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November 23, 2022

British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, BC
V6Z 2N3

Attention: Ms. Sara Hardgrave, Acting Commission Secretary

Dear Ms. Hardgrave:

Re: British Columbia Utilities Commission (BCUC) 2022 Generic Cost of Capital (GCOC) Proceeding

FortisBC Energy Inc. (FEI) and FortisBC Inc. (FBC) (collectively FortisBC) Responses to Undertakings

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FortisBC writes in compliance with BCUC Order G-237-22 to provide its responses to undertakings resulting from the Oral Hearing of November 7, 2022 to November 9, 2022 in the above noted proceeding.

In addition, FortisBC would like to provide a correction to testimony provided during the Oral Hearing on November 9, 2022 regarding FBC's cryptocurrency load. Beginning at Transcript Volume 5A, Page 821, Line 4, the materiality of FBC's cryptocurrency load is introduced, and discussion ensues about Industrial load in general. This discussion continues in Transcript Volume 5B, where, at Page 828, Line 10, Ms. Roy clarified that FBC has a single cryptocurrency customer that represents 92 percent of the Technology portion of the load of the largest 20 customers of FBC.

For further clarity, and to correct the figures provided by Ms. Roy at Transcript Volume 5A, Page 822, Line 6, with respect to FBC's Industrial load, as provided in Exhibit B1-8-1, Appendix B, Table B2-1, Industrial load is approximately 14 percent of FBC's Approved 2022 total load. Further, to clarify the figure provided at Transcript Volume 5A, Page 822, Line 8, FBC can confirm that in 2021 cryptocurrency represented approximately 2.7 percent of FBC's total load.

If further information is required, please contact the undersigned.

Sincerely,

on behalf of FORTISBC

Original signed:

Diane Roy

Attachments

cc (email only): Registered Interveners

BCUC 2022 Generic Cost of Capital

FORTISBC UNDERTAKING No. 1

HEARING DATE: November 8, 2022

TRANSCRIPT REFERENCE: Volume 4, Page 403, Line 19 to Page 407, Line 7

REQUESTOR: BCUC Staff

WITNESS: Mr. Coyne

QUESTION: BCUC staff requested that Mr. Coyne perform a number of scenario analyses based on December 31, 2021 and October 2022 data

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RESPONSE:

Please see the attached Concentric Response to Undertaking No.1.

REPORT:

UNDERTAKING #1 – SCENARIOS ANALYSIS

PREPARED FOR:

FORTISBC ENERGY INC. AND FORTISBC INC.

BEFORE THE:

BRITISH COLUMBIA UTILITIES COMMISSION

NOVEMBER 23, 2022

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Response to Undertaking #1

During the hearing on November 7-8, 2022, the Staff of the British Columbia Utilities Commission ("BCUC") requested that Mr. Coyne make certain modifications to his ROE analysis for FEI and FBC based on model inputs suggested by Dr. Lesser. The requested scenarios include the following modifications:

1) Use current average interest rates (30-day and 90-day) instead of forecast bond yields;
2) Use forward-looking market risk premium ("MRP") only rather than the average of historical and forward looking MRP;
3) Use multi-stage DCF model to compute forward-looking MRP instead of constant growth DCF model;
4) Ensure that the correct GDP growth rates are used in the multi-stage DCF model used to compute the forward-looking MRP;
5) Use country specific MRPs for Canada and U.S.; and
6) Use market data as of December 31, 2021 and October 31, 2022.

Mr. Coyne also indicated at the hearing that he would provide additional adjustments to the CAPM analysis, as suggested by Dr. Lesser, and he understood that Staff agreed. These include:

1) Small size premium using FERC's methodology, as described by Dr. Lesser; and
2) Hamada adjustment as discussed in Dr. Lesser's August 2021 report to adjust for differences in financial leverage between FEI, FBC and the various proxy groups.

Mr. Coyne has prepared the tables below to summarize the ROE results for each of the scenarios requested by Staff. The supporting analyses are provided as follows:

Attachments A.1 through A.3 – Mr. Coyne's original and updated analysis

B.4 through B.7 – Modifications to Mr. Coyne's analyses based on Staff's requested scenarios

C.8 and C.9 – Additional adjustments for small size premium and Hamada equation

The table below summarizes the bond yields and MRPs in each scenario.

Table 1: Bond Yields and Market Risk Premiums

Scenario	As of	Bond Yield (Canada)	MRP (Canada)	Bond Yield (U.S.)	MRP (U.S.)
A.1 – Coyne - original	December 2021	2.58%	8.49%	2.91%	8.49%
A.2 – Coyne – 90 day	October 2022	3.21%	7.29%	3.50%	7.28%
A.3 – Coyne – 30 day	October 2022	3.27%	7.17%	3.92%	7.17%
B.4 – Lesser – 30 day	December 2021	1.82%	6.20%	1.87%	5.69%
B.5 – Lesser – 90 day	December 2021	1.90%	6.12%	1.94%	5.62%
B.6 – Lesser – 30 day	October 2022	3.27%	5.47%	3.92%	3.30%
B.7 – Lesser – 90 day	October 2022	3.09%	5.66%	3.43%	3.78%

<u>Observations on the Scenarios:</u>

As shown in Table 2, Mr. Coyne's and Dr. Lesser's multi-stage DCF results are very similar. The multi-stage DCF results understate a reasonable ROE estimate for FEI or FBC because the evidence does not support a conclusion that GDP growth serves as a cap on EPS growth for the companies in the proxy groups as explained in Mr. Coyne's evidence (see Figure 23 of his January 2022 report). The constant growth DCF model results are higher than the multi-stage DCF results for each proxy group. The constant growth DCF model was developed to estimate the cost of equity for dividend-paying companies in mature industries with steady and predictable growth rates, such as public utilities.

A U.S. MRP of 3.30% or 3.78% (as calculated in Scenarios B.6 and B.7) is outside any reasonable range of the MRP estimates and 3.5% to 4.0% lower than the historical U.S. MRP of 7.46% from 1929-2021. And the historical MRP is understated because it is based on government bond yields of approximately 5.0%, compared with average bond yields of 3.4% to 3.9% in October 2022, so one would expect a higher than historical MRP given current bond yields, and not lower, as indicated by Dr. Lesser's method.

