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October 9, 2012

BRITISH COLUMBIA UTILITIES COMMISSION
GENERIC COST OF CAPITAL PROCEEDING EXHIBIT A-18

Ms. Diane Roy
Director, Regulatory Affairs – Gas
FortisBC Energy Inc.
16705 Fraser Highway
Surrey, BC V4N 0E8

Mr. Dennis Swanson
Director, Regulatory Affairs
FortisBC Inc.
Suite 100 – 1975 Springfield Road
Kelowna, BC V1Y 7V7

Dear Ms. Roy and Mr. Swanson:

Re: British Columbia Utilities Commission
Project No. 3698660/G-20-12
Generic Cost of Capital Proceeding

Commission Information Request No. 2

Further to Commission Order G-84-12, which established an Amended Preliminary Regulatory Timetable with respect to the above noted proceeding, enclosed please find Commission Information Request No. 2. In accordance with the Amended Preliminary Regulatory Timetable, please file your responses electronically with the Commission by Monday, October 29, 2012.

Yours truly,

Erica Hamilton

EC/dg
cc: Registered Parties
(BCUC-GCOC)

151.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 2.1.1, pp. 2-3; Question 97.1, pp. 223-224; Question 98.2, p. 232
Throughput and Risk to Electricity Rates (Step 2 Rate)

In response to BCUC IR No. 1 Question 2.1.1, the FBCU show that FEI's natural gas throughput would have to decrease by 76 percent based on 2009 natural gas and Step 2 electricity rates, and by 83 percent based on today's natural gas and Step 2 electricity rates.

FBCU also state that "natural gas prices are at their lowest levels in over ten years and current forecasts indicate that a tightening of the supply and demand balance will lead to higher prices in the future. With higher natural gas prices and rates, less throughput would have to be lost for FEI's distribution margin to increase so that its natural gas rates became equal to BC Hydro's Step 2 electricity rates." [Emphasis added]

The FBCU present Table 1: Throughput Decrease Required to Increase FEI's Distribution Margin. The table shows the Residential Commodity charge of $2.977/GJ in 2012 and $6.103/GJ in 2009 as well as other input assumptions.

151.1 Please repeat Table 1 under the following four scenarios where FEI's "throughput that would need to be lost (%)" are equal to: (i) 50 percent, (ii) 25 percent, (iii) 10 percent, and (iv) zero percent. Holding all other assumptions constant, what would be the required increase in the Residential Commodity (or natural gas commodity price)?

152.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 2.1.1, pp. 2-3; Question 97.1, pp. 223-224; Question 98.2, p. 232
Throughput and Risk to Electricity Rates (Step 1 Rate)

In response to BCUC IR No. 1, Questions 2.1.1, 97.1, and 98.2, the FBCU indicate that in practice the majority of residential customers would be at a blend of the Step 1 and Step 2 (electricity) rates for their space and water heating energy requirements, so a straight comparison of natural gas against the Step 2 rate does not provide a realistic picture. Smaller or more energy-efficient dwellings such as townhouses and condominiums may be capable of getting some or all of the energy need for space and water heating from BC Hydro's Step 1 block. The FBCU further state the Step 1 rate is a relevant comparator that must be considered.

152.1 At 2009 and 2012's natural gas and electricity Step 1 rates, please compute how much average natural gas throughput would need to be lost to drive FEI's distribution margin up so that its natural gas rates would become equal to BC Hydro's Step 1 electricity rate. Please show calculations and any assumptions in similar format as Table 1 on page 3 of BCUC IR No. 1 Question 2.1.1.

152.1.1 Based on electricity Step 1 rate and holding all else equal for year 2012, please compute the Residential Commodity (or natural gas commodity price) if FEI's "throughput that

would need to be lost (%)" are equal to: (i) 50 percent, (ii) 25 percent, (iii) 10 percent, and (iv) zero percent. Please show calculations and any assumptions in similar format as Table 1 on p. 3 of BCUC IR No. 1, Question 2.1.1.

153.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 3.2, p. 6; Question 19.1, p. 52
P/E multiples

In response to BCUC IR No.1, question 3.2, the FBCU provide P/E multiples of the TSX and Canadian Utilities Group in September 2009 and 2012. The Canadian Utilities Group multiples have risen significantly while the TSX multiples have fallen.

The graph in response to IR 19.1indicates that Utilities P/E multiples moved up to the TSX multiples in 2005 and are now significantly above the TSX.

153.1 Why do the FBCU believe this shift has occurred and is it anticipated to be a long-term phenomenon?

153.2 How does FEI account for this type of shift in market sentiment in its DCF analysis? How has Ms. McShane accounted for this in her three tests? If not, why not.

153.3 When was the last time such a large differential in P/E multiples occurred in Canadian Utilities favour and was it during a time of high perceived TSX risk? Please provide the data.

153.4 Does it indicate that Canadian utilities are lower risk than previously thought if investors are bidding up Canadian utility stock multiples so dramatically during this past period of investment risk?

154.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 4.1, pp. 8, 9
Cost of Capital for Benchmark FEI

The FBCU revised two tables in the respective Return on Equity/Capital Structure applications of 2005 and 2009. FEI also states in the response to IR 4.1 that the revised tables are not indicative of the differential that exists today given there are several applications pending and new proceedings in 2013 that will be addressing cost of capital, many of which will result in Utilities seeking increases to Equity Thickness and ROE.

154.1 The table showing the weighted Return Component on page 8 provides the title "2005 Table." Please confirm that the table shows 2012 data. Please add an additional column to indicate the date of the decision for the allowed ROE and capital structure.

154.2 Footnotes (2) and (5) indicate a higher than allowed ROE earned by the utilities, at 10.5 percent for EGD and at 10.9 percent for Union Gas. Are these allowed ROEs similar in nature to the Actual Post-ESM for FEI as indicated in the table in Response to BCUC IR 95.1?

154.3 The table showing the Advantage to FEI (bps) on page 9 provides the title "2009 Table." Please confirm that the table shows 2012 data.

154.4 Do the FBCU agree that until decisions are issued with respect to applications seeking increases to equity thickness and ROE, the data in the table are indicative of the differential that exists today?

155.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 9.1, p. 24; Question 47.5, p. 110 and Attachment 47.5c
Allowed Returns on Equity for Canadian and U.S. Utilities

The updated chart shows the trends of the respective Canadian and US utilities from 1990 to 2011. The sample of Canadian utilities is the same as that which appears on Ms. McShane's Schedule 3, page 2.

The response to IR 47.5 provides a list of allowed ROEs of the US sample companies, which shows an overall declining trend in allowed ROEs for most of the companies.

155.1 Please comment on the reasons for this declining trend.

155.2 The chart shows a kink in 2010 for Canadian utilities. Please explain the kink.

156.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 15.1, p. 41
Cost of Debt

In response to BCUC IR No.1, Question 15.1, Mr. Engen pointed out that two of the issuers (Enbridge and Emera) in the bond spread charts are publicly traded "holding companies" of regulated utilities and CU Inc. is a "holding company" of ATCO Gas and Pipelines Ltd. and ATCO Electric Ltd.

