
INFORMATION REQUEST NO. 1 FROM INTRAGAZ TO DR. BOOTH

- 1. Reference: Piece numbers: C-ACIG-0010, C-ACIG-0012, C-ACIG-0013, and C-ACIG-0014.**

Requests:

- 1.1. If not otherwise requested in this set of Information Requests, please provide complete copies of any article, regulatory order, scholarly paper, investor service publication, financial media report, or other documents cited in the testimony of witness Booth.

- 2. Reference: Piece C-ACIG-0010, page 2, lines 3-6 and page 4, lines 18-20.**

Preamble:

"In particular IGUA has asked me to recommend an allowed ROE and capital structure conditional on the Régie allowing cost of service regulation and a ten year contract for storage services between Gaz Metro and Intragaz."

Requests:

- 2.1. Please confirm that conducting an analysis of the fairness of cost of service based rates is not part of Dr. Booth's mandate to recommend an allowed ROE and capital structure conditional on the Régie allowing cost of service regulation.
- 2.2. Please confirm that recommending an appropriate level of rate base is not part of Dr. Booth's mandate as stated in his evidence.
- 2.3. Please confirm that calculating the long-run average cost of Intragaz's operations is not part of Dr. Booth's mandate as stated in his evidence.

3. Reference:

- (i) Piece C-ACIG-0010, page 2, lines 27 to 29.
- (ii) Piece C-ACIG-0010, page 12, lines 14 and 15.

Preamble:

- (i) *"I recommend that Intragaz' storage asset have the same 46% equity ratio that Gaz Metro uses (common + preferred) since I regard these assets as indistinguishable from other Gaz metro utility assets."*
- (ii) *"If this cost of service revenue requirement is folded into Gaz Metro's rates it would have only a limited impact..."*

Requests:

- 3.1. Please confirm that Gaz Métro is regulated under cost of service regulation.
- 3.2. Please provide examples of precedents where the Régie has reduced Gaz Métro's rate base because there were lower costs alternatives?

4. Reference:

- (i) Piece C-ACIG-0010, page 8, line 20 through page 9, line 1.
- (ii) Piece C-ACIG-0010, page 21, line 20 through line 25.

Preamble:

- (i) "If the Régie had accepted the proposal all future commercial risks attached to storage, as well as the cost of all the past investments made by Intragaz, would have been shifted to Gaz Metro's ratepayers."
- (ii) "In particular, I note an inherent conflict of interest with cost of service regulation when Gaz Metro is both an owner in Intragaz and its sole customer. The conflict of interest is simply that as the sole customer, Gaz Metro can sign only a short term contract, which makes Intragaz look "risky" due to the lack of financing, leading to a higher ROE and common equity ratio under cost of service regulation, which benefits Gaz Metro as part owner!"

Requests:

- 4.1. Who would bear the risk if Intragaz is unable to perform under the contract?
- 4.2. Who would bear the risk if Intragaz incurs unforeseen costs?
- 4.3. Who would bear the risk if the contract between Intragaz and Gaz Métro is not renewed?
- 4.4. Do you know who is responsible for the working gas, and in the case of Pointe-du-Lac the cushion gas, while it is in the possession of Intragaz?
- 4.5. Please confirm that if IGUA believes that a 15 year contract shifts all commercial risks to Gaz Métro's ratepayers, there is no reason why Gaz Métro should not sign a contract that covers the entire remaining useful life of the Intragaz's facilities (approximately 30 years).
- 4.6. Please reconcile your statement in (i) that "all future commercial risks attached to storage, as well as the cost of all the past investments made by Intragaz, would have been shifted to Gaz Metro's ratepayers." with your statement in (ii) that "Gaz Metro can sign only a short term contract, which makes Intragaz look "risky"".

5. Reference: Piece C-ACIG-0010, page 9, lines 26-27.

Preamble:

"... the economics of a fixed cost "service" industry are such that a single firm usually survives in the market with the potential for abuse of its dominant position."

Request:

- 5.1. Please confirm that the following are fixed-cost service companies: commercial office buildings, movie theatres, ski slopes.

6. Reference: Piece C-ACIG-0010, page 10, lines 25-26.

Preamble:

"To an economist, "fair and reasonable" means minimum long run average cost ..."

Requests:

- 6.1. Please confirm that to an economist "long run" means the current capital costs and not the historic (or original) capital costs.
- 6.2. Prior to filing his evidence in this proceeding, did Dr. Booth conduct a study to determine the long-run average cost of service for Intragaz?
- 6.3. If Dr. Booth conducted a study of the long-run average costs of Intragaz, why did he not file such a study as part of his evidence in this proceeding?
- 6.4. If Dr. Booth conducted a study of the long-run average costs of Intragaz, please provide all engineering and cost studies that Dr. Booth relied upon in calculating the current long run capital costs of constructing Intragaz's storage facilities under present day conditions.
- 6.5. If he were to do a study of long-run average cost for Intragaz's storage facilities, how would Dr. Booth incorporate economies of scale into his calculations?
- 6.6. Please provide copies of regulatory decisions in which the regulated revenue requirement has been set using the current long-run average cost of the utility assets instead of using the original cost less depreciation of the utility's assets.

