

September 24, 2012

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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 (the "FBCU")1

Response to the British Columbia Utility Customers<sup>2</sup> (the "BC Utility Customers") Information Request ("IR") No. 1 on the Evidence of the FBCU

On August 3, 2012, the FortisBC Utilities filed its Written Evidence in the Generic Cost of Capital proceeding as referenced above. 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 response to the BC Utility Customers IR No. 1 on the Evidence of the FBCU.

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

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

including the Association of Major Power Consumers of BC ("AMPC"), British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") and the Commercial Energy Consumers Association of British Columbia ("CEC").



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# 1. Topic: Fair return standard

1.1 Please confirm that as stated by the National Energy Board on page 16 a fair return has to be comparable to the return from the **application** of invested capital to other enterprises of like risk and not as stated on page 17 a return comparable to the returns of other enterprises of similar risk.

## Response:

The quotation from the National Energy Board is set out accurately on page 16, and it includes the requirement to "be comparable to the return available from the application of the invested capital to other enterprises of like risk (comparable investment requirement)." The NEB decision is based on, and cited from, a long line of jurisprudence dating back to *Bluefield, Northwestern,* and *Hope Natural Gas.* All of that jurisprudence should be reviewed in considering the definition of the Fair Return Standard. Those decisions date from a time when the comparable returns test was standard.

1.2 Please confirm that application means that the dollar of capital has to be able to be applied or invested to earn that return, which is not possible if the market value of the firm exceeds its book value since the firm cannot access investments at the book value of the comparable firm.

## Response:

FBCU do not understand the question.

1.3 Please confirm that the Supreme Court of Canada defined the fair return such

"that the company will be allowed as large a return on the capital invested in the enterprise as it would receive if it were investing the same amount in other securities possessing an attractiveness, stability and certainty equal to that of the company's enterprise."



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Consistent with the NEB's requirement of "application" the legal standard of a fair return in Canada involves the securities of the comparable firm and not the return earned by the firms itself as indicated on page 17. If this cannot be confirmed please explain in detail how an investor can apply capital in another firm without buying its securities.

## Response:

The quotation from the Supreme Court of Canada is accurate. However, the FBCU do not accept the apparent premise that the wording cited precludes the use of comparable earnings test. What follows is a summary of other authorities. This point can be addressed further in legal submissions. Please see the responses to BC Util Cust-FBCU IRs 1.1.1 and 1.1.4.

While the 1929 decision *Northwestern Utilities Limited v. City of Edmonton*, [1929] S.C.R. 186 of the Supreme Court of Canada cited in this question defined the fair return by reference to "securities", other judicial decisions commonly cited with *Northwestern* as the basis of the fair return standard use different language that implies a broader scope of investments than just securities. These precedents, in their totality, provide the basis for the relevance of the returns of comparable risk enterprises. Consistent with this view, Canadian regulators have established the fair return on equity on many occasions since that time by considering the returns of comparable risk enterprises, for example, by reference to the comparable earnings test. For example, the Ontario Energy Board in its *Report of the Board on the Cost of Capital for Ontario's Regulated Utilities* issued in December 2009 (pages 16-17) stated as follows:

"The FRS [Fair Return Standard] is a legal concept, and has been articulated in three seminal court determinations as set out below:

 In Bluefield Waterworks & Improvement Co. v. Public Service Commission of West Virginia et. al. 262 U.S. 679 (1923), the FRS is expressed to include concepts of comparability, financial soundness and adequacy:

A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative



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ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties.

2. In Northwestern Utilities Limited v. City of Edmonton, [1929] S.C.R. 186, the FRS concept was described as follows:

By a fair return is meant that the company will be allowed as large a return on the capital invested in its enterprise, which will be net to the company, as it would receive if it were investing the same amount in other securities possessing an attractiveness, stability and certainty equal to that of the company's enterprise.

3. In Federal Power Commission v. Hope Natural Gas 320 U.S. 591 (1944), the Court outlines three elements of a fair return:

The rate-making process under the act, i.e., the fixing of "just and reasonable" rates, involves a balancing of the investor and the consumer interests...the investor interest has a legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock...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."

In the NEB's first rate of return decision for TransCanada Pipelines in RH-1-70 (December 1971), at page 6-2, the NEB formulated the test as follows:

"Let it be clear that the power to regulate carries with it the responsibility so to conduct the regulatory function that the regulated enterprise has the opportunity to recover its reasonable expenses, and to earn a return on capital usefully employed in providing



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utility service which is comparable with the returns available from the application of the capital to other enterprises of like risk." (page 6-2)

In that same decision, the NEB stated that it had been guided by relevant jurisprudence, and cited not only *Northwestern*, but also *City of Edmonton et al. v. Northwestern Utilities Ltd.,* [1961] S.C.R. 392, *British Columbia Electric Railway v. British Columbia Public Utilities Commission,* [1960] S.C.R. 837, and the *Bluefield* and *Hope* decisions referenced above. In its determination of a fair return for TransCanada in that decision, the NEB considered the returns on book equity of other regulated entities in Canada and stated (page 6-17) that:

"The Board feels that the return on equity of companies with similar business and financial risks can be of much assistance in establishing the appropriate rate of return on common equity. The investor is entitled to a return on his investment equal to the return he could earn on alternative investments with due allowance for difference in risk."

In later proceedings, the NEB routinely gave weight to the comparable earnings approach. As noted in response to BCUC IR 1.34.3.1, in RH-2-92 (2/93) for TransCanada PipeLines, the NEB stated that:

"Both the comparable earnings and equity risk premium techniques provided the Board with useful information in its determination of the appropriate rate of return to be allowed on TransCanada's deemed common equity component. However, the Board remains of the view that the results of the risk premium method should be given more weight than those of the comparable earnings method." (page 28)

In the RH-1-2008 TQM decision cited by the FBCU, the NEB again considered returns of comparable risk enterprises, stating (page 69) that, although it placed principal weight on the market-based return data, nonetheless, it found that litigated U.S. allowed returns were useful as a check against the results from the analyses which relied upon market returns.

1.4 Please confirm that the Supreme Court of Canada and the NEB definition of a fair rate of return satisfies the economic definition of an opportunity cost, since



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capital can be allocated at that rate of return whereas the company's definition on page 17 does not.

## Response:

This question was referred to Ms. McShane to respond.

In Ms. McShane's view, the FBCU's definition of the fair return standard to include the returns of comparable risk enterprises satisfies the economic definition of opportunity cost. The opportunity cost of capital reflects the returns that could be earned if that capital were invested in an alternative venture of similar risk. According to Dr. Charles Phillips in Public Utility Regulation: Theory and Practice, Public Utilities Reports, Inc., 1993, page 397, "The comparable earnings standard recognizes a fundamental economic concept; namely, opportunity cost." He goes on to say, borrowing part of his definition from Ms. McShane's late colleague, Dr. Stephen Sherwin (Testimony in Tampa Electric, Docket 800011-EU, February 1980) "Stated another way, the opportunity cost of capital concept holds that 'capital should not be committed to any venture unless it can earn a return commensurate with that prospectively available in alternative employments of similar risk." Further, Dr. Phillips notes (page 398) that "Investors will seek the opportunity that provides the greatest profit, commensurate with the risks involved." He also notes (page 398) that returns on the book value of equity are used because utilities are regulated on the basis of original cost.

Canadian regulators have established the fair return on equity on many occasions by considering the returns of comparable risk enterprises, for example, by reference to the comparable earnings test.



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# 2. Topic: Allowed ROEs

2.1 For each of the Fortis BC utilities please provide the annual allowed ROE and actual ROE for each year since the adoption of the automatic adjustment formula in 1994 where data permits.

## Response:

This response also addresses BC Util Cust-FBC IRs 1.2.2 and 1.2.3.

Please refer to the following tables which contain the ROE data applicable to FEI, FEVI, FEW, Fort Nelson and FBC. The following tables include the after-sharing ROE amounts as requested in BC Util Cust-FBCU IR 1.2.2 and the variance explanations requested in BC Util Cust-FBCU IR 1.2.3.

Please note that FEI was under Performance Based Regulation, which included sharing with ratepayers, for 1998-2001 and again for the years 2004-2009. FEVI was under negotiated settlement agreements for the years 2003-2009 that included incentive mechanisms for O&M costs. While these agreements did not result in sharing with ratepayers on variances in O&M, in accordance with the Special Direction the agreements did maintain the true-up between forecast test year cost of service and actual costs for all other costs. FEW and FEFN were not under a settlement or incentive regulation from 1994-2011. FBC has had incentive mechanisms from 1996 onward.



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#### FEI- ROE

		Actual Pre-	<u>Actual</u>		
	Allowed <sup>1</sup> (a)	<u>ESM</u> (b)	Post-ESM <sup>2</sup> (c)	Variance <sup>3</sup> (d)	<u>Variance Explanation</u>
1994	10.65%	9.73%	N/A	-0.92%	Lower customer revenue partially offset by lower rate base than approved
1995	12.00%	12.03%	N/A	0.03%	Not required
1996	11.00%	11.80%	N/A	0.80%	Rate Base lower than approved
1997	10.25%	11.27%	N/A	1.02%	Higher customer revenue and lower rate base
1998	10.00%	9.41%	9.70%	-0.30%	than approved Not required
1999	9.25%	10.70%	9.97%	0.72%	Lower O&M and lower rate base
2000	9.50%	10.75%	10.12%	0.62%	Higher other revenue and lower rate base
2001	9.25%	9.38%	9.31%	0.06%	Not required
2002	9.13%	9.73%	N/A	N/A	4
2003	9.42%	10.23%	N/A	0.81%	O&M lower than approved in addition to lower rate base
2004	9.15%	9.34%	9.25%	0.10%	Not required
2005	9.03%	10.78%	9.91%	0.88%	O&M lower than approved; partially offset by higher taxes
2006	8.80%	10.47%	9.64%	0.84%	O&M lower than approved in addition to lower rate base; partially offset by higher taxes
2007	8.37%	10.73%	9.55%	1.18%	O&M and depreciation lower than approved in addition to lower rate base; partially offset by
2008	8.62%	10.64%	9.63%	1.01%	O&M and depreciation lower than approved in addition to lower rate base
2009	8.99%	11.89%	10.44%	1.45%	O&M and depreciation lower than approved in addition to lower rate base
2010	9.50%	9.42%	N/A	-0.08%	Not required
2011	9.50%	10.15%	N/A	0.65%	Rate Base lower than approved

 $<sup>^{\</sup>rm 1}\,{\rm N/A}$  indicates that an approved revenue requirement did not exist for that year

 $<sup>^2</sup>$  Post-ESM only applicable for the years when FEI was under PBR (1998-2001, 2004 - 2009)

<sup>&</sup>lt;sup>3</sup> Variance calculated as column (c) less column (a) in PBR years; or column (b) less column (a) in non-PBR years

 $<sup>^{\</sup>rm 4}$  Revenue Requirement for 2002 was withdrawn; allowed ROE represents the ROE as determined by the formula for that year



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## FEVI- ROE

		Actual Pre		., . 3	
	Allowed <sup>1</sup> (a)	ESM <sup>1</sup> (b)	Post-ESM <sup>2</sup> (c)	(d)	Variance Explanation
1994	N/A	N/A	N/A	N/A	
1995	N/A	N/A	N/A	N/A	
1996	11.69%	9.74%	N/A	-1.94%	VINGPA adjustment and higher O&M than forecast
1997	10.82%	10.11%	N/A	-0.72%	VINGPA adjustment
1998	10.01%	9.45%	N/A	-0.56%	VINGPA adjustment partially offset by lower O&M than forecast
1999	9.09%	8.80%	N/A		Not required
2000	9.66%	9.20%	N/A		Not required
2001	9.36%	9.44%	N/A	0.08%	Not required
2002	9.25%	9.92%	N/A	0.67%	Lower O&M than forecast partially offset by VINGPA adjustment
2003	9.92%	8.98%	N/A	-0.94%	VINGPA adjustment partially offset by lower O&M than forecast
2004	9.65%	9.88%	N/A	0.23%	Not required
2005	9.53%	11.01%	N/A	1.48%	Lower O&M than forecast partially offset by VINGPA adjustment
2006	9.50%	10.43%	N/A	0.93%	Lower O&M than forecast partially offset by VINGPA adjustment
2007	9.07%	10.96%	N/A	1.89%	Lower O&M than forecast partially offset by VINGPA adjustment
2008	9.32%	10.77%	N/A	1.45%	Lower O&M than forecast partially offset by VINGPA adjustment
2009	9.59%	10.92%	N/A	1.33%	Lower O&M than forecast partially offset by
2010	10.00%	9.78%	N/A	-0.22%	VINGPA adjustment Not required
2011	10.00%	9.74%	N/A	-0.26%	Not required

