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September 17, 2013

Via Email
Original via Mail

British Columbia Utilities Commission
6th Floor, 900 Howe Street
Vancouver, BC
V6Z 2N3

Attention: Ms. Erica M. Hamilton, Commission Secretary

Dear Ms. Hamilton:

**Re: British Columbia Utilities Commission (BCUC or the Commission) Generic Cost
of Capital (GCOC) Proceeding – Stage 2
FortisBC Inc. (FBC) Response to the BCUC Information Request (IR) No. 2**

In accordance with the Regulatory Timetable set out for Stage 2 of the GCOC proceeding by Commission Order G-77-13, FBC respectfully submits the attached response to BCUC IR No. 2.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC INC.

Original signed:

Dennis Swanson

Attachments

cc (email only): Registered Parties

British Columbia Utilities Commission (BCUC or the Commission) Generic Cost of Capital (GCOC) Proceeding – Stage 2	Submission Date: September 17, 2013
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1 **24.0 Reference: Exhibit B1-73, BCUC IR 1.1.1; Exhibit B1-74, BCPSO IR 1.24.1**

2 **ROE Premium and Equity Ratios**

3 FBC states that: "...although the Commission confirmed the basis point risk premium in
4 FBC's 2005 Revenue Requirements Application Decision (May 2005), the 40 basis point
5 risk premium over the benchmark utility ROE actually dates back to a negotiated
6 settlement approved by the BCUC in Order G-134-199 [sic] in December 1999. In other
7 words, the current allowed equity risk premium is not supported by any quantitative
8 analysis, and should, in FBC's view, be reassessed from first principles."

9 24.1 If the 40 basis points (bps) premium was reaffirmed in 2005 after a regulatory
10 review, would that not be considered a "quantitative analysis"?

11

12 **Response:**

13 As indicated in the preamble, the 40 basis point premium was accepted by parties as part of a
14 negotiated settlement dating from 1999, i.e., it was not based on any explicit quantification of
15 the equity risk premium required by a shareholder in FBC versus FEI. But it is correct to say
16 that the Commission's Order G-134-99 confirmed that negotiated premium after hearing
17 evidence. A better way of articulating the point that FBC was trying to make in the quoted
18 response to BCUC FBC IR 1.1.1 is to say that the 40 bps risk premium, in FBC's view, was and
19 remains lower than warranted based on FBC's business risk.

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24 24.2 If FBC is concerned about its debt credit ratings shouldn't it be more focused on
25 the equity ratio rather than the ROE premium? For example, Ms McShane states
26 in exhibit B1-74, page 35 that "...it is Ms. McShane's professional judgment that
27 a 45 percent equity ratio would be required to obtain both debt ratings in the A
28 category."

29

30 **Response:**

31 Ms. McShane was not suggesting in the quoted sentence that the focus should be on the equity
32 ratio, rather than the ROE, or that ratings in the A category are to be specifically targeted. In
33 both FBC's and Ms. McShane's view, FBC should be concerned with maintaining strong
34 investment grade credit ratings, with achieving an overall cost of capital consistent with
35 maintaining strong investment grade credit ratings, and also with being allowed a fair return. It

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1 is FBC's judgment, and that of its expert, Ms. McShane, that the requested capital structure and
2 risk premium relative to the benchmark are compatible with those objectives.

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6 24.2.1 Is it true that the 'negative watch' issued by Moody's was a result of the
7 recent Decision on GCOC proceeding – Stage 1 and not because of the
8 current equity risk premium of 40 bps?

9

10 **Response:**

11 Correct. Moody's Negative Outlook for FBC was in reaction to the GCOC Stage 1 Decision,
12 which would have the effect of lowering the allowed ROE for other BC utilities and raising the
13 risk of a lower common equity ratio for FBC in Stage 2.

14

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16

17 24.3 Would FBC agree that the quality of its generation and transmission
18 infrastructure has been significantly upgraded since 1999, thereby reducing its
19 risk compared to FortisBC Energy Inc.(FEI)?

20

21 **Response:**

22 FBC agrees that much of FBC's generation and transmission infrastructure has undergone
23 refurbishments and capital investments in order to extend the life of these assets. These
24 refurbishments extend the life of the assets, but the facilities are still exposed to similar risks
25 related to unexpected events that cause generator failure or impact transmission and
26 distribution infrastructure which is primarily above ground and therefore more exposed. The
27 inherent risks present with owning and operating electrical generation facilities and transmission
28 infrastructure has not changed, despite capital investments to extend the life of its aging assets.
29 Please also refer to the response to BCUC FBC IR 2.41.3.

30 Furthermore, there is a logic flaw in the premise of the question. Suggesting that upgrading and
31 maintaining the FBC infrastructure reduces the risk *relative to FEI* could only logically hold if the
32 assumption is that FEI has not similarly maintained its infrastructure, which is not the case as
33 both entities undertake appropriate asset management plans. Therefore, it is incorrect to
34 suggest that FBC's risk would be reduced compared to FEI as a result from FBC's capital
35 investments.

36



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1 **25.0 Reference: Exhibit B1-73, BCUC IR 1.3.1, 1.3.7**

2 **Credit Ratings**

3 In response to BCUC IR 1.3.7, FBC states that “[w]hile revenue requirement forecasts
4 were established for each year using an approved capital structure of 40 percent equity
5 and a risk premium of 40 bps, the first line of each [of Table 1 and Table 2 in Exhibit B-1-
6 72] includes FortisBC’s actual results for each of the years.”

7 25.1 Please clarify whether the “actual results” referenced above means the achieved
8 return on equity (ROE) and actual capital structure for each of the years
9 represented?

10
11 **Response:**

12 Confirmed.

13

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1 **26.0 Reference: Exhibit B1-73, BCUC IR 1.3.1; BCUC IR 1.5.1 & IR 1.5.2**

2 **ROE Premium and Capital Structure**

3 “Based on the required financial thresholds identified in Moody’s June 26, 2013 Credit
4 Opinion that could possibly support a ratings upgrade, FortisBC does not expect that
5 maintaining its equity thickness at 40 percent is sufficient to obtain a ratings upgrade and
6 thus eliminate the split credit ratings.

7 If the common equity ratio is maintained at 40 per cent and a 50 to 75 basis point equity
8 risk premium relative to the benchmark utility is approved, FortisBC would expect that
9 this regulatory support could mitigate a potential downgrade by Moody’s, ...”

10 26.1 Responses to BCUC IR 1.5.1 and 1.5.2 on pages 15 and 16 indicate large
11 increases to equity ratios or ROE to achieve a ratings upgrade. Do these
12 premiums indicate that the required metrics for an upgrade are unreasonable for
13 a stable utility like FBC? Please discuss.

14
15 **Response:**

16 Not necessarily, as BCUC IR 1.5.1 and 1.5.2 were posed such that one variable was changed
17 and one variable was held constant, therefore suggesting that large increases would be
18 necessary for a ratings upgrade. In reality, both equity thickness and ROE would both need to
19 be optimized in some fashion to best meet the credit metrics needed for an upgrade and also
20 satisfy the interest of stakeholders, such as creditors and equity providers. There wouldn’t be
21 such large increases to each one of the variables per the responses if both were optimized
22 together to meet the coverage ratios. Moody’s has reviewed FBC’s metrics relative to US rate-
23 regulated utilities per its ratings methodology in establishing the requirements for an upgrade
24 and many higher rated US Utilities have higher ROE’s and greater equity thickness in
25 combination and, hence, significantly better credit metrics.

26 Furthermore, FBC has not requested better financial metrics be met for the purpose of obtaining
27 a ratings upgrade. Rather as FBC noted in response to BCUC FBC IR 1.5.1 “... the Company
28 has never suggested that its allowed ROE should be such that it achieves specific thresholds
29 that may permit a ratings upgrade. FortisBC is more concerned with maintaining its current
30 ratings and avoiding a downgrade as alluded to in Moody’s June 21, 2013 negative outlook
31 ratings action and Moody’s June 26, 2013 Credit Opinion. A risk premium of 50 to 75 basis
32 points over the allowed benchmark ROE for FortisBC would assist in mitigating this risk.”

33

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1 26.2 The wording in the preamble does not seem to indicate any certainty that
2 approval of the requested ROE premium would ensure that Moody's would
3 maintain the existing ratings. Please explain why?
4

5 **Response:**

6 FBC is cautious in making a statement that a downgrade will be avoided with certainty as the
7 rating agencies assign a credit rating through their independent credit rating process. The
8 rating agencies consider numerous factors, including financial and non-financial, and apply
9 quantitative and qualitative analysis in the final determination of a credit rating. Therefore, it is
10 difficult to say for certainty what rating outcome will be achieved.

11 What can be interpreted with greater certainty from Moody's recent credit reports and negative
12 outlook release for the FortisBC Utilities is that a reduction in FBC's current risk premium and/or
13 equity thickness will increase the prospect of a ratings downgrade. Further, a decision that
14 approves FBC's common equity at 40 per cent and a 50 to 75 basis point equity risk premium
15 relative to the benchmark could improve the stability of financial metrics, and directionally assist
16 FBC in maintaining its existing credit ratings.

17

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1 **27.0 Reference: Exhibit B1-73, BCUC IR 1.3.0 pp. 3 – 7 & Attachment to IR 1.3.2**

2 **Debt Issuance Yields**

3 Data in the table that is in Attachment 3.2 indicates that at the peak of the financial crisis
4 in December 2008, the yields for FEI were 338 basis points (bps) whereas the yields for
5 FBC were 398 bps, a difference of 60 bps. In December 2012, the yields for FEI were
6 160 bps whereas the yields for FBC were 169, a difference of 9 bps. With the exception
7 of the financial crisis of 2008-09, it seems that FBC was able to raise money at yields
8 very close to FEI.

9 27.1 In FBC's view, why is there such small yield differential between FEI and FBC
10 since, say, January 2011?

11

12 **Response:**

13 FBC expects that the differential between FEI and FBC's yields would have tightened since
14 around 2010 as fear from the financial crisis partially subsided. This resulted in credit spreads
15 generally tightening across most investment grade corporate credits. Contributing to the tighter
16 credit spread could be FBC's credit ratings upgrade after the Cost of Capital and ROE decision
17 in 2009. Beyond this, FBC speculates that since 2009-2010 there has been greater demand for
18 yield and corporate bonds, in particular, as the global equity financial markets and economy
19 slowly recovered, which may have contributed to the narrow spread. A ratings downgrade for
20 FBC would see the yield differential widen between FEI and FBC.