7. Reference: Piece C-ACIG-0010, page 11, line 27.

Preamble:

“However, regulation does not necessarily mean cost of service regulation and the paramount motivation for regulation is to protect the customer.”

Requests:

- 7.1. What do you mean by “paramount motivation”?
- 7.2. Do you believe that there are other “motivations” for regulation?
- 7.3. If so, indicate what they are and their degree of importance.
- 7.4. Provide all sources, precedents and authorities in support of your answer.

8. Reference: Piece C-ACIG-0010, page 11, line 27 to page 12, line 1.

Preamble:

“As mentioned previously the OEB Act allows forbearance, which essentially means the suspension of direct regulation. In the case of Ontario storage facilities, the OEB decided to regulate in-franchise storage on a cost of service basis ...”

Requests:

- 8.1. Please confirm that Intragaz is the only in-franchise storage facility in Gaz Métro’s service territory.
- 8.2. Please confirm that the OEB Act does not apply to the Régie.
- 8.3. Please confirm that the OEB regulates existing in-franchise storage under cost of service.

9. Reference:

- (i) Piece C-ACIG-0010, page 12, lines 13 and 14.
- (ii) Piece C-ACIG-0010, page 12, lines 20-21.
- (iii) Piece C-ACIG-0015, page 9, paragraphe 42.

Preamble:

- (i) “For Intragaz a requested revenue requirement of \$20 million I am informed is about 1/3 in excess of avoided cost of about \$15 million. “
- (ii) “... then it should first reduce the starting rate base such that on its allowed ROE and common equity the revenue requirement is equivalent to avoided cost.”
- (iii) “Le point moyen de l’option retenue (Option 1) est de 15 million\$ mais l’ACIG appuierait une entente à long terme pour les services d’Intragaz même si le revenu annuel requis uniforme approchait les 17 million \$ en raison, entre autres, de l’aspect stratégique des sites d’Intragaz suite au déplacement proposé vers Dawn.” (Nos soulignés)

Requests:

- 9.1. Is Dr. Booth aware that IGUA’s witness, M. Bernard Otis, took the position in his evidence that IGUA would support a long term agreement for Intragaz’ services even if its its levelized revenue requirement was around \$17 million (reference (iii)) rather than \$15 million (reference (i))?
- 9.2. Is Dr. Booth aware that Intragaz’ annual levelized revenue requirement based on a 10 year term and IGUA’s recommended ROE of 7.5% and a capital structure composed of 54% debt and 46% equity is approximately \$17 million?
- 9.3. Based on reference (iii) and the fact that Intragaz’ annual levelized revenue requirement based on a 10 year term and IGUA’s recommended ROE of 7.5% and a capital structure composed of 54% debt and 46% equity is approximately \$17 million, why would Dr. Booth recommend the Régie “should first reduce the starting rate base such that on its allowed ROE and common equity the revenue requirement is equivalent to avoided cost” (reference (ii))?

10. Reference: Piece C-ACIG-0010, page 12, lines 24 to page 13, line 8.

Requests:

- 10.1. Please provide copies of those portions of Dr. Booth's testimony and hearing transcripts for the National Energy Board's hearing into TQM's cost of capital for 2007 and 2008 (RH-1-2008) where Dr. Booth made the arguments referred to on page 12, line 25 through page 13, line 8.
- 10.2. Please provide the citations to specific places in those documents where he made those arguments.

11. Reference: Piece C-ACIG-0010, page 12, lines 20-21.

Preamble:

Dr. Booth recommends that the Régie "... *should first reduce the starting rate base such that on its allowed ROE and common equity the revenue requirement is equivalent to avoided cost.*"

Request:

- 11.1. Would Dr. Booth agree that if the starting rate base were to be reduced such that the revenue requirement is equivalent to avoided costs, as he is suggesting, then by definition Intragaz' rates would be set using avoided cost and would not be set using the cost of service method?

12. Reference: Piece C-ACIG-0010, page 14, line 14.

Request:

12.1. Please provide the OEB report cited.

13. Reference: Piece C-ACIG-0010, page 14, line 23 to page 15, line 1.

Preamble:

“S&P goes on to rate the operating risk of gas storage as tending to be lower than assets like power generation.”

Requests:

13.1. Please confirm that this section of Dr. Booth’s evidence is referring to pages 4-5 of the S&P report which states:

“Operating risk tends to be lower with gas storage, as with much of the mid-stream space, compared with assets like power generation.”

