FORTIS BC™

BRITISH COLUMBIA UTILITIES COMMISSION
GENERIC COST OF CAPITAL PROCEEDING EXHIBIT B1-28

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November 16, 2012

BC Utility Customers – AMPC/BCPSO/CEC
c/o Bull, Housser & Tupper LLP
3000 Royal Centre, P.O. Box 11130
1055 W. Georgia Street,
Vancouver, BC V6E 3R3

Attention: Mr. Brian Wallace

Dear Mr. Wallace:

Re: Generic Cost of Capital Proceeding

FortisBC Utilities[1] (the "FBCU") Information Request ("IR") No. 1 to the Association of Major Power Customers of BC ("AMPC") and British Columbia Utility Customers[2] (collectively ("AMPC/BC Utility Customers")) on the Evidence of Dr. Laurence D. Booth

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In accordance with the British Columbia Utilities Commission Order No. G-84-12 setting out the Amended Preliminary Regulatory Timetable, the FBCU respectfully submit the attached IR No. 1 to AMPC/BC Utility Customers on the Evidence of Dr. Laurence D. Booth.

If there are any questions regarding the attached, please contact the undersigned.

Yours very truly,

on behalf of the FORTISBC UTILITIES

Original signed:

Diane Roy

Attachment

cc (e-mail only): Commission Secretary
Registered Parties

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[1] comprised of FortisBC Inc., FortisBC Energy Inc., FortisBC Energy (Vancouver Island) Inc., and FortisBC Energy (Whistler) Inc.

[2] including, British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO"), and Commercial Energy Consumers Association of British Columbia ("CEC")

1.0 Reference: Booth Evidence, Page 2, Lines 28 - 31

Dr. Booth states:

"Recently the Governor of the Bank of Canada has described the Canadian financial system as 'firing on all cylinders' and he expects the remaining output gap to be removed in 2013. So forecasters are anticipating interest rate increases."

1.1 Please provide a copy of the Bank of Canada report or other materials containing the Governor's referenced comments.

1.2 Please provide specific references confirming that "forecasters are anticipating interest rate increases."

2.0 Reference: Booth Evidence, Page 3, Lines 11 - 13

Dr. Booth states that he judges *"that current long Canada bond yields are about 0.80% below where they should be for this stage in the business cycle."*

2.1 Please identify all academic literature which Dr. Booth is aware of that supports the notion that long Canada bond yields should stand at any particular level during the business cycle.

2.2 Please identify previous periods where the Canadian economy has been at the same stage in the business cycle as is the case today. Please identify such periods over the last five business cycles.

2.3 Please identify what long Canada bond yields stood at during those same stages in the business cycle.

3.0 Reference: Booth Evidence, Page 6: Principles in Assessing Business Risk

Dr. Booth discusses principles in assessing business risk, and addresses FEI's business risk later in his evidence.

3.1 Please confirm that Dr. Booth's assessment of FEI's business risk is integral to his opinion on the fair return for FEI. If not, why not?

4.0 Reference: Booth Evidence, Page 20, Lines 25-26

Dr. Booth states:

"…there is little disagreement amongst academics that debt is valuable to the firm due to the tax shields it generates."

4.1 Does Dr. Booth judge the tax deductibility of interest payments to be the main advantage of debt financing?

4.2 Does Dr. Booth agree that a large debt ratio is of less value to a non-taxable than to a taxable entity?

4.3 Does Dr. Booth agree that, the lower the corporate income tax rate is, the less is the value of a large debt ratio? If not, please explain why not.

5.0 Reference: Booth Evidence, Page 24, Lines 24-28

Dr. Booth states:

"In Federal Power Commission et al v. Hope Natural Gas Co. [320 US 591, 1944], the United States Supreme Court decided that a fair return 'should be sufficient to assure confidence in the financial integrity of the enterprise so as to maintain its credit and to attract capital.'"

5.1 Please confirm that the entire quote from *Federal Power Commission et al v. Hope Natural Gas Co.* is as follows:

> *"By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital."*

6.0 Reference: Booth Evidence, Page 38 Figure 1

Figure 1 on page 38 shows that the operating cost advantage of natural gas over electricity for space heating has improved since 2000.

6.1 Can Dr. Booth please provide a detailed explanation as to why, in his view, residential throughput on FEI's system has declined during this same period despite the increased operating cost advantage?