21

22

23

24 27.2 FBC states in response to BCUC IR 1.3.5 that: "...FortisBC did not raise debt
25 during the worst of the Financial Crisis nor did it attempt to raise debt during the
26 worst of the crisis and, therefore, was not shut out of the debt market. FortisBC
27 did complete a \$105 million, 30 year debt issue in June 2009. At the time of
28 issuance, the debt markets had improved and indicative interest rates had
29 decreased by approximately 200 basis points from the highs reached in January
30 2009." Since the bond yield spread differential with FEI at that time seems to be
31 only 20 bps, does that indicate that the impact on customer rates of the rating
32 differential is very small? Please discuss.

33

34 **Response:**

35 FortisBC does not agree that the comparison of a historical bond yield spread differential at a
36 point in time, under specific market conditions, can be used to suggest that the customer rate
37 impact of a ratings differential will be "very small" on a prospective basis.



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1 First, focussing on facts at a point in time ignores factors such as varying market conditions, the
2 change in indicative spreads as related to the underlying Government of Canada yields and the
3 potential for changes in credit opinions. For example, the difference in the indicative spread
4 between FEI and FBC bonds during depth of the crisis on January 31, 2009 was 90 basis
5 points.

6 Second, ratings differentials can adversely affect customer rates as described in the response
7 to BCUC FBC IR 1.3.6, "The Government of Canada bond yield and credit spread are both
8 influenced by the then prevailing economic environment. Economic conditions can lead to
9 higher interest rates and lower the amount of debt financing available to FBC. Also, economic
10 conditions could lead to supply and demand imbalances in the market, which could effectively
11 shut out lower rated credits and reduce the tenors of debt issues, including those sought by
12 FBC." As noted, in troubled economic periods when there is a flight to quality, spreads of lower
13 rated credits relative to higher rated credits widen, and vice versa in better economic conditions,
14 it doesn't, however mean that the respective companies long-term business risk profiles have
15 also changed by such a degree as well. Additionally, long-term business risks are considered a
16 significant component of credit ratings as the underlying business fundamentals impact ratings.

17 Third, the determination of its risk premium and capital structure must be based on FBC's risk
18 profile rather than a focus on customer rate impact.

19

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1 **28.0 Reference: Exhibit B1-73, BCUC IR 1.3.10**

2 **Ratings Metrics**

3 FBC states that: “Yes, the average ratios for the last three years are higher than the
4 thresholds identified by Moody’s in the October 16, 2012 credit opinion, cited in the
5 preamble to the IR. However, FortisBC does not agree that this precludes a downgrade.
6 At the current allowed ROE of 9.15% and 40% equity ratio, which is above the current
7 benchmark utility’s capital structure, Moody’s has put FBC on negative outlook, which
8 clearly indicates the potential for a downgrade. Moody’s also stated at the time of the
9 negative outlook that “ratings downgrades would be considered if financial metrics below
10 3.0x and 13% CFO pre-WC interest coverage and CFO pre-WC to debt, respectively.”
11 Calculating the credit metrics utilizing the benchmark capital structure and allowed ROE,
12 produces 2.9x for the CFO pre-WC interest coverage and 10% for the CFO pre-WC to
13 debt, both of which fall below Moody’s most recent thresholds.”

14 28.1 Why has Moody’s made its rating outlook more difficult to achieve than in its
15 October 2012 opinion? Is this a general change to all companies rated by
16 Moody’s or just for FBC?

17
18 **Response:**

19 FBC is not aware of any changes to Moody’s ratings methodology or that Moody’s has made it
20 more difficult for FBC to maintain its current rating. FBC understands the evaluation of its credit
21 rating and specifically, credit metrics, are still based on Moody’s Regulated Electric and Gas
22 Utilities Rating Methodology from August 2009. In this publication, if a regulated utilities’ credit
23 metrics are at 2.7x CFO pre-WC interest coverage and 13% CFO pre-WC to debt, these are
24 indicators of a ratings of Ba, which is lower than FBC’s current rating. The change that is
25 specific to FBC since the October 2012 credit opinion is whether the GCOC Stage 1 Proceeding
26 decision and the outcome of Stage 2 will further deteriorate FBC’s already weak financial
27 metrics. This uncertainty and risk has been viewed by Moody’s as significant enough to warrant
28 a negative outlook. Moody’s outlook releases are not necessarily tied to bright-line tests that
29 automatically trigger downgrades, but rather bring focus to the market on possible material
30 changes to a company’s financial position, in this case, whether FBC’s credit metrics will
31 deteriorate further as a result of the GCOC Proceedings.

32

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1 **29.0 Reference: Exhibit B1-73, BCUC 1.3.10 – 1.3.12; Exhibit B1-74, BCPSO 1.17.1 –**
2 **1.19.1**

3 **Credit Ratings**

4 FBC states that “[c]alculating the credit metrics utilizing the benchmark capital structure
5 and allowed ROE, produces 2.9x for the CFO pre-WC interest coverage and 10% for the
6 CFO pre-WC to debt, both of which fall below Moody’s most recent thresholds.” (BCUC
7 IR 1.3.10) [Underline added]

8 29.1 Please discuss the relevance of the above underlined excerpt of the statement
9 when FBC is not proposing the benchmark capital structure nor the benchmark
10 allowed ROE.

11
12 **Response:**

13 To clarify, FBC has requested a risk premium of 50 to 75 basis points over the benchmark
14 based on its relative risk profile. The relevance in using the benchmark capital structure and
15 allowed ROE in calculating the metrics for FBC was done in response to BCUC FBC IR 1.3.10
16 which asked/suggested, “that even after applying the benchmark utility’s current capital
17 structure and allowed ROE, the average ratios for the last 3 years are higher than the
18 thresholds identified by Moody’s which could lead to a potential downgrade?”.

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20

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22

23 In response to BCUC IR 1.3.12, FBC provides two tables which calculate the potential
24 DBRS and Moody’s credit metrics using 40 equity and various levels of risk premium.

25 29.2 Please confirm that the benchmark ROE that was used to produce the tables
26 was based on the current benchmark ROE of 8.75 percent.

27

28 **Response:**

29 Confirmed.

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34 FBC indicates that the proposed risk premium of 50 to 75 basis points over the allowed
35 benchmark ROE “would assist in mitigating” the risk of being downgraded by Moody’s

1 (BCUC IR 1.5.1). FBC provides a calculation of the potential Moody's credit metrics in
 2 Table 2 of BCUC IR 1.3.12, copied and highlighted below for reference:

BCUC IR 1.3.12 - Table 2 - Potential Moody's Credit Metrics

		Estimated (CFO Pre-WC + Interest)/Interest Expense				Estimated CFO Pre-WC/Debt			
		2012	2011	2010	Average	2012	2011	2010	Average
Scenario 1	40% equity; +40bps risk premium	3.3	3.0	2.7	3.0	10%	12%	10%	11%
Scenario 2	40% equity; +50bps risk premium	3.3	3.0	2.7	3.0	10%	12%	10%	11%
Scenario 3	40% equity; +60bps risk premium	3.3	3.0	2.7	3.0	10%	12%	10%	11%
Scenario 4	40% equity; +70bps risk premium	3.3	3.1	2.8	3.0	10%	12%	10%	11%

3
 4 Given Moody's financial metrics thresholds of 3.0x and 13% CFO pre-WC interest
 5 coverage and CFO pre-WC to debt, respectively, the above table indicates that
 6 regardless of the potential level of risk premium that may be awarded (that is, between
 7 40-70 bps), the Estimate CFO Pre-WC/Debt metric is still below the 13 percent threshold
 8 indicated by Moody's.

9 29.3 Does FBC agree that the level of risk premium proposed by FBC (that is,
 10 between 40-70 bps) will have limited or have no impact on avoiding this
 11 speculated credit downgrade by Moody's? Otherwise, please provide additional
 12 clarity on how the proposed equity risk premiums "would assist in mitigating" the
 13 risk of being downgraded by Moody's (as suggested in BCUC 1.5.1), given the
 14 highlighted results of Table 2 above.

15
 16 **Response:**

17 FBC disagrees. The metrics are not necessarily bright-line tests which will automatically trigger
 18 downgrades, but rather further deterioration in FBC's already weak credit metrics as a result of
 19 the GCOC Stage 1 and Stage 2 Proceedings could serve as the "tipping point" for a ratings
 20 downgrade. FBC's point was that, directionally, the FBC proposed 50-75 basis point ROE
 21 premium will be more supportive in maintaining FBC's current credit rating than if no such
 22 premium were applied.

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1 29.4 Does FBC agree that regardless of the proposed level of risk premium proposed
2 by FBC (that is, between 40-70 bps), this will also have limited or no impact on
3 the Estimated CFO pre-WC interest coverage financial metric?
4

5 **Response:**

6 Confirmed, it will have little impact on the specific metric in comparison to Moody's thresholds of
7 13%. However, any reduction in, or failure to increase the premium may impact the overall
8 assessment of FBC's credit rating and lead to a downgrade. FBC's existing metrics are already
9 considered weak when based on the premium of 40 bps and benchmark ROE of 9.5%. As
10 noted in the response to BCUC FBC IR 2.29.3, metrics are not the only ratings driver for
11 Moody's. A reduction in the premium, coupled with the already reduced Benchmark ROE,
12 would be a further signal to re-evaluate other factors, such as regulatory support. Therefore, an
13 increase in the premium, albeit a marginal increase, would be directionally positive for FBC's
14 rating.

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19 In response to BCUC IR 1.22.3, it is apparent that FBC's **achieved** ROE since 2003 has
20 always been higher than it's **allowed** ROE (with the exception of 2010).

21 29.5 Could it be reasonable to assume that based on FBC's potentially achievable
22 ROEs in the future, its financial metrics is very likely to be more optimistic than
23 what is depicted in the above tables? Discuss why or why not.
24

25 **Response:**

26 No. It should not be reasonably assumed that FBC financial metrics will be more optimistic than
27 what is depicted in the above tables as FBC cannot be expected to outperform its allowed ROE
28 in the future and the metrics themselves are influenced by factors other than ROE. FBC's
29 achievable ROE in the future will be partially dependent on the outcome of the Company's
30 2014-2018 PBR Application proceeding. Past PBR agreements and cost of service application
31 have allowed for different variances and mechanisms to affect FBC's achieved ROE which may
32 not be in place for FBC's proposed five year PBR term. For example, during 2006 to 2011 a
33 portion of the variances in power purchase expense would affect FBC's achieved ROE for those
34 years, while pursuant to the proposed 2014-2018 PBR Application, none of those same
35 variances would affect FBC's achievable ROE in the next five years. Although PBR presents an
36 opportunity for the Company to achieve higher earnings, that opportunity comes with additional
37 risk associated with setting rates with reference to a formula for an extended period of time.