13.2. Please confirm that S&P considers gas storage to be part of the “mid-stream” segment of the energy industry.

13.3. Please confirm that Dr. Booth is aware that S&P ranks the risks of industries in the following order:

- i. Merchant Generation
- ii. Mid-stream (including Gas Storage)
- iii. Electric Generation
- iv. Gas Transmission
- v. Electric Transmission & Distribution
- vi. Gas Distribution

14. Reference: Piece C-ACIG-0010, page 15, line 25 to page 16, line 2.

Preamble :

“Storage is one way of arbitraging the differences to reduce natural gas price volatility. S&P refers to this seasonal as providing the ‘intrinsic’ value of storage and specifically points out that large capacity, low turn storage facilities are best suited to this type of storage, such as depleted reservoirs and aquifers.”

Request:

- 14.1. Please confirm that this section of Dr. Booth’s evidence is referring to pages 4-5 of the S&P report which states:

The so called “intrinsic” value of storage comes from the resulting seasonal fluctuation in natural gas prices. Companies buy and inject gas from spring to fall, when prices are low, and withdraw gas and sell it in the winter, when prices are high. Large –capacity, low-turn assets are best suited to this type of injection/withdrawal profile, and the value of high deliverability does not earn a large premium. As a result, we typically see depleted reservoirs and aquifers as the primary providers of seasonal gas storage, although it is also a function of geography.

While there is a relatively consistent seasonal demand profile, a number of factors may narrow the seasonal gas price spread in the future. This would erode the market value of storage and raise credit issues for projects that face recontracting risk. (Our underlines)

15. Reference: Piece C-ACIG-0010, page 16, line 10 to page 17, line 5.

Preamble:

“... storage facilities with a high exposure to “hub services” get lower credit ratings. For this reason S&P rated Bob Cat gas storage non-investment grade at B+ and SG resources slightly higher at BB.”

Request:

15.1. Please provide a list of all storage facilities that have an investment grade rating from Standard & Poor's.

16. Reference: Piece C-ACIG-0010, page 17, line 9 and page 18, line 7.

Request:

16.1. Please define "operational" and "operating" risk as these terms are used throughout Dr. Booth's evidence.

17. Reference: Piece C-ACIG-0010, page 19, lines 17-21.

Preamble:

"I conclude from this analysis that if the Régie does in fact allow Intragaz cost of service regulation and a long term contract, then if it awards Intragaz Dr. Gaske's recommended financial parameters there is negligible risk beyond a ten year contract period. De facto the shareholders will have got almost all the value of their investment out before the contract terminates."

Requests:

17.1. Does this conclusion take into account Dr. Booth's recommendation that the Régie reduce the starting rate base?

17.2. If the Régie were to agree with Dr Booth's rate base recommendation would he still conclude that "the shareholders will have got almost all the value of their investment out"?

18. Reference: Piece C-ACIG-0010, page 21, line 25 to page 22, line 3.

Preamble:

"I would therefore recommend that the Régie ignore any financing "problems" facing Intragaz if it decides to allow cost of service regulation. Instead, I would recommend that either Gaz Metro and GDF Quebec guarantee the debt of Intragaz, or that Gaz Metro itself finance Intragaz on the same terms that it itself borrows at. The latter option is the

standard approach taken by many utility holding companies in Canada for their 100% owned affiliates.”

Requests:

- 18.1. Please confirm that Gaz Métro does not own 100% of Intragaz.
- 18.2. Please confirm that loan guarantees, or loans from the various owners, are not the standard approach for financing when a company is not 100% owned by a single parent company.
- 18.3. Please describe Dr. Booth’s understanding of the standard approach for loans to companies with more than one owner, and provide the basis or support for his understanding.
- 18.4. Is Dr. Booth aware that the Régie regulates the capital structure of Gazifère as if it were a stand-alone company, despite the fact that it is owned by Enbridge and obtains its financing through Enbridge?

19. Reference: Piece C-ACIG-0010, page 22, lines 19-25.

Request:

- 19.1. Please provide a copy of the NSPI settlement agreement and the regulatory approval on which Dr. Booth is relying.

20. Reference: Piece C-ACIG-0010, pages 25, 27- 29, 31, 32 and 34.

Request:

- 20.1. Please provide backup data in Excel for the charts appearing on the referenced pages.

21. Reference: Piece C-ACIG-0010, page 31, footnote 24.

Request:

21.1. Please provide the cited DBRS report.

22. Reference: Piece C-ACIG-0010, page 36, footnote 27.

Request:

22.1. Please provide the cited IMF report.

23. Reference: Piece C-ACIG-0010, page 39, lines 3-4.

Request:

23.1. Please provide the RBC Financial Markets Monthly, June 3, 2011, report that is cited.

24. Reference: Piece C-ACIG-0010, page 40, footnote 29.

Request:

24.1. Please provide documentation or calculations in support of the forecast of a reduction of 2.5% in U.S. GDP.

25. Reference: Piece C-ACIG-0010, pages 41 – 43, 45.

Request:

25.1. Please provide the sources, as well as the backup data in Excel for the charts appearing on page 41, page 42, page 43, and page 45.