Using Dr. Lesser's method for calculating the forward-looking MRP produces CAPM results that are well below the multi-stage DCF model results, the constant growth DCF results and the risk premium model results. This calls into question the reliability of the CAPM results using Dr. Lesser's inputs.

Adjusting the CAPM results for small size and differences in financial leverage (scenarios C.8 and C.9) produces higher CAPM results, but still well below the results of other models and other allowed returns.

When the multi-stage DCF results are combined with the CAPM results based on Dr. Lesser's suggested inputs, the average ROE results are well below a reasonable estimate of an authorized ROE for FEI and FBC. Dr. Lesser's CAPM results are around 7.0% (see Scenarios B.6 and B.7), which includes 50 bps for flotation costs. That return would be lower than any authorized ROE for a Canadian regulated utility since at least 2000. If that adjustment for flotation costs were removed, the CAPM estimate would be about 6.5%, closer to the cost of debt.

Table 2: Summary Table – Multi-Stage DCF Results

Scenario	As of	Canadian	US Gas	North American Gas	US Electric	North American Electric
A.1 – Coyne - original	Dec 2021	10.28%	9.53%	10.05%	8.82%	9.07%
A.2 – Coyne – 90 day	Oct 2022	10.46%	8.94%	9.72%	8.74%	9.11%
A.3 – Coyne – 30 day	Oct 2022	10.93%	9.24%	10.03%	9.10%	9.52%
B.4 – Lesser – 30 day	Dec 2021	10.33%	9.48%	10.06%	8.86%	9.10%
B.5 – Lesser – 90 day	Dec 2021	10.28%	9.53%	10.05%	8.92%	9.14%
B.6 – Lesser – 30 day	Oct 2022	10.93%	9.24%	10.03%	9.10%	9.52%
B.7 – Lesser – 90 day	Oct 2022	10.46%	8.94%	9.72%	8.74%	9.11%

Table 3: Summary Table – CAPM Results

Scenario	As of	Canadian	US Gas	North American Gas	US Electric	North American Electric
A.1 – Coyne - original	Dec 2021	10.68%	10.67%	11.05%	11.12%	10.80%
A.2 – Coyne – 90 day	Oct 2022	10.12%	9.96%	10.30%	10.51%	10.24%
A.3 – Coyne – 30 day	Oct 2022	10.07%	10.27%	10.46%	10.82%	10.45%
B.4 – Lesser – 30 day	Dec 2021	7.87%	7.23%	7.78%	7.53%	7.49%
B.5 – Lesser – 90 day	Dec 2021	7.88%	7.24%	7.78%	7.54%	7.50%
B.6 – Lesser – 30 day	Oct 2022	8.58%	7.11%	7.95%	7.36%	7.60%
B.7 – Lesser – 90 day	Oct 2022	8.56%	7.03%	7.90%	7.31%	7.55%

Scenario A.1 – Coyne Original Analysis

Figure 1: Summary of Results – Natural Gas[1] - As Filed

	Canadian Regulated Utilities	US Gas Utilities	North American Utilities - Gas
CAPM	10.68%	10.67%	11.05%
Constant Growth DCF	11.61%	10.39%	10.99%
Multi-Stage DCF	10.28%	9.53%	10.05%
Risk Premium		9.97%	9.97%
Average	10.9%	10.3%	10.7%
Avg CAPM and Multi-Stage DCF	10.5%	10.1%	10.6%

Figure 2: Summary of Results - Electric[2] - As Filed

	Canadian Regulated Utilities	US Electric Utilities	North American Utilities-Electric
CAPM	10.68%	11.12%	10.80%
Constant Growth DCF	11.61%	9.57%	9.87%
Multi-Stage DCF	10.28%	8.82%	9.07%
Risk Premium		10.01%	10.01%
Average	10.9%	10.0%	10.0%
Avg CAPM and Multi-Stage DCF	10.5%	10.0%	9.9%

1 DCF results are based on 90-day average stock prices for proxy group companies. Results include 50 basis points for flotation costs and financial flexibility except for U.S. risk premium results. The risk premium analysis was only conducted for the U.S. Gas proxy group; as such, there are no risk premium results for the Canadian Regulated proxy group. The CAPM results do not include a leverage adjustment using the Hamada formula.

2 Ibid.

Scenario A.2 – Coyne Updated Analysis – 90-day average stock prices and interest rates

Figure 3: Summary of Results – Natural Gas[3] - Oct 2022 Update

	Canadian Regulated Utilities	US Gas Utilities	North American Utilities - Gas
CAPM	10.12%	9.96%	10.30%
Constant Growth DCF	11.98%	9.81%	10.95%
Multi-Stage DCF	10.46%	8.94%	9.72%
Risk Premium		10.12%	10.12%
Average	10.9%	9.7%	10.3%
Avg CAPM and Multi-Stage DCF	10.3%	9.5%	10.0%

Figure 4: Summary of Results - Electric[4] - Oct 2022 Update

	Canadian Regulated Utilities	US Electric Utilities	North American Utilities-Electric
CAPM	10.12%	10.51%	10.24%
Constant Growth DCF	11.98%	9.67%	10.09%
Multi-Stage DCF	10.46%	8.74%	9.11%
Risk Premium		10.16%	10.16%
Average	10.9%	9.8%	9.9%
Avg CAPM and Multi-Stage DCF	10.3%	9.6%	9.7%

3 Ibid.
4 Ibid.

Scenario A.3 – Coyne Updated Analysis – 30-day average stock prices and interest rates

Figure 5: Summary of Results – Natural Gas[5] - Oct 2022 Update

	Canadian Regulated Utilities	US Gas Utilities	North American Utilities - Gas
CAPM	10.07%	10.27%	10.46%
Constant Growth DCF	12.35%	10.07%	11.22%
Multi-Stage DCF	10.93%	9.24%	10.03%
Risk Premium		10.12%	10.12%
Average	11.1%	9.9%	10.5%
Avg CAPM and Multi-Stage DCF	10.5%	9.8%	10.2%