<sup>&</sup>lt;sup>1</sup> N/A indicates data not available

<sup>&</sup>lt;sup>2</sup> Post-ESM not applicable to FEVI

<sup>&</sup>lt;sup>3</sup> Variance calculated as column (c) less column (a) in PBR years; or column (b) less column (a) in non-PBR years



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## FEW- ROE

	Allowed <sup>1</sup> (a)	Actual Pre- ESM <sup>1</sup> (b)	Actual Post-ESM <sup>2</sup> (c)	Variance <sup>3</sup> (d)	Variance Explanation
1994	N/A	N/A	N/A	N/A	
1995	N/A	N/A	N/A	N/A	
1996	11.75%	N/A	N/A	N/A	
1997	11.00%	11.00%	N/A	0.00%	Not required
1998	10.75%	9.82%	N/A	-0.93%	Higher rate base than approved
1999	10.00%	10.57%	N/A	0.57%	Lower rate base and lower actual cost of debt
2000	10.25%	8.96%	N/A	-1.29%	Higher rate base than approved
2001	10.00%	7.76%	N/A	-2.24%	Lower customer revenues than forecast
2002	9.73%	10.12%	N/A	0.39%	Not required
2003	10.02%	9.29%	N/A	-0.73%	Higher rate base than approved
2004	9.75%	9.38%	N/A	-0.37%	Not required
2005	9.75%	10.51%	N/A	0.76%	Breakout of approved amounts not available, however deferred ROE mechanism captured variance
2006	N/A	8.96%	N/A	N/A	Not required
2007	8.97%	8.97%	N/A	0.00%	Not required
2008	9.22%	9.22%	N/A	0.00%	Not required
2009	9.49%	9.49%	N/A	0.00%	Not required
2010	10.00%	9.50%	N/A	-0.50%	Higher rate base than approved
2011	10.00%	10.41%	N/A	0.41%	Not required

 $<sup>^{1}</sup>$  N/A indicates that an approved revenue requirement did not exist for that year or data not available

 $<sup>^{\</sup>rm 2}$  Post-ESM not applicable as FEW was not under PBR

<sup>&</sup>lt;sup>3</sup> Variance calculated as column (c) less column (a) in PBR years; or column (b) less column (a) in non-PBR years



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	Allowed <sup>1</sup> (a)	Actual Pre- ESM <u>F</u> (b)	Actual Post-ESM <sup>2</sup> (c)	Variance <sup>3</sup>	<u>Variance Explanation</u>
1994	10.65%	35.55%	N/A	N/A	4
1995	12.00%	15.52%	N/A		Higher customer revenue, lower O&M and a
1996	11.00%	18.24%	N/A	N/A	reduction in the cost of preference shares 4
1997	10.25%	11.52%	N/A	N/A	4
1998	10.00%	12.94%	N/A	N/A	4
1999	9.25%	5.85%	N/A	N/A	4
2000	9.50%	3.97%	N/A	N/A	4
2001	9.25%	-1.58%	N/A	N/A	4
2002	9.13%	-1.46%	N/A	N/A	4
2003	9.42%	2.30%	N/A	N/A	4
2004	9.15%	10.64%	N/A		Lower depreciation than approved partially offset by higher rate base
2005	9.03%	10.85%	N/A	N/A	, c
2006	8.80%	5.69%	N/A	N/A	4
2007	8.37%	5.80%	N/A	N/A	4
2008	8.62%	12.25%	N/A	3.63%	Lower O&M and depreciation than approved
2009	8.99%	13.77%	N/A		Higher customer revenue, lower depreciation and lower rate base than approved
2010	9.50%	7.05%	N/A	N/A	• •
2011	9.50%	12.23%	N/A		Higher customer revenue, lower depreciation and lower rate base than approved

 $<sup>^{1}\,\</sup>text{N/A}$  indicates that an approved revenue requirement did not exist for that year

<sup>&</sup>lt;sup>2</sup> Post-ESM not applicable as FN was not under PBR

<sup>&</sup>lt;sup>3</sup> Variance calculated as column (c) less column (a) in PBR years; or column (b) less column (a) in non-PBR years

<sup>&</sup>lt;sup>4</sup> Approved Revenue Requirement did not exist for this period; allowed ROE represents the ROE as determined by the formula for that year



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## FBC - ROE

	Allowed (a)	ctual Pre- ESM (b)	Actual Post-ESM <sup>1</sup> (c)	Variance <sup>2</sup> (d)	Variance Explanation
1994	11.00%	10.44%	N/A	-0.56%	Lower Margin offset by lower interest and taxes
1995	12.25%	12.42%	N/A	0.17%	Not required
1996	11.25%	12.89%	12.57%	1.32%	Higher margin and lower Interest Expense
1997	10.50%	11.64%	11.94%	1.44%	Higher margin and lower Interest Expense
1998	10.25%	10.37%	10.26%	0.01%	Not required
1999	9.50%	9.83%	10.48%	0.98%	Higher margin and lower interest offset by higher O&M
2000	10.00%	10.09%	10.00%	0.00%	Not required
2001	9.75%	10.79%	10.20%	0.45%	Not required
2002	9.53%	7.64%	8.24%	-1.29%	Lower margin and higher O&M offset by higher other income and lower interest
2003	9.82%	10.66%	10.88%	1.06%	Higher margin and lower interest offset by higher O&M
2004	9.55%	11.67%	10.70%	1.15%	Higher margin and lower interest offset by higher O&M
2005	9.43%	9.98%	9.88%	0.45%	Not required
2006	9.20%	10.69%	9.94%	0.74%	Higher margin and lower O&M
2007	8.85%	9.83%	9.23%	0.38%	Not required
2008	9.02%	9.64%	9.28%	0.26%	Not required
2009	8.87%	10.00%	9.41%	0.54%	Higher margin and lower O&M and interest
2010	9.90%	9.55%	9.65%	-0.25%	Not required
2011	9.90%	11.33%	10.67%	0.77%	Higher margin and lower O&M and interest

<sup>&</sup>lt;sup>1</sup> Post-ESM only applicable for the years when an earnings sharing mechanism was in place (1996-2011)

<sup>&</sup>lt;sup>2</sup> Variance calculated as column (c) less column (a) when sharing in place; or column (b) less column (a) when no sharing in place



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2.2 Please indicate for each utility and each year in 2.1 above where the actual ROE resulted from a settlement or incentive regulation and provide the ROE both before and after any sharing with ratepayers.

## Response:

Please refer to the response to BC Util Cust-FBCU IR 1.2.1 for the applicable before and after sharing ROEs.

2.3 Please discuss the reason for any deviations of the actual from the allowed ROE that are greater than 0.50% and provide a brief explanation for the deviation.

## Response:

Please refer to the response to BC Util Cust-FBCU IR 1.2.1.

2.4 Please provide a table with the book equity and actual and allowed net income for each FortisBC utility since 1994, where data permits, and the breakdown of the net income into risk free and risk premium components as determined by the BCUC allowed ROE for the year.

## Response:

The FortisBC Utilities interpret book equity to mean the equity reported in the annual financial statements. Please note that because the book equity represents a single point in time it may differ from the equity used to determine the achieved return for regulatory purposes (i.e. for regulatory purposes the achieved equity is based on the actual mid year rate base for each year and not a single point in time).



British Columbia Utilities Commission ("BCUC" or the "Commission")  Generic Cost of Capital Proceeding	Submission Date: September 24, 2012
FortisBC Utilities ("FBCU" or the "Companies") Response to British Columbia Utility Customers (including Association of Major Power Customers of BC ("AMPC"), 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"))  AMPC/BCPSO/CEC Information Request ("IR") No. 1 on Evidence of the Companies	Page 13

Further, the FortisBC Utilities have assumed that the Government of Canada 30 year bond yield represents the risk free component of the return on equity. For the years 1994 through 2009, the 30 year bond yield is as included in the automatic adjustment mechanism used to determine the approved benchmark ROE. For the years 2010 and 2011, the 30 year bond yield is held at the 2009 level reflecting that the approved ROE for 2010 and 2011 is equivalent to the approved 2009 ROE.

Please refer to the tables below.



British Columbia Utilities Commission ("BCUC" or the "Commission")  Generic Cost of Capital Proceeding	Submission Date: September 24, 2012
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(inclu 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"))

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FEI (\$00	00s)			Allo	wed			Actual			
			Risk Free:				Risk				Risk
			30 YR			Risk Free	Premium	Actual	Actual	Risk Free	Premium
			Gov. of		Allowed	Allowed	Allowed	Pre-ESM	Post-ESM	Achieved	Achieved
			Canada	Risk	Utility	Utility	Utility	Utility	Utility	Utility	Utility
	Book	Allowed	Bond	Premium	Net	Net	Net	Net	Net	Net	Net
	Equity <sup>1</sup>	ROE <sup>2</sup>	Yield	3	Income <sup>4</sup>	Income <sup>5</sup>	Income <sup>6</sup>	Income	Income <sup>7</sup>	Income <sup>8</sup>	Income <sup>8</sup>
·	<u>(a)</u>	<u>(b)</u>	<u>(c)</u>	<u>(d)</u>	<u>(e)</u>	<u>(f)</u>	<u>(g)</u>	<u>(h)</u>	<u>(i)</u>	<u>(i)</u>	<u>(k)</u>
1994	606,900	10.65%	7.75%	2.90%	42,480	30,913	11,567	38,510	38,510	30,683	7,827
1995	663,500	12.00%	9.12%	2.88%	53,598	40,726	12,872	52,825	52,825	40,038	12,787
1996	608,200	11.00%	8.62%	2.38%	53,411	41,855	11,556	56,081	56,081	40,957	15,124
1997	610,600	10.25%	7.20%	3.05%	52,151	36,618	15,533	56,325	56,325	35,982	20,343
1998	683,000	10.00%	6.39%	3.61%	51,511	32,905	18,606	48,309	49,840	32,812	17,028
1999	691,200	9.25%	5.47%	3.78%	50,044	29,583	20,461	57,001	53,141	29,133	24,008
2000	755,700	9.50%	6.04%	3.46%	53,451	33,967	19,484	59,792	56,322	33,585	22,737
2001	785,100	9.25%	5.73%	3.52%	68,346	42,345	26,001	68,225	67,769	41,703	26,066
2002	791,000	9.13%	5.63%	3.50%	N/A	N/A	N/A	70,980	70,980	41,068	29,912
2003	788,400	9.42%	5.92%	3.50%	70,584	44,374	26,210	75,914	75,914	43,963	31,951
2004	805,300	9.15%	5.65%	3.50%	69,460	42,870	26,590	71,125	69,946	42,717	27,229
2005	847,800	9.03%	5.53%	3.50%	71,399	43,709	27,690	85,697	78,728	43,929	34,799
2006	918,000	8.80%	4.79%	4.01%	77,195	42,019	35,176	89,527	82,380	40,950	41,429
2007	899,300	8.37%	4.22%	4.15%	72,502	36,546	35,956	91,112	81,094	35,826	45,268
2008	879,000	8.62%	4.55%	4.07%	75,574	39,879	35,695	92,050	83,324	39,365	43,958
2009	881,700	8.99%	4.35%	4.64%	79,984	38,702	41,282	102,419	89,935	37,476	52,458
2010	1,021,600	9.50%	4.35%	5.15%	96,305	44,098	52,207	95,115	95,115	43,941	51,174
2011	1,047,800	9.50%	4.35%	5.15%	99,908	45,747	54,161	104,084	104,084	44,599	59,485

Notes:

Book equity represents financial statement equity. FN is a separate entity for regulatory purposes only; FEI and FN are one entity for legal purposes and, therefore, the financial statement equity is combined.