7.0 Reference: Booth Evidence, Page 40, Lines 10-13 and Page 41, Lines 2-5

Dr. Booth states:

"Further utility witnesses have in the past stated that gas distribution companies serving a heavier industrial load are riskier since that demand is more sensitive to the business cycle than residential load which is heat sensitive. As a result, the short run impact of a decline in industrial customers and load is a more stable customer base and less risk."

"Of importance is that since 2000 the industrial load has declined from 12.91% of revenues to 7.6% in 2005 to the current 6-7% level. Overall this would indicate a similar risk profile to 2009 but a substantial decline from 2000 particularly in view of the more comprehensive RSAM that has been introduced since 2000 to handle the impact of weather on residential demand."

7.1 Can Dr. Booth please quantify the impact that, in his view, the "more comprehensive RSAM that has been introduced since 2000" has had on the appropriate capital structure and/or ROE for FEI? If the impact cannot be quantified, please describe its significance in qualitative terms.

7.2 Does Dr. Booth regard a utility with 12.91% of revenues from industrial load as being heavily dependent on industrial customer base? Please explain your answer.

7.3 All else equal, would Dr. Booth consider an absolute reduction of industrial load since 2005 to be directionally favourable or unfavourable or neutral to FEI's business risk? Please explain the answer.

8.0 Reference: Booth Evidence, Page 41, Line 7

With respect to business risk, Dr. Booth states: "I would rate FEI as a low risk Canadian utility".

8.1 Please list all the investor-owned utilities that Dr. Booth regards as low business risk Canadian utilities, average business risk Canadian utilities and above average business risk Canadian utilities.

9.0 Reference: Booth Evidence, Page 42, Lines 9-11

Dr. Booth states:

"So relative to these gas distributors I would rate FEI as in the same risk bucket, or perhaps slightly riskier, than EGDI and ATCO Gas and lower risk than either Union Gas or Gaz Metro."

9.1 Please explain in more detail, and with relevant evidentiary support, why Dr. Booth regards Union Gas as having higher business risk than FEI.

9.2 Please explain in more detail the factors that support Dr. Booth's conclusion that FEI is "perhaps slightly riskier" than both Enbridge Gas Distribution and ATCO Gas.

10.0 Reference: Booth Evidence, Page 43, Lines 13-14

Dr. Booth states:

"Overall I would judge FEI as warranting a common equity ratio of 37% in a range from 36% (Union and EGDI) to 38.5% (Gaz Metro) based on these comparators."

10.1 Please confirm that Gaz Métro is also allowed a 7.5% <u>deemed</u> preferred share component (i.e. there are no actual preferred shares issued), which is not reflected in the 38.5% referenced by Dr. Booth.

11.0 Reference: Booth Evidence, Page 43, Lines 10-12

Dr. Booth states:

"NSPI negotiated a settlement on September 14, 2012 where it maintained its 37.5% common equity ratio in return for a 9.0% ROE."

11.1 Please clarify what Dr. Booth means when he says NSPI maintained its 37.5% common equity ratio **<u>in return for</u>** a 9.0% ROE. [emphasis added]

12.0 Reference: Booth Evidence, Page 43, Lines 4-6

Dr. Booth states:

"I regard the increase in ATCO Gas' common equity ratio as reflecting the extreme capital market conditions of 2009, rather than any increase in business risk."

12.1 Can Dr. Booth please confirm that the Alberta Utilities Commission affirmed the same common equity ratio for ATCO Gas in December 2011?

12.2 Can Dr. Booth please confirm that the following passage, referencing credit metrics in the context of the appropriate equity ratio for Alberta Utilities, is from the 2009 AUC Decision to which Dr. Booth referred:

> *The credit metric analysis of relatively pure-play Canadian utilities indicates that in order to target a credit rating in the A range: (i) the minimum equity ratio for Alberta Utilities should be 34 percent based on EBIT analysis, (which is 1 percentage point higher than the existing level awarded to transmission companies), 30 to 36 percent based on FFO/Debt analysis and 33 percent based on FFO interest coverage analysis; (ii) as a result of lower income tax rates and lower ROEs a 4 percentage point equity ratio increase would be required to maintain credit metrics at the same level as the 2004 levels; and (iii) the 4 percentage points equity ratio increase would be offset to some degree by the lower debt costs in 2009 versus 2004.* (Paragraph 411, page 106, Decision 2009-216, November 2009)