Figure 6: Summary of Results - Electric[6] - Oct 2022 Update

	Canadian Regulated Utilities	US Electric Utilities	North American Utilities-Electric
CAPM	10.07%	10.82%	10.45%
Constant Growth DCF	12.35%	9.98%	10.44%
Multi-Stage DCF	10.93%	9.10%	9.52%
Risk Premium		10.16%	10.16%
Average	11.1%	10.0%	10.1%
Avg CAPM and Multi-Stage DCF	10.5%	10.0%	10.0%

5 Ibid.
6 Ibid.

Scenario B.4 – Lesser Inputs – 30-day average stock prices and interest rates, forward MRP, country specific MRP

Figure 7: Summary of Results – Natural Gas[7] - Dec 2021

	Canadian Regulated Utilities	US Gas Utilities	North American Utilities - Gas
CAPM	7.87%	7.23%	7.78%
Multi-Stage DCF	10.33%	9.48%	10.06%
Avg CAPM and Multi-Stage DCF	9.1%	8.4%	8.9%

Figure 8: Summary of Results - Electric[8] - Dec 2021

	Canadian Regulated Utilities	US Electric Utilities	North American Utilities-Electric
CAPM	7.87%	7.53%	7.49%
Multi-Stage DCF	10.33%	8.86%	9.10%
Avg CAPM and Multi-Stage DCF	9.1%	8.2%	8.3%

7 Includes 50 basis points for flotation costs and financial flexibility.
8 Ibid.

Scenario B.5 – Lesser Inputs – 90-day average stock prices and interest rates, forward MRP, country specific MRP

Figure 9: Summary of Results – Natural Gas[9] - Dec 2021

	Canadian Regulated Utilities	US Gas Utilities	North American Utilities - Gas
CAPM	7.88%	7.24%	7.78%
Multi-Stage DCF	10.28%	9.53%	10.05%
Avg CAPM and Multi-Stage DCF	9.1%	8.4%	8.9%

Figure 10: Summary of Results - Electric[10] - Dec 2021

	Canadian Regulated Utilities	US Electric Utilities	North American Utilities-Electric
CAPM	7.88%	7.54%	7.50%
Multi-Stage DCF	10.28%	8.92%	9.14%
Avg CAPM and Multi-Stage DCF	9.1%	8.2%	8.3%

9 Ibid.
10 Ibid.

Scenario B.6 – Lesser Inputs – 30-day average stock prices and interest rates, forward MRP, country specific MRP

Figure 11: Summary of Results – Natural Gas[11] - Oct 2022

	Canadian Regulated Utilities	US Gas Utilities	North American Utilities - Gas
CAPM	8.58%	7.11%	7.95%
Multi-Stage DCF	10.93%	9.24%	10.03%
Avg CAPM and Multi-Stage DCF	9.8%	8.2%	9.0%

Figure 12: Summary of Results - Electric[12] - Oct 2022

	Canadian Regulated Utilities	US Electric Utilities	North American Utilities-Electric
CAPM	8.58%	7.36%	7.60%
Multi-Stage DCF	10.93%	9.10%	9.52%
Avg CAPM and Multi-Stage DCF	9.8%	8.2%	8.6%

11 Ibid.
12 Ibid.

Scenario B.7 – Lesser Inputs – 90-day average stock prices and interest rates, forward MRP, country specific MRP

Figure 13: Summary of Results – Natural Gas[13] - Oct 2022

	Canadian Regulated Utilities	US Gas Utilities	North American Utilities - Gas
CAPM	8.56%	7.03%	7.90%
Multi-Stage DCF	10.46%	8.94%	9.72%
Avg CAPM and Multi-Stage DCF	9.5%	8.0%	8.8%

Figure 14: Summary of Results - Electric[14] - Oct 2022

	Canadian Regulated Utilities	US Electric Utilities	North American Utilities-Electric
CAPM	8.56%	7.31%	7.55%
Multi-Stage DCF	10.46%	8.74%	9.11%
Avg CAPM and Multi-Stage DCF	9.5%	8.0%	8.3%

13 Ibid.
14 Ibid.

Scenario C.8 – Lesser Inputs – 90-day average stock prices and interest rates, forward MRP, country specific MRP, small size premium

Figure 15: Summary of Results – Natural Gas[15] - Oct 2022

	Canadian Regulated Utilities	US Gas Utilities	North American Utilities - Gas
CAPM	9.04%	8.02%	8.63%
Multi-Stage DCF	10.46%	8.94%	9.72%
Avg CAPM and Multi-Stage DCF	9.8%	8.5%	9.2%

Figure 16: Summary of Results - Electric[16] - Oct 2022

	Canadian Regulated Utilities	US Electric Utilities	North American Utilities-Electric
CAPM	9.04%	7.61%	7.93%
Multi-Stage DCF	10.46%	8.74%	9.11%
Avg CAPM and Multi-Stage DCF	9.8%	8.2%	8.5%

15 Ibid.
16 Ibid.

Scenario C.9 – Lesser Inputs – 90-day average stock prices and interest rates, forward MRP, country specific MRP, Hamada equation adjustment

Figure 17a: Summary of Results – Natural Gas[17] - 45.0% - Oct 2022

	Canadian Regulated Utilities	US Gas Utilities	North American Utilities - Gas
CAPM	8.44%	7.03%	7.72%
Multi-Stage DCF	10.46%	8.94%	9.72%
Avg CAPM and Multi-Stage DCF	9.4%	8.0%	8.7%

Figure 18b: Summary of Results – Natural Gas[18] - 38.5% - Oct 2022

	Canadian Regulated Utilities	US Gas Utilities	North American Utilities - Gas
CAPM	9.09%	7.51%	8.32%
Multi-Stage DCF	10.46%	8.94%	9.72%
Avg CAPM and Multi-Stage DCF	9.8%	8.2%	9.0%

Figure 19: Summary of Results - Electric[19] - 40.0% - Oct 2022

	Canadian Regulated Utilities	US Electric Utilities	North American Utilities-Electric
CAPM	8.92%	7.59%	7.81%
Multi-Stage DCF	10.46%	8.74%	9.11%
Avg CAPM and Multi-Stage DCF	9.7%	8.2%	8.5%

17 Ibid.
18 Ibid.
19 Ibid.

FORTISBC UNDERTAKING No. 2

HEARING DATE: November 7, 2022

TRANSCRIPT REFERENCE: Volume 3, Page 357, Line 22 to Page 358, Line 9

REQUESTOR: BCUC Staff

WITNESS: Mr. Coyne

QUESTION: Calculate how the proposed 50 basis points flotation cost and financial flexibility ROE adder can be reflected in the capital structure

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RESPONSE:

Please see the attached Concentric Response to Undertaking No. 2.