156.1 Please provide a revised table of the credit ratings for the specified sample of companies and the credit ratings for their related holding companies or related regulated principal operating company, as applicable. Please ensure to include Fortis Inc. as one of the related companies. If there are multiple levels of holding companies, please include the holding companies that have outstanding market related debt.

156.2 Based on the information from the revised table, are the credit ratings for holding companies lower than their related regulated operating companies?

156.3 For the Canadian sample of utilities, please provide a graph of the 30-year credit spread for the holding companies and their related regulated operating companies, or holding company as applicable. Please ensure to include Fortis Inc. as one of the related companies.

157.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 19.4, p. 55, Question 35.1.2, p. 93
P/E ratios

In response to BCUC IR No.1, Question 19.4, Mr. Engen states: "In the case of the Canadian Utilities with strong recent earnings growth and 2012-2014 consensus EPS growth forecast of over 10%, it is not possible to conclude whether the rising P/E ratio for the sector is a result of a lower cost of equity."

157.1 Please differentiate the impact of historical earnings growth versus anticipated earnings growth and their impact on the P/E ratio.

157.2 Please elaborate on the difference between the absolute earnings growth rate and the change in the earnings growth rate and their associated impacts on the P/E ratio.

157.3 Please provide the historical earnings growth percentage of the Canadian Utilities Group and the S&P/TSX for each year since 2008.

157.4 Please provide the prior historical consensus EPS growth forecasts, and BMO's historical consensus EPS forecasts, for the Canadian Utilities Group and the S&P/TSX for each year since 2008, if available.

157.5 Figure 9, on page 27 of Mr. Engen's original evidence displays a pause or deceleration of earnings growth in the most recent period for Canadian corporate earnings. If the rate of change of earnings growth also affects the P/E ratio, could the effect of decelerating growth also cause a decline in the P/E ratio of the S&P/TSX?

158.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 21.1, pp. 61-62
P/E Multiples

The graph indicates that FEI can borrow money significantly cheaper than Canadian Generic 'A' companies.

158.1 Does this indicate that FEI's regulatory and overall business risk is significantly less than other 'A' rated companies?

158.2 Why do FBCU think the spread has continued to grow?

159.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 23.2, p. 65-66
Cross Border Issuance

The response provides a table of equity issuance.

159.1 The table lists the amount of securities "Offered Outside Canada" for a number of Canadian companies. Do these amounts represent securities that were offered both outside and within Canada at the same time?

159.2 If the amounts of securities "Offered Outside Canada" are not exclusively outside Canada, please provide detail of the amounts or proportions that were actually placed within Canada versus outside Canada?

160.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 25.1, p. 71
Acquisition Price to Book / Rate Base to Book Value Ratios

The response to BCUC IR No.1, Question 25.1, states that: "This, of course, ignores other tools available to the acquirer which can increase acquisition returns.

160.1 Specifically, what other tools are available to the acquirer of a regulated utility to increase acquisition returns?

161.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 28.2.1, p. 79; and Attachment 47.3, Moody's Special Comment on Regulatory Frameworks – Ratings and Credit Quality for Investor-Owned Utilities, Appendix A
Pension Fund Foreign Investment

The response to BCUC IR No.1, Question 28.2.1, states: "Again, as disclosed in [Puget Energy's] 10-K, the utility "rate making process has a delay between incurring expenses and their recovery in rate base." Mr. Engen understands there is currently a two-year regulatory cycle in Washington with the result that recent substantial capital expenditures (2011- $484 million) and expenses, which put downward

pressure on the company's earnings, are not recoverable until after the following regulatory approval proceedings, at which time the company's earnings would increase."

Appendix A of Moody's Special Comment on Regulatory Frameworks – Ratings and Credit Quality for Investor-Owned Utilities (Attachment 47.3 to the FBCU IR Response) indicates that Moody's Factor 1 (Regulatory Framework) Score for Puget Sound Energy is Baa. Moody's awards FortisBC a Regulatory Framework Score of A.

161.1 Is the existence of regulatory lag in the regulation of Puget Sound Energy a principal reason for the Baa Regulatory Framework rating for Puget Sound? If not, is it possible to outline other significant factors that would affect the rating?

161.2 Is the relatively shorter duration of regulatory lag in the regulation of FEI a reason for its relatively higher Moody's Regulatory Framework than Puget Sound Energy's?

161.2.1 Is this an example of how Canadian regulators provide better risk support to their utilities compared to U.S. regulators?

162.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Questions 28.2 -28.3, pp. 78-80
Cross Border Issuance, and Question 47.5, p. 110, Attachment 47.5b
Cost of Capital

The response to 28.2.1 states that achieved ROEs for Puget Sound Energy were lower than allowed ROEs in prior years, and that recent performance has been affected by "regulatory lag." With respect to the desirability of US utility investments, the response to IR 28.3 states that "Determining which is more attractive, a higher allowed ROE or a lower ROE, is a matter of expected returns. Higher allowed ROEs with greater achieved ROE variability are more attractive than lower allowed ROEs with lower achieved ROE variability if the former produces a higher expected return than the latter."

162.1 Footnote 4 refers to the weighted-average outcome as the "expected return." Is this the definition of "expected return?" Does this definition include time horizon and total holding period returns? Does this definition include the separate use of arithmetic or geometric returns?

162.2 What proportion of revenues and expenses of Puget Sound Energy are covered by deferral or adjustment mechanisms?

Attachment 47.5b provides a table of historical achieved ROE's for the U.S. utility comparables provided by Ms. McShane.

162.3 There appears to be a number of years in which the achieved ROEs of some of the US companies have significantly fluctuated. For example, AGL Resources' achieved ROE declined from 13.0% to 6.7% during 2010-2011; Alliant Energy Corp's achieved ROE drifted from 9.0% down to negative 0.3% during 2003 – 2005, and more recently moved from 10.5% down to 4% during 2008-2009; Atmos Energy Corp's achieved ROE declined from 11.1% to 8.7% during 2003-2004; Consolidated Edison declined from 11.5% to 8.5% during 2002-2003; Integrys Energy declined from 10.5% to negative 2.4% during 2007-2009; WGL Holdings Inc. declined from 11.0% to 5.0% during 2001-2002; Xcel Energy Inc. declined from 13.3% to 6.8% during 2001-2004, with one year of a large negative ROE within that period. If possible, please provide reasons for the large fluctuations. To what extent are the fluctuations due to "regulatory lag?"

162.4 Please comment on the variability of the achieved ROEs of these US companies, in conjunction with the achieved ROE experience of Fortis Energy Inc.

163.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 31.3, p. 84
Market Required Returns

Question 31.3 asks if the returns on equity of 10 percent that Canadian pension funds seek are being currently achieved, and whether these return targets have been reduced. The response to the question states that the return targets have remained the same.

163.1 Please clarify whether the target return stated above relates to direct equity investments or public equity investments.

163.2 Please provide the definition of direct equity investments and contrast this to publicly traded equity.

163.3 Do investors demand different returns when they enter into direct equity investments versus publicly traded equity? If they are different, please describe the reasons for this difference.

163.4 What is and has been the difference in desired returns between these two types of investing, both currently and over the last 10 years?