26. Reference: Piece C-ACIG-0010, graph of default spreads on page 41.

Request:

26.1. Would Dr. Booth agree that the required risk premium tends to be significantly more volatile for riskier securities?

27. Reference: Piece C-ACIG-0010, page 41, footnote 31.

Preamble:

“... it was the behaviour of Tea Party members in Congress arguing that the U.S. should default that so frightened global investors in 2011.”

Requests:

27.1. Please provide documentation to support the statement in the preamble.

27.2. Please confirm that Dr. Booth believes that investors become frightened when authorities or interveners argue that investors should not be allowed to recover their investment.

27.3. If investors become frightened, do such fears tend to raise the cost of capital?

28. Reference: Piece C-ACIG-0010, page 43, lines 14-16.

Request:

28.1. Please provide a copy of the source document for the Kansas City “Financial Stress” Index.

29. Reference: Piece C-ACIG-0010, page 43, lines 4-6.

Request:

29.1. Please provide citation references for the cited testimony and provide copies of that testimony.

30. Reference: Piece C-ACIG-0010, page 45, lines 5-9.

Request:

30.1. Please provide copies of the Bank of Canada's Financial System Review (December 2011) and the Monetary Policy Report (July 2012) cited.

31. Reference: Piece C-ACIG-0010, page 46, lines 15-17.

Preamble:

"The fact is any investor would have loved to hold a diversified portfolio of Canadian utilities through the last five years rather than the TSX Composite!"

Request:

31.1. Given that fact, please explain why any investors held any investment other than Canadian utilities prior to the last five years.

32. Reference: Piece C-ACIG-0010, page 47, footnote 37.

Request:

32.1. Please provide a copy of the cited article from the Calgary Herald.

33. Reference: Piece C-ACIG-0010, page 48, lines 17-18.

Preamble:

"As long as the market risk premium is approximately correct the estimate will be in the right 'ball-park'."

Request:

33.1. Given that required risk premiums for common stocks are constantly changing, how would one know whether the estimated market risk premium is “approximately correct”?

34. Reference: Piece C-ACIG-0010, page 48, lines 26-27.

Request:

34.1. Please provide a copy of the Graham and Harvey survey cited.

35. Reference: Piece C-ACIG-0010, page 51, footnote 39.

Request:

35.1. Please provide a copy of the cited article by Richard Roll.

36. Reference: Piece C-ACIG-0010, page 51, footnote 40.

Request:

36.1. Please provide a copy of the cited article by Levy and Roll.

37. Reference: Piece C-ACIG-0010, page 51, lines 16-25.

Request:

37.1. Please describe the “sample parameters” to which Dr. Booth is referring.

38. Reference: Piece C-ACIG-0014, Refer to Appendix C, page 11, lines 7-8.

Preamble:

“The average beta estimate by the Royal Bank of Canada was 0.29 or slightly lower than my estimate (Booth) of 0.32 derived using data up until December 2011.”

Request:

38.1. Please confirm that the beta range that Dr. Booth decided to use in his CAPM estimate, 0.45-0.55, is between 40 percent and 72 percent higher than the estimate of 0.32 that Dr. Booth derived using data up until December 2011.

39. Reference: Piece C-ACIG-0010, page 53, lines 1-2.

Preamble:

"... I continue to judge the relative risk of a Canadian utility to be 45%-55% of that of the market as a whole."

Request:

39.1. Please confirm that Dr. Booth's estimated range for the current level of utility betas is based on his opinion and is not based on any quantified measurement of the current value of beta.

40. Reference: Piece C-ACIG-0010, page 63, lines 17-19.

Preamble :

"The estimates for 2014 may be marginally high since I am adding my 1.20% credit spread and Operation Twist adjustments while forecasting that the long Canada bond yield will increase from the current 2.2% to 4.0%."

Request:

40.1. Please confirm that Dr. Booth added 200 basis points to his CAPM estimate of the current cost of equity capital for Canadian utilities (120 basis points for credit market conditions, and 80 basis points by forecasting that the current Canada bond yield will increase to 3.0 percent in 2013).

41. Reference: Piece C-ACIG-0010, page 64, lines 25-26.

Preamble:

"Hence the big advantage of the CAPM is that it is difficult to make big mistakes."

Requests:

41.1. Please confirm that without applying adjustments based on Dr. Booth's subjective judgments, his current measured CAPM would produce a range of 3.8% to 4.1% as the cost of common equity for Canadian utilities:

$$2.2\% + (0.32 \times 5.0\%) = 3.8\%$$

$$2.2\% + (0.32 \times 6.0\%) = 4.1\%$$

41.2. If Dr. Booth is unable to confirm (a), please indicate what estimates the CAPM would produce without using subjective judgments.

