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October 6, 2022

British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, B.C.
V6Z 2N3

Attention: Ms. Sara Hardgrave, Acting Commission Secretary

Dear Ms. Hardgrave:

Re: FortisBC Inc. (FBC)
Annual Review for 2023 Rates (Application)
Response to the British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1

On August 5, 2022, FBC filed the Application referenced above. In accordance with the regulatory timetable established in BCUC Order G-193-22 for the review of the Application, FBC respectfully submits the attached response to BCUC IR No. 1.

For convenience and efficiency, FBC has occasionally provided an internet address for referenced reports instead of attaching lengthy documents to its IR responses. FBC intends for the referenced documents to form part of its IR responses and the evidentiary record in this proceeding.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC INC.

Original signed:

Diane Roy

Attachments

cc (email only): Registered Parties

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 1

1	Table of Contents	Page No.
2	A. INTRODUCTION.....	1
3	B. FORMULA DRIVERS.....	6
4	C. LOAD FORECAST.....	10
5	D. OTHER REVENUE.....	25
6	E. OPERATIONS AND MAINTENANCE EXPENSE	32
7	F. RATE BASE.....	38
8	G. FINANCING AND RETURN ON EQUITY.....	60
9	H. TAXES	65
10	I. EARNING SHARING	71
11	K. ACCOUNTING MATTERS	74
12	L. SERVICE QUALITY INDICATORS	83
13		
14	A. INTRODUCTION	
15	1.0 Reference: INTRODUCTION	
16	Exhibit B-2 (Application), Section 1.2, p. 1, 7; FortisBC Inc. (FBC)	
17	Electric Vehicle Workplace and Fleet Charging Funding Deferral	
18	Account Application (FBC EV Workplace and Fleet Deferral Account	
19	Application), Exhibit B-1, Section 3.3, p.11, Exhibit B-3, BCSEA-	
20	VEVA¹ IR 8.1	
21	Interim Rates	
22	On Page 7 of the Application, FBC states: “The revenue requirement components set out	
23	in the Application result in an effective rate increase of 3.99 percent for 2023 compared to	
24	2022.”	
25	1.1 Please provide the annual bill impact of the proposed 2023 rate increase, in	
26	dollars, for the average customer.	
27		

¹ B.C. Sustainable Energy Association (BCSEA) and Vancouver Electric Vehicle Association (VEVA).

Response:

Please refer to Table 1 below for the annual bill impact of the proposed 2023 rate increase, in dollars and in percentage, for the average customer in each customer class. As FBC's bills are bundled, the bill impact in percentage is equal to the proposed rate increase in percentage.

Table 1: Annual Bill Impact of Proposed 2023 Rate Increase by Customer Class

	Average (MWh)	Average Bill Impact (\$)	Average Bill Impact (%)
Residential	10	60	3.99%
Commercial	56	246	3.99%
Wholesale	96,333	346,333	3.99%
Industrial	13,690	45,500	3.99%
Lighting	7	65	3.99%
Irrigation	35	129	3.99%

1.2 Please provide a table that compares FBC's approved and achieved annual return on equity (ROE) (before and after earnings sharing), in dollars, for 2021 actual, 2022 projected and 2023 to 2024 forecast.

Response:

Please refer to Table 1 below for FBC's approved and achieved return on equity (ROE), before and after earnings sharing, for 2020 and 2021 Actual. For 2022 Projected and 2023 to 2024 Forecast, FBC does not have actual information and is therefore unable to forecast any variance from the currently approved ROE of 9.15 percent.

As discussed in Section 10 of the Application, earnings sharing will have a two-year lag. For example, the 2021 actuals are true-up in the proposed 2023 rates. This is consistent with the calculations for formula O&M, where the true-up of the formula inputs happens only once actuals are known.