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Scenario 7	40% equity; + 20 bps risk premium								
Scenario 8	40% equity; + 30 bps risk premium								

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Table 2A - Potential Moody's Credit Metrics

		(CFO Pre-WC + Interest) / Interest Expense				CFO Pre-WC / Debt			
		2012	2011	2010	Average	2012	2011	2010	Average
Scenario 1	40% equity; +40 bps risk premium,	3.3	3.0	2.7	3.0	10%	12%	10%	11%
Scenario 2	40% equity; +50 bps risk premium	3.3	3.0	2.7	3.0	10%	12%	10%	11%
Scenario 3	40% equity; +60 bps risk premium	3.3	3.0	2.7	3.0	10%	12%	10%	11%
Scenario 4	40% equity; +70 bps risk premium	3.3	3.1	2.8	3.0	10%	12%	10%	11%
Scenario 5	40% equity; + 0 bps risk premium								
Scenario 6	40% equity; + 10 bps risk premium								
Scenario 7	40% equity; + 20 bps risk premium								
Scenario 8	40% equity; + 30 bps risk premium								

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Response:

5 The following updated tables demonstrate that the financial metrics themselves are not sensitive
6 to changes in risk premiums in the range of 70 basis points, however based on past experience
7 the rating agencies would not be indifferent to a 70 basis point change on allowed ROE
8 regarding the credit ratings of FBC. For example, the 2009 ROE Decision, which resulted in a
9 change of approximately 100 basis point change in allowed ROE for FBC, prompted the two
10 rating agencies to issue independent ratings upgrades. Further, the GCOC Stage 1 decision

1 reduced the benchmark allowed ROE by 75 basis points and slightly reduced the FEI equity
 2 thickness, prompting Moody's to issue a negative outlook on the FBC Utilities. Both of these
 3 examples are evidence that, while the financial metrics below may not be as sensitive to these
 4 quantitative changes, the rating agencies do view changes in risk premium and equity thickness
 5 as significant factors in their credit ratings of FBC.

BCUC IR 29.6 - Table 1A - Potential DBRS Credit Metrics

		Estimated EBIT Gross Interest Coverage				Estimated Cash Flow/Total Debt			
		2012	2011	2010	Average	2012	2011	2010	Average
Scenario 1	40% equity; +40bps risk premium	2.3	2.3	2.0	2.2	13%	13%	12%	13%
Scenario 2	40% equity; +50bps risk premium	2.3	2.3	2.0	2.2	14%	13%	12%	13%
Scenario 3	40% equity; +60bps risk premium	2.3	2.3	2.0	2.2	14%	13%	12%	13%
Scenario 4	40% equity; +70bps risk premium	2.4	2.3	2.0	2.2	14%	13%	12%	13%
Scenario 5	40% equity; +0bps risk premium	2.3	2.2	1.9	2.1	13%	12%	12%	12%
Scenario 6	40% equity; +10bps risk premium	2.3	2.2	2.0	2.2	13%	12%	12%	12%
Scenario 7	40% equity; +20bps risk premium	2.3	2.3	2.0	2.2	13%	13%	12%	13%
Scenario 8	40% equity; +30bps risk premium	2.3	2.3	2.0	2.2	13%	13%	12%	13%

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BCUC IR 29.6 - Table 2A - Potential Moody's Credit Metrics

		Estimated (CFO Pre-WC + Interest)/Interest Expense				Estimated CFO Pre-WC/Debt			
		2012	2011	2010	Average	2012	2011	2010	Average
Scenario 1	40% equity; +40bps risk premium	3.3	3.0	2.7	3.0	10%	12%	10%	11%
Scenario 2	40% equity; +50bps risk premium	3.3	3.0	2.7	3.0	10%	12%	10%	11%
Scenario 3	40% equity; +60bps risk premium	3.3	3.0	2.7	3.0	10%	12%	10%	11%
Scenario 4	40% equity; +70bps risk premium	3.3	3.1	2.8	3.0	10%	12%	10%	11%
Scenario 5	40% equity; +0bps risk premium	3.2	3.0	2.7	3.0	10%	12%	10%	10%
Scenario 6	40% equity; +10bps risk premium	3.2	3.0	2.7	3.0	10%	12%	10%	10%
Scenario 7	40% equity; +20bps risk premium	3.3	3.0	2.7	3.0	10%	12%	10%	11%
Scenario 8	40% equity; +30bps risk premium	3.3	3.0	2.7	3.0	10%	12%	10%	11%

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1 **30.0 Reference: Exhibit B1-73, BCUC IR 1.7.6; Exhibit B1-20 BCUC IR 1.48.2**
2 **Budget Measures Implementation Act and Impact of Corporate**
3 **Income Tax Increase on Credit Metrics**

4 FBC states that: "...FBC obtained information regarding the increase in BC's general
5 corporate income tax rate from 10% to 11% on April 1, 2013, which was implemented by
6 Bill 2, Budget Measures Implementation Act, 2013, which received first reading on June
7 27, 2013 and subsequently received Royal Assent on July 25, 2013."

8 In Stage 1 of this proceeding, FEI states, in its response to IR 1.48.2, that all other things
9 equal, as the income tax rate declines and the income tax allowance forms a relatively
10 smaller portion of Earnings before Interest and Taxes (EBIT) and Earnings before
11 Interest, Depreciation and Amortization (EBITDA), the pre-tax credit metrics will be
12 weaker.

13 30.1 Will this income tax increase improve FBC's financial metrics due to improved
14 cash flow from rates? Please discuss and show the expected impact on FBC's
15 financial and credit metrics. Please include your calculations in your response.

16
17 **Response:**

18 The increase in general corporate income tax rate would not improve cash flow from rates and it
19 will slightly increase DBRS' financial metric of EBIT Gross Interest Coverage, which is similar in
20 nature to EBIT calculation referred to in FEI's response to Stage 1 GCOC BCUC IR 1.48.2 in
21 the preamble to this IR, from 2.43x to 2.44x as shown below.

	2012	2012
DBRS' EBIT GROSS INTEREST COVERAGE	As Reported	Revised to tax rate change
	(in \$millions)	
Net Earnings and Comprehensive Earnings	49.0	49.0
Taxes	8.8	9.3
Interest on Funded Indebtedness (last 12 months)	38.9	38.9
EBIT	96.7	97.2
Gross interest (before AFUDC)	39.8	39.8
EBIT Gross Interest Coverage (times)	2.43	2.44

22
23
24 There would be no additional net cash flow from an increase in the corporate tax rate as
25 revenue requirements would be slightly increased to compensate for the increase in the tax
26 rate, this cash inflow will be offset by an equal increase in income taxes outflow for FBC.
27 Therefore Moody's key financial metrics of CFO pre-WC interest coverage and CFO pre-WC to



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1 debt, as well as DBRS' Cash Flow to Debt, are unaffected by the increased general corporate
2 income tax rate as they are after-tax measures.

3 It should be noted that DBRS EBIT Gross Interest Coverage ratio is less affected by the
4 increase in the general corporate tax rate and more sensitive to FBC's effective tax rate. Since
5 FBC does not recover deferred income tax expense in customer rates, pursuant to Commission
6 Order G-37-84, tax timing differences primarily related to capital expenditures will have a much
7 more significant impact on decreasing income tax expense, decreasing cash flow and keeping
8 FBC's credit metrics low. The nature of capital expenditures in a given year, along with the
9 Undepreciated Capital Cost pools for which they are eligible for, will be much more relevant as
10 these factors will drive the income taxes that are used in calculating DBRS' EBIT Gross Interest
11 Coverage ratio.

12

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1 **31.0 Reference: Exhibit B1-73, BCUC IR 1.9.3 and IR 1.9.6**

2 **Wholesale Customer Class Risk**

3 “FBC’s Wholesale customers’ service agreements do not contain any take-or-pay
4 clauses. None of FBC’s Wholesale customers are required to make nominations of load
5 and are able to discontinue embedded cost service as provided by the Access Principles
6 Settlement Agreement (APSA) which also limits FortisBC’s ability to collect stranded
7 costs from departing customers.” (BCUC IR 1.9.3) [Underline added]

8 “If a Wholesale customer chooses to terminate their contract under the early termination
9 subsection of the contract, the Wholesale customer may then be liable to pay such
10 costs, including stranded costs, if any.” (BCUC IR 1.9.6) [Underline added]

11 31.1 Please explain the difference in executing the APSA versus exercising the early
12 termination clause.

13
14 **Response:**

15 Early termination of a Wholesale Agreement pursuant to the early termination clause may only
16 be done in reference to the APSA. Typical language (as from the most recent Kelowna
17 agreement) is,

18 *If the Customer elects to engage any third party supplier to perform the Commodity*
19 *Services and notice as provided for in the APSA is given to the Company the Customer*
20 *may terminate this Agreement prior to expiry of the Term. If this Agreement terminates*
21 *pursuant to this subsection, the Customer may then be liable to pay such costs,*
22 *including stranded costs, if any, as directed by the Commission.*

23
24 There is therefore no difference in executing under the Wholesale Agreement or the APSA. The
25 referenced statements are not at odds. The exiting customer may be liable to pay stranded
26 costs, however the amount of the costs is limited by the terms of the Access Principles.

27

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1 **32.0 Reference: Exhibit B1-73, BCUC IR 1.9.7**

2 **City of Kelowna**

3 FBC states that: “As discussed in Appendix B of Exhibit B1-74, the loss of Wholesale
4 customer load would result in a reduction of \$32 million in revenue to be included in
5 these deferral accounts, and would result in a substantial rate increase of approximately
6 5 percent for FBC’s remaining customers.” And “While FBC’s competition risk with
7 respect to the impact of a Wholesale customer (City of Kelowna) leaving FBC service for
8 lower cost alternatives of electric supply has been somewhat reduced as a result of the
9 transaction, FBC’s operational risk has increased as a result of assuming ownership and
10 operation of the assets used to serve these additional direct customers.” And FBC
11 concludes that “Overall, FBC’s business risk has not changed as a result of the
12 transaction.”

13 32.1 Did FBC previously have similar operational risks in its operations contracts with
14 Kelowna?

15
16 **Response:**

17 No. FBC’s operational risks and liabilities were limited to an operator under the Master Services
18 Agreement with the City of Kelowna. Since acquiring the utility assets of the City of Kelowna,
19 FBC’s operational risks and liabilities are now that of an owner and operator of the assets,
20 equivalent to all of the assets FBC owns and operates.

21
22

23
24 32.2 Why is it the case that Wholesale customers are a significant risk because they
25 might leave FBC but that there is no improvement to risk when they become
26 regular customers?

27
28 **Response:**

29 As stated in response to BCUC FBC IR 1.10.1.2, FBC’s competition risk with respect to the
30 impact and risk of a Wholesale customer leaving FBC service for lower cost alternatives of
31 electricity supply is reduced as a result of the City of Kelowna transaction. However, FBC’s
32 operational risk increases as a result of assuming ownership and operation of the assets used
33 to serve these additional direct customers (refer to the response to BCUC FBC IR 2.32.1), and
34 therefore on the balance, FBC’s business risk does not materially change as a result of the CoK
35 transaction.