163.5 What does this imply about the desired returns of publicly traded equity of energy infrastructure assets?

164.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 41.1, p. 100; and Attachment 47.3 Moody's Special Comment on Regulatory Frameworks – Ratings and Credit Quality for Investor-Owned Utilities.
Acquisition Price to Book / Rate Base to Book Value Ratios

The response to BCUC IR No.1, Question 41.1, states that: "Ms. McShane is of the view that the benefits to a score card approach to comparing business risk are limited for the reasons set forth at lines 1040 to 1045 of her testimony."

Moody's Special Comment on Regulatory Frameworks – Ratings and Credit Quality for Investor-Owned Utilities, (Attachment 47.3 to the FBCU IR response), sets out in its Table 1 a ratings methodology for regulated electric and gas utilities, as shown in the table below:

Table 1
Regulated Electric and Gas Utility Rating Methodology

KEY RATING FACTORS AND WEIGHTINGS
1. Regulatory Framework – 25%
2. Ability to Recover Costs and Earn Returns – 25%
3. Diversification – 10%
4. Financial Strength and Liquidity – 40%

164.1 Notwithstanding Ms. McShane's comments at lines 1040 to 1045 of her evidence, would she agree that the Moody's ratings methodology represents a basic scorecard approach to business risk? If not, why not?

165.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 44.1, p. 104
Business Risk

In the response to BCUC IR No.1, Question 44.1, FEI notes that following the 2010 LTRP submission it was directed to adopt an end use methodology for the next long term forecast. The intention was to be able to more accurately model changing use rates for different end uses, and then to be able to design scenarios around those end uses.

165.1 For each table in Attachment 44.1, please present it with the tables in the 2010 LTRP (Exhibit B-5, Response to BCUC IR 53.3 Attachment) and calculate the variances (volume and percent difference). Please comment on the variances.

165.1.1 The tables provided in attachment 44.1 appear slightly different from those in the actual 2010 LTRP. If the tables provided in Attachment 44.1 are from an update filed during the review of the 2010 LTRP, please identify the source of the update.

165.1.2 Please provide all of section 4 "Market Trends and Energy Forecasting" and Appendix B-3 from the 2010 LTRP.

166.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 47.4, pp. 109-110
Cost of Capital

The response provides a table of comparable US utilities that are currently used and that have been used in the past, and the reasons for the changes. A comparison of the 2005 and 2012 proceedings samples shows that 6 of the 9 changes were made due to changes in the credit risk or business risk. A comparison of the 2009 and 2012 proceedings samples shows that 10 of the 11 changes were made due to change in the credit or business risk. All the remaining changes were made due to merger related activity.

166.1 Please confirm that the changes to the samples over 2005, 2009 and 2012 are usually due to changes in business or credit risk.

166.2 Please comment on the inherent survivorship bias of the samples over time and the effect on returns demanded by equity investors.

166.3 Does the large number of changes between the 2009 and 2012 samples indicate a higher degree of risk in the US utility industry versus Canada? If so, why does the US industry display the higher risk?

167.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 49.4, p. 115
Deferral accounts

Ms. McShane states that "Many other North American utilities have mechanisms that mitigate forecasting risk."

167.1 Please identify those US utilities that have an equivalent and greater level of deferral account support to FEI? List the deferral accounts for those US utilities and their percent impact on those utilities' revenue requirements.

168.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 52.1, p. 120
Fair ROE for FEI as Benchmark BC Utility

The response to BCUC IR No. 1, Question 52.1 states that: "When the regulatory paradigm is based on historical costs of the assets, but the allowed return represents a capital market-derived return applied to the book value of the equity, with the underlying premise for the allowed return is that the utility market value should equal book value, the resulting prices will understate the real economic costs of providing utility services and send price signals to customers that encourage overconsumption of scarce resources."

168.1 Based on the above statement, is it Ms. McShane's view that if a utility is purchased for a premium over book value, in order to reflect the 'real economic costs of providing utility services,' the new rates should be based on a rate base that includes the acquisition premium? Why? If not, why not?

169.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Questions 56.3 and 56.4, pp. 135-136
CAPM judgment

Ms McShane states that "It is possible that investors' recent experience in the equity markets … has coloured their outlook" and that CAPM "application is particularly problematic under current market conditions …".

169.1 How has Ms. McShane accounted for this in her 2012 CAPM analysis?

170.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 58, p.140
DCF judgment

Ms. McShane states that the DCF test results for Canadian utilities range from a high of 11.2 percent to 8.6 percent.

170.1 Isn't this range so large that it makes the DCF analysis suspect? Why or why not?

171.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 60.1, p. 143
Fair ROE for FEI as Benchmark BC Utility

The response to BCUC IR No. 1, Question 60.1 states that the CAPM "…does not focus on the fundamental risks related to the underlying real assets, and the risk that capital invested in real assets will not earn returns that could have been achieved by investing in comparable risk real assets and the risk that the capital invested in real assets will not be recovered."

171.1 To what extent is the risk that the capital invested in real assets will not be recovered a concern for utility investments that, once they have been allowed into rate base by regulators have a low probability of not continuing to earn a return, relative to investments in assets by unregulated companies?

171.2 Doesn't the regulatory process of issuing a CPCN or approving a utility capital spending plan mitigate this risk except for the risk of imprudent cost control by the utility?

172.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 62, p. 145-146
Arithmetic and Geometric Averages

In response to a query on the difference of standard deviations of returns of equity markets and U.S. ROE decisions, Ms. McShane states that the two standard deviations are unrelated. The preamble to the original question notes that arithmetic averages are used to compensate for high volatility.

Exhibit B1-9-6, Appendix F, pages 65 to 119 of Ms. McShane's original evidence includes the use of market based equity market risk premium tests, using arithmetic averages of returns, to arrive at an estimate for a fair ROE.

172.1 Market information appears to be used as a test to relate equity market returns to allowed book value equity returns. Please provide the reasons that the associated standard deviations of those two types of data are unrelated.

173.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 66.4, p. 153
Risk Adjusted Equity Market Risk Premium

The response quotes from Ms. McShane's evidence on page 93 which states: "The intercept in the equation should, in principle, represent the risk-free rate."

173.1 What factors or concerns affect the adoption of the intercept in the equation as a practical representation of the risk-free rate, rather than one "in principle?"

173.2 What factors affect the accuracy of the intercept as an estimation of the risk-free rate?

174.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 71.1, p. 158
Risk Adjusted Equity Market Risk Premium

The response notes that Ms. McShane acknowledged that on page 111 of her testimony, that "analysts' earnings growth forecasts as a measure of investor expectations [have] been questioned by some Canadian regulators, as some studies have concluded that analysts' earnings growth forecasts are optimistic." The response then states that "…she tested this proposition with respect to the forecasts for her own sample, and found that that there was no support for this proposition."

174.1 How, specifically, did Ms. McShane test this proposition concerning the forecasts for her own sample?

Research by Bradshaw *et al*., summarized in the Investor Relations Quarterly stated that their research "… showed that sell-side analysts' forecasts and recommendations were most optimistic for firms that were issuing securities and least optimistic for firms that were repurchasing securities. We found that the observed bias is pervasive and exists in analysts' short-term earnings forecasts, long-term earnings forecasts, stock recommendations and target prices. Additionally, the impact of investment banking pressures on analyst research integrity extended to financing activities in both debt and equity securities. [Full article attached as Exhibit A2-24]

174.2 To what extent does Ms. McShane agree with the proposition that optimism bias may exist to a greater or lesser extent depending on the context and motivations of the analyst?