13.0 Reference: Booth Evidence, Page 48, graph, Leading Indicators

13.1 Please provide the source of the data in the graph.

13.2 Please explain if the leading indicators are measured the same in the two countries.

14.0 Reference: Booth Evidence, Page 49, graph, Quarterly Changes in GDP

14.1 Please provide the source and data series for the graph.

15.0 Reference: Booth Evidence, Page 52, graph, Break-even inflation rate

15.1 Please provide the source of the data, and the data series used.

16.0 Reference: Booth Evidence, Page 64, Footnote 31

Dr. Booth notes that he had manipulated the Bank of Canada index by "*multiplying it through by -1"*.

16.1 Please provide a revised chart of the Bank of Canada index using the data as the bank originally intended.

16.2 Please provide the data used to build the chart, in machine readable format.

17.0 Reference: Booth Evidence, Page 73, Line 13

Dr. Booth states:

"1) Analysts do not generally adjust betas in the way that the BCUC assumed in 2009. In fact the only paper that looks at adjusting utility betas adjusts them toward their grand mean of about 0.55 not the Blume adjustment towards 1.0.

2) I report beta estimates from RBC, Yahoo finance and Google Finance and none of these adjust betas towards 1.0, instead they seem to be actual betas."

17.1 Please discuss the types of analysts to which Dr. Booth is referring in the phrase "Analysts do not generally adjust betas in the way that the BCUC assumed in 2009".

17.2 Please provide evidence that analysts who estimate the cost of equity "do not generally adjust betas in the way that the BCUC assumed in 2009".

17.3 Please confirm that Yahoo Finance and Google are not analysts.

18.0 Reference: Booth Evidence, Page 73, Lines 29 – 32

Dr. Booth states:

"Here the message is very clear that utilities are very low risk investments that add little risk to a diversified portfolio. This is because they are sensitive to interest rates which means that when the stock market collapse and the central banks lower interest rates, they have "bond-like" support and as a result low betas."

18.1 Please discuss in detail the relationship between utility share prices and interest rates including how and when the latter affects utility share prices.

18.2 Assuming Dr. Booth's assertion that utility stocks are sensitive to interest rates, are there times where the relationship has broken down or could break down?

18.3 Please discuss in detail what Dr. Booth meant when he referred to utility shares as having "bond like" support. How and where does that support come from?

18.4 Assuming Dr. Booth is correct that such support exists, are there instances where that support is not active?

19.0 Reference: Booth Evidence, Page 74, Lines 3-6:

Dr. Booth states:

"This estimate is drawn from the Canadian capital market history going back to 1924 so encompasses periods very similar to today, such as the bleak 1930s of slow growth and falling prices, as well as booms and serious inflation problems such as the 1970's."

19.1 To what periods other than the 1930s is Dr. Booth referring when he states "encompasses periods very similar to today"? Please provide the years for all periods to which he refers.

20.0 Reference: Booth Evidence, Page 74, Lines 9-10

Dr. Booth states:

"Second, Canadian governments have moved to a primary surplus on their budgets. The primary surplus is the actual surplus after stimulus expenditures and the impact of an economic slow-down have been removed."

20.1 Please provide a list of the "Canadian governments" to which Dr. Booth is referring in the statement quoted.

20.2 Please provide the period during which these Canadian governments have moved to primary surplus on their budgets and provide the data for each period including detailed information on both (a) the amount of the stimulus expenditure removed and (b) how the impact of the economic slow-down is removed.

21.0 Reference: Booth Evidence, Page 78, Lines 11-14

Dr. Booth states:

"Before several boards in 2009 I stated that much of the increase in credit (or corporate) spreads was caused by liquidity problems in the market making function of investment banks, that is, they were sellers of corporate bonds since their solvency was in question and survival was the most important imperative."

21.1 Please confirm which investment banks Dr. Booth is referring to in making the statement.

21.2 Would the referenced investment banks include Canadian investment banks?

21.3 To what extent did Canadian investment banks experience liquidity problems?

21.4 Assuming Dr. Booth is correct in his assertions, please provide evidence of the referenced liquidity problems.

22.0 Reference: Booth Evidence, Page 80, Line 1

Dr. Booth states: *"This liquidity effect is still at work in the bond market."*

22.1 Can Dr. Booth confirm that bond trading volumes are a direct indicator of liquidity or illiquidity in the bond market? If not, why not?

