital structure of 55% debt and 45% equity, the ROE under GAPP will be about 13.7%, or some 320 basis points above the ROE of 10.5% OPG asks the Board to approve. In the 42.5% debt and 57.5% equity scenario, the ROE under GAPP will be about 13.4%, some 290 basis points above the ROE of 10.5% OPG is asking the Board to approve. The value of ARC must be eliminated from capital structure in order to assure that the utility ROE that the Board approves for OPG and the effective ROE are one and the same. OPG's approach to capital structure is inappropriate because it fails to achieve this objective.

148. If ARC is not removed from capital structure, then the ROE the Board approves for OPG should recognize the effective ROE which will result. Using the process we have described, it can be demonstrated that a ROE of 7% on a capital structure consisting of 45% equity and 55% debt at a cost of 5.8% will produce an effective ROE in a GAPP reporting scenario of 8.69%.

149. We submit that the value of ARC must be removed from the capital structure because OPG and its owner have acknowledged the need for transparency. This

acknowledgement is contained in the Agreement where OPG expressly acknowledges that it "will maintain a high level of accountability and transparency". We submit that this transparency objective can only be achieved if ARC is excluded from the capital structure for the purposes of determining the costs of debt and equity recoverable in OPG's rates.

150. We submit that the separate identification of ARC and the derivation of the Cost of Service amount recoverable in rates over and above ARC depreciation, by applying the prevailing discount rate of 4.6% to the undepreciated ARC account balance, is the only transparent way of determining ARC costs recoverable in rates, assuring that the equity return allowed is confined to the ROE rate the Board approves for OPG.

151. We recognize that, excluding average ARC from test period capital structure, reduces the capital structure to be used for determining OPG's costs of debt and equity capital to about $5,100M. The portion of debt that results from applying a 55/45 debt/equity ratio, or the higher equity ratio OPG requests, results in a deemed debt component of capital structure which is less than the amount of debt OPG directly assigns to its utility operations. The removal capital structure of ARC for the purposes of deriving OPG's costs of debt and equity capital completely eliminates the "plug" or "gap" component of the capital structure OPG proposes.

152. This is the same result that would ensue if OPG had updated its Reference Plan and discovered that the ARC value is substantially reduced. This result should be of no consequence since its effect is to re-classify some directly assigned debt as deemed equity. This benefits OPG as long as the ROE the Board approves exceeds OPG's cost of debt.

C. Appropriate Debt Equity Ratio

153. When considering OPG's request to materially vary the debt equity ratio of the capital structure which the Government applied in determining OPG's initial rates, the Board should proceed from the premise that the Government's determination that a 55% debt and 45% deemed equity ratio was appropriate for rate setting, was a considered conclusion based on recommendations provided by CIBC World Markets Inc. and collaboration between the Ministry of Energy, Ministry of Finance and OPG. Whatever risks OPG then faced were taken into account by the Government, as OPG's regulator, when it determined the current rates for OPG.

154. The principle that capital structures should only be changed when a material change in risk occurs is well established.[80] OPG's witnesses acknowledge that there have been no material changes in the risks OPG faces since February 23, 2005 when the Government, as OPG' regulator, established OPG's current rates. In the context of this acknowledgement, there is no evidentiary basis for increasing OPG's equity ratio.

155. Apart from the fact that there have been no material changes in OPG's risks since the Government established its current rates, the evidence of Ms McShane with respect to the risks OPG faces, upon which OPG relies, materially exaggerates those risks by according little, if any, weight to the Government's 100% ownership of OPG in her Risk Assessment.[81] The "Stand-Alone" principle contemplates that OPG's regulated operations should be considered as if they were operating separately from its unregulated lines of business. The "happenstance" of ownership should not be ignored. [82] We submit that by ascribing little, if any, weight to the risk mitigation effects of the Government's ownership of OPG, Ms McShane misapplies the "Stand-Alone" principle.