Table 1: Approved/Forecast and Actual ROE (Before and After Earnings Sharing) for 2020 to 2024

Line	Particular	Reference	2020	2021	2022	2023	2024
1	Approved/Forecast Equity Portion of Rate Base (\$000s)	See Note 1	564,861	591,694	633,163	670,172	694,294
2	Approved/Forecast ROE (\$000s)	Line 1 x Line 3	51,685	54,140	57,934	61,321	63,528
3	Approved ROE (%)	G-129-16 & G-47-14	9.15%	9.15%	9.15%	9.15%	9.15%
4							
5	Actual Equity Portion of Rate Base (\$000s)	See Note 2	567,564	602,295			
6	Actual ROE Before-Sharing (\$000s)	See Note 2	53,677	56,439			
7	Actual ROE Before-Sharing (%)	Line 6 / Line 5	9.46%	9.37%			
8							
9	Actual Earnings Sharing (\$000s)	See Note 2	(872)	(665)			
10	Actual ROE After-Sharing (\$000s)	Line 6 + Line 9	52,804	55,773			
11	Actual ROE After-Sharing (%)	Line 10 / Line 5	9.30%	9.26%			

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 3

Notes to table:

1) *Approved/Forecast Equity Portion of Rate Base:*

- *For 2020 & 2021 – approved by Order G-42-21;*
- *For 2022 – approved by Order G-374-21;*
- *For 2023 – see Section 11 of the Application, Schedule 26, Line 3, Column 3; and*
- *For 2024 – rate base forecast based on no change to capital additions from prior year except for growth, sustainment, and other capital forecast for 2024 as discussed in Section 7.2 of the Application.*

2) *Actual Equity Portion of Rate Base, ROE Before-Sharing and Earnings Sharing for 2020 and 2021 are from FBC's 2020 and 2021 Annual Reports, page 26.3.*

On page 1 of the Application, FBC requests BCUC approval for the following:

1. Approval to recover the 2023 revenue requirement and resultant rate change on an interim basis, effective January 1, 2023, [...]. Rates will remain interim pending the outcomes of the BCUC's current generic cost of capital (GCOC) proceeding and FBC's 2023-2027 Demand Side Management (DSM) Plan proceeding. [*Emphasis added*]

- 1.3 Please explain why FBC is not requesting interim and permanent approval of 2023 rates in this proceeding pending the outcoming of other concurrent BCUC and FBC proceedings, similar to the approach taken in the FBC Annual Review for 2017 Rates or FortisBC Energy Inc. (FEI) Annual Review for 2018 Delivery Rates.

Response:

In both the FBC 2017 Annual Review and the FEI 2018 Annual Review (as referenced by the BCUC in this IR) only permanent rate approval was requested. However, due to circumstances which occurred subsequent to the filing of those applications, FEI/FBC filed for interim rate approval. FBC also notes that its approach to requesting interim rates in this Application is consistent with the approach taken in the FBC Annual Review for 2016 Rates proceeding, where FBC requested interim rates effective January 1, 2016 pending the outcome of the cost of capital proceeding in progress at that time (see page 2 of the FBC Annual Review for 2016 Rates application).

With regard to FBC's 2017 Annual Review, FBC only requested a permanent rate increase in the application (see pages 1 and 2 of the FBC Annual Review for 2017 Rates application). However, subsequent to filing the application, it became apparent that FBC's Application for Acceptance of Demand Side Management Expenditures for 2017 (2017 DSM Application) would not be approved before the end of 2016. As stated in Order G-180-16 approving interim 2017 rates for FBC:

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 4

1 [P]ursuant to section 44.2(2) of the UCA, the BCUC may not consent under section 61 of
2 the UCA to an amendment to a schedule filed under section 61 to the extent that the
3 amendment is for the purpose of, among other things, recovering expenditures on
4 demand-side measures the public utility anticipates making during the period addressed
5 by the schedule, unless the amendment is for the purpose of setting an interim rate.

6 Therefore, FBC's 2017 rates were approved on an interim basis pending the outcome of the DSM
7 Application so as not to be in contravention of the UCA. FBC notes that approval of the DSM
8 Application had no impact on 2017 rates, and, by Order G-11-17, FBC's interim 2017 rates were
9 made permanent with no change between interim and permanent rates.