175.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 78.1 p. 170; Flotation Costs and Financial Flexibility

175.1 Please describe the various elements of flotation cost and the relative magnitude of these costs for a typical company that issues shares in similar sizes and patterns as Fortis Inc.

175.2 Please illustrate an example of flotation costs, including discussion of the effects of market value of equity issuance, book value of equity, returns to the investor, return on investment for the company, and accounting principles.

175.3 Please compare and contrast the treatment of flotation related costs between equity and debt instruments.

175.4 What have been the actual equity flotation costs, expressed in dollars and percentage of offering price/amounts, in each of the last 10 years, for Fortis Inc and any predecessor entitiles that issued equity?

176.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 73.5, p. 162, DCF Cost of Equity

In response to a query on the risk premium between holding companies and operating companies, the response states the following: "This "chain of command" flowing upward from operating company to holding company is unique to debt. In the case of equity, the chain of command flows downward, from holding company to operating company. Consequently, it does not follow that a lower credit spread for the operating company than for the holding company translates to a lower equity risk premium for the operating company than for the holding company. Whether a lower equity risk premium is warranted for an operating company is a function of the lines of business and degree of business risk diversification of the holding company vs. the operating company and the holding company leverage measured in market value terms."

176.1 Please compare and discuss the relative business risks of the holding company, Fortis Inc. and the operating company FortisBC Energy Inc. Does Ms. McShane consider one entity to have more business risk than the other? Does Ms. McShane consider the holding company to be more leveraged or have higher financial risk than FEI?

176.2 If we assess the relative risk of the equity of the operating company and holding company using the stand alone principle, how would this affect the "chain of command?"

176.3 For illustrative purposes, please assume that there were two distinct and equal 50 percent holders of a regulated operating company's equity, of which one holder was a holding company that had its portion of the operating company equity as the sole investment, as well as some holding company level debt. The other holder was a private investor. Please discuss the relative risk of the common equity of the holding company and the common equity of the operating company held by the private investor.

176.4 Is it possible to disentangle the effect of the three factors mentioned (lines of business, business risk diversification, and leverage) on the debt risk premium?

176.5 Does Ms. McShane use credit spreads to risk adjust the cost of equity in the Comparable Earnings Test?

The response further states: "In any event, for Ms. McShane's U.S. utility sample, the reported debt ratings are the ratings for the holding company unless the holding company itself does not have a

separate credit rating. As the debt ratings of the holding companies are similar to the ratings of the typical Canadian gas or electric operating utility, there is no basis to even consider an adjustment to their cost of equity."

176.6 Please provide a long term graph of long bond credit spreads for the holding companies and their related regulated operating companies of the U.S. utility sample, if available.

176.7 Do holding companies historically have a higher credit spreads/credit risk premiums than their associated operating companies in the U.S. Please explain why or why not.

176.8 Using the attachments provided in FBCU's evidence and responses, the following table of ratings for the US companies has been prepared. Please confirm the accuracy of the information in the table.

Publicly Traded Entity - Subsidiary if parent rating not available	Moody's Debt Rating
AGL Resources	Baa1
Alliant Energy Corp	Baa1
Atmos Energy Corp	Baa1
Consolidated Edison Inc.	Baa1
Integrys Energy Group Inc.	Baa1
Northwest Natural Gas	A3
Piedmont Natural Gas	A3
Southern Company	Baa1
Vectren Corp - Vectren Utility Holdings Inc.	No rating - A3
WGL Holdings Inc - Washington Gas Light Co.	No rating - A2
Wisconsin Energy Corp	A3
Xcel Energy Inc	Baa1
Fortis Inc. - FortisBC Holdings Inc - FortisBC Energy Inc	No rating - Baa2 - A3

177.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 75.18.1 p. 170
Flotation Costs and Financial Flexibility

The response states that financial flexibility is comprised of three components, 1) flotation costs 2) a margin for capital market conditions and 3) recognition of the fairness principle (as market values diverge from book values).

177.1 Does a newly formed company that effectively issues all its shares at equivalent market and book values require any adjustment for the fairness principle? Should a recently formed company, or new capital that has a price to book ratio of 1, earn the same book value based ROE as a mature company with a much higher price to book ratio?

177.2 Does a mature company with a stable equity base and ample income retention capacity for future equity needs require much adjustment for flotation costs?

177.3 Please confirm that the DCF market based test incorporates current market prices and current market expectations to derive an Investor's desired return.

177.4 Does a market based test, such as DCF, provide a market based estimate of cost of capital that already includes the current investor's consideration of prior flotation costs? If not, why not?

177.5 Why would an existing investor that bought shares in the secondary market require higher compensation for flotation costs that is implied by a market based DCF test?

177.6 Does the capital attraction element of the fair return standard require the total existing equity base to recover flotation costs over and above the DCF market based implied cost of equity? Should flotation costs be apportioned to the incremental portions of new equity capital?

177.7 How can the three different components of financial flexibility be fairly allocated between existing equity capital, new equity capital or internally funded equity capital?

178.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 87.1(b), p. 192, Comparable Risk Utilities

The response to BCUC IR No. 1, Question 87.1(b) states that: "As discussed in Answer 75, page 28 of his written evidence, I/B/E/S reports the analysts' EPS growth forecasts and provides the mean and standard deviation of the forecasts received for each firm."

178.1 For the firms that Dr. Vander Weide used in his DCF analysis please provide a table showing the mean and standard deviation of the forecasts for each firm.

179.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 88.3, p. 195 Comparable Risk Utilities

The response to BCUC IR No. 1, Question 88.3 states that: "In recent years, Dr. Vander Weide has also recognized that the average Value Line utility beta frequently understates the beta derived from the historical risk premium ratio calculated as shown in Exhibit 14."

179.1 Please elaborate on the reasons for Dr. Vander Weide's recognition that the average Value Line utility beta frequently understates the beta derived from the historical risk premium ratio. Does Dr. Vander Weide mean that it is a recognized fact that he adopts or that in his opinion the Value Line Beta understates the beta?

179.2 Why does Dr. Vander Weide believe it to be the case that the average Value Line utility beta frequently understates the beta derived from the historical risk premium ratio as he calculates it, as opposed to the alternative hypothesis that the historical risk premium overstates the beta relative to the Value Line beta.

180.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 4.1, p. 9, and Question 90.1, p. 198 Allowed Canadian Utility ROEs and Common Equity Ratios

The response to BCUC IR No.1, Question 4, provides a table of 2009 allowed ROEs and common equity ratios. The response to question 90.1 provides current data.

180.1 Please explain why FBCU consider FEI to be higher risk than Enbridge Gas or Union Gas?

180.2 Have Enbridge Gas, Union Gas or FEI faced any difficulties in accessing debt markets in the past

10 years as a result of their common equity ratios? If yes, please provide a list of examples.

180.3 Did FEI pay significantly higher premiums to acquire long term debt compared to Enbridge Gas or Union Gas in the past 10 years? If so, please provide a list of examples.