36

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1 **33.0 Reference: Exhibit B1-73, BCUC 1.10.5, 1.10.8**

2 **City of Kelowna (CoK)**

3 FBC states that “Commission Order C-4-13, ... determined that approximately \$38
4 million was to be included in rate base, with the associated cost of capital recovered by
5 customers, while approximately \$17 million ... to be financed by the Company
6 shareholders, with no recovery of the cost of capital associated with the \$17 million. The
7 result of which is that the Company will earn less than the allowed ROE on the total
8 investment in the CoK assets.” (BCUC IR 1.10.5)

9 FBC also states “The earnings of FBC will increase due to the increase in rate base of
10 \$38 million resulting from the transaction. However, as the BCUC denied \$17 million of
11 assets from rate base, FortisBC will not be able earn the approved cost of capital
12 associated with the full value of this investment.” (BCUC IR 1.10.8)

13 Page 17 of the accompanying Reasons to Commission Order C-4-13¹ states that “[t]he
14 Commission Panel considers the difference between the negotiated price of \$55 million
15 and the approved amount of \$37.7 million to be included in rate base as a premium for
16 the account of the shareholder, should the Transaction proceed. **FortisBC is directed
17 to confirm acceptance of this condition by March 31, 2013.**”

18 33.1 FBC confirmed acceptance of this, and other conditions, established by the
19 Commission with its letter of confirmation dated April 2, 2013. Does FBC agree
20 that its shareholders do not and should not be making investments that are
21 detrimental to the earnings of the company? Does FBC also agree that despite
22 its position on the earnings on the CoK assets, this transaction was still
23 considered a reasonable investment by FBC’s shareholders?
24

25 **Response:**

26 When considering an investment, the shareholder will consider both financial and non-financial
27 factors. Earnings are a key consideration and as noted in the preamble, the acquisition of the
28 CoK assets does have a positive earnings contribution. As noted further in the preamble,
29 however, the return on this investment is less than the approved return due to the regulatory
30 decision. While the return on the investment has been negatively impacted, other factors were
31 considered that in total supported conclusion of the transaction and acceptance of the
32 conditions.

¹ In the Matter of an Application by FortisBC for Approval of a Certificate of Public Convenience and Necessity for the Purchase of Utility Assets of the City of Kelowna, Decision dated March 26, 2013

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33.2 Does FBC agree that the purchase of the City of Kelowna assets provided qualitative benefits and other advantages, such as improved branding of the company through the expansion of its service area and wider recognition of the FortisBC name?

Response:

The purchase of the City of Kelowna assets may have provided FBC with other qualitative benefits, however, given the small size of the CoK service area, small number of customers at approximately 15,000, FBC's previous history of operating these utility assets for the CoK, and the fact that FBC already serves the majority of customers in Kelowna directly, any qualitative benefits gained would be minimal.

33.2.1 Do these and/or other qualitative advantages reduce FBC's business risk by any extent? Please discuss.

Response:

No. Please refer to the response to BCUC FBC IR 2.33.2.

33.3 From a debt holder's perspective what is the impact of the \$17 million excluded from rate base? Does it result in an implicit increase to the deemed equity ratio?

Response:

There is little impact to Debt holders given the small amount of premium relative to the amount of debt outstanding, and due the fact that FBC has financed the \$17 million with non-regulated equity. FBC's regulated deemed equity ratio is unaffected.

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1 **34.0 Reference: Exhibit B1-73, BCUC IR 1.10.7**

2 **Moody's Credit Opinion**

3 FBC states that: "The determination to exclude the City of Kelowna implications in the
4 most recent credit opinion was at the discretion of Moody's. Moody's has full access to
5 the regulatory decisions and FortisBC's continuous disclosure documents, but retains
6 ultimate editorial control over the form and content of its publications."

7 34.1 Has FBC contacted Moody's to determine why it did not take account of the
8 Kelowna purchase? If not, why not?

9
10 **Response:**

11 FBC discussed the City of Kelowna regulatory decision with Moody's prior to closing the
12 transaction and Moody's has been fully apprised of the City of Kelowna transaction through
13 FBC's disclosure documents. FBC also discussed the transaction with Moody's prior to the
14 release of the June 2013 credit opinion; therefore Moody's had available for its consideration
15 the City of Kelowna purchase in issuing their overall credit opinion on June 26, 2013.

16 FBC expects that factors other than the City of Kelowna transaction would have had a more
17 significant impact on Moody's perspective. As Ms. McShane explained in the response to
18 BCUC FBC IR 1.10.9, "the effect on rate base is no different than incurring a couple larger
19 capital expenditures, such as substations, in a given year. As such, the financial effect does not
20 necessarily warrant separate discussion. From the perspective of customer and economic base,
21 FortisBC's risk is essentially unchanged relating to the City of Kelowna customers whether they
22 were direct or indirect customers."
23

24
25

26
27 34.2 If Moody's had taken the Kelowna purchase into account, might that have caused
28 it to not tighten its credit metrics from those in October 2012?
29

30 **Response:**

31 No. Please refer to the response to BCUC FBC IR 2.34.1. Debtors should be unaffected by the
32 City of Kelowna transaction given the premium was funded with non-regulated Equity. The
33 tightened credit metrics have to do with the GCO Stage 1 and Stage 2 proceedings which are
34 much more material to FBC's credit metrics than the City of Kelowna purchase.

35

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1 **35.0 Reference: Exhibit B1-73, BCUC IR 1.11.7**

2 **Self Generation**

3 FBC states that: “Beyond the two industrial customers that currently have self-
4 generation, the Company has received inquiries from at least two other industrial
5 customers and one Wholesale customer regarding the installation of self-generation.”

6 35.1 Which customers are being spoken about in the above quote and what are their
7 loads? If necessary, please respond in confidential filing.

8
9 **Response:**

10 The response is being filed confidentially with the Commission under separate cover as it
11 contains commercially sensitive customer information.

12
13

14
15 35.2 What are the self generation power sources available to each of the identified
16 customers and are those self generation sources price competitive with FBC on
17 an efficiency adjusted, delivered basis?

18
19 **Response:**

20 This information is filed on a confidential basis and included in the response to BCUC FBC IR
21 2.35.1 above.

22

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1 **36.0 Reference: Exhibit B1-73, BCUC 1.13.3**

2 **Customer Forecast Risk**

3 “FBC believes that housing start volatility is indicative of the higher customer forecast
4 risk in the FortisBC service territory.”

5 36.1 Please provide FBC’s forecast customer additions versus actual customer
6 additions by year since 2008.

7

8 **Response:**

9 Please refer to the following table.

10

Forecast and Actual Customer Additions from 2008 to 2012

	2008	2009	2010	2011	2012
Forecast	5514	1985	998	1425	1769
Actual	1995	1134	1396	1009	657

11

12

1 **37.0 Reference: Exhibit B1-73, BCUC IR 1.16.4**

2 **Power Purchases**

3 FBC refers to the past five years’ trend and states that: “During this time, market prices
4 in the Pacific Northwest have shifted lower as a result of lower natural gas prices,
5 increased renewable generation in the region and a large snow pack and run off in 2011
6 and 2012. This created opportunities for the Company to displace both BC Hydro
7 purchases and, to a much smaller degree, Company owned generation with lower cost
8 market and contracted energy in order to mitigate power purchase expense.”

9 37.1 In what circumstances are market purchases cheaper than FBC generation?
10 How often has this occurred in the past five years and how much FBC generation
11 was impacted?
12

13 **Response:**

14 Between 2008 and August 1, 2013, FBC purchased a sufficient volume of market purchases to
15 result in displacement of FBC owned generation in the spring of 2010, 2011 and 2012. In order
16 for displacement of FBC owned generation to occur, the market price must be below FBC’s
17 variable cost which is limited to the incremental water fee rate that FBC pays on owned
18 generation, currently \$6.0/MWh. During the spring of 2008, 2009 and 2013, FBC purchased
19 market energy at a low cost during the spring, but not in sufficient volume to cause
20 displacement of FBC generation. The table below shows the amount of FBC generation that
21 was displaced between 2008 and August 1, 2013.

Month	FBC Generation Spill (GWh)
Jul-10	19.2
Jun-11	9.7
Jul-11	38.8
Jun-12	4.1
Jul-12	49.4

22
23

24
25 37.2 How does the cost of FBC generation compare with other firm generator costs in
26 the Pacific Northwest?
27

28 **Response:**

29 FBC does not have this information. However, the actual cost of generation has very little to no
30 impact on if FBC will displace owned generation with market purchases or not. This is since



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1 under the Canal Plant Agreement (CPA), it is B.C. Hydro that makes the decision to dispatch
2 FBC generation or not. FBC receives an entitlement under the CPA to both energy and
3 capacity that does not have to be dispatched. Therefore, the only variable cost of generation
4 that applies to FBC decision making around the displacement of owned generation with market
5 resources is the incremental water fee rate of approximately \$6.0/MWh. While water fees are
6 charged by the Province on actual generation, under the CPA, FBC works with B.C. Hydro such
7 that our effective water fee rate is based on entitlement generation rather than actual
8 generation.

9

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1 **38.0 Reference: Exhibit B1-73, BCUC IR 1.16.5**

2 **Energy Supply Risk**

3 “FBC’s Energy Supply Risk is ranked higher than FEI due to FBC’s generation supply
4 risk. As stated in section 6 of Appendix A (Exhibit B1-72), FBC generates 45 percent of
5 its energy needs and approximately 30 percent of its capacity needs from its own hydro
6 generating facilities. In addition, FBC buys the output of the Brilliant plant (and beginning
7 in 2015 the Waneta Expansion) under long term firm contracts, giving it the operational
8 equivalent from a generation supply risk perspective. As identified in the referenced
9 excerpt from the Moody’s report, due to operation the Canal Plan Agreement, the FBC’s
10 hydrological risk related to these facilities is mitigated. However, failure of a unit of one
11 of these generation facilities would require that FBC find replacement power which may
12 not be available due to lack of supply or lack of available transmission.”