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80 See for example, NEB Reasons for Decision, RH-2-94, March 1995, at page 32
81 Transcript Volume 11, June 13, 2008, page 95
82 Transcript Volume 11, June 13, 2008, page 98

156. Ms McShane's contention that OPG's regulated operations are exposed to a material risk of not being dispatched is unsupported by the evidence and untenable. We support and adopt AMPCO's more detailed submissions to this effect.

157. The notion that the regulatory risks OPG faces exceed those faced by other OEB regulated utilities is untenable, particularly where OPG's owner has both legislative and ministerial directive powers over the OEB, which it has already exercised to transfer ownership risks to electricity consumers.

158. Ms McShane's contention that OPG's equity ratio should be thickened because OPG is exposed to political risk is untenable. This contention is tantamount to a proposition that a perpetrator of harm can benefit therefrom. Everything the Government has done to date has been designed to transfer risks associated with its ownership of OPG to electricity consumers. Accordingly, the possibility that the Government might take action to harm its shareholder interest in OPG is remote. We submit that it is unreasonable to suggest that electricity consumers should pay a higher return because OPG's owner, the Government, might take some action which could harm the shareholder interest the Government holds in OPG. Ratepayers should not be burdened with higher Costs of Capital because the Government might decide to act in a way which causes harm to taxpayers as the ultimate owners of OPG.

159. Other risks which OPG faces such as production, operating and cost recovery risks are not materially different than they were when the Government established OPG's current equity ratio of 45%. Accordingly, there is no reason to increase OPG's equity ratio because of these risks.

160. Further, if the Board finds favour with OPG's proposals to broaden the ambit of existing Deferral and Variance Accounts and to approve a fixed cost element in OPG's rate for nuclear electricity generation, then the deemed equity ratio of 45% should be reduced. The Government-approved 55% debt, 45% equity

capital structure does not reflect these risk reduction measures. Ms McShane estimates in Ex.KT1.6 that the absence of deferral and variance accounts not required under the Regulation operates to reduce OPG's ROE by up to 50 basis points. We suggest that approving the nuclear fixed charge has a similar risk reduction effect. Accordingly, we submit that broadening the ambit of existing deferral and variance accounts, and approving a fixed cost element in OPG's rate for nuclear electricity generation will operate to reduce ROE by up to 100 basis points. We estimate that a 100 basis point change in ROE for a capital structure consisting of 45% equity and 55% debt equates to about a 4.50% change in equity ratio. Accordingly, if these risk reduction measures are approved, then OPG's equity ratio should be reduced to 40%.

161. Based on the foregoing, CME submits that the deemed equity ratio for Rate Base, excluding ARC, should remain at 55% Debt and 45% Equity. If the range of Deferral Account protection is broadened, as OPG proposes, and a fixed cost component is approved for its regulated nuclear electricity rate, then the equity ratio should be reduced to 40% with a deemed debt equity ratio of 60/40 to be applied to a capital structure, excluding ARC, to determine OPG's cost of debt and equity capital.

D. Costs of Debt

162. We rely on the Board to apply its expertise to determine whether the short and long term debt rates OPG proposes are reasonable.

163. OPG's forecast cost of long term debt reflecting a credit risk spread of 130 basis points may be excessive. The revenue deficiency impact of applying a 80 basis points spread is $8.9M as shown in Ex.J1.2. The short term rate seems high in relation to the prevailing short-term lending rate. We support AMPCO's more detailed submissions in support of the proposition that the short and long-term debt rates OPG proposes are too high.

E. Cost of Equity

164. We submit that the point of departure for considering the reasonableness of OPG's request for a 10.5% ROE is the 5% ROE embedded in OPG's Government-approved current rates, which the Government, as OPG's regulator and owner, describes as "… a rate of return which balances the needs of customers and assures a fair return for taxpayers."[83] (emphasis added) We have already emphasized that the source of the equity the Government holds in OPG as its sole shareholder is the OPG debt owing to OEFC, which the Government assumed to acquire its equity position. The cost of this debt is about 5.85%.