180.4 Please provide a comparison table showing FEI, Enbridge Gas and Union Gas credit spreads in the long term debt markets since 2009.

181.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 93.1.1, p. 204
Comparable Risk Utilities

The response to BCUC IR No. 1, Question 93.1.1 states that Concentric selected its gas and electric utility proxy groups based upon screening criteria, to assemble a group of like risk companies and sets out its screening criteria in the six points following. The response also states that Concentric also examined the relative risk profiles of the Ontario and proxy group utilities on a variety of operating and financial performance metrics, to assess the relative risk profiles of the groups compared to that of the subject company.

181.1 Can Concentric elaborate on the reasons for deciding that these criteria were the important criteria to be used for screening the proxy group companies?

182.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 96.1.1, p. 219
Deferral account impact on 2011 revenue requirement

The table identifies that 75.3 percent of FEIs revenue requirement is protected by deferral accounts.

182.1 Please provide the actual and approved operations and maintenance expenses (line 2) for the past 10 years.

182.2 Given that the majority of utilities use straight line depreciation for its assets in service, isn't depreciation and amortization expense (line 4) largely a known cost for each year?

182.3 Doesn't the BCUC CPCN treatment which allow those projects to enter rate base the year after its completion help to ensure that the forecast depreciation and amortization expense do not vary significantly from forecast?

182.4 Please provide the aggregate actual and approved depreciation and amortization expenses for the last 10 years. For any variances greater than 3 percent in any year, please explain the variances.

182.5 Please confirm that the changes in income tax rates (line 6) are trued up through the use of deferral account mechanism.

182.6 Please confirm that in years when FEI was under PBR that 50 percent of variances in ROE (line 9) were covered by revenue sharing. Does FEI anticipate returning to PBR if amalgamation is approved?

182.7 The table on page 212 indicates that FEI over earned its approved ROE in every year except 2010, when it only slightly missed its approved ROE. Wouldn't one expect that FEI should have under earned its approved ROEs over time by about as much and as often as it over earned?

183.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 96.1.1, p. 220

Depreciation and Amortization Risk

In Table 3 on page 220, FEI states that there is a high overall risk assessment for depreciation and amortization expenses since 0 percent of this category is covered by deferral accounts in 2011.

183.1 Please explain why the risk assessment is high when you consider that: (i) Table 3 indicates that the actual amortization of deferrals is set to the approved amounts which results in no variance between forecast and actual amortization, and (ii) variances between forecast and actual depreciation expenses have a short term impact since rate base is trued up at the beginning of each test period (FEU Reply Argument p. 29, FEU 2012-2013 Revenue Requirements Application).

184.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 108.1, pp. 255-258
Market Shifts – Changes in Energy Use – Higher Risk Status since 2009

In response to BCUC IR No. 1 Question 108.1, the FBCU indicate that making it more difficult to attach customers is problematic and counterproductive. The FBCU state: "The current main extension test (MX Test) does not result in a subsidy to low use residential customers. The current MX Test sends economic signals to residential customers that are choosing to add a small number of low demand natural gas appliances as these customers are more likely to have to provide a contribution in aid of construction (CIAC) than the same customers choosing to add a larger number of relatively high demand natural gas appliances. For example, a builder/developer that only added natural gas fireplaces to dwellings in her project would be more likely to pay a CIAC than if she added natural gas heat and hot water appliances."

184.1 Please clarify whether the CIAC is a mechanism to mitigate risk when FEI is facing declining annual use rates from its new and existing customers.

184.2 Please discuss the merits of implementing tighter CIAC policies for developers (e.g. partial/fully refundable contributions) to account for market shifts risk and low customer use rates.

On page 258, the FBCU state that "Simply making the MX Test more stringent by raising the PI threshold would be counterproductive for customers as it would result in more customers needing to provide a CIAC and likely choosing not to use natural gas thereby putting upward pressure on rates and creating potential equity issues among groups of customers."

184.3 Do the FBCU agree that attaching low use customers would also put upward pressure on rates if main extension costs exceed revenue? If not, please explain why not.

185.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 111.1, p. 264
Benchmark Utility

185.1 Please describe the considerations used in determining a benchmark utility, presented by Ms. McShane in the 2010 Enbridge Gas New Brunswick cost of capital proceedings.

186.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 140.0, pp. 333-334
Debt Related Matters

In response to BCUC IR No.1, Question 140.1, the FCBU provide an example of a separate class of service within a larger regulated utility and state that: "TES projects, such as Delta School District and Tsawwassen Springs, depending on outcome of AES Inquiry, may be projects within a separate class of service of FEI, although they currently reside in FAES."

186.1 For regulated TES projects residing in FAES, would the FBCU still describe them as separate class of service within a larger regulated utility? If not, how would the FBCU describe them?

186.2 Hypothetically, if regulated TES projects were to remain in FAES in the future, do the FBCU agree that deemed debt would also be appropriate for these regulated TES projects? Why or why not?

In response to BCUC IR No.1, Question 140.1, the FCBU cite Fort Nelson and FEW as cases where deemed debt makes the most sense.

186.3 Please confirm that "Option 1 – Assign a credit rating" could also be used to determine the deemed interest rate for Fort Nelson and FEW. If not, why not?

In response to BCUC IR No.1, Question 140.2.1, the FCBU state that: "The factors in assessing whether the Utility would be able to raise the requisite debt in a cost efficient manner at the desired terms will include financial metrics such as asset base or enterprise value, which are typically used to assess size."

186.4 Please explain how the FBCU would apply this evaluation approach to the following TES projects: 1) Delta School District; 2) Tsawwassen Springs; and 3) Marine Gateway.

187.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 141.5.2, p. 339; Question 141.12, p.345
Deemed Interest Rate

On page 339, the FBCU indicates that "subjectivity can be reduced by first attempting to identify proxy companies that are engaged in similar industries or lines of business."

187.1 Please identify which proxy companies are engaged in the utility industry and which are engaged in similar industries?

On pate 345, the FBCU state that "if there were a 20-year contract, then the appropriate deemed term should be 20 years"…and "the FBCU believe that the deemed cost rate should remain unchanged for the deemed term of the debt."

187.2 Please comment on whether the deemed term and deemed cost rate should change if capital injections, such as for sustaining capital / capital replacements, are required during the term of the contracts.

188.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 141.0, pp. 336-347
Basis for Calculating Deemed Interest Rate

In response to BCUC IR No.1, Question 141.2, the FBCU provide a hypothetical example of how to calculate the deemed interest rate, which includes an Issuance Fee. In the hypothetical example, the annualized issuance fee is 0.05 percent.

188.1 In practice, if the FBCU needed to calculate a deemed interest rate that would apply to the long-term portion of the deemed debt of a small utility without third-party debt, please explain exactly how the FBCU would calculate a reasonable issuance fee. Please provide the supporting Excel live spreadsheet with formulas if one is used.

188.1.1 Specifically, what are the determinants of the issuance fee and why?

188.1.2 Would the size of the small utility or project affect the issuance fee?

In response to BCUC IR No.1, Questions 141.5.1 and 141.5.2, the FBCU state that: "The more subjective component is determining the group of issuers that are viewed as comparable, and the industries they are drawn from" and further that "[t]he subjectivity can be reduced by first attempting to identify proxy companies that are engaged in similar industries or lines of business."