<sup>&</sup>lt;sup>2</sup> As shown in BCUtilCust IR 1.2.1

<sup>&</sup>lt;sup>3</sup> Calculated as Column (b) - Column (c)

<sup>&</sup>lt;sup>4</sup> N/A indicates that an approved revenue requirement did not exist for that year

<sup>&</sup>lt;sup>5</sup> Calculated as Column (e) x Column (c) / Column (b)

<sup>&</sup>lt;sup>6</sup> Calculated as Column (e) x Column (d) / Column (b)

<sup>&</sup>lt;sup>7</sup> Post-ESM only applicable for the years when FEI was under PBR (1998-2001, 2004-2009), all other years data in this column equal to column (h)

<sup>&</sup>lt;sup>8</sup> Determined based on achieved post-ESM ROE and net income; assumption that actual risk free rate is equal to the allowed risk free rate



British Columbia Utilities Commission ("BCUC" or the "Commission")	Submission Date:
Generic Cost of Capital Proceeding	September 24, 2012
FortisBC Utilities ("FBCU" or the "Companies")	
Response to British Columbia Utility Customers	
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FEVI (\$	000s)			Allo	wed			Actual			
			Risk Free: 30 YR			Risk Free	Risk Premium		Risk Free	Risk Premium	
			Gov. of		Allowed	Allowed	Allowed	Actual		Achieved	
	Dook	Allowed	Canada	Risk	Utility	Utility	Utility	Utility	Utility	Utility	
	Book Equity <sup>1</sup>	ROE <sup>2</sup>	Bond Yield	Premium 3	Net Income <sup>4</sup>	Net Income <sup>5</sup>	Net Income <sup>6</sup>	Net Income <sup>7</sup>	Net Income <sup>8</sup>	Net Income <sup>8</sup>	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(i)	
1994	N/A	N/A	7.75%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
1995	N/A	N/A	9.12%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
1996	122,259	11.69%	8.62%	3.07%	13,433	9,908	3,525	11,200	9,908	1,292	
1997	134,103	10.82%	7.20%	3.63%	13,433	8,933	4,499	12,544	8,933	3,611	
1998	142,172	10.01%	6.39%	3.63%	13,115	8,367	4,748	12,381	8,367	4,014	
1999	154,229	9.09%	5.47%	3.63%	12,756	7,671	5,085	12,351	7,671	4,680	
2000	167,325	9.66%	6.04%	3.63%	14,521	9,073	5,448	13,824	9,073	4,751	
2001	168,236	9.36%	5.73%	3.63%	14,219	8,706	5,513	14,353	8,714	5,639	
2002	167,447	9.25%	5.63%	3.62%	14,072	8,560	5,512	15,089	8,560	6,529	
2003	165,917	9.92%	5.92%	4.00%	15,180	9,062	6,118	13,742	9,061	4,681	
2004	169,279	9.65%	5.65%	4.00%	14,880	8,708	6,172	15,233	8,708	6,525	
2005	172,587	9.53%	5.53%	4.00%	15,097	8,757	6,340	17,434	8,757	8,677	
2006	202,914	9.50%	4.79%	4.71%	17,639	8,894	8,745	19,365	8,894	10,472	
2007	206,319	9.07%	4.22%	4.85%	17,367	8,079	9,289	20,993	8,079	12,914	
2008	224,645	9.32%	4.55%	4.77%	19,066	9,305	9,761	22,024	9,305	12,719	
2009	239,779	9.59%	4.35%	5.24%	20,443	9,273	11,170	23,273	9,273	14,000	
2010	241,480	10.00%	4.35%	5.65%	21,906	9,529	12,377	21,418	9,529	11,889	
2011	309,223	10.00%	4.35%	5.65%	26,645	11,590	15,054	25,958	11,590	14,367	

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 $<sup>\</sup>frac{\text{Notes:}}{^{1}\text{N/A indicates data not available. Book equity amounts are financial statement equity.}}$ 

<sup>&</sup>lt;sup>2</sup> As shown in BCUtilCust IR 1.2.1

<sup>&</sup>lt;sup>3</sup> Calculated as Column (b) - Column (c)

 $<sup>^{\</sup>rm 4}$  N/A indicates that an approved revenue requirement did not exist for that year

 $<sup>^{5}</sup>$  Calculated as Column (e) x Column (c) / Column (b)

 $<sup>^{\</sup>rm 6}$  Calculated as Column (e) x Column (d) / Column (b)

<sup>&</sup>lt;sup>7</sup> Post-ESM not applicable to FEVI

 $<sup>^{8}</sup>$  Determined based on achieved ROE and net income; assumption that actual risk free rate is equal to the allowed risk free rate



British Columbia Utilities Commission ("BCUC" or the "Commission")  Generic Cost of Capital Proceeding	Submission Date: September 24, 2012
FortisBC Utilities ("FBCU" or the "Companies") Response to British Columbia Utility Customers	
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FEW (\$000s)			Allo	Allowed				Actual		
			Risk Free: 30 YR Gov. of			Risk Free Allowed	Risk Premium Allowed	Actual	Risk Free Achieved	Risk Premium Achieved
			Canada	Risk	Allowed	Utility	Utility	Utility	Utility	Utility
	Book	Allowed	Bond	Premium	Utility Net	Net	Net	Net	Net	Net
	Equity <sup>1</sup>	ROE <sup>2</sup>	Yield	3	Income <sup>4</sup>	Income <sup>5</sup>	Income <sup>6</sup>	Income <sup>7</sup>	Income <sup>8</sup>	Income <sup>8</sup>
	<u>(a)</u>	<u>(b)</u>	<u>(c)</u>	<u>(d)</u>	<u>(e)</u>	<u>(f)</u>	<u>(g)</u>	<u>(h)</u>	<u>(i)</u>	<u>(i)</u>
1994	N/A	N/A	7.75%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1995	N/A	N/A	9.12%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1996	3,798	11.75%	8.62%	3.13%	N/A	N/A	N/A	N/A	N/A	N/A
1997	3,837	11.00%	7.20%	3.80%	N/A	N/A	N/A	405	265	140
1998	4,196	10.75%	6.39%	4.36%	409	243	166	368	239	129
1999	4,564	10.00%	5.47%	4.53%	375	205	170	392	203	189
2000	4,959	10.25%	6.04%	4.21%	452	266	186	403	272	131
2001	5,899	10.00%	5.73%	4.27%	575	330	245	434	321	113
2002	5,848	9.73%	5.63%	4.10%	572	331	241	595	331	264
2003	6,397	10.02%	5.92%	4.10%	589	348	241	553	353	200
2004	6,947	9.75%	5.65%	4.10%	573	332	241	553	333	220
2005	6,825	9.75%	5.53%	4.22%	573	325	248	629	331	298
2006	7,407	N/A	4.79%	N/A	N/A	N/A	N/A	534	285	249
2007	6,405	8.97%	4.22%	4.75%	629	296	333	528	248	280
2008	7,054	9.22%	4.55%	4.67%	631	311	319	542	267	275
2009	15,581	9.49%	4.35%	5.14%	1,473	675	798	1,196	548	648
2010	21,474	10.00%	4.35%	5.65%	1,714	746	968	1,725	790	935
2011	20,051	10.00%	4.35%	5.65%	1,709	743	965	1,884	787	1,097

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 $<sup>\</sup>frac{\text{Notes:}}{^{1}\text{N/A indicates data not available.}}$  Amounts are based on financial statement equity

<sup>&</sup>lt;sup>2</sup> As shown in BCUtilCust IR 1.2.1

<sup>&</sup>lt;sup>3</sup> Calculated as Column (b) - Column (c)

 $<sup>^4</sup>$  N/A indicates that an approved revenue requirement did not exist for that year or data not available

 $<sup>^{\</sup>rm 5}$  Calculated as Column (e) x Column (c) / Column (b)

<sup>&</sup>lt;sup>6</sup> Calculated as Column (e) x Column (d) / Column (b)

<sup>&</sup>lt;sup>7</sup> Post-ESM not applicable for FEW

 $<sup>^{8}</sup>$  Determined based on achieved ROE and net income; assumption that actual risk free rate is equal to the allowed risk free rate



British Columbia Utilities Commission ("BCUC" or the "Commission")	Submission Date:
Generic Cost of Capital Proceeding	September 24, 2012
FortisBC Utilities ("FBCU" or the "Companies")	
Response to British Columbia Utility Customers	
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FEFN (\$000s)		Allowed						Actual		
			Risk Free: 30 YR				Risk Premium		Risk Free	Risk Premium
			Gov. of	Risk	Allowed	Allowed Utility	Allowed Utility	Actual Utility	Achieved Utility	Achieved Utility
	Book	Allowed	Canada Bond	Premium	Utility Net	Net	Net	Net	Net	Net
	Equity <sup>1</sup>	ROE <sup>2</sup>	Yield	3	Income <sup>4</sup>	Income <sup>5</sup>	Income <sup>6</sup>	Income <sup>7</sup>	Income <sup>8</sup>	Income <sup>8</sup>
,	(a)	<u>(b)</u>	<u>(c)</u>	<u>(d)</u>	<u>(e)</u>	<u>(f)</u>	<u>(g)</u>	<u>(h)</u>	<u>(i)</u>	<u>(i)</u>
1994	N/A	10.65%	7.75%	2.90%	N/A	N/A	N/A	232	51	181
1995	N/A	12.00%	9.12%	2.88%	92	70	22	124	73	51
1996	N/A	11.00%	8.62%	2.38%	N/A	N/A	N/A	150	71	79
1997	N/A	10.25%	7.20%	3.05%	N/A	N/A	N/A	102	64	38
1998	N/A	10.00%	6.39%	3.61%	N/A	N/A	N/A	131	65	66
1999	N/A	9.25%	5.47%	3.78%	N/A	N/A	N/A	64	60	4
2000	N/A	9.50%	6.04%	3.46%	N/A	N/A	N/A	53	81	(28)
2001	N/A	9.25%	5.73%	3.52%	N/A	N/A	N/A	(24)	87	(111)
2002	N/A	9.13%	5.63%	3.50%	N/A	N/A	N/A	(20)	77	(97)
2003	N/A	9.42%	5.92%	3.50%	N/A	N/A	N/A	32	82	(50)
2004	N/A	9.15%	5.65%	3.50%	132	81	51	156	83	73
2005	N/A	9.03%	5.53%	3.50%	N/A	N/A	N/A	156	79	77
2006	N/A	8.80%	4.79%	4.01%	N/A	N/A	N/A	97	82	15
2007	N/A	8.37%	4.22%	4.15%	N/A	N/A	N/A	102	74	28
2008	N/A	8.62%	4.55%	4.07%	156	82	74	219	81	138
2009	N/A	8.99%	4.35%	4.64%	170	82	88	244	77	167
2010	N/A	9.50%	4.35%	5.15%	N/A	N/A	N/A	152	94	58
2011	N/A	9.50%	4.35%	5.15%	260	119	141	308	110	198

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 $<sup>^1</sup>$  N/A - FN is a separate entity for regulatory purposes only; FEI and FN are one entity for legal purposes and, therefore, the financial statement equity is combined. Book equity represents financial statement equity.