165. We have also demonstrated that the effective ROE for a 5% ROE on a capital structure, which includes ARC, is in the order of 5.7%, being an amount approximately equal to the costs the Government incurs to sustain its equity interest in OPG.

166. When determining the ROE to be allowed to OPG, the Board should continue to have regard for the fact that the Government acquired its equity position in OPG by assuming debt owed by OPG to OEFC which we understand carries a cost of about 5.85%. Electricity consumers compensate the Government, as the shareholder of OPG, for its actual cost of equity by paying OPG's costs through the energy charges in their bills. In addition, electricity consumers pay the Government imposed DRC to retire additional stranded debt costs arising as a result of the insolvency of Ontario Hydro. CME submits that these circumstances should not be ignored when determining an appropriate ROE for the equity interest the Government holds in OPG.

167. None of the experts who testified in this case considered the costs the Government incurs to maintain its equity position in OPG. The views of the expert witnesses with respect to an appropriate equity return for a benchmark Canadian utility for a 21 month test period expiring December 31, 2009, differ. In

[83] Ex.J1.1

some cases, the experts use the same data but come to different conclusions. In others, they criticize the data upon which one another rely and use different data to come to different conclusions. They ascribe different weights to the methods to be used in estimating equity return. For some experts, the comparable earnings test is excluded as an appropriate method for consideration.

168. There appears to be a consensus that the use of an adjusted equity risk premium test is appropriate but there is a material disagreement on the appropriate beta adjustment factor to use for the benchmark Canadian utilities. There is also a question as to whether it is appropriate to include an allowance for financing flexibility in OPG's case when it obtains all of its borrowings from the OEFC.

169. The Board is experienced in determining the appropriate equity return for the utilities it regulates, so we do not propose to provide any detailed analysis of the differences in the ROE recommendations of the experts and the differences in the approaches which lead to the different conclusions. Suffice it to say that OPG relies on Ms McShane's ROE recommendation to support its request for approval of a ROE of 10.5% on a 57.5% equity ratio. The ROE recommendations of the other expert witnesses are considerably lower, ranging between 7.1% and 7.75%.

170. In Argument, OPG criticizes Dr. Booth's recommendation in this case and in other cases because they traditionally fall below the approved ROEs. One can see from Ex.J11.2 that Ms McShane's ROE recommendations tend to be 150 to 200 basis points higher than the ROEs eventually approved.

171. We submit that the Board should approve a ROE for OPG which it considers to be compatible with the costs the Government actually incurs to support its equity position in OPG and the ROE the Board allows to the other Government owned electricity utilities it regulates.

172. The Board has recently approved a ROE for Hydro One Distribution Networks Inc. ("Hydro One") of 8.57% for 2008. We submit that the ROE to be allowed OPG for the test period should be no more than the ROE the Board allows to the other Government owned electricity utilities it regulates. Accordingly, we submit that the Board should approve a ROE for OPG which lies within the range of 5.85%, being the costs the owner of OPG incurs to support its equity interest in OPG, and 8.57% being the Board approved ROE for Hydro One for 2008.

173. In determining where within the range of 5.85% to 8.57% the appropriate ROE for OPG rests, the Board should give considerable weight to the Government's February 23, 2005 announcement in which it states that a 5% ROE for OPG allows OPG to earn a rate of return which balances the needs of customers and ensures a fair return for taxpayers. The Government, as OPG's former regulator and as its owner, has unequivocally acknowledged that a 5% ROE on 45% equity component of a capital structure which includes ARC is just and reasonable.

174. This is an acknowledgement that rates which provide OPG with an equity return in an amount sufficient to cover the costs of OPG debt owing to the OEFC, which the Government assumed to obtain its equity position in OPG, constitutes a fair return. In these circumstances, we submit that the ROE to be approved for OPG on a 45% equity component of a capital structure which excludes the value of ARC should be found to be at the lower end of the 5.85% to 8.57% range.

F. <u>Relevance of American Regulatory Decisions</u>

175. Ms McShane acknowledges that Section V of her testimony, which contains evidence to the effect that returns awarded to U.S. utilities are higher than the returns awarded to Canadian utilities, has no impact on her recommendations.[84] In these circumstances, we submit that the Board is free to disregard that section of her testimony in its entirety.