REPORT:

UNDERTAKING #2 – FLOTATION COSTS AND WACC ANALYSIS

PREPARED FOR:

FORTISBC ENERGY INC. AND FORTISBC INC.

BEFORE THE:

BRITISH COLUMBIA UTILITIES COMMISSION

NOVEMBER 23, 2022

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Response to Undertaking #2

Mr. Coyne was also asked to use a Weighted Average Cost of Capital analysis to determine the effect of accounting for recovery of flotation costs and financial flexibility through the deemed capital structure of FEI and FBC rather than by applying a 50 basis points adder to the authorized ROE of each company. The table below summarizes the results of that analysis. The supporting schedule is provided as Attachment U.2. As shown, the deemed equity ratio would need to increase by 2.0 to 2.3 percent for FEI and by 2.1 percent for FBC. Mr. Coyne continues to believe that flotation costs and financial flexibility should be recovered through an adjustment to the authorized ROE of 50 basis points for each company.

Table 1: Adjustment to Equity Ratio for Flotation Costs and Financial Flexibility

	Equity Ratio	Adjusted for Flotation and Financial Flexibility
FEI – current	38.5%	40.51%
FEI – proposed	45.0%	47.34%
FBC – current/proposed	40.0%	42.10%

HEARING DATE: November 9, 2022

TRANSCRIPT REFERENCE: Volume 5B, Page 862, Lines 18-21

REQUESTOR: Ms. Mis

WITNESS: Mr. Lorimer

QUESTION: If available, FortisBC to file any new credit rating reports for FEI and FBC

RESPONSE:

Moody's has not issued any new credit rating reports for FEI or FBC. FortisBC will file Moody's credit rating reports for FEI and FBC in this proceeding if they become available prior to close of the evidentiary record on December 9, 2022.

As for DBRS Morningstar (DBRS), the latest credit rating report for FBC was published on March 22, 2022 when DBRS confirmed FBC's credit rating. The report is attached to this undertaking. FEI anticipates that DBRS will publish a new credit rating report for FEI in December 2022 or January 2023.

Rating Report
FortisBC Inc.

DBRS Morningstar
March 22, 2022

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Ratings

Debt	Rating	Rating Action	Trend
Issuer Rating	A (low)	Confirmed	Stable
Secured Debentures	A (low)	Confirmed	Stable
Unsecured Debentures	A (low)	Confirmed	Stable
Commercial Paper	R-1 (low)	Confirmed	Stable

Rating Update

On March 8, 2022, DBRS Limited (DBRS Morningstar) confirmed the Issuer Rating, the rating of Secured Debentures, and the rating of Unsecured Debentures of FortisBC Inc. (FBC or the Company) at A (low). DBRS Morningstar also confirmed FBC's Commercial Paper rating at R-1 (low). All trends are Stable. The confirmations reflect FBC's strong financial profile with strong metrics and solid liquidity in 2021, which are expected to remain relatively stable over the medium term. The confirmations also reflect DBRS Morningstar's view that the regulatory framework in British Columbia (BC) is supportive and stable for FBC's business risk profile through the Multiyear Rate Plan (MRP). DBRS Morningstar rates FBC's Unsecured Debentures the same as its Secured Debentures because the amount of Secured Debentures outstanding is minimal, accounting for only approximately 3% of total long-term debt.

DBRS Morningstar recognizes FBC's operational resiliency in coping with the November 2021 Pacific Northwest Floods (BC Floods), which had no material impact on FBC's financial and operational performance for the year. The ongoing Coronavirus Disease (COVID-19) pandemic has also not had any material impact on FBC's performance because, as a regulated utility, FBC operates critical infrastructure and provides essential services to customers.

With respect to cost of capital proceedings in BC, the British Columbia Utilities Commission (BCUC) has initiated generic cost of capital (GCC) proceedings for regulated utilities in BC. GCC proceedings will include a review of the deemed equity component of total capital structure and allowed return on equity (ROE) for FBC and other regulated utilities in BC. DBRS Morningstar notes that any adverse material changes in the allowed ROE or deemed equity as a result of GCC proceedings that could potentially weaken FBC's credit profile may affect FBC's rating.

In June 2020, the BCUC issued its decision on FBC's MRP. In the BCUC's decision, it approved, among other items, the following key features in the MRP: (1) a level of operation and maintenance (O&M) expense per customer indexed for inflation, less a fixed productivity factor of 0.5% and (2) a forecast approach to the regular capital. DBRS Morningstar believes that the use of O&M costs per customer, which will be subjected to a true-up in subsequent years, will help FBC eliminate the impact of any forecast variances. In addition, the MRP also provides incentives for operational efficiency with a 50:50 sharing of variances from allowed ROE between customers and FBC. Also, variances associated with revenue and other expenses, including those not controllable, are recorded in deferral accounts to be refunded to or recovered from customers. FBC's credit profile is further supported by its deferral accounts, which stabilize power-supply cost for the benefit of the customers. The BCUC kept all the deferral accounts substantially unchanged in its 2020–24 MRP decision. DBRS Morningstar notes that allowed ROE and the deemed equity component of the capital structure remained unchanged at 9.15% and 40.0%, respectively, until the conclusion of the next GCC proceeding.

FBC's credit metrics in 2021 remained solidly supportive of the current ratings. The cash flow-to-debt and interest coverage ratios improved slightly compared with 2020 levels. Capital expenditures (capex) for 2022 are expected to be approximately $156 million (including the allowance for funds used during construction but excluding customer contributions in aid of construction), which will likely result in a modest free cash flow deficit. DBRS Morningstar expects FBC to finance the cash flow deficit in a manner that will maintain the regulatory capital structure of 40% equity and 60% debt. DBRS Morningstar expects FBC's credit metrics to remain stable over the near to medium term. If FBC's credit metrics weaken significantly from the current level on a sustained basis, it could negatively affect the Company's ratings. However, DBRS Morningstar considers this scenario unlikely.