10 With regard to FEI's Annual Review for 2018 Delivery Rates, FEI also only requested a permanent
11 rate increase in the application (see page 2 of the FEI 2018 Annual Review for Delivery Rates
12 application). As explained in FEI's letter dated November 30, 2017, the reason that FEI later
13 applied for interim 2018 rates was because FEI was anticipating that the BCUC would not be able
14 to issue its decision in that proceeding in time for FEI to implement permanent delivery rates
15 effective January 1, 2018. Thus, FEI applied for interim 2018 delivery rate approval.

16 The situation in this current Application is different primarily due to the potential impact of a
17 decision in the Generic Cost of Capital (GCOC) proceeding. FBC does not know at this time what
18 the effective date of the GCOC decision will be. If the effective date of the GCOC decision is
19 January 1, 2023, and it is determined that changes are to be made to FBC's return on equity
20 (ROE) and capital structure, this would have an impact on 2023 rates. FBC has not incorporated
21 any potential changes to its ROE and capital structure into its forecast 2023 revenue requirements
22 in this Application (i.e., FBC's currently applied for rate increase for 2023 is based on its existing
23 ROE and capital structure); therefore, it would not be appropriate to request permanent 2023 rate
24 approval based on what has been filed in this Application.

25
26
27
28 On Page 11 of FBC's EV Workplace and Fleet Deferral Account Application, FBC states:
29 "FBC proposes that all costs, [...] be captured in a non-rate base deferral account, named
30 the 'EV Fleet and Workplace Charging Funding Account', attracting AFUDC [Allowance
31 for Funds Used During Construction] until the end of the year in which this application is
32 approved. The deferral account, and the accumulated balance on a net of tax basis within
33 it, would then be transferred to rate base on January 1 of the following year, and amortized
34 over a ten-year period into the rates of all customers."

35 In response to BCSEA VEVA IR 8.1 in the FBC EV Workplace and Fleet Deferral Account
36 Application, FBC stated:

37 As part of the Annual Review process, FBC would provide details of the deferral
38 account balance within the financial schedules, which will include the actual costs

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 5

of the program from prior years and the forecast costs, consistent with how FBC reports on all of its deferral accounts.

1.4 Please confirm, or explain otherwise, that the approval of permanent 2023 rates is also pending a BCUC decision on FBC's EV Workplace and Fleet Deferral Account Application.

1.4.1 If confirmed, please provide FBC's proposed process and timing to incorporate the decision on FBC's EV Workplace and Fleet Deferral Account Application into the 2023 rates if the application is approved. Please include the expected impact to 2023 rates.

1.4.2 If not confirmed, please explain why not.

Response:

Not confirmed. Permanent 2023 rates can be approved regardless of the timing of the BCUC's decision on FBC's EV Workplace and Fleet Charging Funding Deferral Account Application (EV Fleet Deferral Application).

In the EV Fleet Deferral Application, FBC stated that the deferral account would commence amortization into rates in the year following approval of the EV Fleet Deferral Application.² If the BCUC approves the EV Fleet Deferral Application prior to the end of 2022 (and prior to FBC filing the compliance filing to the 2023 Annual Review decision), FBC will incorporate the deferral account and the resulting deferral amortization into 2023 rates as part of the compliance filing to the 2023 Annual Review decision. If approval of the EV Fleet Deferral Application does not occur in time to incorporate the deferral account into the 2023 Annual Review compliance filing, then FBC would commence amortization of the EV Fleet deferral account in 2024.

The impact of including the EV Fleet deferral account amortization in 2023 rates would be negligible. For reference, the forecast additions to the deferral account in 2022 based on the EV Fleet Deferral Application are approximately \$500 thousand (page 9, Table 5, lines 3 and 4). These additions would be amortized over 10 years based on the amortization period requested in the application; therefore, the amortization expense for 2023 would be approximately \$50 thousand, which would have a 0.012 percent impact on 2023 rates. Given this negligible rate impact, inclusion of the deferral account in the compliance filing to the 2023 Annual Review decision would be appropriate and consistent with past approaches. FBC notes that it is typical for minor changes to occur to the rate and revenue requirement as part of the revenue requirement review process and as a result of the BCUC's decision on the revenue requirement application, and often to incorporate any impacts of the BCUC's decisions in other matters. This does not mean that interim rate approval is required.

² EV Fleet Deferral Application, p. 11.