<sup>&</sup>lt;sup>2</sup> As shown in BCUtilCust IR 1.2.1

<sup>&</sup>lt;sup>3</sup> Calculated as Column (b) - Column (c)

 $<sup>^4</sup>$  N/A indicates that an approved revenue requirement did not exist for that year or data not available

<sup>&</sup>lt;sup>5</sup> Calculated as Column (e) x Column (c) / Column (b)

<sup>&</sup>lt;sup>6</sup> Calculated as Column (e) x Column (d) / Column (b)

<sup>&</sup>lt;sup>7</sup> Post-ESM not applicable for Fort Nelson

<sup>&</sup>lt;sup>8</sup> Determined based on achieved ROE and net income; assumption that actual risk free rate is equal to the allowed risk free rate



British Columbia Utilities Commission ("BCUC" or the "Commission")	Submission Date:
Generic Cost of Capital Proceeding	September 24, 2012

FortisBC Utilities ("FBCU" or the "Companies") Response to British Columbia Utility Customers

(including Association of Major Power Customers of BC ("AMPC"), 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"))

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FBC (\$0	00s)			Allo	wed				Act	ual	
			Risk Free:				Risk				Risk
			30 YR			Risk Free	Premium	Actual	Actual	Risk Free	Premium
			Gov. of		Allowed	Allowed	Allowed	Pre-ESM	Post-ESM		
			Canada	Risk	Utility	Utility	Utility	Utility	Utility	Utility	Utility
	Book	Allowed	Bond	Premium	Net	Net	Net	Net	Net	Net	Net
	Equity <sup>1</sup>	ROE <sup>2</sup>	Yield	3	Income <sup>4</sup>	Income <sup>5</sup>	Income <sup>6</sup>	Income	Income <sup>7</sup>	Income <sup>8</sup>	Income <sup>8</sup>
	<u>(a)</u>	<u>(b)</u>	<u>(c)</u>	<u>(d)</u>	<u>(e)</u>	<u>(f)</u>	<u>(g)</u>	<u>(h)</u>	<u>(i)</u>	<u>(i)</u>	<u>(k)</u>
1994	90,870	11.00%	7.75%	3.25%	8,654	6,097	2,557	9,238	9,238	6,858	2,380
1995	95,884	12.25%	9.12%	3.13%	10,749	8,001	2,748	11,538	11,538	8,470	3,068
1996	100,908	11.25%	8.62%	2.63%	10,771	8,253	2,518	12,656	12,336	8,460	3,876
1997	106,483	10.50%	7.20%	3.30%	10,450	7,163	3,287	12,076	12,379	7,462	4,917
1998	110,575	10.25%	6.39%	3.86%	10,734	6,690	4,044	11,267	11,147	6,940	4,207
1999	126,177	9.50%	5.47%	4.03%	10,850	6,245	4,605	11,620	12,408	6,474	5,934
2000	132,333	10.00%	6.04%	3.96%	12,461	7,523	4,938	13,031	12,926	7,803	5,123
2001	161,346	9.75%	5.73%	4.02%	13,842	8,136	5,706	16,765	15,827	8,893	6,934
2002	181,355	9.53%	5.63%	3.90%	15,438	9,119	6,319	13,559	14,630	9,994	4,636
2003	190,987	9.82%	5.92%	3.90%	17,300	10,433	6,867	19,822	20,250	11,022	9,228
2004	234,845	9.55%	5.65%	3.90%	19,638	11,613	8,025	25,748	23,585	12,448	11,137
2005	272,725	9.43%	5.53%	3.90%	22,544	13,216	9,328	24,673	24,380	13,641	10,739
2006	291,329	9.20%	4.79%	4.41%	24,873	12,950	11,923	28,750	26,684	12,859	13,825
2007	322,673	8.85%	4.22%	4.63%	26,212	12,496	13,716	30,031	28,143	12,864	15,279
2008	355,255	9.02%	4.55%	4.47%	29,688	14,971	14,717	32,271	31,001	15,195	15,806
2009	385,254	8.87%	4.35%	4.52%	32,215	15,799	16,416	36,734	34,499	15,948	18,551
2010	418,546	9.90%	4.35%	5.55%	38,615	16,967	21,648	37,943	38,293	17,262	21,031
2011	448,813	9.90%	4.35%	5.55%	43,292	19,022	24,270	49,205	46,268	18,863	27,405

<sup>&</sup>lt;sup>1</sup> Book equity represents financial statement equity.

<sup>&</sup>lt;sup>2</sup> As shown in BCUtilCust IR 1.2.1

<sup>&</sup>lt;sup>3</sup> Calculated as Column (b) - Column (c)

<sup>&</sup>lt;sup>4</sup> N/A indicates that an approved revenue requirement did not exist for that year

<sup>&</sup>lt;sup>5</sup> Calculated as Column (e) x Column (c) / Column (b)

<sup>&</sup>lt;sup>6</sup> Calculated as Column (e) x Column (d) / Column (b)

<sup>&</sup>lt;sup>7</sup> Post-ESM only applicable for the years when an earnings sharing mechanism was in place (1996-2011), in 1994-1995 Post-

 $<sup>^{8}</sup>$  Determined based on achieved post-ESM ROE and net income; assumption that actual risk free rate is equal to the allowed risk free rate



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# 3. Topic: Deferral accounts

3.1 Please list the major deferral accounts available to each Fortis BC utility in 2000, 2005, 2009 and currently.

## Response:

The following tables show the major rate base deferral accounts for FEI, FEVI, FEW, FN and FBC in each of the respective years. Please also refer to Exhibit B1-9-5, Section 8b of Appendix A, and Exhibit B-1-9-6, Section 8b of Appendices B, C, and D for a complete listing of deferral accounts in place for each FortisBC utility for the period 2002-2011.



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FEI RATE BASE DEFERRAL ACCOUNTS	2000	2005	2009	2012
Margin Related				
GCRA	Х			
GCRA Interest	Х			
Revenue Stabilization Adjustment Mechanism (RSAM)	Х	Χ	Χ	Χ
Commodity Cost Reconciliation Account (CCRA)		Χ	Χ	Χ
Midstream Cost Reconciliation Account (MCRA)		Χ	Х	X
Revelstoke Propane Cost Deferral Account		Χ	Χ	Χ
Interest on CCRA/MCRA/RSAM		Χ	Χ	Χ
SCP Mitigation Revenues Variance Account		Χ	Χ	Χ
Energy Policy				
Energy Efficiency & Conservation (EEC)/Demand Side				
Management	Х	X	X	X
NGV Conversion Grants	Х	Х	Χ	Х
Non-Controllable				
Property Tax Deferral	Х	X	Х	Χ
Interest Variance	Х	Χ	Χ	X
Insurance Variance		Χ	Χ	X
Pension & OPEB Variance		Χ	Χ	Χ
BCUC Levies Variance		Χ	Χ	Χ
OSC Certification Compliance		Χ	Χ	Χ
Tax Variance Account			Χ	Χ
Accounting Change Related Deferrals			Χ	Χ
Customer Service Variance Account				Χ
Depreciation Variance				Χ
Application Costs	Х	Х	Х	Х
<u>Other</u>				
Earnings Sharing Mechanism		Χ	Χ	
Deferred Removal Costs				Χ
Gains and Losses on Asset Disposition				Χ
2010-2011 Customer Service O&M & COS				Χ
Negative Salvage Provision/Cost				Χ
Gas Assets Record Project				Χ
BC OneCall Project				Χ



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FEVI RATE BASE DEFERRAL ACCOUNTS	2000	2005	2009	2012
Margin Related				
Gas Cost Variance Account (GCVA)		Х	Х	Х
Energy Policy				
Energy Efficiency & Conservation (EEC)/Demand Side				
Management	X	Χ	Χ	Χ
NGV Conversion Grants				X
Non-Controllable				
Insurance Variance		Χ	Χ	Χ
Pension & OPEB Variance		Х	Χ	Χ
OSC Certification Compliance			Χ	
Accounting Change Related Deferrals			Χ	Χ
BCUC Levies Variance				Χ
Vancouver Island HST Implementation				Χ
Customer Service Variance				Χ
Depreciation Variance				X
Application Costs	x	Х	X	Х
<u>Other</u>				
Financing Costs	X	Χ	Χ	
PCEC Start Up Costs	X	Χ	Χ	Χ
Deferred Removal Costs				Χ
Gains and Losses on Asset Disposition				Χ
2010-2011 Customer Service O&M & COS				Χ
Negative Salvage Provision/Cost				Χ
Gas Assets Record Project				Χ
BC OneCall Project				Χ



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FEW RATE BASE DEFERRAL ACCOUNTS	2000	2005	2009	2012
Margin Related				
Gas Cost Reconciliation Account (GCRA)	Х	Х	Х	
Cost of Gas - Rate Rider A	^	X	X	
Sales Margin Differential		X	X	
Commodity Cost Reconciliation Account (CCRA)		^	^	Х
Midstream Cost Reconciliation Account (MCRA)				X
Revenue Stabilization Adjustment Mechanism (RSAM)				X
Interest on RSAM				X
				χ
Energy Policy				
Energy Efficiency & Conservation (EEC)/Demand Side				
Management				Х
Non-Controllable				
Property Tax Deferral	X	Χ	Χ	Х
Interest Variance	Х	Χ	Χ	Х
Accounting Change Related Deferrals			Χ	Х
Insurance Variance				Х
Tax Variance Account				Х
Customer Service Variance Account				Х
Depreciation Variance				Х
Application Costs	х	х	х	Х
Whistler Pipeline				
Appliance Conversion Planning Costs			Х	Х
Direct Customer Appliance Conversion Costs			X	X
Conversion Income Tax Deferral Account			X	X
Decommissioning of Propane Assets			X	X
Capital Gain on Sale of Propane Land			X	X
Property Tax - Propane plant			X	X
<u>Other</u>				
Deferred ROE Variance		Χ	Χ	
Deferred Removal Costs				Χ
Gains and Losses on Asset Disposition				Χ
2010-2011 Customer Service O&M & COS				Χ
Negative Salvage Provision/Cost				Χ
Gas Assets Record Project				Χ
BC OneCall Project				Χ



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FN RATE BASE DEFERRAL ACCOUNTS	2000	2005	2009	2012
Mannin Dalatad				
Margin Related				
Gas Cost Reconciliation Account (GCRA)	Х	Χ	Χ	Х
Revenue Stabilization Adjustment Mechanism (RSAM)		Х	Χ	Х
RSAM Interest		Х	Х	Х
Energy Policy				
NGV Conversion Grants	Χ			
Energy Efficiency & Conservation (EEC)/Demand Side				
Management	Х			
Non-Controllable				
Interest Variance	Х	Χ	Χ	Χ
Property Tax Deferral		Χ	Χ	Х
Customer Service Variance Account				Х
Accounting Change Related Deferrals				Х
Depreciation Variance				Х
Application Costs				Χ
<u>Other</u>				
Fort Nelson ROE & Capital Structure Deferral			Χ	
Deferred Removal Costs				Х
Gains and Losses on Asset Disposition				Х
Negative Salvage Provision/Cost				Х
2012 Fort Nelson Revenue Surplus/Deficit				Х



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FBC RATE BASE DEFERRAL ACCOUNTS	2000	2005	2009	2012
Demand Side Management	X	X	Х	Х
ncentive and Flow Through Adjustments				
Incentive Adjustments	X	X	Х	Х
Power Purchase Incentive	X	X		,
Accounting Provision for Incentive True-Up		X		
CCA Legislative Change		X		
BC Hydro Rate Increase			Χ	
Application Costs				
Revenue Requirements Applications	X	X	Χ	Χ
Rate Design and Cost of Service Applications	X		X	Χ
Transmission Access Tariff	X			
Return on Equity/Capital Structure Applications	X	X	X	
Proposed Settlement Agreement Revision	X			
Renew BC Hydro Power Purchase Agreement			X	X
BC Hydro Waneta Transaction			Χ	Χ
BC Hydro Amendment to RS3808			Χ	Χ
Section 5 Provincial Transmission Inquiry			X	
Section 71 Filing (WAX CAPA)				X
Preliminary and Investigative Charges	X	X	X	Х
<u>Other</u>				
Trail Office Lease Costs	X	X	X	X
Trail Office Rental Revenue	X	X	X	Χ
Kootenay Damage Claims	X			
Long Term Capital and Resource Planning	X	X	X	
Vehicle Depreciation Adjustment	X			
Cominco Property Tax Appeal	X			
Deferred Telecommunications Planning	X			
Renegotiation of Canal Plant Agreement		X		
Brilliant Terminal Station Expense		X		
Revenue Protection		X	X	X
PLP Transition Costs (captures all PLP Deferral Accounts)			X	X
Advanced Metering Infrastructure Application			X	
Right of Way Reclamation (Pine Beetle Kill)			X	Х
International Financial Reporting Standards			X	
Right of Way Encroachment Litigation			X	
Demand Side Management Study			X	X
NERC/MRS Set Up Cost			X	X
US GAAP				X
Debt Issue Costs	Χ	Χ	Χ	Х



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3.2 Please discuss which risks have been removed from the shareholder between each of the years in 3.1 above.