Financial Information

FortisBC Inc. (USGAAP)	For the year ended December 31				
(CAD millions, where applicable)	**2021**	**2020**	**2019**	**2018**	**2017**
Cash flow-to-adjusted debt (%)[1]	13.0	12.5	12.5	13.4	13.8
Adjusted debt-to-capital (%)[2]	58.1	59.0	60.9	59.5	59.4
EBIT-to-interest (times) (%)	2.45	2.22	2.22	2.41	2.58

(1) DBRS Morningstar excludes finance leases related to the Brilliant Power Purchase Agreement
(2) DBRS Morningstar excludes finance leases related to the Brilliant Power Purchase Agreement and Goodwill

Issuer Description

FBC is an integrated utility operating in south-central BC. FBC's regulated operations include (1) transmission assets, (2) distribution assets, and (3) four hydroelectric generating plants (totalling 225 megawatts (MW)) on the Kootenay River. FBC provided electricity services to approximately 184,800 direct and indirect customers as at the end of 2021. FBC is wholly and indirectly owned by Fortis Inc. (rated A (low) with a stable trend by DBRS Morningstar).

Rating Considerations

Strengths

1. Reasonable and stable regulatory environment

FBC is a regulated utility, operating primarily under a cost-of-service regulation prescribed by the BCUC with some performance incentive attributes. With respect to power supply costs, most power purchase contracts, and power-supply cost variances from the forecast are recovered or refunded through future rates using approved regulatory deferral accounts. FBC also has a flow-through deferral account that captures variances from regulated forecast items, excluding formulaic O&M costs, that do not have separately approved deferral mechanisms and flows those variances through to customer rates in the following year. DBRS Morningstar also notes that BC has no history of any material negative regulatory intervention in the past decade.

2. Vertically integrated utility/supply security

FBC is a vertically integrated regulated utility that owns generation, transmission, and distribution assets. The Company's four hydroelectric generation plants with 225 MW of capacity on the Kootenay River, which are insulated from annual hydrology risk as a result of the Canal Plant Agreement (CPA), represented approximately 45% of FBC's annual energy needs. In addition, FBC has secured a mix of other BCUC-approved long-term and short-term power purchase contracts that allow the Company to meet its electricity supply requirements. (See the Major Contracts section for details.)

3. Solid financial profile

FBC's financial profile remains solid with key credit metrics that are consistent with the current rating category. DBRS Morningstar anticipates FBC's credit metrics to remain stable in 2021 and expects the Company to finance its modest free cash flow deficit in a manner that is consistent with the deemed capital structure. FBC's refinancing risk on its long-term debt over the next five years is low.

Challenges

1. Managing O&M costs and base capex

Managing actual O&M costs throughout the MRP period is critical for FBC. The Company has to manage operational efficiency within the context of service-quality measures set out by the BCUC. There is always a risk that O&M costs could increase more than planned. In addition, FBC has an ongoing capital program to maintain its current generation, transmission, and distribution assets to accommodate customer growth and meet reliability requirements. There is no assurance that actual costs will be within the BCUC-approved capex, and, if the BCUC determines capex to be imprudent, costs may not be fully recovered.

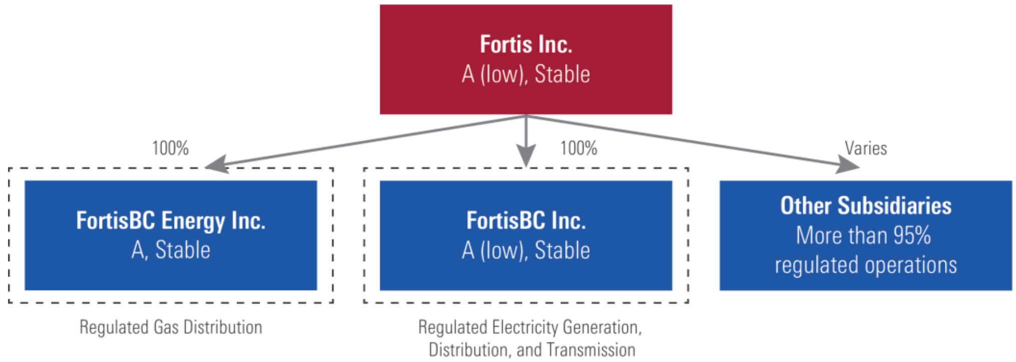
2. Reliant on parent for equity

FBC does not have direct access to the equity market. All of its funding requirements to finance the equity portion of its capital projects would require financial support from its parent, Fortis Inc. In the event that the parent's access to the capital markets weakens significantly, it could have a negative impact on the parent's ability to inject equity into FBC in a timely manner.

3. Operational risk

FBC is required to ensure system reliability and the continued performance of its physical assets. FBC determines expenditures that should be undertaken to maintain, replace, and expand the assets. FBC could experience service disruptions and increased costs if it is unable to maintain, replace, or expand its asset base. Occurrences of significant unforeseen natural disaster or equipment failures could have a materially adverse effect on the Company's operations and financial position.

Simplified Organizational Structure



Earnings and Outlook

FortisBC Inc.(USGAAP)					
Consolidated Income Statement	For the year ended December 31				
(CAD millions, where applicable)	**2021**	**2020**	**2019**	**2018**	**2017**
Total revenue	454	412	404	391	381
Power purchase costs[1]	(168)	(152)	(153)	(135)	(141)
Net revenue	286	260	251	256	240
Operating, maintenance & other	(118)	(108)	(98)	(96)	(80)
EBITDA	168	152	153	160	160
Depreciation & amortization	(65)	(61)	(62)	(61)	(62)
EBIT	103	91	91	99	98
Gross interest expense	(42)	(41)	(41)	(41)	(38)
Debt component of AFUDC	1	1	1	1	1
Other income (expense)	5	5	4	3	1
Pre-tax income	67	56	55	62	62
Income tax	(11)	(3)	(5)	(12)	(12)
Net income before extra. items	56	53	50	50	50
Non-recurring items	-	-	-	-	-
Net income	56	53	50	50	50

1. BPPA Finance Lease is excluded from power purchase costs as a result of an accounting change effective from Jan 1,2019. DBRS Morningstar has included BPPA Finance Lease back in the power purchase cost for comparison purposes.