22.2 What bond tenors is Dr. Booth referring to when making the statement?

22.3 Please provide chart bond trading volumes over the relevant period to support Dr. Booth's assertions.

23.0 Reference: Booth Evidence, Page 81, Lines 6 – 8

Dr. Booth states:

"… the average corporate credit spread is about 100 bps and I would expect the adjustment to average out to zero over the course of the complete business cycle."

23.1 At what points in the business cycle would one expect the adjustment to be negative?

23.2 In what regulatory hearings has Dr. Booth recognized this phenomenon and accordingly, made adjustments, either positive or negative? Please provide specific references.

24.0 Reference: Booth Evidence, Page 83, Lines 26-27

Dr. Booth states that in 2004 utility yield spreads were about 100 bps over the long Canada bond yield. He then states that such spreads are *"about 'normal' for a complete business cycle."*

24.1 Please discuss how Dr. Booth arrived at the conclusion that a 100 bps spread is "about 'normal'" over a complete business cycle?

24.2 Please provide empirical evidence supporting Dr. Booth's views on this point.

25.0 Reference: Booth Evidence, Page 84, Graph, Preferred and A Spreads

25.1 Please provide the source of the preferred data, including the name of the preferred index, the current constituents in the index (issuer and type of preferred share) and the corresponding yields on the preferred share index for the period shown in the graph, the latter in Excel format.

26.0 Reference: Booth Evidence, Page 90, Graph, Difference between Naive DCF and CAPM Estimates for the Market

26.1 Please provide in Excel format the Naïve DCF and CAPM estimates used to create the graph. For the DCF, please provide the yields on the TSX and the CPI inflation rates separately.

27.0 Reference: Booth Evidence, Page 91, Line 18

Dr. Booth states: *"The analysis also helps explain why DCF estimates fell out of favour in the 1990s…"*

27.1 Please provide relevant excerpts from regulatory decisions supporting Dr. Booth's conclusion.

28.0 Reference: Booth Evidence, Page 99, Lines 15-17

Dr. Booth states:

"Third, for 2009 the ROE at 9.39% was 35 basis points less than the 9.70% the NEB allowed TQM. However, this is probably misleading since this sort of credit spread data was not available at the time of the hearing."

28.1 Please clarify what Dr. Booth means when he says that "this sort of credit spread data **was not available** at the time of the hearing." [emphasis added]

28.2 Please confirm that the return to which Dr. Booth refers was for test years 2007 and 2008, not 2009.

29.0 Reference: Booth Evidence, Page 100, Lines 1-3

Dr. Booth recommends a formula, which includes a floor on long-term Government of Canada bond yields of 3.8%.

29.1 Please confirm that Dr. Booth recommended the same formula for TransCanada Pipelines in his March 2012 evidence in the Business and Services Restructuring and Mainline 2012 – 2013 Tolls Application.

29.2 Please confirm that in the TransCanada Pipelines proceeding referenced in 28.1, Dr. Booth recommended a floor on long-term Government of Canada bond yields of 4.0%, not 3.8%.

29.3 Please explain why Dr. Booth has now lowered the floor on the long-term Government of Canada bond yield from 4.0% to 3.8% since March 2012.

30.0 Reference: Booth Evidence, Page 100, Line 5

Dr. Booth sets out the following formula:

ROE = 7.50 + 0.50(Spread-1.86%) + 0.75*(max(Forecast LTC Yield, 3.80%) –3.80%)*

30.1 Is the spread of 1.86% in the formula Dr. Booth's recommended starting spread for the purposes of applying his recommended formula?

30.2 If the response is yes, then please justify the 1.86% spread.

30.3 If the response is no, then please provide his recommended starting spread, with support for the recommendation.

31.0 Reference: Booth Evidence, Page 101, Lines 16 -19

Dr. Booth states:

"The only contrary argument is that the capital markets have made their adjustment to the Bank of Canada's 2.0 inflation target in a 1.0-3.0% range, whereas in 1993/4 inflation was significantly higher and the going in forecast LTC rate for 1994 in the NEB model was 9.25%."