42. Reference: Piece C-ACIG-0010, page 52, lines 9 - 13.

Preamble:

Dr Booth states:

"While the Canadian data points to a market risk premium of under 5.0%, I give weight to the US evidence for two main reasons. First, most of the restrictions on keeping Canadian capital within Canada have been removed resulting in significant capital outflows and higher expected returns on Canadian investments. Second, Canadian governments have moved to a primary surplus on their budgets."

Requests:

42.1. Indicate what weight Dr. Booth gave to the US data and provide all data, sources, precedents and authorities in support of this assertion.

42.2. Indicate when you began to believe it is justified to give this weight to the US data and provide all data, sources, precedents and authorities in support of Dr. Booth's assertion.

43. Reference: Piece C-ACIG-0010, page 52, line 27 to page 53, line 2.

Preamble:

Dr Booth states:

« On a going forward basis I do not expect the US financial system to collapse again, as it did in 2008/9, and trigger a global meltdown. As a result, I believe that the relative risk

of Canadian utilities will move back to their historic range reflecting normal market risk. This is why I continue to judge the relative risk of a Canadian utility to be 45-55% of that of the market as a whole. »

Request:

43.1. Indicate the elements that form the basis for Dr. Booth's assertion that the risk of a Canadian utility is 45-55% of that of the market as a whole and provide all the data and the sources, precedents and authorities in support of this assertion.

44. Reference: Piece C-ACIG-0010, page 53, lines 12 - 14.

Preamble:

Dr Booth states:

"Q. DO YOU USE THIS SIMPLE CAPM ESTIMATE FOR YOUR RECOMMENDATION?

A. No. The CAPM estimate is appropriate under "normal" circumstances, [...]."

Requests:

44.1. Describe in detail all the circumstances that would not be "normal" and for which CAPM would not be appropriate.

44.2. Provide all the sources, precedents and authorities in support of this assertion.

45. Reference: Piece C-ACIG-0010, page 55, lines 10-14.

Request:

45.1. Please provide the Board of Commissioners of Newfoundland and Labrador decision cited.

46. Reference: Piece C-ACIG-0010, page 56, footnote 41.

Request:

46.1. Please provide a copy of the Garcia and Yang study.

47. Reference: Piece C-ACIG-0010, page 58, lines 9-10.

Preamble:

“... liquidity in the equity market generally increases during a flight to quality.”

Requests:

47.1. Please define “liquidity.”

47.2. Please provide any evidence that supports Dr. Booth’s opinion that liquidity in the equity market generally increases during a flight to quality.

48. Reference: Piece C-ACIG-0010, page 59, lines 14 – 15 and page 63, lines 9-12.

Preamble:

Dr Booth states:

“However, I still regard the resulting ROE as an under estimate at the current point in time.

[...]

At the current point in time I would upwardly adjust my CAPM ROE estimate for 2013 by 0.40% for the credit spread adjustment and by 0.80% for the impact of Operation Twist. In total I would add 1.20% to the simple CAPM estimates. This produces a fair ROE in the following range.”

Requests:

- 48.1. Indicate what period is covered by the expression "*at the current point in time*" used in the above excerpts.
- 48.2. Provide all sources, precedents and authorities in support of this assertion.

49. Reference: Piece C-ACIG-0010, page 62, chart.

Request:

- 49.1. Please provide the backup data and documentation, as well as any Excel file, used in preparing the "Preferred and A Spreads" chart appearing on page 62.

50. Reference: Piece C-ACIG-0010, page 64, lines 26-27 and page 67, line 2 and lines 16-17.

Preamble:

"The CAPM also avoids one of the big problems with DCF estimates in that the forecast inflation rate is automatically incorporated into the long Canada bond yield."

Requests:

- 50.1. Please confirm that the forecast inflation rate is incorporated into the common stock prices, dividend yields and forecasted growth rates of analysts.
- 50.2. Please provide any evidence of which Dr. Booth is aware that common stock investors do not incorporate inflation expectations in their stock price, dividend yield and growth rate estimates.
- 50.3. Please confirm that on p. 67 Dr. Booth's "naïve" estimate of investors' expected growth rate is the inflation rate plus the long-run average growth rate in real GDP.

50.4. Please confirm that on p. 67, lines 16-17, Dr. Booth states: “whereas the DCF estimate directly captured the year over year inflation rate, the LTC yield did not ...”

51. Reference: Piece C-ACIG-0010, page 65, lines 1-4.

Preamble:

“This is currently not a significant problem, since inflation is so low, but part of the reason the DCF model fell out of favour was that it was giving bad signals when applied mechanically in the 1990s, when there was a structural break in the forecast inflation rate.”

Requests:

- 51.1. Please identify who Dr. Booth is referring to when he says that the DCF model fell out of favor in the 1990s.
- 51.2. Please indicate any Canadian regulators that ceased using the DCF model because there was a structural break in the forecast inflation rate.
- 51.3. Please define “a structural break in the forecast inflation rate” and explain how Dr. Booth thinks that it affected the results of the DCF model in the 1990s.
- 51.4. Please describe what Dr. Booth means by a “mechanical” application of the DCF model.
- 51.5. What were the “bad signals” in the 1990s?