## Response:

While a more specific discussion by company on changes in deferral accounts is provided below, the existence of deferral accounts has not significantly changed the overall business risk of FEU and FBC over time. As described in Appendix H, Section 10.3 of the Application, recently approved deferral accounts have reduced the short-term business risks to the companies, but not the long-term risks. The majority of these new deferral accounts have been put in place to ensure forecast variances do not result in costs being inappropriately borne by customers or by the companies, and are mainly used to mitigate the rate impacts and rate volatility for customers. The new deferral accounts or the discontinuation of previous accounts do not affect the overall business risks as discussed in Appendix H, Sections 2.1 and 2.2, and, specifically, the FEI business risk and regulatory risk can be considered no lower, and perhaps higher, than what it was in 2009.

A summary by utility of general changes to deferral accounts and impact to shareholder risk are described below:

## <u>FEI</u>

FEI's long term shareholder risks, arising from the existence of deferral accounts, have not been reduced over the period 2000 to 2012. Over the period of 2000-2012, FEI has added deferrals to address uncontrollable O&M related costs, to mitigate impacts from changes to accounting standards (IFRS, US GAAP deferrals) and to capture costs for various projects where the expenditures were not forecast in the cost of service.

# <u>FEVI</u>

FEVI's long term shareholder risks, arising from the existence of deferral accounts, have not been reduced over the period 2000 to 2012. Over the period of 2000-2012, FEVI has added deferrals to address uncontrollable O&M related costs, to mitigate impacts from changes to accounting standards (IFRS, US GAAP deferrals) and to capture costs for various projects where the expenditures were not forecast in the cost of service.



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## **FEW**

FEW's long term shareholder risks, arising from the existence of deferral accounts, have not been reduced over the period 2000 to 2012. Over the period of 2000-2012, FEW has added deferrals to address uncontrollable O&M related costs, to mitigate impacts from changes to accounting standards (IFRS, US GAAP deferrals) and to capture costs for various projects where the expenditures were not forecast in the cost of service. This includes the Whistler Pipeline Conversion project with several deferrals created during the period.

#### <u>FEFN</u>

FEFN's long term shareholder risks, arising from the existence of deferral accounts, have not been reduced over the period 2000 to 2012. Over the period of 2000-2012, consistent with FEI and FEW, Fort Nelson added an RSAM mechanism to capture variances in use rates. In addition, deferral accounts were added to address uncontrollable O&M related costs and to maintain customer rates at the previous year levels.

## <u>FBC</u>

FBC's long term shareholder risks, arising from the existence of deferral accounts, have not been reduced over the period 2000 to 2012. FBC has operated under various PBR Plans since 1996 (with the exception of 2005 and 2006, however incentive mechanisms were also in place during those years). In 2012 and 2013 pursuant to Order G-110-12, Uncontrollable Expense variances are held in non-Rate Base deferral accounts.



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## 4. Topic: Revenue Composition

For each Fortis BC utility for 2000, 2005, 2009 and currently

4.1 Please provide a breakdown of the revenue derived from the following customer classifications: retail, commercial and industrial.

## Response:

The FortisBC Utilities interpret the word retail to mean Residential customers. The following tables provide a breakdown, by utility, of the total revenues by Residential, Commercial and Industrial customers. The 2012 FEU amounts shown are the amounts as approved in the 2012/2013 RRA through BCUC Order G-44-12. The 2012 FBC amounts shown are the revenues at 2011 rates as 2012 rates have not yet been finalized at time of submission. For both FEU and FBC, the amounts shown for 2000, 2005, and 2009 are the actual non-normalized revenue amounts.

FEI		2012		2009		2005		2000
TOTAL REVENUE	RR	A Forecast <sup>4</sup>		Actual	Actual			Actual
		(\$	000	Os)				
Residential <sup>1</sup>	\$	764,913	\$	873,992	\$	867,144	\$	621,063
Commercial <sup>2</sup>	\$	389,328	\$	480,129	\$	444,649	\$	332,865
Industrial <sup>3</sup>	\$	85,989	\$	91,342	\$	107,915	\$	141,413
Total	\$	1,240,230	\$1	L,445,463	\$	1,419,708	\$1	1,095,341

<sup>&</sup>lt;sup>1</sup> - Rate Schedule 1

<sup>&</sup>lt;sup>2</sup> - Rate Schedules 2, 3 and 23

<sup>&</sup>lt;sup>3</sup> - Rate Schedules 4, 5, 6, 7, 22, 25 and 27, and includes Burrard Thermal

<sup>&</sup>lt;sup>4</sup> - Total of \$1,240,230 agrees to financial schedules for 2012/2013 RRA approved through Order G-44-12 Section 7, Tab 7.1, Schedule 5, Row 18, Column 5



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FEVI		2012		2009	2005	2000
TOTAL REVENUE	RRA	$Fore cast^4$		Actual	Actual	Actual
		(\$	0000	s)		
Residential <sup>1</sup>	\$	70,287	\$	81,348	\$ 64,232	\$ 42,941
Commercial <sup>2</sup>	\$	89,879	\$	99,105	\$ 75,551	\$ 52,458
Industrial <sup>3</sup>	\$	19,779	\$	24,106	\$ 24,227	\$ 13,941
Total	\$	179,945	\$	204,559	\$ 164,010	\$ 109,340

#### Notes:

- <sup>1</sup> Rate Schedule RGS
- <sup>2</sup> Rate Schedules AGS, SCS1, SCS2, LCS1, LCS2, LCS3, HLF and ILF
- <sup>3</sup> Transportation Rates which include BC Hydro and ICP, VIGJV, FEW and Squamish

<sup>&</sup>lt;sup>4</sup> - Total of \$179,945 agrees to financial schedules for 2012/2013 RRA approved through Order G-44-12 Section 7, Tab 7.2, Schedule 5, Row 16, Column 5

FEW		2012		2009	2005		2000
TOTAL REVENUE	RRA	Forecast	/	Actual	Actual	Α	ctual
		(\$	000	s)			
Residential <sup>1</sup>	\$	3,925	\$	4,393	\$ 2,770	\$	1,770
Commercial <sup>2</sup>	\$	7,560	\$	10,553	\$ 7,920	\$	6,094
Industrial	\$	-	\$		\$ =	\$	=
Total	\$	11,485	\$	14,946	\$ 10,690	\$	7,864

- <sup>1</sup> Rate Schedule SGS1 and SGS2 Residential
- $^{2}$  Rate Schedules SGS1 and SGS2 Commercial, LGS1, LGS2 and LGS3
- <sup>3</sup> Total of \$11,485 agrees to financial schedules for 2012/2013 RRA approved through Order G-44-12 Section 7, Tab 7.3, Schedule 5, Row 14, Column 5



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FEFN	:	2012		2009		2005		2000	
TOTAL REVENUE	<b>RRA Forecast</b>		A	Actual	1	Actual		Actual	
		(\$	6000s	5)					
Residential	\$	2,149	\$	2,479	\$	2,244	\$	1,128	
Commercial	\$	2,484	\$	2,632	\$	2,513	\$	1,159	
Industrial	\$	141	\$	142	\$	336	\$	335	
Total	\$	4,774	\$	5,253	\$	5,093	\$	2,622	

#### Notes:

FBC	2012		2009			2005		2000	
TOTAL REVENUE	<b>RRA Forecast</b>		Actual			Actual		Actual	
	(\$000s)								
Residential	\$	137,502	\$	112,059	\$	79,177	\$	57,313	
Commercial	\$	65,583	\$	62,515	\$	44,574	\$	32,806	
Industrial	\$	18,090	\$	14,051	\$	17,945	\$	12,695	
Wholesale	\$	62,114	\$	49,946	\$	41,424	\$	30,490	
Total	\$	283,289	\$	238,572	\$	183,120	\$	133,304	

4.2 For each customer classification please provide a cost comparison for a typical user for the major fuel sources, natural gas, fuel oil and electricity.

<sup>&</sup>lt;sup>1</sup> - Rate Schedule 1

<sup>&</sup>lt;sup>2</sup> - Rate Schedules 2.1 and 2.2

<sup>&</sup>lt;sup>3</sup> - Rate Schedule 25

<sup>&</sup>lt;sup>4</sup> - Total of \$4,774 agrees to financial schedules for 2012/2013 RRA approved through Order G-44-12 Section 7, Tab 7.4, Schedule 5, Row 18, Column 5



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## Response:

This response first addresses FEI, followed by FEVI and FEW.

The FBCU have provided an analysis for residential customers only. FBCU are unable to provide cost comparisons between commercial and industrial customers for different fuel applications because customers in these classes use fuel in different applications than residential customers (i.e. primarily space heating and hot water). In other words, due to the widely differing consumption profiles and end uses of these customer classes, there is not a 'typical' commercial or industrial customer that can be used for an analysis of cost comparisons. Fuel use by commercial and industrial customers may be more sensitive to changes in price depending on the customer's ability to switch fuels. For FEI, residential customers represent the majority of FEI's consumption load and therefore a cost comparison using a residential customer is most appropriate. As stated on page 8, Section 3 of Appendix H of the FBCU's Evidence (Exhibit B1-9-6), "The fact that the majority of the FEI's delivery margin revenue in 2011 was generated from residential customers (i.e. Rate Schedule 1) is significant because FEI faces its greatest challenges in the residential market."

## FortisBC Energy Inc.

For a comparison between natural gas and electricity, the figure below graphically illustrates the operating cost differences between natural gas and electricity for a space heating residential customer in the Lower Mainland. The data is shown for four annual periods; 2000, 2005, 2009, and 2012.

The calculations in the figure below are based on the following assumptions:

- The estimated residential bills are based on prevailing rates as of July 1 of each specified year;
- The BC Hydro Step 1 and Step 2 rates are used for the 2009 and 2012 periods based on average consumption<sup>1</sup>;

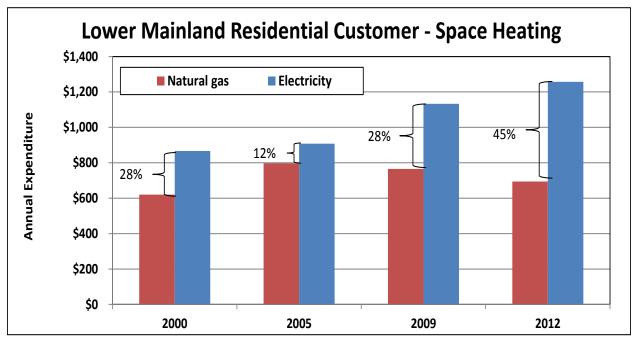
<sup>&</sup>lt;sup>1</sup> 2009 average electricity rate of \$0.07/kWh is based on average consumption of 675 kWh per month at Step 1 rate of \$0.059/kwh and 575 kWh per month at Step 2 rate of \$0.083/kwh. 2012 average electricity rate of \$0.0836/kWh is based on average consumption of 675 kWh per month at Step 1 rate of \$0.068/kWh and 575 kWh per month at Step 2 rate of \$0.102/kWh.