[84] Transcript Volume 11, June 13, 2008, page 79

176. Since the American jurisprudence does not influence the recommendation of the expert upon whom OPG relies to support its request for a 10.5% ROE, the Board does not need to address matters pertaining to the justification for those differences in its Reasons for Decision in this case. The reasons for the differences are fully explained by Dr. Booth in his testimony at pages 88 to 96. We submit that there is no basis for increasing the ROE to be allowed to OPG simply because some American regulators award higher ROEs than are awarded by the OEB and other Canadian regulators.

G. Revenue Deficiency Impacts

177. Excluding ARC from capital structure, for the purposes of determining OPG's cost of debt and equity, reduces the test period revenue deficiency by $334M. Allowing OPG a ARC retirement cost as a Cost of Service item at the prevailing discount rate of 4.6% applied to the average ARC balance for ARC during the 21 month test period produces a revenue requirement increase of about $181M for a net deficiency reduction of $153M.

178. We estimate the additional revenue deficiency reduction attributable to rejecting OPG's proposed equity ratio of 57.5% and adhering to a 45% equity ratio to be about $32M and the revenue deficiency reduction impact of approving a ROE for OPG in a range of 5.85% to 8.57% instead of the 10.5% ROE proposed by OPG to be in a range between $44M and $107M, with the mid-point of the range being about $76M. With the equity ratio adjustment amount of $32M, the deficiency reduction at the mid-point of the range is about $108M.

H. Equity Adjustment Mechanism

179. CME accepts, as reasonable, that a 75 basis point change in ROE for every 1% point change in the forecast 30 year Canada Bonds remains a reasonable approximation of the relationship between cost of equity and interest rates, and supports the adoption of this formula as the equity adjustment mechanism for

OPG. We can see no reason to predetermine that the formula should be reviewed if forecast long Canada Bonds yield 8% when the equity adjustment mechanism OPG proposes was developed at a time when long Canada Bonds exceeded 8%.[85]

VI. REVENUES

A. Production Forecasts

180. We can find no basis for contending that OPG's hydro-electric and/or nuclear production forecasts for the test period should be modified because they are unreliable.[86] OPG expresses confidence in its forecasts and the results to date for 2008 appear to be in line with the forecast. In future cases, we will be better able to test the reliability of OPG's production forecasts because more historical information with respect to OPG's forecasting track record will be available.

B. Other Revenues

181. We support AMPCO's detailed submissions with respect to OPG's proposed treatment of Segregated Mode Operations ("SMO") revenues to the effect that it is inappropriate for consumers to bear the risk of uneconomic SMO transactions and that the portion of the SMO revenues which OPG proposes to share with customers should be increased.

C. Excess of Bruce Revenues Over Costs

182. For reasons already noted, we submit that costs OPG incurs with respect to the Bruce Nuclear Generating Stations can only be included in revenue requirement to the extent they exceed Bruce revenues. For this reason and for the added reason that Bruce assets are not prescribed assets, the Bruce nuclear liability

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85 Transcript Volume 11, June 13, 2008, pp. 132 and 133
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costs recorded in the Nuclear Liabilities Transition Deferral Account amounting to between $62M and $68M cannot be recovered in rates.

183. It remains to consider whether the nuclear liability costs with respect to prescribed assets, which OPG has recorded in the Deferral Account, are correct. We submit that the amount recorded in the account is incorrect because it has been derived from applying the inappropriate Cost of Capital approach OPG proposes to use to derive the nuclear liability costs recoverable in its revenue requirement. We urge the Board to find that the correct amount for recording in the Deferral Account is derived by applying the discount rate of 5.6% applicable for the period January 1 to December 31, 2007, to the increase in the ARC account to Pickering Darlington only. According to the information provided in Ex.J15.1 Addendum 2, this amount is $508M, with the result that the correct amount to be included in the Deferral Account is $28.45M, being 5.6% of $508M. This exceeds the amount of $21M currently recorded in the account for Prescribed Assets by about $7M. We submit that the Deferral Account balance needs to be corrected to account for the elimination of Bruce nuclear liabilities recorded therein and to adjust for OPG's use of an inappropriate method to determine the revenue requirement impact of the change in nuclear liabilities associated with prescribed assets brought about by the December 31, 2006 Reference Plan. We estimate that the correct balance is about $78M, rather than $131M, which recognizes an elimination of $62M for Bruce-related costs and an addition of $7M of costs attributable to the Prescribed Assets. This results in a net reduction of $53M.