52. Reference: Piece C-ACIG-0010, pages 66-68.

Request:

- 52.1. Please provide backup data in Excel for the charts appearing on page 66, page 67, and page 68.

53. Reference: Piece C-ACIG-0010, page 69, lines 18 - 19.

Preamble:

Dr Booth states:

“The analysis also helps explain why DCF estimates fell out of favour in the 1990s while the validity of recent CAPM estimates has recently been questioned.”

Requests:

- 53.1. Indicate who questioned the recent CAPM estimates.
- 53.2. Indicate when the recent CAPM estimates were questioned.
- 53.3. Indicate how the recent CAPM estimates were questioned.
- 53.4. Provide all sources, precedents and authorities in support of this assertion.

54. Reference: Piece C-ACIG-0010, page 70, footnote 46.

Request:

- 54.1. Please provide a copy of the TD Economics report.

55. Reference: Piece C-ACIG-0010, page 70, line 2-3.

Requests:

- 55.1. In Dr. Booth's opinion, do investors require the same rate of return for (i) Canadian equities, (ii) U.S. equities, and (iii) other international equities?
- 55.2. Please explain why (or why not) Dr. Booth believes the risks and required returns are identical for all three categories of equities.

56. Reference: Piece C-ACIG-0010, page 71, lines 24 - 29.

Preamble:

Dr Booth states:

“DCF:

Canadian equity market return:	9.30%
US SP500 Electric Utility risk premiums	3.00-3.50%
Low risk US sample Median DCF:	8.73%

Comparable earnings

Market return:	9.28%.”
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Request:

56.1. Confirm whether the return that Dr. Booth proposes is based on his analysis of the discounted cash flow (DCF) model.

57. Reference: Piece C-ACIG-0010, page 77, footnote 49.

Request:

57.1. Please provide the cited Moody's report on rating methodology.

58. Reference: Piece C-ACIG-0010, page 77, footnote 50.

Request:

58.1. Please provide the cited Infrastructure Finance report.

59. Reference:

- (i) Piece C-ACIG-0010, page 3, lines 29-20
- (ii) Piece C-ACIG-0010, page 78, lines 13-16 and page 12, lines 13-21.

Preamble :

- (i) "I would discount the use of estimates from the US since Moody's and other rating reports indicate there is greater regulatory protection in Canada."
- (ii) "Moody's further states 'as is characteristic of the US, the ability to recover costs and earn returns is less certain ...' this reflects a less protective regulatory environment than we have in Canada."

Requests:

- 59.1. Dr. Booth recommends that the Régie "... should first reduce the starting rate base such that on its allowed ROE and common equity the revenue requirement is equivalent to avoided cost."
- 59.2. Would Dr. Booth agree that if the Régie adopts his rate base recommendation, Moody's and investors should no longer view Québec as a protective regulatory environment that allows companies to recover costs?

60. Reference: Piece C-ACIG-0010, page 79, footnote 52.

Request:

- 60.1. Please provide the S&P Corporate Ratings Criteria report cited in this footnote.

61. Reference: Piece C-ACIG-0010, page 81, lines 3 - 6.

Preamble:

Dr Booth states:

"The upshot is that even US utilities with an excellent business risk profile, similar to that of Canadian utilities, will have poorer financial market access unless they are in a

regulatory jurisdiction that mimics the degree of protection Canadian utilities experience and are structurally insulated or “ring fenced” from their aggressive parents.”

Requests:

61.1. Indicate what Dr. Booth means by “the degree of protection Canadian utilities experience”.

61.2. Explain in detail how Dr. Booth believes this protection applies to Intragaz.

62. Reference: Piece C-ACIG-0010, page 83, lines 17 - 23.

Preamble:

Dr Booth states

“Q PLEASE SUMMARISE YOUR RECOMMENDATIONS.

A. I judge Intragaz as warranting a 46% common equity ratio, the same as Gaz Metro. I judge a fair ROE for a benchmark utility as being 7.50% for 2013 and would recommend an ROE adjustment model that adjusts by 50% of the change in utility credit spreads and 75% of the change in forecast LTC yields subject to a minimum forecast LTC yield of 3.80%. Alternatively I would recommend a fixed rate ROE of 8.25% for the term of the contract with Gaz Metro, should the Regie allow a ten year contract.”

Requests :

62.1. Confirm whether Dr. Booth took into consideration his rate of return calculation based on the DCF analysis in reaching the above findings and recommendations.

62.2. If so, describe in detail how Dr. Booth took the DCF analysis into consideration.

62.3. If not, please explain why not.

62.4. Confirm whether Dr. Booth took into consideration the US benchmark distributors identified in your report in reaching the above findings and recommendations.