1 B. FORMULA DRIVERS

2 2.0 Reference: FORMULA DRIVERS

3 Exhibit B-2, Section 2.2, pp. 10–11; FBC 2022 Annual Review of
4 Rates proceeding (FBC 2022 Annual Review), Exhibit B-2, Section
5 2.2, p. 8; FEI and FBC (collectively, FortisBC) Application for
6 Approval of a Multi-Year Rate Plan (MRP) for the Years 2020 through
7 2024 (FortisBC 2020–2024 MRP Application), Decision and Orders G-
8 165-20 and G-166-20 (MRP Decision), Section 3.4, p. 101; CBC News,
9 “Inflation rises again to new 39-year high of 8.1%”³ dated July 20,
10 2022

11 Inflation Factor Calculation Summary

12 On page 11 of the Application, FBC provides Table 2-1: I-Factor [Inflation Factor]
13 Calculation, which is reproduced in part below:

Table 2-1: I-Factor Calculation

Line No.	Date	Table: 18-10-0004-01	Table: 14-10-0223-01	12 Mth Average				Last Completed Year		I-Factor %	MRP Year
		BC CPI index	BC AWE \$	CPI index	AWE \$	CPI %	AWE %	Non Labour %	Labour %		
24	Jun-2022	146.5	1,176.54	140.4	1,152.37	4.940%	4.235%	40%	60%	4.517%	2023

14
15 On page 8 of the FBC 2022 Annual Review application, FBC provides Table 2-1: I-Factor
16 Calculation, which is reproduced in part below:

Table 2-1: I-Factor Calculation

Line No.	Date	Table: 18-10-0004-01	Table: 14-10-0223-01	12 Mth Average				Last Completed Year		I-Factor %	MRP Year
		BC CPI index	BC AWE \$	CPI index	AWE \$	CPI %	AWE %	Non labour %	Labour %		
24	Jun-2021	135.8	1,124.55	133.8	1,106.14	1.281%	6.532%	37%	63%	4.589%	2022

17
18 2.1 Please discuss the drivers of the shift in non-labour and labour weighting from 37
19 percent and 63 percent, respectively, in the FBC 2022 Annual Review to 40
20 percent and 60 percent, respectively in the 2023 Annual Review.

21 Response:

22
23 In any given year, the weightings of labour and non-labour in FBC’s O&M costs reflect the
24 Company’s mix of resources required to meet its business needs. Changes in priorities and work
25 activities and costs from year to year can influence the mix of labour and non-labour resources
26 used, which then affects the labour and non-labour weightings. While FBC does not anticipate

³ Retrieved on August 31, 2022 from: <https://www.cbc.ca/news/business/canada-inflation-rate-1.6526060#:~:text=Inflation%20in%20Canada%20hits%2039%2Dyear%20high&text=New%20numbers%20from%20Statistics%20Canada,fastest%20annual%20increase%20since%201983>

significant changes in the weightings, the mix of labour and non-labour can fluctuate over time as evidenced during the recent PBR Plan term. From 2014 to 2018,⁴ the labour and non-labour weightings varied between a range of 57 percent labour to 43 percent non-labour in 2017 to 64 percent labour and 36 percent non-labour in 2014.

Although the labour and non-labour weightings may fluctuate from year to year, the weightings used for the 2022 Annual Review and in this Application are generally consistent with recent years' weightings. For example, the Inflation Factor calculation for the 2020 and 2021 rates was based on weightings of 62 percent labour and 38 percent non-labour.

2.2 Please discuss whether FBC foresees a shift to a heavier labour weighting continuing in the future. Please explain why or why not.

Response:

Please refer to the response to BCUC IR1 2.1.

On page 10 of the Application, FBC states:

FBC uses inflation data from July through June and Statistics Canada Table 18-10-0004-01 for CPI-BC⁵ and Table 14-10-0223-01 to determine AWE-BC⁶. The supporting Statistics Canada tables are provided in Appendix A1. The latest available month of April 2022 for AWE-BC has been used as a placeholder, as results to June 2022 have not been released by Statistics Canada.