188.2 Please complete the following table:

Circumstances for which deemed debt is appropriate (per FBCU's response to BCUC IR No. 1, question 140.1, p. 333):	**Please identify the comparable industries/lines of business for each circumstance described. Why?**
1. Separate division within a larger regulated utility: e.g., Fort Nelson	
2. Separate class of service within a larger regulated utility: e.g. TES projects such as Delta SD and Tsawwassen Springs	
3. Regulated subsidiary within a larger corporate organization: e.g., FEW	

188.3 For each of the circumstances described in the table above, would the FBCU view the following industries as comparable, and why?

a) Power
b) Energy Infrastructure
c) Telecommunications

In response to BCUC IR No.1, Question 141.6.1, the FBCU state that: "In general, however, given the current level of interest rates, and the fact that an embedded rate incorporates the cost of past debt issuances, <u>a current deemed cost of debt is likely to be higher than the actual (market) cost of debt for that utility</u>." [Emphasis added]

188.4 Regarding the underlined phrase above, do the FBCU mean to say that the embedded cost of debt is likely to be higher than the actual (market) cost of debt? If not, please clarify what the FBCU meant to say.

In response to BCUC IR No.1, Question 141.8, the FBCU state that: "On the other hand, such [alternative energy] projects are being financed from a pool of debt raised by a single issuer, as it is inefficient and too costly for each project to raise funds on its own. The use of the embedded cost implicitly recognizes that, typically, when new funds are raised by an issuer, those funds are not colour-coded for, and traced to, a particular project or service. While embedded cost rates are likely to deviate from market rates of interest at any given time, due to issuance timing, where the issuer's cost of debt is unlikely to be measurably affected by the financing of projects, using an embedded cost of debt is an administratively efficient way to allocate debt issued by a single regulated entity, allows the benefits that issuing all debt centrally to be shared, and provides a reasonable degree of assurance that the regulated entity that raises the debt will be able to recover its actual incurred costs of debt."

188.5 In the case of FAES' projects such as Delta SD, Tsawwassen Springs and Marine Gateway, for which a deemed interest debt rate has been calculated using "Option 1 – Assign a credit rating," please identify the entity who is raising the debt that will be used to finance these projects.

188.5.1 If the issuing entity is FEI, how would the actual incurred cost of debt rate on the pool of debt used to finance these projects be determined? Would the more recent long-term debt issue be the most representative debt rate? Why or why not?

188.5.2 If FEI's actual incurred cost of debt rate is higher than the deemed interest cost of debt rate allowed in Delta SD (5.37%), Tsawwassen Springs (5.01%) and Marine Gateway (5.37%), which regulated entity pays for the difference?

There was an error in BCUC IR No.1, Question 141.9. Please provide the FBCU's response to the corrected BCUC IR, which reads as follows:

188.6 Given the scarcity of BBB-rated utilities in Canada that can be used as proxy for the TES class of service, and the possibility that utilities with BBB rating be upgraded/ downgraded at some point, please comment on the pros and cons of the following methodology to calculate the deemed long-term debt rate for TES projects:

- Step 1: Obtaining the yield on an appropriate Government of Canada bond as the benchmark;
- Step 2: Obtaining the bond yield spread between the Government of Canada bond benchmark and a high grade utility (A or A low utility) and adding it to the rate in Step 1;
- Step 3: Obtaining the spread between BBB-rated <u>utility</u> bond spreads and A-rated <u>utility</u> bond spreads. This step could be looking at historical data (e.g., two most recent years) to have more data points. Then, adding this spread between BBB and A-rated <u>utility</u> bond spreads to the rate calculated in Step 2.

In response to BCUC IR No.1, question 141.10, the FBCU state that: "The term of debt can be matched to the term of a contract or a term that represents the longer-term nature of the assets, i.e., long-term assets are financed with long-term debt. In the FBCU's view, the deemed debt rate should be fixed to match the selected term. The FBCU do not see any pros with annual varying the imputed cost of debt for what in principle should be viewed as a fixed-rate debt instrument. Varying a long-term debt rate annually potentially exposes the issuer or the customer to avoidable interest rate risk."

188.7 Would the FBCU not agree that one "pro" of varying annually the deemed debt rate would be a fair treatment of the utility and the customers in both declining and rising interest rate environments? If not, why not?

188.8 If, in approving the rates for a regulated thermal energy project, the Commission were to fix the deemed debt rate to match the term of the contract or a term that represents the longer-term nature of the assets, say 20 years, please confirm that under no circumstances would the regulated entity carrying the project come back to the Commission to request an increase in the deemed debt rate.

188.8.1 If not, please explain which specific circumstances could justify the regulated entity coming back to the Commission to request an increase in the deemed debt rate, before the end of the previously approved 20-year term.

In response to BCUC IR No.1, Question 141.11, the FBCU state that: "With respect to TES projects, the FBCU are of the view that an individual TES project will likely not have a significant business risk difference from other TES projects. The FBCU believe that it is reasonable, in order to achieve regulatory efficiency and streamline the regulatory process for these projects, to consider utilizing consistent capital structures, equity risk premiums and designated stand-alone credit ratings for each project that falls within the TES class of service, when determining the specific debt for such projects."

188.9 Please confirm that, in the FBCU's view, all TES projects, whether carried through by the FBCU, FAES, Corix or River District Energy Partnership Limited, should have the same capital structure, equity risk premium, and designated stand-alone credit ratings in order to achieve regulatory efficiency. If not, why not?

189.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 143.0, pp. 349-354
Portions of Short-Term and Long-Term Debt

In response to BCUC IR No.1, Question 143.2, the FBCU state that: "For example, short-term financing in FEI's capital structure averaged 4.6% at year-end over the past 5 years and reached a low of 0.1% and a high of 9.4% at year-end December 31 2011 and 2008, respectively . FBCU speculate that short-term financing (floating rate) could range from 0-10% as seasonality, gas prices, rates and capital expenditures impacts may vary the amount."

189.1 In contrast to the example cited in the preamble, short-term financing in the capital structure of FEVI and FEW exceeded 10% respectively in eight and nine years of the 2002-2012 period, and in up to four years for Fort Nelson and FortisBC Inc. Given this reality, please explain why the FBCU would speculate that short-term financing would not exceed 10 percent?

In response to BCUC IR No.1, Question 143.3, the FBCU provide tables for each of the utilities within the FBCU group with information on short-term and long-term debt, common equity and preferred shares.

189.2 Please add a line at the end of each table that provides the average across each of the eight columns. In doing so, please copy in the new response the entire table provided in response to BCUC IR No.1, question 143.3 and add the average line.

190.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 144.4, p. 356
Deemed Interest Rate for Short Term Debt

The FBCU state that "To estimate the short-term debt rate for Ontario Electricity Distributors, the OEB obtains up to six quotes. If it obtains six quotes, it discards the highest and the lowest and uses the average of the remaining four. If less than four are obtained, it uses the average of all the quotes it obtains." [Emphasis Added]

190.1 The FBCU indicate that the approach used by the OEB is reasonable. Should there be a minimum number of quotes obtained? Why or why not?