13 38.1 Aren’t these long term, firm generation resources with approved cost recovery by
14 the BCUC result in lower energy supply risk compared to FEI which has to
15 purchase from the market with possible shortages or transmission interruption?
16 Please demonstrate through examples with regulatory consequences where of
17 FBC increased risk would show itself in costs to the shareholders.
18

19 **Response:**

20 No. As stated in the full response to BCUC FBC IR 1.16.5 that was not included in the excerpt
21 reproduced above, unlike FBC, whose supply risk is dependent on its owned generation or long
22 term contracted supply from specific generation resources, FEI procures all of its commodity
23 supply in the wholesale market. In the case of FEI, the risk of replacement supply is generally
24 borne by the contracted energy supplier who can source from multiple sources (i.e. as opposed
25 to the production output of a single well or plant). FEI’s does have supply risk associated with
26 possible transmission interruption (i.e. constraints on its owned transmission pipelines or
27 contracted capacity on third party pipelines), but FBC also faces supply interruption risk related
28 to both its own transmission and the transmission systems to which it connects and relies on to
29 meet its customer requirements across its service territory.

30 With respect to reference to “approved cost recovery” in the question, both FEI and FBC have
31 mechanisms by which they expect to be able to recover differences between actual and forecast
32 costs. As discussed in Ms. McShane’s evidence (Exhibit B-1, Appendix B, page 13) “*All
33 investor-owned Canadian electric utilities have the ability to recover variances between forecast
34 and actual power purchase (and fuel) expenses, as do most U.S. electric utilities. The ability of
35 FEI to recover variances between forecast and actual commodity costs of gas and pipeline
36 costs through its Commodity Cost Reconciliation Account (“CCRA”) and Midstream Cost
37 Reconciliation Account (“MCRA”) are the natural gas distribution utility analogues to FBC’s
38 deferral account for purchased power cost variances.*”



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1 However, as discussed in the responses to BCUC FBC IRs 1.16.2 and 1.16.3, FBC's cost
2 recovery mechanism (i.e. the Power Purchase Expense Deferral Account) provides FBC a tool
3 to manage short term variances in power purchase costs but does not protect FBC or its
4 customers from the uncertainty of future power purchase costs or longer term shifts in the
5 regional market environment. The deferral account has been put in place to ensure forecast
6 variances do not result in costs being inappropriately borne by customers or by FBC. However,
7 to the degree future power purchase expenses result in upward pressure on rates paid by
8 customers, this puts further pressure on FBC's competitive position relative to BC Hydro, natural
9 gas, and alternative energy and increases FBC's business risk.

10
11

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13 38.2 Aren't any of the postulated FBC risks above covered by Power Purchase
14 Expense Deferral Account or other safeguards afforded by the Commission?

15

16 **Response:**

17 Please refer to the response to BCUC FBC IR 1.38.1.

18

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1 **39.0 Reference: Exhibit B1-73, BCUC 1.16.8**

2 **Energy Supply Risk**

3 “FBC does consider that the WAX capacity agreement has improved FBC’s business
4 risk related to the uncertainty regarding availability of FBC’s long term resources to meet
5 its capacity requirements, however ... due to FBC’s generation supply risk, FBC energy
6 supply risk is greater than FEI energy supply risk.”

7 39.1 FBC, as a vertically integrated utility, has been providing generation services
8 today and also back in 2005. Therefore, this business risk comparison to FEI
9 does not appear to be new. However, the WAX CAPA appears to be a new
10 consideration given that it was initially accepted by the Commission in August of
11 2010². Please explain why FBC considers the “generation supply risk” to be the
12 overriding factor that puts its energy supply risk to be greater than FEI, even after
13 considering that the WAX CAPA has improved its long term resources and
14 capacity requirements.

15
16 **Response:**

17 As discussed in the response to BCUC FBC IR 1.16.6, generation supply risk is related to the
18 operation of the generation units it owns or to which it holds long term off-take commitments,
19 including WAX. In its submissions, FBC recognised that its supply risk has been somewhat
20 mitigated through long term capacity agreements, but that overall price risk has increased due
21 to uncertainty related to BC Hydro rates and market prices. As a result, FBC concluded that on
22 balance its energy supply risk has not materially changed since the 2005 Revenue Requirement
23 process. As such, FBC energy supply risk continues to be higher than FEI’s supply risk due to
24 its generation supply risk. FBC summarised its view of its energy supply risk on page 4 of
25 Exhibit B1-72 as follows:

26 **Power Supply:** *FBC’s power supply risk has not materially changed since the 2005*
27 *Revenue Requirements process. FBC’s supply risk has been slightly mitigated through*
28 *long-term capacity agreements; however, price risk has increased due to uncertainty*
29 *with respect to future rate increases related to FBC’s Power Purchase Agreement (PPA)*
30 *with BC Hydro, and prices on the open market. FBC’s supply risk is higher than FEI’s*
31 *supply risk due to its owned generation, which has the potential to result in high costs for*
32 *replacement power if generation is suddenly not available due to failure.*

33
34 FBC further discussed its supply risk relative to FEI at Exhibit B1-72, Appendix A, page 20:

² Commission Order E-29-10



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1
2 *Given that FBC generates 45 percent of its energy and approximately 30 percent of its*
3 *capacity needs from its own hydro generating plants, failure of a unit would result in FBC*
4 *needing to acquire replacement power which may not be available due to either lack of*
5 *available supply or lack of available transmission. In addition, the replacement power, if*
6 *acquired, could be at a significantly increased cost on the open market. As a result,*
7 *FBC's supply risk is higher than FEI who does not face these same risks as it does not*
8 *own generation and therefore the risk of replacement supply is borne by the contracted*
9 *energy supplier as opposed to by FEI itself.*

10
11 Please also refer to the responses to BCUC FBC IRs 1.16.5, 1.16.6, 1.16.8, and 1.16.11
12 (Exhibit B1-73, pages 54-57) for further discussion on energy supply risk and the impact of the
13 WAX CAPA.

14

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1 **40.0 Reference: Exhibit B1-73, BCUC IR 1.16.11**

2 **Energy Supply Risk**

3 FBC states that: “The Waneta Capacity Agreement does mitigate FBC’s long term
4 resource uncertainty. However, as discussed in the responses to BCUC FBC IRs 1.16.4
5 and 1.16.5 , its generation supply risk associated with WAX is similar to FBC other
6 owned generation, and therefore overall the risk is unchanged relative to FEI since
7 2009.”

8 40.1 Does this imply that FBC’s equity ratio should be reduced by 2 percent as was
9 done with FEI?

10
11 **Response:**

12 No, FBC’s equity ratio should not be reduced as the comparison to risk in BCUC FBC IR
13 1.16.11 specifically relates to energy supply which is one of many risks that is evaluated in
14 determining the overall risk profile for FBC.

15

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1 **41.0 Reference: Exhibit B-73, BCUC IR1 17.1-1.17.2; Exhibit B1-72, Tab A Business**
2 **Risk, pp. 22 – 27**
3 **Operating Risk**

4 FBC states that “[t]o date, FBC has completed refurbishments of these electrical and
5 mechanical components at 11 of the 15 generating units.” (Exhibit B-72, p. 22)

6 41.1 Please identify the four remaining generator units to undergo refurbishments in
7 the future.

8
9 **Response:**

10 Upper Bonnington Units 1, 2, 3, and 4 are the four generating units that have not undergone
11 refurbishments.

12
13

14
15

16 “FBC would not characterize its generator reliability over this period as having improved
17 but rather that existing reliability has been maintained as a result of the refurbishments
18 on these 11 generating units.” (Exhibit B1-73, BCUC 1.17.2)

19 41.2 Please discuss why the refurbishment did not contribute significantly to improved
20 generator reliability.

21
22 **Response:**

23 Please refer to the response to BCUC FBC IR 2.41.2.1.

24
25

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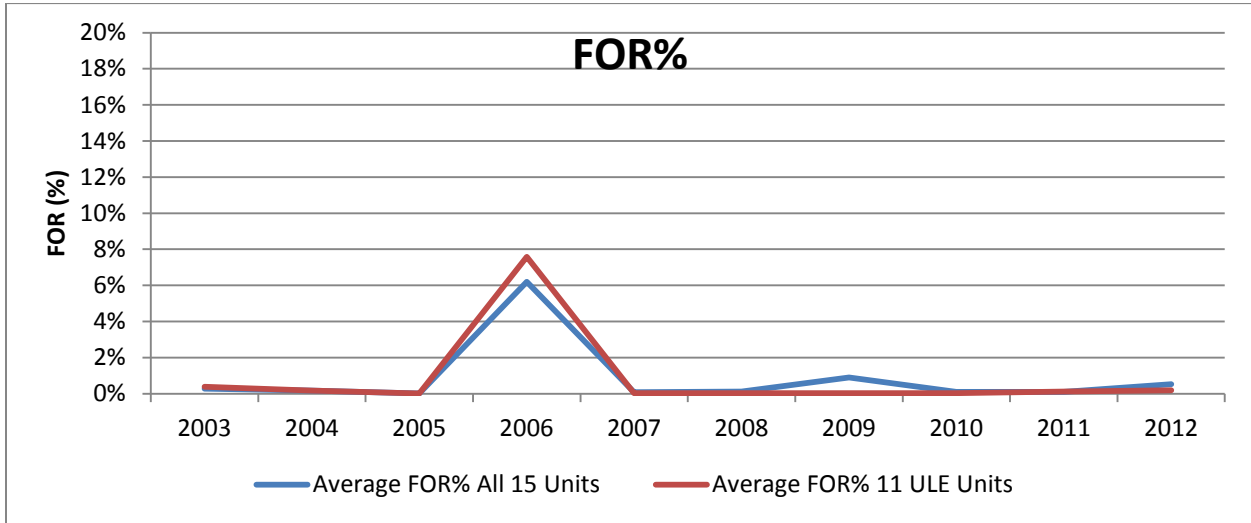
28 41.2.1 Provide a graph of the generator forced outage data which includes all 15
29 units and another graph with the 11 refurbished units.

30

31 **Response:**

32 The following graph includes the Forced Outage Rate (FOR%) for all 15 generating units, as
33 well as the FOR for the 11 units that have had refurbishments. The below graph shows that all
34 15 units have had consistent reliability over time, and shows no trend of improvement in or

1 degradation of generator reliability despite ongoing generator refurbishments. It is reasonable to
 2 expect that existing reliability for the 11 refurbished units has been maintained into the long term
 3 as a result of the upgrades.



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41.2.2 Please discuss how FBC’s sustaining capital expenditures may impact its generator reliability and ultimately risk for the company. If the timing and amount of capital expenditures are fully within management’s control, then is it also true that reliability is also a manageable risk by FBC?

Response:

FBC has managed and continues to manage the reliability and integrity of its generating assets to the extent that it can predict degrading equipment or equipment failure, including capital expenditures for refurbishing its generating units. This capital has maintained existing reliability. By doing so, decreased reliability is avoided and potentially higher power purchase costs are avoided. However, there is still a risk of generator failure by causes that are outside of management’s control, impacting the physical generating units.

Please also refer to the response to BCUC FBC IR 2.41.3.