184. As already noted, for the 21 month test period, OPG's misinterpretation of the word "costs" in paragraphs 9 and 10 of Section 6(2) of the Regulation requires that revenue deficiency be reduced by about $172.1M for the 21 month test period to adjust for OPG's understatement of the extent to which Bruce revenues exceed Bruce costs.

VII. COSTS OF SERVICE

A. <u>Operations, Maintenance and Administration ("OM&A") Costs</u>

185. In the Agreement, OPG acknowledges and agrees to be judged by the cost containment and overall operating efficiency challenges of its mandate, and agrees that its response to these challenges should be measured, *inter alia*, by reference to performance benchmarks.[87] As a result, we submit that the reasonableness of the OM&A cost increases OPG seeks should be determined by considering whether the cost increases are compatible with the cost containment and performance benchmarking criteria described in the Agreement.

186. The extent to which OPG's total OM&A costs have increased since 2005 when its current Government-approved rates were established is summarized in Board Staff Submission at pages 35 to 38. There, it is noted that the annual average increase in OPG's total OM&A costs for the years 2005 to 2009 is about 6.4%, or about $110.6M per year. This level of OM&A costs of annual OM&A cost increases is, we submit, in and of itself, convincing evidence that OPG has failed to respond to the challenges made by its owner and then regulator to "contain costs and improve overall efficiencies".[88]

187. CME submits that the starting point for considering whether OPG's overall increases in OM&A costs are reasonable is the level of OM&A costs for 2007 which are embedded in the current Government-approved rates. Ex.J15.5 Attachment, filed by OPG at the very end of the oral hearing of evidence, shows that the total budgeted OM&A for 2007 embedded in current rates is $1,971M, consisting of $1,889M for the nuclear business and $82M for the regulated hydro-electric business. OPG's actual 2007 total OM&A costs for nuclear are $2,023.8M and for hydro-electric, $113.3M. For 2009, total OM&A for regulated hydro-electric reduces to about $93.6M and nuclear OM&A is $2,168.7M. Actual

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87 Ex.A-1-4-1, Appendix B
88 Ex.J1.1

2007 nuclear OM&A expenditures exceeded the 2007 budgeted amounts embedded in current rates by $135M, or by about 7.1%. Expressing actual 2007 expenditures of about $2,024M for a 21 month test period results in an amount of $3,542M. The nuclear OM&A 2007 budget embedded in current rates, of $1,889M is $3,305M for a 21 month time frame. For a 21 month time frame, 2007 actual expenditures exceed 2007 budgeted expenditures embedded in current rates by $237M.

188. The 2008 total nuclear OM&A budget of $2,184.6M translates into a $3,823M budget for 21 months. This budget exceeds 2007 actual by $280M and the 2007 budget embedded in current rates of $3,305M by $517M. The 2008 budget, on a 21 month basis, exceeds the 2007 budget embedded in current rates by 15.6%. The 2008 budget, expressed on a 21 month basis, represents a 7.9% increase over 2007 actuals.

189. Excluding the allocations of corporate costs, the nuclear 2008 OM&A budget is $1,728M, or $3,024M for 21 months. This compares to 2007 actuals, excluding corporate costs, of $1,577M, or about $2,760M for 21 months. Excluding corporate costs, the increase OPG seeks of $264M for 21 months represents about a 9.6% increase over 2007 actuals of $2,760M.