Summary

- Modestly higher net earnings in 2021 compared with 2020 are attributed to the higher investment in the regulated assets. Net earnings are based on an allowed ROE of 9.15% and a deemed equity component of the capital structure of 40%.
- Total revenues consist of (1) electric revenue (which accounts for most of total revenues), (2) other contract revenue (customer connection fees, surplus capacity sales, third-party contract work, and pole attachments), (3) alternative revenue (earnings-sharing mechanism revenue and flow-through variances related to tariff-based revenue), and (4) other revenue (regulatory deferral adjustments that capture variances from regulated forecast items but excluding formulaic O&M costs).
- The increase in total revenues in 2021 primarily reflected (1) higher revenue from the higher customer rates; 2) an increase in surplus power sales; 3) an increase in revenue associated with third-party contract work; and (4) higher revenue associated with an increase in the electricity sales volume partly resulting from extreme weather and the impact of the coronavirus pandemic in 2020. The decrease in revenue associated with regulatory deferrals partially offsets the increase in total revenues.

Outlook

- DBRS Morningstar expects slightly higher earnings in 2022 than 2021, reflecting DBRS Morningstar's expectation for FBC to achieve or exceed its allowed ROE along with higher levels of investment in regulated assets.
- Based on the incentive mechanism as approved in FBC's MRP application, DBRS Morningstar believes that the Company’s management of its O&M costs and base capex will be key to achieve or exceed its allowed ROE. DBRS Morningstar notes that, historically, the Company’s operations have been very efficient.

Financial Profile

FortisBC Inc. (USGAAP)					
Cash Flow Statement	For the year ended December 31				
(CAD millions, where applicable)	**2021**	**2020**	**2019**	**2018**	**2017**
Net income before extra. items	56	53	50	50	50
Depreciation & amortization	65	61	62	61	62
Other	(2)	(2)	(3)	(1)	(1)
Cash flow from operations	**119**	**112**	**109**	**110**	**111**
Dividends	(47)	(45)	(45)	(44)	(47)
Capex	(126)	(127)	(96)	(93)	(92)
Free cash flow before WC	**(54)**	**(60)**	**(32)**	**(27)**	**(28)**
Working capital (WC)	6	5	(16)	14	(10)
Other	(2)	(12)	(8)	(1)	3
Net free cash flow	**(50)**	**(67)**	**(56)**	**(14)**	**(35)**
Acquisitions	0	0	0	0	0
Other investment activities	0	0	0	0	0
Net changes in equity	30	50	0	0	0
Net changes in debt	20	18	56	14	35
Other financing	0	(1)	0	0	0
Change in cash	**0**	**0**	**0**	**0**	**0**
Adjusted total debt[1]	915	894	875	820	806
Cash flow-to-adjusted debt (%)[1]	13.0	12.5	12.5	13.4	13.8
Adjusted debt-to-capital (%)[2]	58.1	59.0	60.9	59.5	59.4
EBIT-to-interest (times)	2.45	2.22	2.22	2.41	2.58

1. DBRS Morningstar excludes finance leases related to the Brilliant Power Purchase Agreement
2. DBRS Morningstar excludes finance leases related to the Brilliant Power Purchase Agreement and Goodwill

Summary

- FBC's financial profile remained stable and strong in 2021 for the "A" rating category. Relatively stable cash flow, good liquidity, and low refinancing risk over the medium term continue to support the current rating.
- Key credit metrics improved compared with 2020. The modest amount of free cash flow deficit was funded through external debt.
- The Company's capital structure remained relatively stable and in line with the regulated capital structure. The deemed equity component of the regulatory capital structure was 40% in 2021, unchanged from 2020.
- The cash flow-to-adjusted debt ratio excludes the finance lease related to the Brilliant Power Purchase Agreement (BPPA) that arose from FBC adopting U.S. Generally Accepted Accounting Principles in 2012. The cost associated with the BPPA finance lease is passed through to the ratepayers.
- DBRS Morningstar excludes the BPPA finance lease from the cash flow-to-debt and debt-to-capital ratios, which is consistent with how DBRS Morningstar treats other power purchase agreements.

Outlook

DBRS Morningstar expects FBC's credit metrics to remain strong for the current rating in 2022 based on the following factors: (1) cash flow from operations should increase, reflecting a higher expected rate base in 2022 compared with 2021; (2) with an estimated capex of $156 million (including the allowance for funds used during construction but before customer contributions in aid of construction and including the cost of removal) for 2022, free cash flow deficit is expected to be incurred during the year. However, DBRS Morningstar expects FBC to finance its cash flow deficit so that its current capital structure is maintained.

Liquidity and Long-Term Debt Maturities

Liquidity

Credit Facilities	Committed	Drawn	Letters of Credit	Available	Maturity
(December 31, 2021)					
(CAD millions)					
Operating credit facility	150.0	115.0	-	35.0	April 2026
Demand overdraft facility	10.0	1.0		9.0	
Total	**160.0**	**116.0**	**-**	**44.0**	

- As at the end of 2021, FBC's liquidity remained sufficient to fund its ongoing working capital and short-term capex requirements.
- The Company's commercial paper program is fully supported by its operating credit facility of $150 million, maturing in April 2026.

Long-Term Debt Maturity Schedule

As at December 31, 2021 (CAD millions)	2022	2023	2024	2025	2026	Thereafter	Total
Unsecured Debentures*	-	-	-	-	-	760	760
Secured Debentures	-	25	-	-	-	-	25
Total long-term debt	-	25	-	-	-	760	785

*Excludes unamortized debt issuance costs

- Refinancing risk for FBC's long-term debt is low over the next five years.
- FBC is subject to a financial covenant that consolidated debt must not exceed 75% of its consolidated capitalization. As at December 31, 2021, FBC was in compliance with the financial covenant.