1 41.3 Please provide a side by side comparison of FortisBC data versus the Canadian
 2 Electricity Association (CEA) data on generator forced outages for the past 10
 3 years. Please use the following tabular format:

FortisBC Hydroelectric Units					CEA Hydroelectric Units				
Calendar Year	Availability Factor	Forced Outage Count (Incl. starting failures) (Internal*)	Forced Outage Factor (Incl. starting failures) (Internal*)	Failure Rate	Calendar Year	Availability Factor	Forced Outage Count (Incl. starting failures) (Internal*)	Forced Outage Factor (Incl. starting failures) (Internal*)	Failure Rate

4 * Outages with causes that are external to Generation, such as Transmission System forced outages, are excluded from
 5 this measure.

6
 7 **Response:**

8 The following table includes external cause outage data for the Availability Factor and Failure
 9 Rate calculations. External outages have been excluded from the Forced Outage Count and the
 10 Forced Outage Rate calculations. It has been assumed that the Forced Outage Factor is the
 11 Forced Outage Rate.

FortisBC Hydroelectric Units					CEA Hydroelectric Units				
Calendar Year	Availability Factor	Forced Outage Count (Incl. starting failures) (Internal*)	Forced Outage Rate (Incl. starting failures) (Internal*)	Failure Rate	Calendar Year	Availability Factor	Forced Outage Count (Incl. starting failures) (Internal*)	Forced Outage Rate (Incl. starting failures) (Internal*)	Failure Rate
2003	97.10%	20	0.28%	1.94	2003	92.19%	2329	1.86%	2.37
2004	94.00%	47	0.18%	5.69	2004	91.31%	2344	2.26%	2.41
2005	93.62%	15	0.02%	2.12	2005	90.70%	2427	2.18%	2.54
2006	92.08%	36	6.19%	4.45	2006	90.60%	2222	2.58%	2.40
2007	94.16%	21	0.08%	2.86	2007	92.42%	1153	2.34%	2.04
2008	96.14%	25	0.11%	3.53	2008	93.52%	1112	2.33%	2.08
2009	93.60%	26	0.90%	3.28	2009	91.55%	1049	1.77%	1.95
2010	95.08%	23	0.10%	3.23	2010	89.82%	978	3.92%	1.83
2011	94.11%	11	0.09%	1.14	2011	87.86%	1132	5.03%	2.15
2012	96.00%	55	0.52%	6.14	2012	88.26%	1142	4.88%	2.28

12
 13 The FBC data shown in the table demonstrates that there is no trend of improvement in or
 14 degradation of generator reliability, despite ongoing generator refurbishments. With the
 15 exception of 2006, FBC's Availability Factor and Forced Outage Rate performance has been
 16 consistent year over year. This confirms FBC's previous response to BCUC FBC IR 1.17.2
 17 which stated that generator reliability has not necessarily improved as a result of

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1 refurbishments, but that existing reliability has been maintained, and that the refurbishments
2 have served to extend the life of its generating units as was the intent of the refurbishment
3 program.

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7 41.4 Please discuss any large variances between FortisBC's data versus CEA data as
8 it pertains to operating risk.

9

10 **Response:**

11 There are no large variances between FortisBC data versus CEA data. For FortisBC specific
12 units, however the CEA data included in response to BCUC FBC IR 2.41.3 includes data from
13 hydroelectric generating units from across Canada, and therefore it is difficult to compare the
14 CEA and FBC data from an operating risk perspective without knowing the specific nature of the
15 generating units included in the data.

16 FBC also notes that, with the exception of 2006, FBC's Availability Factor and Forced Outage
17 Rate performance has been consistent year over year. This confirms FBC's previous response
18 to BCUC FBC IR 1.17.2 which stated that generator reliability has not necessarily improved as a
19 result of refurbishments, but that existing reliability has been maintained, and that the
20 refurbishments have served to extend the life of its generating units. The FBC data shown in the
21 table demonstrates that there is no trend of improvement in or degradation of generator
22 reliability, despite ongoing generator refurbishments.

23

24

25

26 41.5 Please identify the magnitude of the financial risks if one or more of the 15
27 generating units fail.

28

29 **Response:**

30 FBC is unable to identify the specific magnitude of a generating unit failure as costs would vary
31 based on the specific case of each failure. However, as noted in response to ICG FBC IR 1.3b
32 (Exhibit B1-75), while generation asset failures occur infrequently, they typically have high costs
33 in order to maintain and rectify. For example, in 2006, two generation failures occurred, which in
34 total cost just under \$1 million to repair (not including insurance recoveries of approximately
35 \$0.5 million or any power replacement costs incurred). FBC notes that a generation failure
36 occurred again in 2013, the costs for which are currently unknown but will likely be in the same
37 magnitude as the generation failures that occurred in 2006.

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41.6 In a tabular format, please provide a comparison of CEA versus FortisBC's overall SAIFI and SAIDI reliability indices for the past 10 years.

Response:

The following is the FortisBC normalized SAIDI and SAIFI indices where Major Event Day data has been removed.

Utility	SAIDI	SAIFI
2003		
FortisBC	3.29	1.99
CEA Canadian Composite	5.11	2.37
2004		
FortisBC	2.44	2.39
CEA Canadian Composite	3.95	1.98
2005		
FortisBC	2.09	3.07
CEA Canadian Composite	4.80	2.13
2006		
FortisBC	2.93	4.19
CEA Canadian Composite	4.37	2.15
2007		
FortisBC	2.51	2.00
CEA Canadian Composite	5.02	2.27
2008		
FortisBC	2.46	2.14
CEA Canadian Composite	4.61	2.18
2009		
FortisBC	2.28	1.48
CEA Canadian Composite	4.20	2.01
2010		
FortisBC	2.84	2.27
CEA Canadian Composite	4.34	2.06
2011		
FortisBC	1.86	1.38
CEA Canadian Composite	5.12	2.53

Utility	SAIDI	SAIFI
2012		
FortisBC	2.00	1.27
CEA Canadian Composite	4.43	2.48

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41.7 In a tabular format, please provide a comparison of CEA versus FBC's transmission forced outage T-SAIFI and T-SAIDI reliability indices for the past 10 years.

Response:

The data below has been normalized to exclude any major event day data. The data is Loss of Supply outages defined by the CEA as:

Loss of Supply

Customer interruptions due to problems in the bulk electricity supply system such as underfrequency load shedding, transmission system transients, or system frequency excursions. During a rotating load shedding cycle, the duration is the total outage time until normal operating conditions resume, while the number of customers affected is the average number of customers interrupted per rotating cycle.

Utility	SAIDI	SAIFI
2003		
FortisBC	1.36	1.21
CEA Canadian Composite	0.63	0.52
2004		
FortisBC	0.58	1.33
CEA Canadian Composite	0.46	0.42
2005		
FortisBC	0.61	2.05
CEA Canadian Composite	0.47	0.39
2006		
FortisBC	1.18	3.16
CEA Canadian Composite	0.41	0.40

Utility	SAIDI	SAIFI
2007		
FortisBC	0.63	1.06
CEA Canadian Composite	0.51	0.45
2008		
FortisBC	1.08	1.63
CEA Canadian Composite	0.59	0.45
2009		
FortisBC	0.71	0.82
CEA Canadian Composite	0.56	0.41
2010		
FortisBC	1.28	1.62
CEA Canadian Composite	0.51	0.45
2011		
FortisBC	0.30	0.65
CEA Canadian Composite	0.56	0.53
2012		
FortisBC	0.55	0.58
CEA Canadian Composite	0.53	0.68

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41.8 In a tabular format, please provide a comparison of CEA versus FortisBC's distribution SAIFI and SAIDI reliability indices for the past 10 years.

Response:

The data below has been normalized to not include any major event day data. The indices include all of the distribution outages and don't include the Loss of Supply outages.

Utility	SAIDI	SAIFI
2003		
FortisBC	1.93	0.78
CEA Canadian Composite	4.48	1.85
2004		
FortisBC	1.87	1.06
CEA Canadian Composite	3.48	1.56



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Utility	SAIDI	SAIFI
2005		
FortisBC	1.48	1.02
CEA Canadian Composite	4.33	1.74
2006		
FortisBC	1.75	1.03
CEA Canadian Composite	3.96	1.74
2007		
FortisBC	1.88	0.94
CEA Canadian Composite	4.51	1.82
2008		
FortisBC	1.38	0.51
CEA Canadian Composite	4.03	1.73
2009		
FortisBC	1.57	0.66
CEA Canadian Composite	3.63	1.59
2010		
FortisBC	1.56	0.65
CEA Canadian Composite	3.84	1.61
2011		
FortisBC	1.56	0.73
CEA Canadian Composite	4.56	1.99
2012		
FortisBC	1.45	0.69
CEA Canadian Composite	3.90	1.80

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1 **42.0 Reference: Exhibit B-73, BCUC IR 1.17.3**

2 **PCB Regulation**

3 FBC states “[a]n additional risk related to the legislated requirement for
4 removal/remediation of equipment containing PCBs by the December 31, 2014
5 deadline...” In the last revenue requirement application³, FBC states that it “was granted
6 an extension to 2014 to remove equipment and oil containing PCB concentration than
7 500 ppm. All other equipment with concentrations between 500 ppm and 50 ppm must
8 be removed by 2025. This includes instrument transformers, bushings, capacitors,
9 switches, etc.”

10 42.1 Has FortisBC applied for relief from the legislated requirement for
11 removal/remediation of equipment containing PCBs by the December 31, 2014
12 deadline?
13

14 **Response:**

15 The original prohibition deadline was December 31, 2009. In 2009, FBC applied for an
16 extension and this was granted to allow PCB-containing equipment to remain in service until
17 December 31, 2014. This extension provision was allowed under the regulations at the time. No
18 such provision is available to extend the deadline beyond 2014.

19
20

21 42.2 Given the secondary deadline of 2025 for all other equipment with lower
22 concentrations of PCBs, does this mitigate some operating risk for FortisBC?
23 Why or why not?
24
25

26 **Response:**

27 FBC’s operating risk as described in Appendix A of its Evidence (Exhibit B1-72) was evaluated
28 in consideration of the 2025 deadline for removal of distribution assets containing PCBs.
29 Despite the secondary deadline of 2025 for distribution assets, FBC still faces risk with respect
30 to release of PCB contaminated fluid in the interim period. As stated in section 7.1 of Appendix
31 to Exhibit B1-72, in the interim period, there remains a prohibition on the release of PCBs in
32 excess of one gram into the environment and the possibility of penalties including fines of up to
33 \$1 million. Since FBC’s distribution assets are largely unsecured and broadly dispersed across

³ In the Matter of an Application by FortisBC for Approval of its 2012 – 2013 Revenue Requirements and Integrated System Plan, Exhibit B-1, pp. 75-76

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1 the service territory, the potential for an unintended release of PCBs into the environment is
2 higher than the risk for substation assets, particularly where incidents such as car accidents
3 occur which can easily trigger an unintended release of PCB contaminated fluid.