191.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 144.5, p. 357
Deemed Interest Rate for Short-Term Debt

In response to BCUC IR No.1, Question 144.5, the FBCU state that: "The formulaic approach taken by the OEB is an efficient way of estimating a deemed short-term debt rate for the types of utilities referenced in the question. However, the OEB methodology is premised on a single debt rating, a short-term debt rating of R1-low, which generally maps to long-term credit ratings in the A category, higher than would be applicable to the referenced small utilities in the information request above" and, in response to BCUC IR No.1, question 144.5.1, "[t]hat disadvantage can be overcome by specifying a more reasonable credit rating for affected utilities. e.g., BBB/BBB(low) on DBRS's long-term rating scale."

191.1 In FBCU's view, what is the appropriate short-term debt rating that would correspond to the FBCU's proposed BBB/BBB(low) on DBRS' long-term scale? Why?

192.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 146.0, pp. 360-362
Applicable Circumstances for Deemed Capital Structure with Deemed Debt

Ms. McShane states on page 122 of Exhibit B1-9-6, Appendix F, that "[w]hile, as discussed below, there are common approaches that the Commission can rely upon for the specific utilities to which a deemed debt cost might apply, the number of potentially affected utilities is relatively small, and the need to approve a deemed cost of debt relatively infrequent. The individual utilities' circumstances may be different, in terms of risk, the funding requirements and appropriate terms of debt. As a result, I recommend that the Commission continue to address the cost of debt for each utility separately."

In response to BCUC IR No.1, Question 146.1.1, the FBCU confirm that the following FAES projects: Delta SD, Tsawwassen Springs and Marine Gateway also fit the definition of 'small utilities' for the purpose of determining whether a deemed debt cost may be warranted.

In response to BCUC IR No.1, Question 141.11 (p. 344), the FBCU submit that: "With respect to TES projects, the FBCU are of the view that an individual TES project will likely not have a significant business risk difference from other TES projects. The FBCU believe that it is reasonable, in order to achieve regulatory efficiency and streamline the regulatory process for these projects, to consider utilizing consistent capital structures, equity risk premiums and designated stand-alone credit ratings for each project that falls within the TES class of service, when determining the specific debt for such projects."

192.1 Please clarify the statements that, on one side, the individual utilities' circumstances may be different, in terms of risk, which would justify that the Commission addresses the cost of debt for each utility separately, and on the other side, an individual TES project (i.e., a small utility) will likely not have a significant business risk difference from other TES projects, which would justify the use of consistent designated stand-alone credit ratings for TES projects.

In response to BCUC IR No.1, Question 146.4, the FBCU state that: "This means that the OEB needs to address 20 revenue requirements applications every year for the electricity distributors alone, including resetting the cost of any existing affiliate and deemed debt and setting the cost of forecast affiliate and deemed debt. In contrast, in BC, for TES projects, the Commission needs to establish the cost of debt much less frequently. For example, in the case of the FAES Delta School District No. 37 project, the term of the deemed debt is 20 years." [Emphasis added]

In Directive 1d) in Commission Order G-71-12, with respect to FAES's Revisions to Rates and Rate Design for Thermal Energy Services to Delta School District Number 37, the Commission directed as follows:

"d. The cost of debt rate of 5.91 percent filed by FAES is denied as it does not meet the condition and intent set out in Directive 3(c) of Order G-31-12. FAES is directed to re-calculate its deemed cost of debt rate based on BBB-rated entities operating specifically in the Thermal Energy Services (TES) class of service and file it with the Commission within 10 business days from the date of this Order. However, if FAES is not able to find such entities, the Panel would accept if FAES used BBB-rated distribution utilities, such as AltaGas Ltd. and Emera Inc., as proxy for the TES class of service. Further, going forward:

i. If the Commission approves, in the Generic Cost of Capital (GCOC) proceeding, a methodology to establish a deemed interest rate automatic adjustment mechanism (Interest AAM), FAES is directed to update its cost of debt rate annually using that Interest AAM.

ii. Alternatively, if the Commission does not approve an Interest AAM in the GCOC proceeding, FAES is directed to review its deemed cost of debt rate in its revenue requirements annual filing, using the same methodology as directed in this Order and accompanying Reasons for Decision."

192.2 In light of Directive 1d) in Commission Order G-71-12, please clarify the statement that the term of the deemed debt is 20 years in the Delta SD case.

In response to BCUC IR No.1, Question 146.4.1, the FBCU state that: "The FBCU do not have a threshold number of utilities in mind. The issue is relevant if the utilities have debt costs that are revisited annually or on a relatively frequent basis. To date in BC, that does not appear to be the case as the debt being approved in the case of FBCU affiliated projects will be term debt." [Emphasis added]

On page 50 of the Commission Decision on the Marine Gateway TES project, the Commission determined that: "**The Commission Panel finds that the deemed cost of debt rate of 5.37 percent is appropriate and the methodology to calculate it to be consistent with that approved in both the DSD decision and the Tsawwassen Springs decision**. Further, going forward, if the Commission approves, in the Generic Cost of Capital (GCOC) proceeding, a methodology to establish a deemed interest rate automatic adjustment mechanism (Interest AAM), FAES is directed to update its cost of debt rate annually using that Interest AAM. Alternatively, if the Commission does not approve an Interest AAM in the GCOC proceeding, FAES is directed to review its deemed cost of debt rate in its revenue requirements annual filing starting in Year 4, using the same methodology as directed in this Decision. FAES is also directed to adjust its cost of service, including the cost of debt, each year for any changes that the BCUC makes." [Emphasis in the original]

192.3 In light of the Commission Directives in the Delta SD and Marine Gateway Decisions regarding the cost of debt rate, would the FBCU continue to believe that the issue of streamlining the deemed cost of debt for utilities without third-party debt is irrelevant? Why or why not?

193.0 Reference: Exhibit B1-20, Response to BCUC IR No. 1, Question 147.1, p. 363
Appropriate Basis to Calculate a Deemed Interest Rate

In response to BCUC IR No. 1, Question 147.1, the FBCU state that: "Consequently, estimating their stand-alone credit rating is inherently a less objective process than it would be for a large utility with rated peers. Ms. McShane considers that there are four key factors that should be considered with respect to the small utilities: (1) they all operate in the same economic environment and energy policy environment as the benchmark utility, FEI; (2) they are all regulated; (3) they are very small; and (4) their equity ratios are likely to be within the range of equity ratios adopted for other Canadian utilities. As they are regulated, it would be reasonable to proceed on the premise that, in theory, they could all be considered to be investment grade. The fact that they are very small, with the inherent risks of small size set out in response to BCUC IR 1.139.5, would preclude them from achieving ratings equal to those of the benchmark. A reasonable deemed stand-alone rating for a small, but regulated, utility is in the range of BBB to BBB(low), with the deemed debt cost set on this basis."

On page 48 of the Commission Decision on FAES' Marine Gateway, the Commission states: "The Panel accepts FAES' portrayal of the Project as low risk both from an operational and revenue perspective." Furthermore, on page 51, the Panel denied the 50 basis points premium.

193.1 In instances where the business risks of a small TES projects are not found to be higher than those of the benchmark utility, please discuss why the credit rating assigned to the small TES could not be equal to that of the benchmark.