Regulation

MRP for 2020–24

In June 2020, the BCUC approved FBC's MRP application. The approved MRP includes, among other items, the following:

- A level of O&M expense per customer that is indexed for inflation less a fixed productivity adjustment factor (0.5%) as well as a forecast approach to growth and sustained capex.
- A growth factor multiplier for O&M is set at 75% of forecast average customers, with a true-up mechanism in subsequent years to reflect actual amounts.
- A forecast approach to capital spending (rather than a formulaic approach per the 2014–19 Performance Based Ratemaking Plan. FBC's forecast capital will be incorporated in rates for the three-year period of 2020–22. FBC is directed to file an updated forecast of the 2023–24 capex in annual review for 2023 rates.
- A 50:50 sharing between customers and FBC of variances from the allowed ROE provides incentive for operational efficiency. Also, variances associated with revenues and other expenses, including those not controllable, are recorded in deferral accounts to be refunded to or recovered from customers.
- A number of service quality indicators designed to ensure the Company maintains service levels.
- FBC may apply for approval of an efficiency carryover mechanism at any time during the last three years of the MRP term. If approved, the net savings will be shared equally between the ratepayers and the Company.
- The regulatory deferral mechanisms that capture revenue shortfalls and incremental costs incurred beyond the control of the Company continue to apply in 2020 and beyond.
- The BCUC continued the off-ramp provision. Under the off-ramp provision, a review of the plan could be triggered if earnings in any one year vary from the approved ROE by more than +/-150 basis points (post-50/50 sharing of variances from the allowed ROE). This provides FBC with some downside protection while maintaining the incentive for operational efficiency.
- In December 2021, the BCUC approved a January 1, 2022, rate increase of 3.47% over 2021 rates.

Cost-of-Capital Proceeding

- The BCUC has initiated GCC proceedings, which will include a review of the deemed equity component of total capital structure and the allowed ROE on common equity for regulated utilities in BC.
- GCC proceedings will move in two stages. In the first stage, BCUC will review allowed ROE and deemed capital structure for FortisBC Energy Inc. (FEI; rated "A" with a Stable trend by DBRS Morningstar) and FBC. Other utilities in BC will be reviewed in the second stage.
- In the previous GCC proceeding, the BCUC set FBC's allowed ROE and common equity component of the capital structure to reflect a risk premium over the benchmark utility, FEI. Effective January 2013, the allowed ROE and deemed equity were set at 9.15% and 40%, respectively.
- In August 2016, the BCUC issued its decision to confirm that FEI's existing common equity component of the capital structure and ROE will remain at 38.50% and 8.75%, respectively. The BCUC also determined that (1) the ROE approved for FEI will serve as the benchmark cost of equity for all other regulated entities in BC that use the benchmark utility to set rates and (2) that the common equity component of the capital structure and ROE for FEI will remain in effect until otherwise determined by the BCUC.

- As a result, FBC's ROE remains 9.15%. FBC's common equity component of the capital structure was not part of the review and remains 40%.

Major Contracts

Canal Plant Agreement

- The CPA is an agreement among British Columbia Hydro and Power Authority (BC Hydro; rated AA (high) with a Stable trend by DBRS Morningstar), FBC, and four other parties. The CPA governs approximately 1,900 MW of capacity of all six parties (including 225 MW of capacity owned by FBC).
  Under the CPA, BC Hydro determines the output of each plant and takes all power generated by the plants. BC Hydro is then contractually obligated to deliver a fixed amount of power to FBC regardless of its actual output, insulating FBC from annual hydrology risk. The CPA will remain in force until terminated by any of the parties by giving no less than five years' notice at any time on or after December 31, 2030.

Power Purchase Agreements

- Waneta Expansion Capacity Agreement (WECA): In 2010, FBC entered into WECA to purchase capacity from a 335-MW hydroelectric generating facility for 40 years. FBC also operates the facility but it is owned by Columbia Power Corporation and Columbia Basin Trust. The WECA was accepted by the BCUC in May 2012 to include into the rate base.
- BCH Power Purchase Agreement (BCH PPA): In 2013, FBC entered into BCH PPA for 200 MW of capacity and 1,752 gigawatt hours per year of associated electricity for 20 years. The BCH PPA was accepted by the BCUC in May 2014 to be recovered in customer rates.
- Capacity and Energy Purchase and Sale Agreement (CEPSA): In 2015, FBC entered into the CEPSA which allows FBC to purchase all of its market energy requirements from Powerex. CEPSA was accepted by the BCUC in April 2014 to be recovered in customer rates.
- Brilliant Expansion Capacity and Energy Purchase Agreement (the Agreement): In 2017, FBC renewed its agreement to purchase capacity and energy from Brilliant Expansion Power Corporation until December 2027. The Agreement was accepted by the BCUC in October 2017.

Finance Lease Obligation

- In 1996, the BCUC approved the 60-year BPPA, under which FBC pays semiannual payments in exchange of the specified take-or-pay amounts of power. The semiannual payments are based on a return of capital, which is subjected to fixed annual escalator, as well as sustaining capital charges. FBC has accounted for this arrangement as a finance lease as a result of adopting ASC 842. ASC 842 recognizes the payments, as approved for setting customer rates, within depreciation and finance charges.

FortisBC Inc.							
Balance Sheet (US GAAP)							
(CAD millions)	Dec. 31	Dec. 31	Dec. 31		Dec. 31	Dec. 31	Dec. 31
Assets	**2021**	**2020**	**2019**	**Liabilities & Equity**	**2021**	**2020**	**2019**
Cash & equivalents	-	-	-	Accounts payable	98	78	67
Accounts receivable	66	60	56	Short term borrowings	116	69	65
Regulatory assets	7	6	5	Current portion of L.T. debt and finance lease	1	26	61
Other current assets	3	3	3	Due to the Parent Company	-	-	60
				Deferred tax	-	-	-
				Regulatory liabilities & other	5	1	7
Total Current Assets	**76**	**69**	**64**	**Total Current Liab.**	**220**	**174**	**200**
Net fixed assets	1,720	1,647	1,578	Long-term debt	779	779	729
Intangibles	65	63	58	Capital lease obligations	332	329	325
Regulatory assets	424	411	381	Deferred income taxes	226	211	192
Goodwill	235	235	235	Pension/OPEB	-	-	-
Other assets	17	12	10	Regulatory liabilities	34	30	27
				Other L.T. liabilities	67	74	71
				Shareholder's equity	879	840	782
Total Assets	**2,537**	**2,437**	**2,326**	**Total Liab. & SE**	**2,537**	**2,437**	**2,326**