62.5. If so, describe in detail how you took the US benchmark distributors into consideration.

62.6. If not, please explain why not.

APPENDIX B

63. Reference: Piece C-ACIG-0012, Appendix B, Schedules 1-9.

Requests:

63.1. Please provide the backup data and calculations in Excel with cells unlocked and original formulas in place for Schedules 1-9 that appear in Appendix B.

63.2. Please provide sources for all data included in these schedules.

64. Reference: Piece C-ACIG-0012, page 1, footnote 1.

Request:

64.1. Please provide a copy of each of the cited papers, "Equities Over Bonds: But By How Much?" and "Equity Risk Premiums in the U.S. and Canada," published by the Canadian Investment Review.

65. Reference: Piece C-ACIG-0012, page 2, lines 23-24.

Requests:

65.1. Please provide any academic or theoretical basis for the assumption that a one-year holding period is the appropriate time period for estimating utility investor required returns.

65.2. Please provide copies of any academic peer reviewed treatises or papers that support this view of utility investment returns.

66. Reference: Piece C-ACIG-0012, page 5, footnote 3.

Request:

66.1. Please provide a copy of the cited article by Dr. Booth, "Estimating the Equity Risk Premium and Equity Costs: New Ways of Looking at Old Data," published in the Journal of Applied Corporate Finance.

67. Reference: Piece C-ACIG-0012, page 6, lines 17-30, of Appendix B.

Requests:

- 67.1. Was Canada insulated from the rest of the world during the periods that did not include the dummy variables?
- 67.2. If yes, please provide documentation in support of this conclusion.

68. Reference: Piece C-ACIG-0012, page 6 lines 17-30, of Appendix B.

Requests:

- 68.1. Did Mr. Booth consider other specification of his regression?
- 68.2. If so, please provide those specifications, backup data, and the results of those regressions.
- 68.3. Did Mr. Booth consider a dummy variable to reflect the recent, "dire shape of the rest of the developed world, " as stated on page 9 line 7?

69. Reference: Piece C-ACIG-0012, Schedule 6 of Appendix B.

Requests:

- 69.1. Please provide the backup data and statistics in support of the regression results provided as Schedule 6 of Appendix B.

- 69.2. Also, please indicate whether the “Deficit” variable, defined as “aggregate government lending as a % of GDP” should actually be defined as “aggregate government borrowing as a % of GDP.”
- 69.3. Please indicate the normal sign of the variable, such that a coefficient -0.25 would produce an increase in real Canada yields, as indicated on p.7, line 22.

70. Reference: Piece C-ACIG-0012, Schedule 8 of Appendix B.

Requests:

- 70.1. Please indicate the source of the data.
- 70.2. Did Dr. Booth use the income return of the long government bond yield to calculate his estimate of the excess equity return?
- 70.3. If not, why not?
- 70.4. What would his excess equity return estimates be if he had calculated them by subtracting only the income return?

71. Reference: Piece C-ACIG-0012, page 9, lines 4-5 of Appendix B.

Request:

- 71.1. Please indicate when and to what degree Canada was insulated from the rest of the world.

72. Reference: Piece C-ACIG-0012, page 11, footnote 8 of Appendix B.

Request:

- 72.1. Please provide a copy of the Survey published by Professor Fernandez in 2009.

73. Reference: Piece C-ACIG-0012, page 13, footnote 9 of Appendix B.

Request:

73.1. Please provide a copy of the cited updated survey published by Professor Fernandez in 2010.

74. Reference: Piece C-ACIG-0012, page 14, footnote 11 of Appendix B.

Request:

74.1. Please provide a copy of the updated survey published by Professor Fernandez in 2011, cited in this footnote.

75. Reference: Piece C-ACIG-0012, page 15, footnote 12 of Appendix B.

Requests:

75.1. Please provide copy of the TD Economics Report cited.

76. Reference: Piece C-ACIG-0012, page 16, footnote 13 of Appendix B.

Request:

76.1. Please provide a copy of the cited Credit Suisse Yearbook.

77. Reference: Piece C-ACIG-0012, page 17, footnote 14 of Appendix B.

Requests:

77.1. Please provide a copy of the cited RBC, "U.S. Equity Strategy Weekly" Report.

APPENDIX C

78. Reference: Piece C-ACIG-0013, Appendix C, Schedules 1-9.

Request:

78.1. Please provide the backup data and calculations in Excel with cells unlocked and original formulas in place for Schedules 1-9 that appear in Appendix C. Also, please provide sources for all data provided.

79. Reference: Piece C-ACIG-0013, page 1, footnote 1 of Appendix C.

Request:

79.1. Please provide a copy of the cited article by William Sharpe.

80. Reference: Piece C-ACIG-0013, page 1, footnote 2 of Appendix C.

Request:

80.1. Please provide a copy of the cited article by Fisher Black.

81. Reference: Piece C-ACIG-0013, page 1, footnote 3 of Appendix C.

Request:

81.1. Please provide a copy of the cited article by Eugene Fama and Ken French.

82. Reference: Piece C-ACIG-0013, page 1, footnote 4 of Appendix C.

Request:

82.1. Please provide a copy of Estrada's three factor model practitioners guide, cited in this footnote.

83. Reference: Piece C-ACIG-0013, page 3, lines 5-6 of Appendix C.

Request:

83.1. Please provide documentation in support of the statement, "By convention, betas are estimated over a five-year period."