190. These levels of nuclear OM&A cost increases are unreasonable and incompatible with the cost containment commitments OPG made in the Agreement.

191. The factors the Board should consider to measure the extent to which the nuclear OM&A cost increases OPG seeks to recover in its 21 month test period revenue requirement are unreasonable, include the following:

(a) The extent to which the overall percentage increases OPG seeks exceed the level of the adjustment factors the Board has established under Incentive Regulation mechanisms, which are an indicator of the percentage level of year over year envelope amount increases which are reasonable;

(b) The extent to which OPG's OM&A cost increases exceed the performance benchmarking criteria specified in the Agreement; and

(c) The extent to which the percentage increase OPG asks the Board to approve exceeds the forecast rate of inflation.

192. A rate of inflation of 2% per year translates into a rate of 3.5% for 21 months. The adjustment mechanisms which the Board recently approved for Union and EGD reflect an annual inflation rate of about 2%, from which is deducted a productivity factor which reduces the overall adjustment factor to a percentage increase less than 2%. The benchmark studies OPG produced in confidence during the hearing indicate that OPG's nuclear labour costs are 12% above benchmark. Ex.J5.2 shows that, on average, the total labour costs in OPG's nuclear OM&A costs is, on average, about $1,031M. Based on the benchmark studies OPG produced, its nuclear labour OM&A costs exceed benchmark by about $123M per annum, or by about $215M over 21 months.

193. The 9.6% increase in the total nuclear OM&A costs, excluding corporate cost allocations, which OPG seeks, is more than 2 and almost 3 times the 21 month rate of inflation of about 3.5%.

194. We urge the Board to consider all of these factors and to arrive at an overall OM&A cost increase disallowance. We submit that OPG's nuclear OM&A cost increases for the OM&A cost envelope, excluding corporate cost allocations, should be constrained to an amount no greater than a 6% increase over and above 2007 actuals of $1,577M for 12 months, which translates into a base of $2,760M for 21 months. A 6% increase produces an envelope allowance, excluding corporate cost allocations of about $2,926M, or an amount about $98M

less than the $3,024M which the 21 month equivalent of the $1,728M of OM&A costs, excluding corporate costs OPG asks the Board to approve.

195. We submit the overall amount to be disallowed is about $98M for a 21 month test period which is equal to about 50% of the extent to which OPG's nuclear labour costs exceed benchmark.

B. Allocation of Corporate Costs

196. The Board has stated in prior cases that the onus is on the utility to justify increases in the amount of allocated corporate costs.[89] The question is whether OPG has discharged that onus when the independent study upon which it relies is out of date. We submit that the Rudden Study on which OPG relies only operates to establish the reasonableness of OPG's 2006 allocation of corporate costs. Since there is no independent evidence to justify the increases in the allocations of corporate costs which OPG seeks to recover in its test year revenue requirement, the allocated amounts should remain at their 2006 level.

197. The total amount of corporate costs allocated to OPG's nuclear and hydro-electric businesses are reproduced in Board Staff's submissions at pages 39 and 40. Total corporate costs allocated to the Prescribed Assets for 2006 are $461.8M. The allocation of corporate costs OPG asks the Board to approve for 2008 is $504.5M and $477M for 2009. OPG has failed to discharge the onus of establishing the reasonableness of the amounts of allocated corporate costs for 2008 and 2009. 2008 costs exceed 2006 costs of about $462M, which the independent study supports, by about $43M, or about $3.58M per month. For seven months, this translates into an amount of $25M. The 2009 corporate cost allocation of $477M exceeds the 2006 amount of $462M, supported by the independent study, by $15M. The total amount of allocated corporate costs, which are unsupported by independent evidence, is $40M.

[89] EB-2005-0001 Reasons for Decision, February 8, 2006, pp. 77 and 78

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.[90] 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.