31.1 What were the CPI rates of inflation in Canada in 1993 and 1994?

31.2 What were the consensus forecast rates of inflation for Canada in 1993 and 1994 for 1994 and 1995 respectively?

32.0 Reference: Booth Evidence, Page 107, Lines 12-14

Dr. Booth states:

"This is very similar to the attitude towards public utilities, where the US has allowed 6 public utilities to fail, a situation that is in sharp contrast to the significant regulatory protection in Canada."

32.1 Please identify the "6 public utilities" that "the US has allowed…to fail" and specify the dates on which the bankruptcies were announced.

33.0 Reference: Booth Evidence, Schedule 4, ROE Performance

33.1 Except for FEI, please provide the source references for this data.

33.2 Please explain why the allowed ROE for Enbridge Gas changes each year from 2007 to 2011 and that of Union Gas stays constant.

34.0 Reference: Booth Evidence, three unnumbered pages preceding Appendix A

Dr. Booth makes reference to a two-factor model and a graph on Schedule 17.

34.1 Please clarify where these pages belong in the Evidence and where Schedule 17 is to be found.

35.0 Reference: Booth Evidence, Appendix B, footnote 12

The latest issue of Credit Suisse' "Global equity returns yearbook 2012," has the equity market risk premium over bonds at 3.4% for Canada; 4.1% for the US and 3.6% for the UK.

35.1 Please explain whether these equity risk premiums are historic values, what period do they cover, how they are measured (arithmetic or geometric averages), and what type of bonds are included in the risk premium.

36.0 Reference: Booth Evidence, Appendix B, Schedule 6

36.1 Please provide in Excel format all data necessary to replicate the equation found on Schedule 6 of Appendix B.

37.0 Reference: Booth Evidence, Appendix C, Page 4, Line 20 to page 5, Lines 1-3 and Schedule 2

Dr. Booth states:

"This graph is slightly different from that in Schedule 1 in that it includes the beta coefficient estimated both with (beta1) and without (beta2) the impact of interest rate changes, as well as the sensitivity of the utility sub index to changes in interest rates which I call "gamma.""

37.1 What is the average "gamma" from Schedule 2?

37.2 Please explain the relationship between the "gammas" estimated in Schedule 2 and the 75% sensitivity factor applied to changes in long-term Government that Dr. Booth recommends in an automatic adjustment mechanism. Specifically, if the gamma is approximately 0.45 to 0.50, how has Dr. Booth justified changing the allowed ROE by 0.75 (75%) times the change in long-term Canada bond yields?

37.3 Would Dr. Booth please provide the corresponding gammas for the equity market composite?

38.0 Reference: Booth Evidence, Appendix C, Page 5, Footnote 10

38.1 Please provide the referenced comment of RBC utility analyst Maureen Howe.

39.0 Reference: Booth Testimony, Appendix B, Schedule 8

39.1 Please provide the missing footnote 1.

40.0 Reference: Booth Testimony, Appendix B, Schedule 9

40.1 Please provide the source of the U.S. TIPs data, including the data series used to create the graph.

41.0 Reference: Booth Testimony, Appendix C, Schedule 2

41.1 Please provide the sources for the data for the schedule.

42.0 Reference: Booth Testimony, Appendix C, Schedule 4

42.1 Please provide the source of the data used to create the schedule.

43.0 Reference: Booth Testimony, Appendix C, Schedule 8

43.1 Please provide the source of the data used to create the schedule and the individual betas for the utilities included in the graph.

44.0 Reference: Booth Testimony, Appendix D, Charts pages 14 and 18

44.1 Please provide the source documents for the data presented in these charts.

45.0 Reference: Booth Testimony, Appendix D, Schedule 3

45.1 Please provide the underlying data and the sources of the data presented in the schedule.

46.0 Reference: Booth Testimony, Appendix D, Schedule 5

46.1 Please provide the sources, including data series, for the data presented in the schedule.

47.0 Reference: Booth Testimony, Appendix D, Schedule 6

47.1 Please provide the sources, including data series, for the data presented in the schedule.

48.0 Reference: Booth Testimony, Appendix D, Schedule 7

48.1 Please provide the underlying data and source for the graph presented in the schedule.

49.0 Reference: Booth Testimony, Appendix D, Schedule 8

49.1 Please provide the sources, including data series, for the data presented in the schedule.

50.0 Reference: Booth Testimony, Appendix D, Schedule 9

50.1 Please provide the underlying data and the source for the graph presented in the schedule.

51.0 Reference: Booth Testimony, Appendix D, Schedule 10

51.1 Please provide the underlying data and the source for the graph presented in the schedule.

52.0 Reference: Booth Testimony, Appendix E, Schedules 4 and 5

52.1 Please provide the underlying data in Excel format so as to be able to replicate the results for the FP population in Schedules 4 and 5.