Balance Sheet & Liquidity & Capital Ratios	For the year ended December 31				
	2021	**2020**	**2019**	**2018**	**2017**
Current ratio (times)	0.35	0.40	0.32	0.39	0.48
Dividend payout ratio (%)	83.9	84.9	90.0	88.0	94.0
Key Credit Metrics					
Cash flow-to-adjusted debt (%)[1]	13.0	12.5	12.5	13.4	13.8
Adjusted debt-to-capital (%)[2]	58.1	59.0	60.9	59.5	59.4
EBIT-to-interest (times)	2.45	2.22	2.22	2.41	2.58
EBITDA-to-interest (times)	4.00	3.71	3.73	3.90	4.21
Fixed-charges coverage (times)	2.44	2.21	2.21	2.41	2.57
Profitability Ratios					
EBITDA margin (%)	58.7	58.5	61.0	62.5	66.7
EBIT margin (%)	36.0	35.0	36.3	38.7	40.8
Profit margin (%)	19.6	20.4	19.9	19.5	20.8
Return on common equity less goodwill (%)[3]	9.0	9.2	9.2	9.3	9.4
Return on common equity (%)	6.5	6.5	6.4	6.5	6.5

1. DBRS Morningstar excludes finance leases related to the Brilliant Power Purchase Agreement
2. DBRS Morningstar excludes finance leases related to the Brilliant Power Purchase Agreement and Goodwill
3. Return on common equity net of goodwill that is not included FBC's rate base

Rating History

	Current	2021	2020	2019	2018	2017
Issuer Rating	A (low)	A (low)	A (low)	A (low)	A (low)	A (low)
Secured Debentures	A (low)	A (low)	A (low)	A (low)	A (low)	A (low)
Unsecured Debentures	A (low)	A (low)	A (low)	A (low)	A (low)	A (low)
Commercial Paper	R-1 (low)	R-1 (low)	R-1 (low)	R-1 (low)	NR	NR

NR - Not rated.

Previous Report

- FortisBC Inc.: Rating Report, March 15, 2021.

Notes:
All figures are in Canadian dollars unless otherwise noted.

For the definition of Issuer Rating, please refer to Rating Definitions under Rating Policy on www.dbrsmorningstar.com.

Generally, Issuer Ratings apply to all senior unsecured obligations of an applicable issuer, except when an issuer has a significant or unique level of secured debt.

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BCUC 2022 Generic Cost of Capital
FORTISBC UNDERTAKING No. 4

HEARING DATE: November 9, 2022

TRANSCRIPT REFERENCE: Volume 5B, Page 857, Line 5 to Page 859, Line 2

REQUESTOR: Commissioner Keilty

WITNESS: Mr. Lorimer

QUESTION: Evidence that FortisBC carries a cushion in its capital structure to provide for financial flexibility

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RESPONSE:

As Mr. Lorimer explained in his response at the oral hearing, this information is provided to the BCUC in Annual Reports. For ease of reference, FortisBC provides the following excerpt from FEI's 2021 Annual Report.

FORTISBC ENERGY INC.
RECONCILIATION OF AVERAGE NON-CONSOLIDATED CAPITAL STRUCTURE
TO AVERAGE UTILITY CAPITAL STRUCTURE
FOR THE YEAR ENDED DECEMBER 31, 2021
($000)

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Line No.	Particulars (1)	Financial Statement Average (2)	Premium (3)	Franchise Obligation (4)	Assets Attracting AFUDC (5)	US GAAP Adjustments (6)	Other Assets (7)	Adjusted Financial Statements (8)	Average Capital Structure Per BCUC Annual Report (9)	Fort Nelson Service Area Capital Structure (10)	Lower Mainland, Inland & Columbia Service Areas Capital Structure (11)
1	Unfunded Debt	$ 134,338	$ (3,166)	$ -	$ (131,376)	$ -	$ 35,195	$ 34,991	$ 107,839	$ (24)	$ 107,863
2											
3	Long-Term Debt	3,081,084	(23,834)	17,920	-	-	21,927	3,097,097	3,097,097	7,544	3,089,553
4											
5	Common Equity	3,073,384	(13,299)	11,218	(82,244)	(910,488)	618	2,079,190	2,006,342	4,708	2,001,634
6											
7											
8	Total Capital	$ 6,288,807	$ (40,299)	$ 29,138	$ (213,620)	$ (910,488)	$ 57,740	$ 5,211,278	$ 5,211,278	$ 12,228	$ 5,199,050
9											
10											
11											
12											
13	Unfunded Debt %	2.14%	7.86%	0.00%	61.50%	0.00%	60.95%	0.67%	2.07%	-0.19%	2.07%
14											
15	Long-Term Debt %	48.99%	59.14%	61.50%	0.00%	0.00%	37.98%	59.43%	59.43%	61.69%	59.43%
16											
17	Common Equity %	48.87%	33.00%	38.50%	38.50%	100.00%	1.07%	39.90%	38.50%	38.50%	38.50%
18											
19											
20	Total Capital %	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

As can be seen, in 2021 FEI's actual average common equity thickness was 39.90 percent or 140 basis points higher than its allowed equity thickness used for rate-making purposes. The same prudent capital structure management practice is applied to FBC although FBC does not provide the same reconciliation of average capital structure in its Annual Report. This is why most Canadian regulators apply a premium to the approved ROE to account for the needed financial flexibility. In contrast, the majority of U.S. regulators do not "deem" the equity thickness and rely upon the utility's actual stand-alone capital structure at the end of the test year.[1]

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[1] When the stand-alone capital structure is not available or is not appropriate, such as in situations when a utility has taken a large write-off and has a very thin equity base or the utility is too equity rich, the regulator, for ratemaking purposes, may adopt a hypothetical capital structure or that of a proxy group of comparable utilities with similar risk.