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- The estimated bills have been calculated by FEI and may differ from actuals;
- The efficiency of natural gas for space heating is assumed to be 90% vs. 100% for electricity space heating application; and
- Carbon tax applicable to natural gas has been included in the natural gas expenditures.

Figure 1: Estimated Annual Expenditure for FEI Lower Mainland Residential Customer – Natural Gas and Electricity for Space Heating



As per the figure 1 above, the operating cost advantage of natural gas over electricity in terms of annual expenditure space heating is about 45% in 2012. This compares to about 28% in 2000, 12% in 2005, and 28% in 2009. Therefore, since 2005, the operating cost advantage of natural gas over electricity has improved for space heating.

The operating cost differences for hot water heating are significantly lower and the results are presented in the following figure.

The calculations in the figure below are based on the following assumptions:

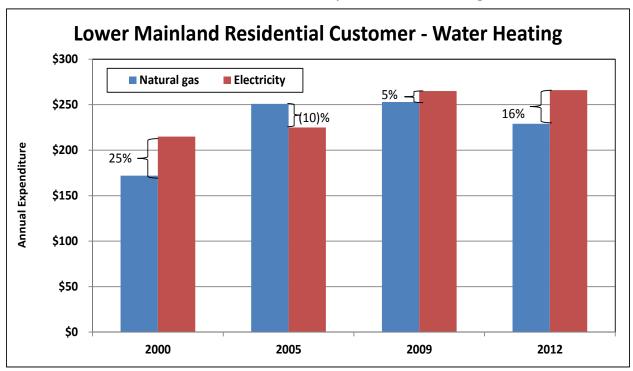


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- The estimated residential bills are based on prevailing rates as of July 1 of each specified year;
- The BC Hydro Step 1 rate is used for the 2009 and 2012 periods based on average consumption for hot water heating application;
- The estimated bills have been calculated by FEI and may differ from actuals; and
- The efficiency of natural gas for hot water heating is assumed to be 60% vs. 90% for electricity, yielding an effective efficiency of 67%; and
- Carbon tax applicable to natural gas has been included in the natural gas expenditures.

Figure 2: Estimated Annual Expenditure for FEI Lower Mainland Residential Customer – Natural

Gas and Electricity for Hot Water Heating



As per the figure 2 above, the operating cost advantage of natural gas over electricity in terms of annual expenditure for water heating is about 16% in 2012. This compares to about 25% in



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2000, -10% in 2005, and 5% in 2009. Therefore, since 2009, the operating cost advantage of natural gas over electricity has widened for hot water heating applications.

This widening of the operating cost advantages of gas over electricity is largely due to the decline in natural gas prices resulting from the proliferation of the shale gas since 2009 and weakened economic growth. At the same time, BC Hydro electricity rates have steadily increased each year. As discussed in Section 5.3 of Appendix H of the Application and the response to BCUC IR 1.97.1, the difference in capital costs for natural gas versus electricity significantly decreases the overall cost competitiveness of natural gas when trying to attract new customers.

With regard to heating oil, a cost comparison between natural gas and heating oil for space heating only for a typical Lower Mainland customer has been provided as heating oil is not typically used for hot water heating applications.

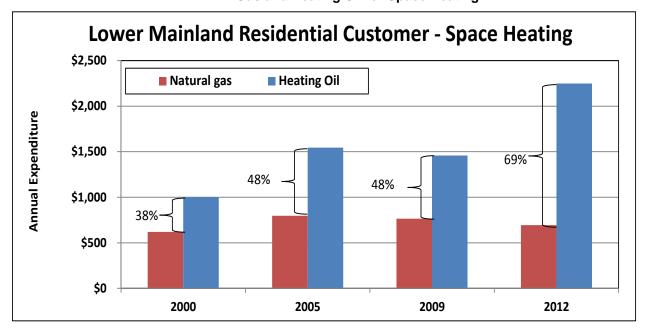
The calculations in the figure below are based on the following assumptions:

- The estimated natural gas residential bills are based on prevailing rates as of July 1 of each specified year;
- The heating oil rates used are obtained from Stats Canada Energy Statistics Handbook, First Quarter 2012 for the Vancouver, BC area;
- The estimated bills have been calculated by FEI and may differ from actuals; and
- The efficiency of natural gas for space heating is assumed to be 90% vs. 80% for heating oil, yielding a relative efficiency of 112.5% for natural gas.



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Figure 3: Estimated Annual Expenditure for FEI Lower Mainland Residential Customer – Natural Gas and Heating Oil for Space Heating<sup>2</sup>



As per the figure 3 above, the operating cost advantage of natural gas over heating oil in terms of annual expenditure for space heating is about 69% in 2012. This compares to about 38% in 2000, 48% in 2005, and 48% in 2009. Therefore, since 2000, the operating cost advantage of natural gas over heating oil has improved for each period for space heating applications. This is largely due to the fact that market heating oil prices are highly correlated with crude oil prices. And while natural gas prices have fallen during the last few years largely due to the abundance of shale gas, crude oil prices have remained high and influenced by geopolitical factors.

# FortisBC Energy (Vancouver Island) Inc.

Due to FEVI's higher cost of service relative to system throughput, its per unit natural gas rates are significantly higher than those for FEI. FEVI's residential bundled variable rate, including delivery, midstream, and commodity costs, has been held constant under the rate freeze mechanism for a number of years. Since FEVI's natural gas rates are set higher than market

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Heating oil prices are obtained from Stats Canada Catalogue no. 57-601-X - Manufacturing and Energy Division Marketing and Dissemination Section Energy Statistics Handbook First quarter 2012. A conversion factor of 25.974 liters per gigajoule are used to represent a mid-efficiency heating oil furnace (per NRCAN conversion tables sourced from: http://oee.nrcan.gc.ca/equipment/heating/2371#table1)



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based rates due to a higher cost structure, it is less price competitive in comparison to electricity than FEI.

The calculations in the figure below are based on the following assumptions:

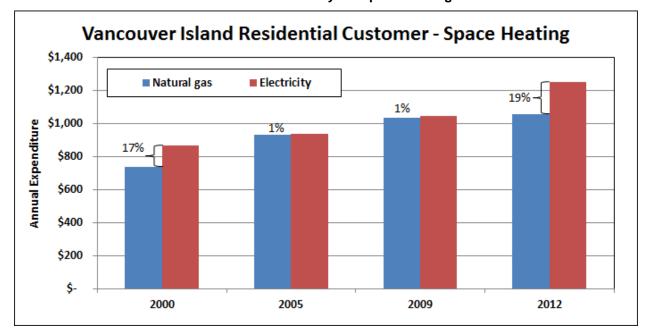
- The estimated residential bills are based on prevailing rates as of July 1 of each specified year;
- The BC Hydro Step 1 and Step 2 rates are used for the 2009 and 2012 periods based on average consumption<sup>3</sup>;
- The estimated bills have been calculated by FEVI and may differ from actuals; and
- The efficiency of natural gas for space heating is assumed to be 90% vs. 100% for electricity space heating application;
- Carbon tax applicable to natural gas has been included in the natural gas expenditures.

<sup>&</sup>lt;sup>3</sup> 2009 average electricity rate of \$0.07/kWh is based on average consumption of 675 kWh per month at Step 1 rate of \$0.059/kwh and 575 kWh per month at Step 2 rate of \$0.083/kwh. 2012 average electricity rate of \$0.0836/kWh is based on average consumption of 675 kWh per month at Step 1 rate of \$0.068/kWh and 575 kWh per month at Step 2 rate of \$0.102/kWh.



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Figure 4: Estimated Annual Expenditure for FEVI Residential Customer – Natural Gas and Electricity for Space Heating



As per the figure 4 above, the operating cost advantage of natural gas over electricity in terms of annual expenditure for space heating is about 19% in 2012. This compares to about 17% in 2000 and 1% in 2005 and 2009. Therefore, since 2009, the operating cost advantage of natural gas over electricity has widened for space heating for an FEVI residential customer.

Hot water heating operating costs pose a much greater challenge for FEVI due to the lower efficiency of a natural gas hot water heater (about 60%) relative to an electric hot water heater (about 90%) and the higher gas rate that is charged to an FEVI residential customer.

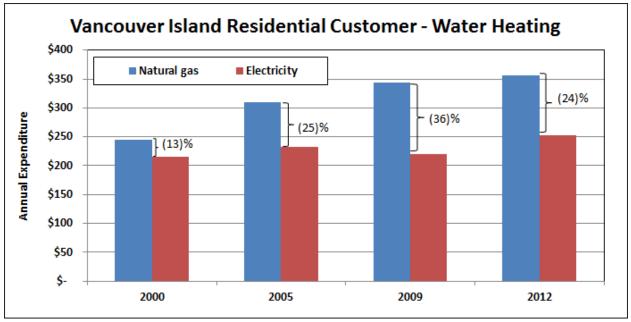
- The estimated residential bills are based on prevailing rates as of July 1 of each specified year;
- The BC Hydro Step 1 rate is used for the 2009 and 2012 periods based on average consumption for hot water heating application;
- The estimated bills have been calculated by FEVI and may differ from actuals; and



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- The efficiency of natural gas for hot water heating is assumed to be 60% vs. 90% for electricity, yielding an effective efficiency of 67%;
- Carbon tax applicable to natural gas has been included in the natural gas expenditures.

Figure 5: Estimated Annual Expenditure for FEVI Residential Customer – Natural Gas and Electricity for Hot Water Heating



As per the figure 5 above, the operating cost disadvantage of natural gas over electricity in terms of annual expenditure for water heating is about 24% in 2012. This compares to about 13% in 2000, 25% in 2005, and 36% in 2009. Therefore, since 2009, the operating cost disadvantage of natural gas over electricity has improved for hot water heating applications for a typical FEVI residential customer.

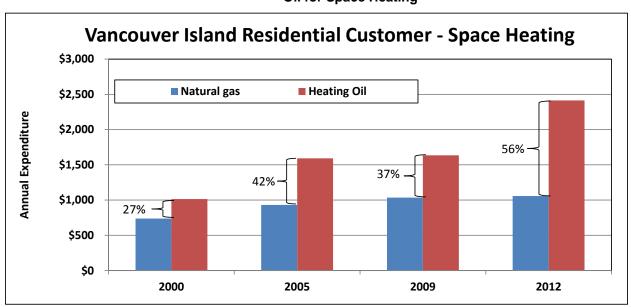
With regard to heating oil, a cost comparison between natural gas and heating oil for space heating for a typical Vancouver Island customer has been provided as heating oil is not typically used for hot water heating applications.



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- The estimated residential natural gas bills are based on prevailing rates as of July 1 of each specified year;
- The heating oil rates used are obtained from Stats Canada Energy Statistics Handbook, First Quarter 2012 for the Victoria, BC area;
- The estimated bills have been calculated by FEVI and may differ from actuals; and
- The efficiency of natural gas for space heating is assumed to be 90% vs. 80% for heating oil, yielding a relative efficiency of 112.5% for natural gas.

Figure 6: Estimated Annual Expenditure for FEVI Residential Customer – Natural Gas and Heating
Oil for Space Heating<sup>4</sup>



As per the figure 6 above, the operating cost advantage of natural gas over heating oil in terms of annual expenditure for space heating is about 56% in 2012. This compares to about 27% in 2000, 42% in 2005, and 37% in 2009. Therefore, since 2009, the operating cost advantage of

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Heating oil prices are obtained from Stats Canada Catalogue no. 57-601-X - Manufacturing and Energy Division Marketing and Dissemination Section Energy Statistics Handbook First quarter 2012. A conversion factor of 25.974 liters per gigajoule are used to represent a mid-efficiency heating oil furnace (per NRCAN conversion tables sourced from: http://oee.nrcan.gc.ca/equipment/heating/2371#table1)



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natural gas over heating oil has improved for each period for space heating applications for a typical FEVI residential customer.

### FortisBC Energy (Whistler) Inc.

Due to FEW's higher cost structure, its competitiveness with electricity is similar to that of FEVI's residential customers. As Whistler customers were not completely converted from propane to natural gas until the latter part of 2009, the cost comparison has only been provided for 2012.