53.0 Reference: Prior Evidence of Dr. Booth

In the 2009 *TGI, TGVI and TGW ROE and Capital Structure Application* Dr. Booth responded to FEI-JIESC/BCOAPO/CEC IR 2.1 as follows:

> ***2. Reference: page 3***
>
> *"Fairness has a variety of connotations…"*
>
> *2.1. Please list all of the connotations of fairness that Dr. Booth believes are relevant to the setting of the allowed ROE for a public utility.*
>
> _____
>
> *2.1 Dr. Booth has in mind that Canadian utilities of equivalent risk be allowed to earn approximately equivalent ROEs, since they are operating under similar regulatory regimes in the same Canadian capital market subject to the same capital market conditions. Dr. Booth therefore believes that allowed ROEs from other Canadian jurisdictions is relevant information, particularly since the evidence put forward in different reviews is different. He is therefore inclined to view other Canadian allowed ROEs as a reasonableness check since other Boards have found these ROEs to be fair and reasonable.*

53.1 Please confirm that Dr. Booth holds the same view today, or explain why not.

54.0 Reference: Prior Evidence of Dr. Booth

In the 2009 *TGI, TGVI and TGW ROE and Capital Structure Application* Dr. Booth responded to FEI-JIESC/BCOAPO/CEC IR 29.1 as follows:

> ***29. Reference: page 53, line 7***
>
> *Dr. Booth refers to "the known estimation problems of the CAPM".*
>
> *29.1. Please provide a complete and forthright discussion of all estimation problems of the CAPM known to Dr. Booth.*
>
> _____

29.1 The CAPM's main problem is endemic to every asset pricing model which is that it needs expected rates of return and we use actual realised returns as proxies. For example for 2008 the actual rate of return on equities was hugely negative but this was clearly not expected at the start of the year, yet for 2008's 12 monthly observations we are forced to use the actual monthly returns as our best estimates of the monthly expected rate of return. The other main problem is that the CAPM needs the market portfolio as the reference portfolio and yet this includes all risky assets not just the levered equities comprising the S&P500 or CRSP Indexes and yet those are what we use as the return on the market portfolio.

The other problems are mainly technical:

-we use ordinary least squares estimation procedures which may bias the results;

-we use monthly holding periods as our estimation window and with serial correlation this may not reflect expected returns over longer time horizons;

-The T bill yield is not a good proxy for the risk free rate since we assume borrowing and lending at the same rate;

-We ignore taxes.

However, most of these problems are endemic to all asset pricing models, not just the CAPM. This is why the CAPM remains by far the most popular model to use in estimating the required rate of return.

54.1 Please confirm that Dr. Booth holds the same view today, or explain why not.

55.0 Reference: Prior Evidence of Dr. Booth

In the 2009 *TGI, TGVI and TGW ROE and Capital Structure Application* Dr. Booth responded to FEI-JIESC/BCOAPO/CEC IR 29.1 as follows:

62. Reference: Appendix G, page 1, Lines 17-20

Dr. Booth states, "Canadian utilities seem to be regulated…" [emphasis added] and "it appears that US utilities sometimes go several years between rate

hearings" [emphasis added] and "Canadian utilities also seem to make more use of deferral accounts." [emphasis added]

62.1. Please provide any studies Dr. Booth has performed to arrive at his conclusions.

62.2. Please explain how going several years between rate hearings would impact the level of risk as perceived by investors and the differential in return requirement required by investors.

62.3. Please provide all analyses that Dr. Booth has conducted to determine the relative proportion of the revenue requirements of Canadian utilities and U.S. utilities are covered by deferral accounts and the difference that would make in investor return requirements.

_____

62.1 This has been Dr. Booth's understanding as a result of answers to information requests by US witnesses such as Ms. McShane.

62.2 Regulatory lag increases risk.

62.3 Dr. Booth has not performed such an analysis. His remarks are based on the responses to information requests provided by US witnesses such as Ms. McShane.