84. Reference: Piece C-ACIG-0013, page 3, footnote 6 of Appendix C.

Request:

84.1. Please provide a copy of the cited Study by Gombola and Kahl.

85. Reference: Piece C-ACIG-0013, page 5, footnote 10 of Appendix C.

Request:

85.1. Please provide a copy of the cited RBC Morning Comment.

86. Reference: Piece C-ACIG-0013, page 5, line 27 of Appendix C.

Request:

86.1. Please provide a copy of the cited information request response (BCUC IR#1.19.0).

87. Reference: Piece C-ACIG-0013, page 7, lines 5-6.

Request:

87.1. Please provide the backup data for the chart that appears on page 7 of Appendix C.

88. Reference: Piece C-ACIG-0013, page 8, footnote 12 of Appendix C.

Request:

88.1. Please provide a copy of the cited article by Shaun Polczer.

89. Reference: Piece C-ACIG-0013, page10, line 16 of Appendix C.

Request:

89.1. Please provide the analysis, or study which supports that the Canadian utility "grand mean" beta is 0.50

90. Reference: Piece C-ACIG-0013, page10, footnote 13 of Appendix C.

Request:

90.1. Please provide a copy of the cited Study by Marshall Blume.

91. Reference: Piece C-ACIG-0013, page 11, lines 5-6.

Requests:

91.1. Please provide copies of the backup documentation in support of the table appearing on page 11 of Appendix C.

91.2. Please describe the methodology of calculating the specific betas which appear in this table for each of the sources, including such data as the dates, intervals, market portfolio and formulae used in the calculations.

91.3. Please provide any academic studies or peer reviewed papers of which Dr. Booth is aware which utilize RBC, Google, or Booth betas to estimate investors' forward-looking required equity returns.

92. Reference: Piece C-ACIG-0013, page11 footnote 14.

Request:

- 92.1. Please provide the name of the data provider that is the source for Google Finance betas.

93. Reference: Piece C-ACIG-0013, page 12, lines 3-4.

Request:

- 93.1. Please provide copies of the RBC Capital Markets Research in support of the table appearing on page 12 of Appendix C.

94. Reference: Piece C-ACIG-0013, page 13, lines 2-3.

Requests:

- 94.1. Please provide copies of the backup documentation in support of the table appearing on page 13 of Appendix C.
- 94.2. Please describe the methodology of calculating the specific betas which appear in this table for each of the sources, including such data as the dates, intervals, market portfolio and formulae used in the calculations.

95. Reference: Piece C-ACIG-0013, page13, lines 13-15, of Appendix C.

Request:

- 95.1. Please provide any peer reviewed papers or studies of which Dr. Booth is aware where the Financial Posts' Utility Analyzer raw betas were utilized to estimate investors' forward- looking required equity returns.

APPENDIX D

96. Reference: Piece C-ACIG-0014, Appendix D.

Request:

96.1. Please provide the backup data and calculations in Excel with cells unlocked and original formulas in place for Schedules 1-11 that appear in Appendix D.

97. Reference: Piece C-ACIG-0014, Appendix D, Schedule 12.

Request:

97.1. Please provide a legible copy of the article attached as Schedule 12.

98. Reference: Piece C-ACIG-0014, page 3 lines 19-23 of Appendix D.

Request:

98.1. Please provide documentation to support these conclusions.

99. Reference: Piece C-ACIG-0014, page 8 lines 20-21 of Appendix D.

Requests

99.1. Please provide documentation in support of the statement that analysts “key” dividend growth forecasts off earnings forecasts.

100. Reference: Piece C-ACIG-0014, page12, line 10.

Preamble:

“As a result, forecast growth was negative ...”

Requests :

100.1. Please identify the analysts or forecasting services that were forecasting negative long-term growth for the S&P Electric Utilities.

101. Reference: Piece C-ACIG-0014, page 14, line 1.

Request:

101.1. Please provide copies of all backup data for the chart that appears on page 14 of Appendix D.

102. Reference: Piece C-ACIG-0014, page 15, line 1.

Request:

102.1. Please identify the sources and provide copies of the backup documentation in support of the table appearing on page 15 of Appendix D.

103. Reference: Piece C-ACIG-0014, page 16 footnote 10.

Request:

103.1. Please provide a copy of the cited study by Easton and Sommers.

104. Reference: Piece C-ACIG-0014, Refer to Schedule 11 of Appendix D.

Request:

104.1. Please provide the formulas and data used to calculate the values shown in the columns labeled URP, URP2, and URP3.