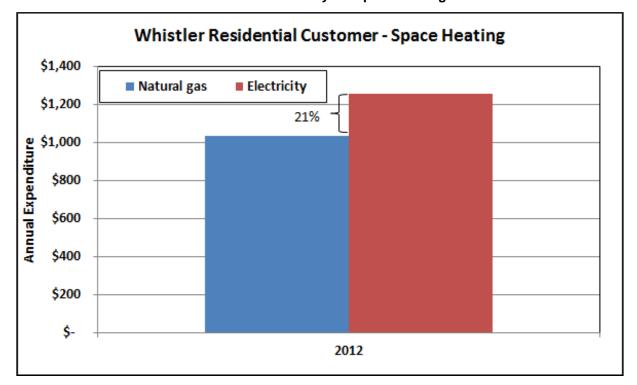
- The estimated residential bills are based on prevailing rates as of July 1 of 2012;
- The BC Hydro Step 1 and Step 2 rates are used for 2012 based on average consumption<sup>5</sup>;
- The estimated bills have been calculated by FEW and may differ from actuals; and
- The efficiency of natural gas for space heating is assumed to be 90% vs. 100% for electricity space heating application;
- Carbon tax applicable to natural gas has been included in the natural gas expenditures.

<sup>&</sup>lt;sup>5</sup> 2009 average electricity rate of \$0.07/kWh is based on average consumption of 675 kWh per month at Step 1 rate of \$0.059/kwh and 575 kWh per month at Step 2 rate of \$0.083/kwh. 2012 average electricity rate of \$0.0836/kWh is based on average consumption of 675 kWh per month at Step 1 rate of \$0.068/kWh and 575 kWh per month at Step 2 rate of \$0.102/kWh.



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Figure 7: Estimated Annual Expenditure for FEW Residential Customer – Natural Gas and Electricity for Space Heating



As per the figure 7 above, the operating cost advantage of natural gas over electricity in terms of annual expenditure for space heating is about 21% in 2012.

Hot water heating operating costs pose a much greater challenge for FEW due to the lower efficiency of a natural gas hot water heater (about 60%) relative to an electric hot water heater (about 90%).

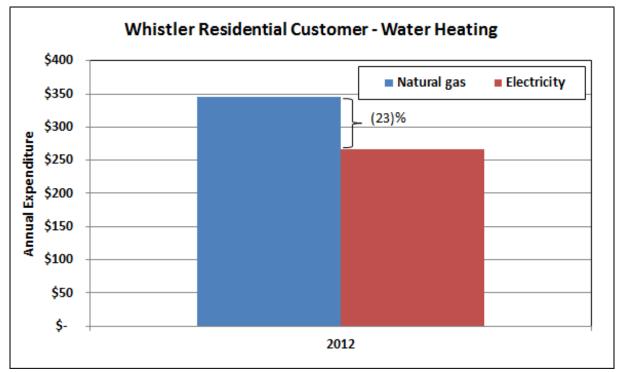
- The estimated residential bills are based on prevailing rates as of July 1 of 2012;
- The BC Hydro Step 1 rate is used for 2012 based on average consumption for hot water heating application;
- The estimated bills have been calculated by FEW and may differ from actuals; and



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- The efficiency of natural gas for hot water heating is assumed to be 60% vs. 90% for electricity, yielding an effective efficiency of 67%;
- Carbon tax applicable to natural gas has been included in the natural gas expenditures.

Figure 8: Estimated Annual Expenditure for FEW Residential Customer – Natural Gas and Electricity for Hot Water Heating



As per the figure 8 above, natural gas is at a disadvantage with electricity in terms of annual expenditure, costing about 23% more in 2012.

FEW is not able to provide cost comparisons for heating oil for Whistler residential consumers as Stats Canada does not provide heating oil rates for Whistler.



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4.3 Please discuss the impact on the trends in the cost competitiveness of the different fuels in 4.2 above

# Response:

Please refer to the response to BC Util Cust-FBCU IR 1.4.2.

4.4 Please provide the number of customers in each customer classification.

# Response:

The following tables provide the number of customers, at the end of each year, for each customer classification.

2011	Mainland	Vancouver Island	Whistler	Fort Nelson	2011 Total
Residential	765,553	92,554	2,296	1,955	862,358
Commercial	82,733	9,556	353	478	93,120
Industrial	903	4		2	909
Grand Total	849,189	102,114	2,649	2,435	956,387

2009	Mainland	Vancouver Island	Whistler	Fort Nelson	2009 Total
Residential	753,735	88,321	2,250	1,925	846,231
Commercial	82,175	9,383	330	440	92,328
Industrial	1,066	4		2	1,072
Grand Total	836,976	97,708	2,580	2,367	939,631

2005	Mainland	Vancouver Island	Whistler	Fort Nelson	2005 Total
Residential	719,356	76,053	2,045	1,918	799,372
Commercial	78,832	8,963	320	421	88,536
Industrial	1,239	4		2	1,245
Grand Total	799,427	85,020	2,365	2,341	889,153



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2000	Mainland	Vancouver Island	Whistler	Fort Nelson	2000 Total
Residential	678,712	61,234	1,612	1,698	743,256
Commercial	78,657	8,231	326	351	87,565
Industrial	1,130	4		2	1,136
Grand Total	758,499	69,469	1,938	2,051	831,957

Rate schedules included in each rate group for each utility follow:

### Mainland

### Residential

RATE 1 - Residential

### Commercial

RATE 2 - Small Commercial

RATE 23 - Commercial Transportation

**RATE 3 - Large Commercial** 

### Industrial

RATE 22 - Burrard T Service

RATE 22 - Large Volume Transportation

RATE 22 - Large Volume Transportation, By Pass

RATE 22 - Special

RATE 22A - Large Volume Transportation, Inland

RATE 22B - Large Volume Transportation, Columbia

RATE 22B - Special

RATE 25 - General Firm Transportation

RATE 25 - General Firm Transportation, By Pass

RATE 27 - General Interruptible Transportation

RATE 4 - Seasonal

RATE 5 - General Firm

RATE 6 - Natural Gas Vehicle

RATE 7 - General Interruptible Sales



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### Vancouver Island

### Residential

**RGS - Residential General Service** 

### Commercial

AGS - Apartment General Service

HLF - High Load Factor

ILF - Inverse Load Factor

LCS1 - Large Commercial Service 1

LCS2 - Large Commercial Service 2

LCS3 - Large Commercial Service 3

SCS1 - Small Commercial Service 1

SCS2 - Small Commercial Service 2

#### Industrial

BCH / ICP

Squamish

**TGW** 

**VIGJV** 

### Whistler

### Residential

SGSR - Small General Service Residential 1

#### Commercial

LGS1 - Large General Service Commercial 1

LGS2 - Large General Service Commercial 2

LGS3 - Large General Service Commercial 3

SGSC - Small General Service Commercial 1

### **Fort Nelson**

### Residential

RATE 1 - Residential

### Commercial

RATE 2.1 - Small Commercial

RATE 2.2 - Large Commercial

### Industrial

RATE 25 - General Firm Transportation



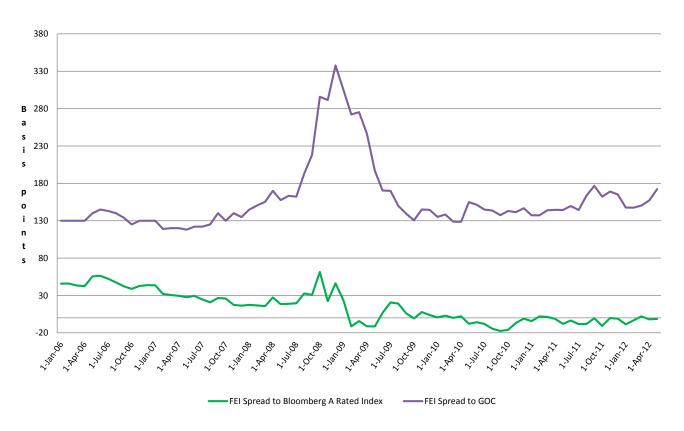
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# 5. Topic: Debt costs

5.1 Please provide a chart with the monthly yield on a representative long term FEI/TGI/BC gas bond issue relative to an equivalent long term Government of Canada bond issue and the Bloomberg long term utility yield.

### **Response:**

Please see the chart below that graphs the 30 year BC GAS Series 18 06.500 05/01/34 long-term MTN relative to the CAN 05.7500 06/01/29 government benchmark bond and against the CAD 29530yr Bloomberg A rated index on a monthly basis from January 31, 2006 to May 31, 2012.



Source: RBC Capital Markets, Bloomberg.



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5.2 Please provide the underlying data used in the graph in 5.1 above.

# Response:

See the underlying data below in the following table:

Month End	BCG 06.5000 05/01/34	CAN 05.7500 06/01/29	FEI Spread to	Bloomberg Utility A rated 30 year Index	FEI Spread to Bloomberg A Rated Index
31-Jan-06	5.58	4.28	130	5.12	46
28-Feb-06	5.50	4.20	130	5.04	46
31-Mar-06	5.61	4.31	130	5.18	43
30-Apr-06	5.86	4.56	130	5.43	43
31-May-06	5.93	4.53	140	5.37	56
30-Jun-06	6.10	4.65	145	5.53	56
31-Jul-06	5.84	4.41	143	5.31	52
31-Aug-06	5.62	4.22	140	5.15	47
30-Sep-06	5.46	4.12	134	5.04	42
31-Oct-06	5.37	4.12	125	4.98	39
30-Nov-06	5.32	4.02	130	4.90	43
31-Dec-06	5.47	4.17	130	5.03	44
31-Jan-07	5.55	4.25	130	5.12	44
28-Feb-07	5.32	4.13	119	5.00	32
31-Mar-07	5.43	4.23	120	5.13	31
30-Apr-07	5.43	4.23	120	5.13	29
31-May-07	5.60	4.42	118	5.33	28
30-Jun-07	5.74	4.52	122	5.45	29
31-Jul-07	5.72	4.50	122	5.47	25
31-Aug-07	5.74	4.49	125	5.53	21
30-Sep-07	5.86	4.46	140	5.60	27
31-Oct-07	5.70	4.40	130	5.45	26
30-Nov-07	5.58	4.18	140	5.40	17
31-Dec-07	5.48	4.13	135	5.31	16
31-Jan-08	5.65	4.20	145	5.48	17



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Month End	BCG 06.5000 05/01/34	CAN 05.7500 06/01/29	FEI Spread to	Bloomberg Utility A rated 30	FEI Spread to Bloomberg A Rated
Month End 29-Feb-08	<u>05/01/34</u> 5.60	4.09	<b>GOC</b> 150	<u>year Index</u> 5.43	<u>Index</u> 17
31-Mar-08	5.50	3.95	155	5.34	16
30-Apr-08	5.79	4.09	170	5.51	27
31-May-08	5.73	4.15	157	5.55	18
30-Jun-08	5.76	4.13	163	5.57	19
31-Jul-08	5.78	4.15	162	5.58	20
31-Aug-08	5.99	4.06	193	5.67	33
30-Sep-08	6.48	4.30	218	6.18	31
31-Oct-08	7.38	4.42	296	6.76	61
30-Nov-08	6.97	4.05	291	6.75	22
31-Dec-08	6.93	3.56	338	6.47	46
31-Jan-09	6.97	3.92	305	6.74	24
28-Feb-09	6.56	3.84	272	6.67	-11
31-Mar-09	6.39	3.63	275	6.43	-4
30-Apr-09	6.36	3.90	246	6.48	-11
31-May-09	6.04	4.07	197	6.16	-11
30-Jun-09	5.68	3.97	171	5.61	7
31-Jul-09	5.76	4.06	170	5.56	21
31-Aug-09	5.50	4.00	150	5.31	19
30-Sep-09	5.34	3.95	140	5.28	6
31-Oct-09	5.35	4.04	131	5.35	-1
30-Nov-09	5.39	3.94	145	5.31	8
31-Dec-09	5.63	4.19	145	5.59	4
31-Jan-10	5.34	3.99	135	5.34	1
28-Feb-10	5.42	4.04	138	5.39	3
31-Mar-10	5.37	4.08	129	5.37	0
30-Apr-10	5.31	4.02	129	5.29	2
31-May-10	5.28	3.73	155	5.36	-8
30-Jun-10	5.13	3.61	151	5.18	-6
31-Jul-10	5.11	3.66	145	5.19	-8
31-Aug-10	4.84	3.40	144	4.98	-15