55.1 Please provide any studies Dr. Booth has performed since giving the above responses in 2009 regarding the similarities or differences between how utilities in Canada and the U.S. are regulated.

55.2 Please confirm that Dr. Booth would still answer the above quoted 2009 IR 62.2 in the same way.

55.3 Please provide all analyses that Dr. Booth has conducted since responding to IR 62.3 in 2009 to determine the relative proportion of the revenue requirements of Canadian utilities and U.S. utilities are covered by deferral accounts and the difference that would make in investor return requirements.

56.0 Reference: Prior Evidence of Dr. Booth

In the 2009 *TGI, TGVI and TGW ROE and Capital Structure Application* Dr. Booth responded to FEI-JIESC/BCOAPO/CEC IR 29.1 as follows:

> ***65. Reference: Past Evidence***
>
> *65.1 Please confirm that in their written Evidence before the BCUC dated March 1994, Dr. Booth and Dr. Berkowitz stated:*
>
> > *"Investors are well aware that weather causes predictable fluctuations in the profitability of gas distributors. They are also aware that this component of the uncertainty in earned returns is random and can be diversified away by investors by including the stock in a portfolio of shares. For example, whether or not the winter is exceptionally cold or mild has no impact on the behaviour of the TSX300 index, whereas it may have significant impact on a gas distributor. From the investor's point of view, the random fluctuations in the price of a gas company's shares caused by warmer than usual weather in one part of the country is completely diversifiable. As a result, it should have no impact on the investors risk assessment of the firm or the investor's required return."*
>
> *65.1 Dr. Booth does not keep Evidence from that far back but he agrees with that view which he repeated in his own Evidence before the BCUC in 2005. Dr. Booth views weather risk as impacting financial market access through the interest coverage ratio that many gas utilities have in their bond indentures. As a result it is a capital structure issue rather than a risk and rate of return issue.*

56.1 Please confirm that Dr. Booth would still answer the above quoted IR 65.1 in the same way.

57.0 Reference: Past Evidence of Dr. Booth

The following table summarizes Dr. Booth's recommended Benchmark ROEs and their component parts as set forth in his evidence as filed with various Canadian regulatory boards over the period August 2009 to November 2012.

Date Filed	Board/ Client/ Company	Dr. Booth's Forecast Long Canada	Market Risk Premium/ Benchmark Utility Beta	Base Risk Premium (Midpoint) Over Long Canada	Flotation Cost	Adjustments to Base ROE and Reasons for Adjustments	Dr. Booth's Benchmark ROE
Aug-09	BCUC/ BC Utility Customers/ Terasen Gas	2010: 4.5%	5.00% 0.45-0.55	2.50%	0.50%	0.25% Margin of Error	7.75%
Jun-10	Régie/ IGUA/ Gazifère	2011: 4.5%	5.00-6.00% 0.45-0.55	2.775%	0.50%	0.5% Crisis Premium	8.25%
Jul-11	Régie/ IGUA/ Gaz Métro	2012: 4.5%	5.00-6.00% 0.45-0.55	2.775%	0.50%	0.325% Spread Adjustment (midpoint 25-40bp)	8.10%
Sep-11	NSUARB/ NSUARB/ Heritage Gas	2012: 4%	5.00-6.00% 0.45-0.55	2.775%	0.50%	0.5% Financial Crisis Premium	7.75%
Mar-12	NEB/ CAPP/ TCPL Restructuring	Restructuring: 2012: 3.3% 2013: 3.8%	5.00-6.00% 0.45-0.55	2.775%	0.50%	1.2% Credit Adjustment (.4%) Operation Twist (.8%)	7.80%
Aug-12	NSUARB/ NSUARB/ NSPI	2013: 3.0% 2014: 4.0%	5.00-6.00% 0.45-0.55	2.775%	0.50%	1.2% Credit Spread Adjust. (.41%) Operation Twist (.8%)	2012: 7.5% 2013: 8.5%
Nov-12	BCUC/ BC Utility Customers/ FEI	2013: 3.0%	5.00-6.00% 0.45-0.55	2.775%	0.50%	1.2% Credit Spread Adjust. (.4%) Operation Twist (.8%)	7.50%

57.1 Please confirm that the information in the above table is accurate, or revise as required.