4
5

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7 42.3 What is the probability of FBC not meeting the 2014 deadline? If this is the case,
8 what is FBC's mitigation plan and what are the costs (penalties) associated with
9 this non compliance?

10

11 **Response:**

12 At this time, FBC intends to meet the prescribed December 31, 2014 deadline for the removal of
13 substation equipment containing greater than 500 ppm of PCBs. Since there is no provision for
14 extensions past this date, no mitigation plan involving an extension past that time has been
15 developed.

16 While FBC is allowed to continue operating other types of PCB-containing equipment until 2025,
17 the prohibition against the release of more than 1 gram of PCBs into the environment is in effect
18 at all times.

19 The potential penalties for non-compliance, either for failing to meet the prescribed end-of-use
20 deadline or for releasing more than 1 gram of PCBs into the environment is \$500,000 and up to
21 \$1 million per day for each day the non-compliance continues.

22

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1 **43.0 Reference: Exhibit B1-73, BCUC IR 1.19.2, IR 1.22.2-1.22.3**

2 **Business Risk**

3 “Ms. McShane considers that FBC’s business risk, in absolute terms, has not changed
4 materially since 2005, whereas FEI’s business risk is higher today than in 2005.
5 Consequently the risk differential between FEI and FBC is smaller today than in 2005.”
6 [Underline added]

7 43.1 Order G-75-13 determined the allowed ROE for the benchmark utility (FEI) to be
8 8.75 percent versus 9.5 percent that was previously approved and at the same
9 time its equity thickness should decrease to 38.5 percent from 40.0 percent.
10 Please explain how FBC considers that FEI’s business risk is higher today than
11 in 2005?

12
13 **Response:**

14 FEI’s business risk is higher today than it was in 2005 primarily due to higher throughput risks in
15 its core markets resulting from the combination of energy policies favouring green energies,
16 changing customer perceptions of natural gas, the adoption of alternative energies in the core
17 markets, and the persistent reduction in customer usage of natural gas.

18 With respect to the reference to the Commission’s findings in the GCOC Stage 1 Decision, FEI’s
19 allowed common equity ratio, at 38.5%, is still higher than the 33% allowed as of 2005 and the
20 35% approved in the Commission’s March 2006 cost of capital decision (Order G-14-06) for FEI
21 and FEVI (then TGI and TGVI). Regarding the allowed ROE, there is no indication that the
22 increase in ROE for FEI adopted in the Commission’s 2009 cost of capital decision (Order G-
23 158-09, December 16, 2009) was the result of increased business risk. Instead, the
24 Commission’s determination that FEI’s business risk had increased was reflected in the capital
25 structure. The increase in the ROE reflected changes in capital market conditions generally,
26 and the recognition that the automatic ROE adjustment mechanism (AAM) was not producing a
27 fair return. The ROE approved for FEI in the May 2013 GCOC Stage 1 Decision is still higher
28 than the ROE that would resulted from the operation of the AAMs in place in 2005 and as
29 adopted in Order G-14-06. Those AAMs would have produced ROEs for FEI of 7.3% and
30 8.06% respectively at the 3.8% long-term Government of Canada bond yield on which the 2013
31 GCOC Stage 1 Decision is premised, lower than the 8.75% ROE allowed.

32
33

34
35 43.2 Please explain how the risk differential between FEI and FBC is smaller today
36 than in 2005?
37

1 **Response:**

2 It follows logically that, if FEI’s absolute overall business risk is higher than it was in 2005 and
 3 FBC’s is unchanged, the difference in risk between the two is smaller. Please refer to the
 4 response to BCUC FBC IR 2.43.2.1.

5
6

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43.2.1 If it is true that the risk differential between FEI and FBC is smaller today
 9 than in 2005, then shouldn’t FBC’s risk premium over the benchmark be
 10 smaller today than it was in 2005?

11

12 **Response:**

13 No, as the question implies that the 40 basis point risk premium has accurately compensated for
 14 the difference in risk between FEI and FBC. As stated in response to BCUC FBC IR 1.1.1,
 15 “Based on a comprehensive assessment, the Company considers that the 40 basis point risk
 16 premium that it has previously been allowed is lower than warranted.”

17
18

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21 In response to BCUC IR 1.22.2, FBC states that “PBR methodology is typically more
 22 risky than Cost of Service ratemaking.” In the following IR response (BCUC IR 1.22.3),
 23 FBC provide a table comparing the **allowed** Return versus the **achieved** return for each
 24 year since 2003. Commission staff calculates the variance in the table below:

Year	Allowed	Achieved	Variance
	%		
2012	9.9	10.52	0.62
2011	9.9	10.67	0.77
2010	9.9	9.65	-0.25
2009	8.87	9.41	0.54
2008	9.02	9.28	0.26
2007	8.77	9.23	0.46
2006	9.2	9.94	0.74
2005	9.43	9.88	0.45
2004	9.55	10.7	1.15
2003	9.82	10.88	1.06

(Adapted from Exhibit B1-73, BCUC IR 1.22.3)

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1
2 43.3 Please confirm that FBC has been operating in a performance base ratemaking
3 (PBR) environment for 8 out of the last 10 years shown in table above.
4

5 **Response:**

6 Confirmed.

7
8

9
10 43.4 Given that FBC’s achieved return has been higher than the allowed return in
11 almost every year of the last 10 years, please reconcile how “PBR methodology
12 is typically more risky than Cost of Service ratemaking.”
13

14 **Response:**

15 PBR methodology is typically more risky than cost of service ratemaking for all the reasons
16 articulated in response to BCUC FBC IR 1.22.2.

17 The premise of the question is flawed because it is taking a retrospective look at the results of a
18 past PBR, whereas utility risk – whether under PBR or COS - is based on prospective
19 uncertainty. Achieving returns that are higher than allowed returns does not demonstrate that
20 FBC faces no business risks going forward, or that PBR methodology is not inherently more
21 risky than Cost of Service ratemaking, but rather demonstrates the ability of FBC management
22 to have efficiently and effectively managed the business through business operations.

23
24

25
26 43.4.1 If FBC is seeking an ROE premium that is commensurate with the level of
27 overall business risk (during a PBR period), then shouldn’t the actual
28 returns indicate that there is a higher level of risk?
29

30 **Response:**

31 Please refer to the response to BCUC FBC IR 2.43.4.

32
33
34

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1 43.5 Please comment on whether the earnings sharing mechanism, the use of
2 deferral accounts and Z-factor treatment moderate FBC's PBR risk compared to
3 cost of service regulation?
4

5 **Response:**

6 The use of deferral accounts does not moderate FBC's risk under PBR relative to Cost of
7 Service ratemaking since deferral accounts are present and used in both types of ratemaking.
8 However, FBC has stated in response to BCUC FBC IR 1.22.2 that PBR plans that use Z-
9 factors or mechanisms for flowing through variances retain links to actual costs and are
10 therefore less risky than a PBR plan with no flow through mechanisms, but are still more risky
11 than Cost of Service ratemaking.

12
13

14

15 43.6 Please clarify whether the achieved returns in the above table are before or after
16 sharing? Does Ms. McShane consider that this asymmetric pattern of earnings
17 might reduce risk under the forms of PBR previously approved for FBC?
18

19 **Response:**

20 The reported ROEs are after sharing. In Ms. McShane's opinion, the fact that the ROEs under
21 PBR have been higher than the allowed ROE are consistent with the objective of PBR, which is
22 to incent the utility to produce efficiencies from which both customers and shareholders will
23 benefit. The observation that the achieved returns have been higher than the allowed returns
24 does not mean that the utility was at less risk of earning less than the allowed ROE under PBR,
25 rather, that it had more incentive to earn higher returns under PBR.

26
27

28

29 43.7 During previous PBR periods, FBC has been able to achieve enhanced earnings.
30 Would that factor into Moody's ratings?
31

32 **Response:**

33 To the extent that the earnings contributed to higher cash flow and stronger credit metrics, yes.
34 However, even with the generally higher than allowed ROEs, Moody's characterizes FBC's
35 credit ratios as "weak".
36

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1 **44.0 Reference: Exhibit B1-73, BCUC IR 1.19.2, IR 1.20.1, and IR 1.20.3**

2 **Comparative Level of Risk**

3 In several instances, Ms. McShane states that her recommendations are not based any
4 increased level of risk for FBC over the benchmark utility over the any given period, but
5 based on quantitative analysis of which she believes support the recommended
6 premium of 50-75 bps. (BCUC 1.19.2 and 1.20.3)

7 44.1 Does this opinion diminish the comparative rankings of risk between FBC and
8 FEI that has been included in the Evidence?

9

10 **Response:**

11 No. The question seems to be based on a misunderstanding of what Ms. McShane was saying.

12 Ms. McShane was comparing FBC to FEI, consistent with the Commission’s use of a
13 benchmark. She was referring to the fact that her recommended premium of 50-75 bps is
14 higher than the current 40 bps premium, and indicating that the difference between 40 bps and
15 50-75 bps is not attributable to a change in the relative risk of FBC compared to FEI. Rather,
16 the 40 bps was too low to begin with.

17 The rankings simply indicate qualitatively which sectors or utilities or more or less risky than
18 each other.

19

20

21

22 44.2 Does this opinion diminish (or even contradict) the scope of this proceeding
23 which, according to the Commission’s Stage 1 Decision,⁴ is to “establish the cost
24 of capital for other utilities as compared to the benchmark”?

25

26 **Response:**

27 No. The question seems to be based on a misunderstanding of what Ms. McShane was saying.

28 The objective of Stage 2 is, as indicated in the question, to establish the cost of capital for the
29 other BC utilities as compared to the benchmark. As such, the qualitative assessment of risk
30 differences must be translated into quantitative differences in cost of capital. That is what Ms.
31 McShane’s analysis has accomplished. Please refer to the response to BCUC FBC IR 2.44.1.

⁴ GCOC Stage 1 Decision, p. (i) and p. 2.

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44.3 If the Panel accepts that FBC’s equity risk premium should be based on its quantitative analysis (as opposed to its comparison of risk over the benchmark utility), should the Commission then place more weight on the comparison of FBC’s business risk assessment to other comparative utilities (such as those electric utilities who are also vertically integrated, those with overhead distribution lines, same size and rate base, etc.)?

Response:

As discussed in the response to BCUC-FBC IR 2.44.1, the question (particularly the parenthetical comment) seems to be based on a misunderstanding of what Ms. McShane was saying.