[90] 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 $181M of ARC costs to Cost of Service [91]	($ 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 $5,100M, which excludes the value of unfunded nuclear liabilities recorded in the ARC fixed asset account calculation provided for a ROE of 7.21%, being the mid-point of the range [92]	($ 107)
• Reducing cost of debt	($ 9M)
• Adjustment for OPG's understatement of Bruce revenues in excess of costs [93]	($ 171M)
• OM&A cost disallowance [94]	($ 98M)
• Allocation of Corporate Costs reduction	($ 40M)
• Nuclear Liability Deferral Account reductions [95]	($ 53M)
TOTAL:	($ 631M)

[91] Section III of this Argument
[92] Section V of this Argument
[93] Section VI of this Argument
[94] Section VII of this Argument
[95] Section VI of this Argument

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.

B. Tax Changes

201. OPG's request for an account to track the impacts of the potential effects of tax re-assessments in periods prior to April 1, 2008, when the Board's regulatory supervision over OPG commences, should be rejected. The scope of any variance account which the Board approves should be constrained to the parameters of accounts the Board has approved for other utilities it regulates and be compatible with the provisions of account 1592 in the Accounting Procedures Handbook. The cost consequences of possible tax re-assessments for prior years should not automatically be recoverable in rates. Any requests for rate relief pertaining to tax re-assessments should be considered on a case-by-case basis.

C. Pension and Other Post-Employment Benefit Costs ("OPEB")

202. The Board should respond to OPG's variance account request in the same manner that it has responded to similar requests made by other utilities which it regulates.

D. Interest Rates

203. The interest rates which the Board allows on deferral and variance accounts it approves for OPG should be compatible with the Board's prescribed interest rates policy. Ex.J14.3 reveals that, for the period ending December 31, 2007, the interest on Deferral Accounts OPG's proposal would produce exceeds the interest which the Board's Prescribed Interest Rates Policy would produce by more than $60M. There is no reason why OPG should be allowed to recover

$60M per annum more in interest on Deferral Accounts compared to the other utilities the Board regulates.

204. In the absence of a demonstration by OPG that the funds recorded in that account are being supported by long term debt, we can see no justification for a higher rate of interest on amounts in the Pickering A Return to Service ("PARTS") deferral account. As far as we are aware, there is no evidence from OPG to demonstrate that it has incurred long term debt obligations to support the expenditures recorded in the parts deferral account. In these circumstances, the Board's prescribed interest rate policy should continue to apply to this deferral account and to all other deferral and variance accounts the Board approves for OPG.

E. Risk Reduction Impact of Deferral Accounts

205. As already noted, if the Board broadens the deferral and variance account coverage that forms part of the rate regime the Government established for OPG, then the currently approved equity ratio of 45% should be reduced.

X. PAYMENT AMOUNTS

A. Hydro-Electric Incentive Payment Structure

206. We support AMPCO's detailed submissions with respect to OPG's hydro-electric incentive payment proposal and we understand that Energy Probe will be making similar submissions with respect to this topic. We adopt and support these submissions and have nothing further to add.

B. Nuclear Fixed Charge Proposal

207. We support AMPCO's detailed submissions in support of the proposition that 25% of the nuclear revenue requirement **not** be recovered in a fixed charge.

208. As already noted, if the Board approves recovery of any portion of the nuclear revenue requirement in a fixed charge, then the 45% equity ratio, embedded in current rates, should be reduced. Alternatively, if all of the additional deferral and variance accounts proposed by OPG and the fixed charge for nuclear generation are approved, the equity ratio embedded in existing rates should be reduced from 45% to 40%.

C. Impact on Electricity Consumers

209. As already noted, the revenue deficiency OPG seeks to recover effective April 1, 2008, leads to a 5.10% increase in the energy charge of bills to residential customers. We assume that there will be a similar impact in the bills to general service customers. The energy charge impact of recovering the revenue deficiency over 14 months rather than 21 months will increase by a factor of 1.5 to about 7.65%. We submit that rate impacts of this magnitude are incompatible with the rate stability and competitiveness criteria upon which the Government relied when it established OPG's current rates. Anything and everything that can be done, should be done to reduce the amount of the revenue requirement OPG seeks to recover.