On Page 101 of the MRP Decision, the BCUC stated: "The Panel determines that for the Proposed MRPs, the off-ramp will be triggered if earnings in any one year vary from the approved ROE by more than +/- 150 basis points (post sharing)."

An article by CBC News dated July 20, 2022, states: "Canada's inflation rate rose to 8.1 per cent last month, Statistics Canada says, the fastest annual increase in the cost of living in decades."

2.3 Given that the 2023 I-factor has decreased from 4.589 percent in 2022 to 4.517 percent in 2023, please discuss whether FBC anticipates rising inflation rates to have an impact on operations for the remainder of 2022 and into 2023.

⁴ 2020-2024 MRP proceeding, BCUC IR2 162.5.

⁵ Consumer Price Index in British Columbia (CPI-BC).

⁶ Average Weekly Earnings in BC (AWE-BC).

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 8

2.3.1 If yes, please discuss how FBC intends to manage inflationary pressures and any risks that inflation may pose to the MRP plan off-ramp provision since formula Operations and Maintenance (O&M) is based on the previous years' inflation data.

2.3.2 If not, please explain why not.

Response:

Yes, FBC has seen recent rising inflationary rates drive up costs in its operations in 2022 and, to the extent that high inflation continues in 2023, FBC expects its costs to remain elevated.

Similar to the significant inflationary pressures FBC has been experiencing in its Growth and Sustainment capital portfolios (as discussed in Section 7.2.1.1.3 of the Application), FBC is also seeing rising inflationary rates impact FBC's O&M expenses in areas such as travel related expenditures for FBC's employees. While FBC anticipates that the approved Inflation Factor (I-Factor) will provide sufficient funding to meet its needs to operate and maintain its assets and provide service to customers, FBC is continuing to monitor the situation. In addition, as outlined in Section 1.4.2 of the Application, FBC is evaluating and implementing a number of initiatives to achieve savings beyond the productivity improvement factor to manage its business needs and to help address cost pressures resulting from its evolving and challenging operating environment.

Despite the above, FBC does not expect the MRP off-ramp will be triggered due to inflationary pressures in 2023 and 2024. For example, based on the 2023 Forecast rate base, in order to trigger the MRP off-ramp of 150 basis points less than the approved ROE of 9.15 percent post-earnings sharing, FBC's 2023 Actual formula O&M would need to increase by approximately \$27.5 million from the 2023 Forecast formula O&M level. This is equivalent to a net inflation factor of approximately 52 percent annually. FBC has no evidence that would suggest the annual inflation could be as high as 52 percent in 2023 or 2024. This also assumes that FBC will take no action to manage its O&M expenses. In addition, the I-Factor calculation uses actual CPI data and as shown in Table 2-1 of the Application, the average CPI has increased to 4.940 percent, which partly reflects the inflationary increases being experienced. To the extent that further inflation is seen in actual data, the increases will be included in the I-Factor used in the 2024 rate-setting process.

2.4 Please discuss whether FBC anticipates that inflationary pressures will cause the MRP plan off-ramp provision to be triggered during the MRP term. Please explain why or why not.

Response:

Please refer to the response to BCUC IR1 2.3.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 9

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4 2.5 Please discuss whether it would be appropriate to reassess the calculation of the
5 I-Factor for 2023 and/or the remainder of the MRP term.

6 2.5.1 If yes, please explain why and provide the proposed timing and regulatory
7 review process for such an assessment.

8 2.5.2 If not, please explain why not.

9

10 **Response:**

11 FBC does not believe the Inflation Factor (I-Factor) calculation should be reassessed for 2023 or
12 the remainder of the MRP term (2024). FBC's costs are subject to inflation, and the I-Factor uses
13 the latest data from Statistics Canada and remains a valid and objective measure of the economy-
14 wide inflation in BC. Further, as explained in the response to BCUC IR1 2.3, FBC does not expect
15 that the off-ramp will be triggered in 2023 or 2024 due to inflationary pressures.