194.0 Reference: Exhibit B1-9-1, Testimony of Ms. McShane, Schedule 19-21
DCF estimates

Ms. McShane provides DCF based estimates of the cost of equity of the comparative sample of U.S. utility companies.

194.1 Of the sample provided, which entities are publicly traded operating companies rated A3 or higher?

194.2 How do the A3 or higher rated publicly traded operating companies' DCF equity estimate compare to the mean estimate of the total U.S. sample?

194.3 Why is the "SV growth" of Northwest Natural Gas substantially higher than all the rest of its U.S. peers?

194.4 How does a change of 1 percent in the long term growth assumption affect the DCF equity estimate?

194.5 What are the assumptions used to estimate the long term nominal GDP growth rate of 4.9% in schedule 21? What is the associated assumption of inflation and real growth? Has this forecast changed? What is the basis and source of this nominal GDP forecast? What has been the actual experience of GDP in recent years?

194.6 What are the expected drivers of long term growth for the regulated assets of FortisBC Energy Inc.? What has been the historical experience of the different factors of growth?

195.0 Reference: Exhibit B1-9-6, Testimony of Ms. McShane, p. 77
Cost of Capital

Ms. McShane provides a long term forecast of the 30 year risk free rate of 5 percent, based on a Consensus Economics Survey report.

195.1 How has the Consensus Economics Survey long term bond yield forecasts compared to actual experience? What is the accuracy of the Survey in terms of direction of movement of yields and degree of change in yields?

195.2 Can existing market levels of bond yields be used as a more accurate indicator of future bond yields?

195.3 Exhibit A2-25 includes a Canadian Transportation Agencies' review of its methodology related to "Risk-free rate." Is Ms. McShane aware of this review and the CTA use of existing market levels of bond yields as the risk free rate for rate setting purposes?

195.3.1 Please comment on the CTA's methodology versus the long term forecast used by Ms. McShane in her evidence.

196.0 Reference: Exhibit B1-9-6, Testimony of Ms. McShane, p. 77
Equity Beta Estimates

Ms. McShane discusses the impediments to the use of equity beta.

196.1 Please discuss the conceptual and actual historical relationship between beta and equity returns.

197.0 Reference: Exhibit B1-11, Response to BC Utility Customers IR No. 1, Question 3.1, p. 20,
Deferral Accounts

The table shows FEI's rate base deferral accounts.

197.1 Please create another table showing the 2012 deferral accounts of FEI along with those of Enbridge Gas, Union Gas and for the three lowest risk US utilities included in the analyses of FBCUs experts.

198.0 Reference: Exhibit B1-11, Response to BC Utility Customers IR No. 1, Question 3.2, p. 25, Deferral Accounts and Risk

The FBCU state that the FEI deferral accounts have reduced short-term business risk but not long-term risk.

198.1 If most of FEIs short term revenue requirement risk is offset by deferral accounts and if the likelihood of over earning in any year is much higher than under earning, and if FEI would have to lose more than 80 percent of its residential customers before reaching Step 2 BC Hydro rates (Cross-reference Exhibit B-20, BCUC IR 2.1), how does this not reduce both short-term business risk and long-term business risk as the practice continues through time?

199.0 Reference: Exhibit B1-11, Response to ICG IR No. 1 to FBCU, Question 4.2, p. 37 Revenue Composition

For its comparative analysis of natural gas versus electricity the FBCU state that: "The efficiency of natural gas for hot water heating is assumed to be 60% vs. 90% for electricity, yielding an effective efficiency of 67 percent.

199.1 What is the current efficiency of a high efficiency natural gas hot water heater? What is the penetration rate of high efficiency hot water heaters for new residential construction?

200.0 Reference: Exhibit B1-12, Response to BC Utility Customers IR No. 1, Question 10.3, p. 20 Low debt costs for utilities

Mr. Engen shows that Canadian utilities can borrow money at lower cost to comparable corporate entities "because of the protective nature of the Canadian regulatory environment."

200.1 Shouldn't regulators consider this factor when trying to determine the most efficient capital structure of a utility?

200.2 Should they then be less concerned about maintaining "A" credit ratings for those utilities because they will protect the utilities from potential default on an ongoing basis?

201.0 Reference: Exhibit B1-15, Response to BC Utility Customers IR No. 1 to Ms. McShane, Question 4.4, p. 11 Deemed Preferred Shares

The Response to BC Utility Customers IR question 4.4 states that Gaz Métro has a 38.5% common equity ratio, but Régie has also allowed Gaz Métro a 7.5% deemed preferred shares, i.e., the company does not have any real preferred shares outstanding that create a financial obligation to the utility. Ms. McShane also states that effectively, with no real preferred shares, Gaz Métro is allowed a higher common equity ratio than the 38.5% common equity ratio in isolation indicates.

In Exhibit B-20, response to BCUC IR No. 1, Question 14.6, Mr. Engen commented that preferred shares would not be an appropriate alternative for common equity, as preferred equity simply creates more financial risk from the perspective of the common equity holder and raises the cost of common equity.

201.1 Would Ms. McShane describe how Gaz Métro is allowed to recover the deemed costs of preferred equity?

201.2 Please comment how the deemed preferred share of Gaz Métro is treated by credit agencies.

201.3 Is Mr. Engen's opinion on the inappropriateness of preferred shares as alternative to common equity limited to actual offering of preferred shares? Or does his opinion extend to deemed preferred shares?

202.0 Reference: Exhibit B1-15, Response to BC Utility Customers IR No. 1, Question 5.5, p. 14
Canadian business and regulatory environments

Ms. McShane quotes Moody's: "We view Canada's business and regulatory environments as being more supportive than many of those in the U.S."

202.1 Would Ms. McShane explain why Moody's holds this view?

202.2 Shouldn't Canadian regulators therefore continue to award lower ROEs to Canadian utilities?

203.0 Reference: Exhibit B1-15, Response to BC Utility Customers IR No. 1, Question 12.7, p. 41
Beta

Ms. McShane is not aware of any Canadian utility samples that have raw betas of 0.65-0.70.

203.1 Wouldn't one expect raw betas to fluctuate above and below the 'real' beta of a firm?

203.2 Why would raw betas of Canadian utilities always be lower than what Ms. McShane considers reasonable?

203.3 Does this cast greater doubt on the validity of the CAPM?

204.0 Reference: Exhibit B1-15, Response to BC Utility Customers IR No. 1, Question 14.8, p. 47
Comparable earnings

Ms. McShane states there are no instances other than BCUC in 2009 where a Canadian board has given weight to the comparable earnings test in the past 10 years.

204.1 Please provide extracts from tribunal decisions over the past 10 years which explain the rationales for not giving weight to the comparable earnings test?

205.0 Reference: Exhibit B1-16, Response to ICG IR No. 1, Question 1, p. 1
Cost of Capital

Mr. Engen states that in a more risk adverse market, one would expect the cost of capital to increase.

205.1 Does this apply to utilities where their P/E multiples have grown significantly against the P/E ratios of the TSX in recent years?

205.2 In a risk adverse market wouldn't the relatively lower risk of low risk utilities see a relatively lower cost of capital compared to other companies?