The qualitative relative risk assessment is important, but, in isolation, it cannot be translated into a risk premium. The qualitative relative risk analysis allows the selection of companies that are comparable to FBC and whose cost of equity can be compared to that of companies that are comparable to FEI. In the absence of that analysis, the selection of a risk premium becomes purely subjective.

44.3.1 If so, has that kind of comparison been fully explored in the Evidence submitted?

Response:

In both FBC and Ms. McShane’s view, the level of analysis in specific comparisons between FBC and other electric utilities are sufficient for the intended purpose.

44.4 For the comparative utilities provided in response to BCUC IR 1.20.1.1, please identify the most comparable utility based on the percentage of overhead lines and number of customers.

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1 **Response:**

2 Neither FBC nor Ms. McShane has data on the percentage of overhead lines for the utilities
3 listed in response to BCUC FBC IR 1.20. With respect only to the number of customers, the
4 most comparable to FBC is ATCO Electric-Distribution, which has approximately 216 thousand
5 customers. However, the number of customers in isolation does not provide a complete picture.
6 ATCO Electric-Distribution's 2012 throughput was over three times that of FBC, 10,397 GWh,
7 versus FBC's 3,144 GWh.

8

9

10

11 44.5 To the best of FBC's abilities, what would be the additional risk premium that
12 should be granted to FEI if its gas mains and pipes were installed above ground
13 (using the same percentage of overhead lines as FBC)?

14

15 **Response:**

16 The question is premised on the erroneous assumption that specific business risk elements can
17 be carved out and basis points of ROE attributed to them. It is not possible to quantify the
18 incremental basis points of ROE that FEI would require if its pipes were above ground.

19

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1 **45.0 Reference: Exhibit B1-74, BCPSO IR 1.3.2; Exhibit B1-75, 1.15(c) p. 19**

2 **Wholesale Customers**

3 “FBC is unaware of an occasion where a Wholesale customer has purchased power
4 from either the market or BC Hydro. To date, FBC rates have been low enough to
5 discourage such transactions. As FBC rates rise relative to those available in the
6 market, the option to make market purchases becomes more attractive.” (BCPSO IR
7 1.3.2)

8 “As an example, based on customer demand of 30,000 kVA and load of 15 GWh, an
9 FBC Wholesale Transmission customer will pay approximately 15 percent more than a
10 BC Hydro Wholesale Transmission customer at April 1, 2013.” (ICG IR 1.15 (c) p. 19)

11 45.1 With BC Hydro rates projected to rise more quickly than FBC, does FBC expect
12 this will deter Wholesale customers from switching to BC Hydro supply?
13

14 **Response:**

15 As stated in the responses to BCUC FBC IRs 1.14.1, 1.14.3 and 1.14.4, as BC Hydro’s rates
16 increase, FBC’s rates are also impacted through higher power supply costs. Even if BC Hydro’s
17 rates increase at a higher rate than FBC’s, in the near to medium term, FBC’s rates will still
18 likely be higher than BC Hydro’s. As a result, increasing BC Hydro rates in the near to medium
19 term may not have a great impact on deterring Wholesale customers from switching to BC
20 Hydro supply.

21
22

23
24 45.2 Why does FBC believe that its rates will rise relative to those available in the
25 market? Please show cost projections and explain why FBC’s low cost self
26 generation would not keep FBC’s cost increases below those of the market.
27

28 **Response:**

29 The above reference was not intended to imply that FBC anticipates its rates will rise relative to
30 the market. Rather, it meant to say that if FBC rates were to rise relative to those in the market,
31 then the option for a Wholesale customer to purchase power from the market becomes more
32 attractive.

33 Given the uncertainty in market rates as discussed in response to ICG FBC IRs 2.2b, 2c and 2d
34 there is a realistic risk that market rates could become sufficiently attractive to FBC’s Wholesale
35 customers that they opt for market based supply.

36

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1 **46.0 Reference: Exhibit B1-74, BCPSO IR 1.14.1**

2 **Deferral Accounts**

3 FBC states that: “Deferral accounts serve a variety of purposes, and many only cover
4 small amounts relative to FBC’s overall revenue requirement. The majority of deferral
5 accounts are used to satisfy a matching principle where costs are deferred and
6 appropriately amortized over the periods in which benefits are expected to occur. A
7 comparison of the number of deferral accounts between periods does not signify a
8 change in use of deferral accounts, or relative risk associated with such costs.”

9 46.1 Please confirm that that FBC views the overall risk mitigation of its deferral
10 accounts to be similar between 2005 and 2013.

11
12 **Response:**

13 Confirmed. Please also refer to the response to BCUC IR 2.46.2.

14
15

16
17 46.2 What percentage of FBC’s revenue requirement was covered by deferral
18 accounts in 2005 and what percentage of 2013 revenue requirements are
19 covered by deferral accounts?

20
21 **Response:**

22 Please refer to the tables below.

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Revenue Requirement Item		Forecast Revenue Requirement		2005 Revenue Requirement Covered by Deferrals		
		\$000's	% of Revenue Requirement ¹	\$000's	% of Category ²	% of Revenue Requirement ³
Line	Particular	(1)	(2)	(3)	(4)	(5)
1	Power Purchases ⁴	\$ 59,451	33.2%	\$ 59,451	100.0%	33.2%
2	Wheeling and Water Fees ⁵	11,559	6.5%	7,681	66.5%	4.3%
3	Operation & Maintenance Expenses ⁶	36,233	20.3%	36,233	100.0%	20.3%
4	Property Taxes	9,986	5.6%	9,986	100.0%	5.6%
5	Depreciation and Amortization Expenses	18,789	10.5%	-	0.0%	0.0%
6	Other Operating Revenue	(3,970)	-2.2%	-	0.0%	0.0%
7	Income Taxes	5,581	3.1%	5,581	100.0%	3.1%
8	Financing Costs	20,438	11.4%	20,438	100.0%	11.4%
9	ROE	22,544	12.6%	-	0.0%	0.0%
10	Incentive Adjustments	(1,791)	-1.0%	-	0.0%	0.0%
11	Total Revenue Requirement	178,820	100.0%	139,369		77.9%

Notes:

- 1 Category amount in column 1 divided by total (line 11) of column 1
- 2 Category amount in column 3 divided by category amount in column 1
- 3 Category amount in column 3 divided by total (line 11) of column 1
- 4 65 percent of the first \$1 million Power Purchase variance and 75 percent of the remainder was recoverable from customers (plus Capacity Block Purchase variances).
- 5 Only variances in Water Fees are recovered from customers
- 6 100 percent of the first \$0.5 million in O&M variance and 40 percent of the remainder was recoverable from customers.



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Revenue Requirement Item		Forecast Revenue Requirement		2013 Revenue Requirement Covered by Deferrals		
		\$000's	% of Revenue Requirement ¹	(\$000's)	% of Category ²	% of Revenue Requirement ³
Line	Particular	(1)	(2)	(3)	(4)	(5)
1	Power Purchases	\$ 91,942	29.6%	\$ 91,942	100.0%	29.6%
2	Wheeling and Water Fees ⁴	15,104	4.9%	9,871	65.4%	3.2%
3	Operation & Maintenance Expenses ⁵	46,097	14.8%	4,224	9.2%	1.4%
4	Property Taxes	15,085	4.9%	-	0.0%	0.0%
5	Depreciation and Amortization Expenses	51,090	16.5%	-	0.0%	0.0%
6	Other Operating Revenue	(7,149)	-2.3%	-	0.0%	0.0%
7	Income Taxes	7,666	2.5%	-	0.0%	0.0%
8	Financing Costs	42,361	13.6%	-	0.0%	0.0%
9	ROE	44,054	14.2%	-	0.0%	0.0%
10	Incentive Adjustments	4,280	1.4%	-	0.0%	0.0%
11	Total Revenue Requirement	310,530	100.0%	106,037		34.1%

Notes:

- 1 Category amount in column 1 divided by total (line 11) of column 1
- 2 Category amount in column 3 divided by category amount in column 1
- 3 Category amount in column 3 divided by total (line 11) of column 1
- 4 Only variances in Water Fees are recoverable from customers
- 5 Only variances in Pension and OPEB in O&M are recoverable from customers

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2
3

1 **47.0 Reference: Exhibit B1-74, BCPSO IR 1.15.1**

2 **AMI and Impact on FBC’s Risk**

3 FBC states that with Advanced Metering Infrastructure (AMI): “FortisBC will be able to
4 identify outages more quickly and will have better tools to detect electricity theft, but
5 these capabilities are not expected to materially impact the fundamental business risk of
6 the utility.”

7 47.1 How can it be that eliminating the significant losses due to electricity theft will not
8 reduce business risk? Please identify the levels of electricity theft that FBC has
9 previously forecast in its two most recent revenue requirement applications and in
10 the AMI application.
11

12 **Response:**

13 In the context of the overall risk assessment of FBC, electricity theft is not viewed as a material
14 business risk since the cost of theft is borne by paying FBC customers as a flow through
15 expense, and the relative amount of theft is small to the overall revenue requirement. . To the
16 extent that minimizing theft ultimately reduces customer rates our competitive position is
17 improved however, the amount is not deemed material to business risk overall.

18 Electricity theft was not specifically quantified in the 2012-2013 RRA and the 2014-2018 Multi-
19 year PBR but were included as a component of overall system losses in both Applications.
20 Please refer to 2012-2013 RRA Tab 3, Section 3.5, page 11 and 2014-2018 Multi-year PBR
21 2014-2018 Tab C, Section 1.4.7, page 89.

22 The following table details the annual amount of electricity theft 2012-2018 submitted as part of
23 the AMI CPCN and that approved by the BCUC.

AMI Annual Electricity Theft Calculation 2012-2018								
	2012	2013	2014	2015	2016	2017	2018	
AMI CPCN (COK)	\$ 4,207,965	\$ 4,681,551	\$ 5,376,356	\$ 6,154,543	\$ 7,023,906	\$ 7,537,429	\$ 7,841,941	
BCUC Decision	\$ 3,155,974	\$ 3,511,163	\$ 4,032,267	\$ 4,615,907	\$ 5,267,929	\$ 5,653,071	\$ 5,881,455	

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47.2 Will AMI also assist in rapid detection and deterrence of copper theft?



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1 **Response:**

2 No, AMI is not expected to assist with rapid detection of and deterrence of copper theft (which
3 generally occurs on non-energized lines that could not be monitored by AMI).

4

5

6

7 47.3 Does FBC intend on reducing or eliminating its approved expenditures on theft
8 prevention with the introduction of AMI? If not, why not?

9

10 **Response:**

11 FortisBC does not intend to reduce or eliminate its approved expenditures on theft prevention.
12 AMI will provide better tools for detection of theft, but does not eliminate the need for staff to
13 deploy metering infrastructure, analyze data and conduct field investigations. These costs
14 were included in the AMI project financial analysis.

15