16

C. LOAD FORECAST

3.0 Reference: LOAD FORECAST

Exhibit B-2, Section 3.3, p. 16, Section 1.5, p. 9; FBC 2023–2027 Demand Side Management Expenditures Application (FBC 2023–2027 DSM Expenditures Application) proceeding, Exhibit B-1, Appendix A, p. 9

DSM Energy Savings

On page 16 of the Application, FBC provides Table 3-1 showing the breakdown of its 2023 Forecast DSM savings:

Table 3-1: Forecast Incremental 2023 DSM Savings (GWh)

Line No.	Description	DSM 2023
1	Residential	(8.9)
2	Commercial	(22.6)
3	Wholesale	(7.7)
4	Industrial	(16.2)
5	Lighting	(0.3)
6	Irrigation	(0.2)
7	Net	(55.9)
8	Losses	(4.6)
9	Gross Load	(60.5)

10

On page 9 of Appendix A to Exhibit B-1 of the FBC 2023–2027 DSM Expenditures Application proceeding, FBC provides Exhibit 4 showing 2023 forecast DSM savings:

12

Exhibit 4 – Portfolio Electricity Savings, Cost-Effectiveness, Levelized Cost of Electricity by Program Area

Program Area	Net Incremental Annual Electricity Savings (GWh)						NPV of Electricity Savings (\$000s)	NPV of Electricity Savings (GWh)	Annual Demand Savings (MW)	NPV of Demand Savings (\$000s)	TRC	LCOE (\$/kWh)
	2023	2024	2025	2026	2027	Total						
Residential	5.7	6.2	6.9	7.6	8.6	35	\$33,700	328	14.5	7,800	1.4	\$0.06
Commercial	10.8	11.1	11.5	11.8	12.2	57.4	\$53,600	526	8.7	5,200	1.4	\$0.03
Industrial	8.4	8.4	8.6	8.6	8.6	42.5	\$33,000	331	7.4	3,200	2.1	\$0.03
Low Income	1.6	1.6	1.7	1.8	1.9	8.5	\$7,200	71	0.9	400	1.2	\$0.13
Conservation Education and Outreach						Savings not estimated						
Enabling Activities						Savings not estimated						
Innovative Technologies						Savings not estimated						
Demand Response									30.6	\$4,400	1.0	
Portfolio Activities						Savings not estimated						
Total	26.4	27.4	28.6	29.7	31.3	143.4	\$127,600	1,256	62.1	\$21,100	1.3	\$0.06

13

On page 9 of the Application, FBC states that it is “seeking approval of interim 2023 rates pending the outcome of Stage 1 of the GCOC proceeding as well as a decision on FBC’s 2023-2027 DSM Expenditure Plan. When a decision is reached on these proceedings, FBC will update its rate calculations and apply for permanent 2023 rates.”

3.1 Please reconcile the DSM savings forecasted for each customer class in 2023 in Table 3-1 of the Application with the energy-savings estimates provided in Exhibit 4 of the FBC 2023–2027 DSM Expenditures Application for 2023.

20

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 11

Response:

Consistent with FBC's response to BCUC IR1 5.1 in the Annual Review for 2022 Rates proceeding, the 2023 DSM savings forecast for each customer class shown in Table 3-1 of the Application and the energy savings estimates provided in Exhibit 4 of the FBC 2023-2027 DSM Expenditures Application for 2023 are not directly comparable. However, the forecast shown in Table 3-1 of the Application is based on, and consistent with, the DSM Plan savings. The difference is a result of the way that the DSM Plan savings are presented, attributed and disaggregated in the Application's load forecast.

The main reason for the difference is that the load forecast in Table 3-1 of the Application presents the DSM savings cumulatively, starting in the first year (the prior years' DSM savings are embedded in the consecutive years), whereas the DSM Plan shows the savings for each plan year separately. For example, as discussed in Section 3.3 of the Application, the DSM savings are incremental to the savings that are already embedded in historical loads up to and including 2021. This means the 2023 DSM savings, when compared to 2021 actual, would include the projected DSM savings for 2022 and the forecast DSM savings for 2023.