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			Bloomberg	FEI Spread to
			Utility A	<u>Bloomberg</u>
				A Rated Index
4.69	3.31	137	4.86	-17
4.77	3.34	143	4.93	-16
4.88	3.47	142	4.95	-7
4.95	3.48	147	4.96	-1
5.08	3.71	137	5.13	-4
5.05	3.68	137	5.03	2
5.17	3.73	144	5.16	1
5.10	3.66	145	5.12	-1
4.85	3.41	144	4.94	-8
4.96	3.46	150	4.99	-4
4.62	3.18	144	4.70	-8
4.61	2.97	164	4.69	-8
4.41	2.64	177	4.41	0
4.40	2.78	162	4.51	-11
4.29	2.60	169	4.29	0
4.04	2.39	165	4.05	-1
3.85	2.38	148	3.94	-9
3.95	2.47	148	3.98	-3
4.03	2.52	150	4.01	2
4.06	2.48	157	4.08	-2
3.86	2.14	172	3.87	-1
	4.77 4.88 4.95 5.08 5.05 5.17 5.10 4.85 4.96 4.62 4.61 4.41 4.40 4.29 4.04 3.85 3.95 4.03 4.06	05/01/34         06/01/29           4.69         3.31           4.77         3.34           4.88         3.47           4.95         3.48           5.08         3.71           5.05         3.68           5.17         3.73           5.10         3.66           4.85         3.41           4.96         3.46           4.62         3.18           4.61         2.97           4.41         2.64           4.40         2.78           4.29         2.60           4.04         2.39           3.85         2.38           3.95         2.47           4.03         2.52           4.06         2.48	05/01/34         06/01/29         GOC           4.69         3.31         137           4.77         3.34         143           4.88         3.47         142           4.95         3.48         147           5.08         3.71         137           5.05         3.68         137           5.17         3.73         144           5.10         3.66         145           4.85         3.41         144           4.96         3.46         150           4.62         3.18         144           4.61         2.97         164           4.41         2.64         177           4.40         2.78         162           4.29         2.60         169           4.04         2.39         165           3.85         2.38         148           3.95         2.47         148           4.03         2.52         150           4.06         2.48         157	BCG 06.5000 05/01/34CAN 05.7500 06/01/29FEI Spread to GOC GOCUtility A rated 30 year Index4.693.311374.864.773.341434.934.883.471424.954.953.481474.965.083.711375.135.053.681375.035.173.731445.165.103.661455.124.853.411444.944.963.461504.994.623.181444.704.612.971644.694.412.641774.414.402.781624.514.292.601694.294.042.391654.053.852.381483.944.032.521504.014.062.481574.08

SOURCE: RBC Capital Markets, Bloomberg

5.3 Please indicate whether the Fortis utilities all raise debt under their own name and whether they have ever used parent guarantees to raise debt.



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### Response:

Not all Fortis utilities raise debt under "their own name". For example, FortisBC Energy (Whistler) Inc. borrows from its parent FortisBC Holdings Inc. at an indicative market rate.

It is not Fortis Inc. policy but it does have a couple of small legacy parental guarantees which were created in part because of the BCUC. The series, F & G secured debentures of FortisBC Inc. of \$15 million and \$25 million maturing Oct 2012 & Aug 2023 respectively are guaranteed by FortisWest a subsidiary holding company of Fortis Inc. which holds indirectly the common interest in FortisBC Inc., FortisAlberta and directly Maritime Electric. FortisWest had assumed these guarantees as part of its indirect acquisition of Aquila Networks Canada (British Columbia) in 2004. These are legacy parental guarantees that were put in place by Aquila (formerly Utilicorp) in accordance with the board ordered conditions contained in the decision from the BCUC approving the Utilicorp's acquisition of West Kootney Power in 1987 (G-31-87) This same condition was not required of Fortis however the holders of the secured debentures would only release Aquila from the parental guarantee with a replacement guarantee from FortisWest.

5.4 Please indicate why the BCUC should not simply impute FEI's cost of debt to each FortisBC subsidiary on the basis that to do otherwise is to penalize BC residents who happen to live in the franchise area of a small utility.

### Response:

If a borrower other than FEI is obtaining financing then it make sense that the rate of interest be at the cost of borrowing applicable to the borrower, not FEI. The debt cost incurred by the particular utility is part of the overall cost of service of that utility. Rates must be set at a level sufficient to permit the recovery of the cost of service, otherwise rates would not meet the requirements of the UCA.



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5.5 Please confirm that the OEB imputes the cost of debt and capital structure for electricity distributors partly on the basis that to use actual costs might hinder consolidation within the industry.

# Response:

It is the FBCU's understanding that the cost of debt was imputed for affiliate (not third party) debt because of the concern that utilities might arrange for debt with affiliates at less favourable terms than otherwise available with third parties.



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# 6. Topic: Financings

6.1 Please provide the following details on all debt and equity financing by FortisBC subsidiaries and the parent company Fortis, since 2000

## Equity:

- a) Date of issue
- b) Size of issue
- c) Discount to the trailing 20 day equity price
- d) Fees

### Debt:

- a) Date of issue
- b) Size of issue
- c) Yield to maturity of issue
- d) Yield of comparable Canada bond
- e) Coupon

### Response:

Preferred Share Issuances are as follows:

Company	Equity Type	Date of Issue	Size of Issue (\$)	Size of issue (Shares)	Discount to trailing 20 day equity price	Fees (\$)
Fortis Inc.	Preferred	26-May-03	125,000,000	5,000,000	n/a	3,750,000
Fortis Inc.	Preferred	20-Jan-04	50,000,000	8,000,000	n/a	6,000,000
Fortis Inc.	Preferred	20-Sep-06	125,000,000	5,000,000	n/a	3,750,000
Fortis Inc.	Preferred	15-May-08	200,000,000	8,000,000	n/a	6,000,000
Fortis Inc.	Preferred	18-Jan-10	250,000,000	10,000,000	n/a	7,500,000



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# Common Equity Share Issuances are as follows:

Company	Equity Type	Date of Issue	Size of Issue (\$)	Size of issue (Shares)	Discount to trailing 20 day equity price	Fees (\$)
Fortis Inc.	Common	17-Oct-00	51,750,000	1,500,000	0.8%	2,070,000
Fortis Inc.	Common	28-May-02	97,700,000	2,000,000	-0.8%	3,908,000
Fortis Inc.	Common	29-Sep-03	350,205,000	6,310,000	3.6%	14,008,200
Fortis Inc.	Common	18-Feb-05	129,891,000	1,740,000	-1.0%	5,195,640
Fortis Inc.	Common	10-Jan-07	149,930,000	5,170,000	-0.4%	5,997,200
Fortis Inc.	Common	7-Mar-07	1,001,000,000	38,500,000	4.2%	40,040,000
Fortis Inc.	Common	12-Dec-08	300,105,000	11,700,000	0.9%	12,004,200
Fortis Inc.	Common	8-Jun-11	300,300,000	9,100,000	0.0%	12,012,000
Fortis Inc.	Common	20-Jun-12	601,250,000	18,500,000	1.9%	24,050,000

NOTE: Fortis has issued more than \$500 million through various plans at market (dividend reinvestment has 2% discount)

Long-term Debt Issuances are as follows:



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	Date of Issue	Size of Issue (CAD\$ 000's) <sup>1</sup>	Yield to Maturity of Issue <sup>3</sup>	GOC Benchmark Yield <sup>3</sup>	Coupon
FEI					
Series 12 MTN	20-Jul-00	200,000	6.70%	6.13%	6.50%
Series 13 MTN	16-Oct-00	100,000	6.56%	5.81%	6.50%
Series 14 MTN	23-Oct-00	50,000	6.03%	5.77%	6.00%
Series 15 MTN	11-Dec-00	75,000	6.05%	5.52%	6.00%
Series 16 MTN	30-Jul-01	100,000	6.18%	5.45%	6.15%
Series 17 MTN <sup>2</sup>	26-Sep-05	150,000	CDOR + .0035%	n/a	n/a
Series 18 MTN	26-Apr-04	150,000	6.55%	5.28%	6.50%
Series 19 MTN	22-Feb-05	150,000	5.94%	4.76%	5.90%
Series 20 MTN <sup>2</sup>	25-Oct-05	150,000	CDOR + .0020%	n/a	n/a
Series 21 MTN	20-Sep-06	120,000	5.94%	4.58%	5.55%
Series 22 MTN	27-Sep-07	250,000	6.03%	4.55%	6.00%
Series 23 MTN	8-May-08	250,000	5.82%	4.19%	5.80%
Series 24 MTN	19-Feb-09	100,000	6.58%	3.73%	6.55%
Series 25 MTN	6-Dec-11	100,000	4.30%	2.67%	4.25%
FEVI Series 2008 Series 2010	7-Feb-08 1-Dec-10	250,000 100,000	6.06% 5.22%	4.23% 3.62%	6.05% 5.20%
FBC Inc.					
Series J	18-Jul-02	50,000	n/a	n/a	6.75.%
Series 01-1 Public	23-Nov-04	140,000	5.49%	4.52%	5.48%
MTN	27-Oct-05	100,000	5.58%	4.38%	5.60%
MTN	22-Jun-07	105,000	5.91%	4.66%	5.90%
MTN	28-May-09	105,000	6.10%	4.15%	6.10%
MTN	19-Nov-10	100,000	5.01%	3.66%	5.00%
Fortis Inc.					
Senior Unsecured	25-Oct-00	100,000	7.40%	5.65%	7.40%
USD Unsecured Subordinated Convertible	12-Mar-02	10,000	n/a	0.0070 n/a	6.75%
USD Unsecured Subordinated Convertible	20-May-03	10,000	n/a	n/a	5.50%
USD Senior Unsecured	28-Oct-04	150,000	n/a	n/a	5.74%
USD Subordinated Convertible	7-Nov-06	40,000	n/a	n/a	5.50%
USD Senior Unsecured	6-Sep-07	200,000	n/a	n/a	6.60%
Senior Unsecured	29-Jun-09	200,000	6.52%	n/a	6.51%

#### Notes

- (1) USD debentures at Fortis Inc. are denominated in USD.
- (2) Floating rate Notes
- (3) Assume new issue yield



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# 7. Topic: Pension Funding

- 7.1 Please provide the latest forecasts of the expected rate of return on the defined benefit pension plan assets of the FortisBC subsidiaries and the actuarial firm that provided the forecasts. These forecasts should include the overall expected rate of return and the rates of return on the following asset groups where appropriate:
  - a. Canadian equities
  - b. US equities
  - c. Non North American equities
  - d. Bonds
  - e. Cash

## Response:

The latest forecast expected rate of returns, which are consistent with the forecasts used for the 2011 year end, on defined benefit plan assets of FortisBC subsidiaries is as follows:

Canadian Equities	7.00%
US equities	7.40%
Non North Americian equities	7.40%
Real Estate	6.50%
Bonds	3.40%
Cash	0.00%

The above forecast returns have been provided by the FortisBC subsidiaries' actuary, Towers Watson.



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7.2 Please indicate the time horizon of the expected return forecasts and whether any of the FortisBC utilities challenged the assumptions used by the actuary.

### Response:

These are long term returns, which effectively means over the lifetime of the plan. The plan lifetime would be until the last remaining member is deceased.

Expected return forecasts are provided by the actuary in their role as expert advisors. These forecasts and assumptions are reviewed and questioned by management prior to being accepted for use in determining pension costs.