XI. CONCLUSIONS & COST AWARDS

210. A summary the findings CME urges the Board to make with respect to the major topics contained in the Board's Issues List upon which CME has made submissions is set out in the attached Schedule.

A. Cost Award Request

211. CME requests an award of its reasonably incurred costs of participating in this case, being one of considerable importance to all Ontario electricity consumers. Through its counsel, CME actively participated in the hearing to assure that the implications of the significant revenue deficiency relief OPG seeks are thoroughly

tested. This case involves issues of considerable complexity and importance to electricity ratepayers. Throughout the process, CME collaborated with other parties having similar interests in an attempt to minimize duplication and to enhance the efficiency of the regulatory process.

212. We respectfully ask the Board to find that our participation in the proceeding was responsible and of assistance to the Board.

213. We have seen AMPCO's request for the issuance of cost awards to eligible intervenors before the final Decision is released. We support these submissions and also support the submissions which we understand counsel for the CCC will be making with respect to this issue.

ALL OF WHICH IS RESPECTFULLY SUBMITTED this 22nd day of July, 2008.

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BORDEN LADNER GERVAIS LLP
Counsel for CME

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SCHEDULE A

SUMMARY OF MAJOR FINDINGS CME REQUESTS THE BOARD TO MAKE

RATE BASE

- The value of unfunded nuclear liabilities recorded in OPG's Asset Retirement Costs ("ARC") fixed asset account is to be included in Rate Base so that OPG can recover ARC depreciation; but not in Capital Structure for the purposes of determining OPG's costs of debt and equity. Instead, the extent to which nuclear ARC are to be recovered in rates is to be determined as a Cost of Service item.

CAPITAL STRUCTURE

- The Capital Structure to be used to calculate OPG's costs of debt and equity is to be an amount equal to the value of OPG's Rate Base after excluding the amount recorded in the ARC fixed asset account.

- The Capital Structure is to be comprised of 55% debt and 45% equity; or 60% debt and 40% equity if the Board approves additional Deferral and Variance Accounts proposed by OPG and the fixed charge for nuclear generation.

- The Return on Equity ("ROE") is to be established in a range between 5.85% and 8.57%.

OPERATING COSTS

- OPG's test period Operating Costs are excessive and an amount of about $138M is to be disallowed.

OTHER REVENUES

- The Revenue Deficiency is to be reduced by an amount of about $172M to adjust for OPG's understatement of the extent to which Bruce revenues exceeds Bruce costs.

- The share of discretionary revenues OPG proposes to allocate to ratepayers should be increased.

NUCLEAR WASTE MANAGEMENT AND DECOMMISSIONING

- OPG's nuclear Asset Retirement Costs ("ARC") are not to be treated as if they were costs of debt and equity capital as OPG proposes. Rather, they are to be quantified and recovered as a Cost of Service supplement to ARC depreciation, having regard to the factors which give rise to their occurrence, including:

  (a) The unfunded and undiscounted portion of the Reference Plan value of total Asset Retirement Obligations ("ARO");

  (b) The remaining economic life of the nuclear assets; and

  (c) Accumulated ARC depreciation and investment income thereon.

- The method used to quantify ARC should have as its objectives the provision of reasonable protection to OPG and the least cost alternative for ratepayers.

DESIGN OF PAYMENT AMOUNTS

- The nuclear fixed charge is inappropriate.

- The hydro-electric incentive payment structure should be re-considered.

DEFERRAL AND VARIANCE ACCOUNTS

<u>Nuclear Liability Deferral Account</u>

- The amounts recorded in the Nuclear Liability Deferral Account are incorrect. The amount recorded needs to be corrected to exclude nuclear liability costs related to Bruce and to calculate the nuclear liability costs related to prescribed assets using the Cost of Service method the Board approves, rather than treating such costs as if they were costs of debt and equity capital, as OPG proposes.

DETERMINATION OF PAYMENT AMOUNTS

- The regulatory tax loss carry-forwards are to be used to mitigate the recoverable revenue deficiency as OPG proposes.