Furthermore, the DSM Plan represents annual incremental energy savings for the DSM projects planned for that calendar year. The DSM forecast presented in the Application factors in the timing of DSM projects: a portion of the savings from the DSM projects land in the plan year, with the remainder attributed to the following year. For example, if a project with 12 MWh of savings was completed in December, the DSM Plan shows all of those savings in that year. In contrast, the Application forecast numbers include only 1 MWh (1/12) of the savings with the remaining 11/12 of the project's savings falling into the following year (11 MWh of savings from January to November). As a result of the pro-rating, some of the DSM Plan incremental energy savings are forecast to be realized in the following year.

Finally, in the Application, FBC disaggregates a number of sub-categories of DSM for forecasting purposes, which are not shown in the DSM Plan savings. For example, "Residential" savings in the DSM Plan includes both FBC direct customers and the residential portion of the "Wholesale" savings (for the City of Penticton and the other municipal electric utilities), which are presented separately in the Application load forecast. Similarly, the "Commercial" program area of the DSM Plan savings includes FBC's direct customers, the commercial customers in Wholesale, and the "[Street] Lighting" and "Irrigation" rate class values, which are each shown separately in the load forecast.

3.2 If FBC has adjusted the estimated DSM savings as shown in Table 3-1 in the Application from those included in Exhibit 4 in the FBC 2023-2027 DSM Expenditures Application for 2023, please explain the basis (including inputs, assumptions, and methodology) for any adjustments.

Response:

FBC has not adjusted the estimated DSM savings from those included in Exhibit 4 of FBC's 2023-2027 DSM Expenditures Application for 2023. Please refer to the response to BCUC IR1 3.1 for an explanation of the differences between the 2023-2027 DSM Expenditures Application and the DSM forecast presented in Table 3-1 of the Application.

3.3 Please provide and discuss any impacts to the load forecast, 2023 rates, and revenue requirement with incremental DSM energy savings of 26.4 GWh [GigaWatt hour] and include any necessary calculations and tables.

Response:

As discussed in Section 3.3 and further explained in the response to BCUC IR1 3.1, the 2023 Forecast DSM savings are incremental to the DSM savings that are already embedded in historical loads up to and including 2021 only. Therefore, the 2023 Forecast DSM savings, when compared to 2021, would include the projected DSM savings for 2022 and the forecast savings for 2023.

Please refer to Table 1 below which provides the breakdown between the 2022 Projected and 2023 Forecast DSM savings that make up the total incremental savings of 60.5 GWh as shown in Table 3-1 of the Application. Please also refer to the response to BCUC IR1 3.1 for further explanation of the differences between the DSM savings shown in Table 3-1 of the Application and the DSM savings forecast in the 2023-2027 DSM Expenditures Plan Application.

Table 1: Breakdown of the Incremental Energy Savings (GWh) from 2022 Projected and 2023 Forecast

Class	2022	2023	TOTAL
Residential	(4.4)	(4.5)	(8.9)
Commerical	(11.5)	(11.1)	(22.6)
Wholesale	(3.9)	(3.8)	(7.7)
Industrial	(8.6)	(7.6)	(16.2)
Lighting	(0.2)	(0.1)	(0.3)
Irrigation	(0.1)	(0.1)	(0.2)
Net	(28.7)	(27.2)	(55.9)
Losses	(2.4)	(2.2)	(4.6)
Gross Load	(31.1)	(29.4)	(60.5)

4.0 Reference: **LOAD FORECAST**

Exhibit B-2, Appendix A2, p. 5; FBC 2023–2027 DSM Expenditures Application proceeding, Exhibit B-2, BCUC IR 7.1

DSM Capacity Savings

On page 5 of Appendix A2 to the Application, FBC provides the following Winter and Summer system peaks before and after demand side savings:

- Winter 2023F [Forecast] System Peak (before savings) – 788 MW [MegaWatt]
- Winter 2023F System Peak (after savings) – 786 MW
- Summer 2023F System Peak (before savings) – 685 MW
- Summer 2023F System Peak (after savings) – 684 MW

In response to BCUC IR 7.1 in the FBC 2023–2027 DSM Expenditures Application proceeding, FBC provides the following tables showing winter and summer forecast demand side savings:

Winter Forecast Demand Savings (MW)							
Program Area	Program Name	2023	2024	2025	2026	2027	All Years
Commercial	Prescriptive	1.3	1.3	1.3	1.3	1.3	6.3
Commercial	Performance	0.3	0.3	0.3	0.3	0.3	1.5
Commercial	Rental Apartment Program	0.0	0.0	0.0	0.0	0.0	0.2
Industrial	Prescriptive	1.0	1.0	1.0	1.0	1.0	5.1
Industrial	Performance	0.2	0.2	0.2	0.2	0.2	0.9
Industrial	Strategic Energy Management	0.2	0.2	0.3	0.3	0.3	1.3
Residential	Home Renovation	1.2	1.6	1.9	2.4	3.6	10.7
Residential	New Home	0.2	0.3	0.4	0.4	0.5	1.8
Low Income	Self Install	-	-	-	-	-	-
Low Income	Direct Install	-	-	-	-	-	-
Low Income	Prescriptive	0.1	0.1	0.1	0.2	0.2	0.7
Low Income	Performance	0.0	0.0	0.0	0.0	0.0	0.2
Program Area (non DR) Total		4.7	5.0	5.6	6.1	7.4	28.8
Demand Response	Residential DR	1.0	2.2	4.5	6.0	7.7	21.5
Demand Response	Commercial DR	-	-	1.9	3.0	4.3	9.1
Demand Response Only Total		1.0	2.2	6.4	9.0	12.0	30.6
Grand Total		5.6	7.3	12.0	15.1	19.4	59.4

Summer Forecast Demand Savings (MW)							
Program Area	Program Name	2023	2024	2025	2026	2027	All Years
Commercial	Prescriptive	1.1	1.1	1.1	1.2	1.2	5.6
Commercial	Performance	0.3	0.3	0.3	0.3	0.3	1.5
Commercial	Rental Apartment Program	0.0	0.0	0.0	0.0	0.0	0.2
Industrial	Prescriptive	1.0	1.0	1.0	1.0	1.0	5.1
Industrial	Performance	0.2	0.2	0.2	0.2	0.2	0.9
Industrial	Strategic Energy Management	0.2	0.2	0.3	0.3	0.3	1.3
Residential	Home Renovation	0.8	1.1	1.5	2.1	3.1	8.6
Residential	New Home	0.2	0.3	0.4	0.4	0.5	1.8
Low Income	Self Install	-	-	-	-	-	-
Low Income	Direct Install	-	-	-	-	-	-
Low Income	Prescriptive	0.1	0.1	0.1	0.1	0.1	0.4
Low Income	Performance	0.0	0.0	0.0	0.0	0.0	0.2
Program Area (non DR) Total		4.0	4.4	4.9	5.6	6.7	25.5
Demand Response	Residential DR	1.0	2.2	4.5	6.0	7.7	21.5
Demand Response	Commercial DR	-	-	1.9	3.0	4.3	9.1
Demand Response Only Total		1.0	2.2	6.4	9.0	12.0	30.6
Grand Total		4.9	6.6	11.4	14.6	18.7	56.2

4.1 Please confirm, or explain otherwise, the Winter system peak DSM capacity savings of 2 MW (calculated by subtracting the Winter 2023F system peak after savings of 786 MW from the Winter 2023F system peak before savings of 788 MW as shown in Appendix A2).

Response:

Confirmed. Please refer to the response to BCUC IR1 4.3 for an explanation of the differences between the winter peak DSM capacity savings shown on page 5 of Appendix A2 of the Application and FBC's 2023-2027 DSM Expenditures Plan Application.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 14

4.2 Please confirm, or explain otherwise, the Summer system peak DSM capacity savings of 1 MW (calculated by subtracting the Summer 2023F system peak after savings of 684 MW from the Summer 2023F system peak before savings of 685 MW as shown in Appendix A2).

Response:

Confirmed. Please refer to the response to BCUC IR1 4.3 for an explanation of the differences between the summer peak DSM capacity savings shown on page 5 of Appendix A2 of the Application and FBC's 2023-2027 DSM Expenditures Plan Application.

4.3 Please reconcile the DSM capacity savings forecasted for 2023 in the Application using the confirmation of the Winter and Summer peak DSM capacity savings (as calculated in the IRs directly prior) with the capacity savings estimate of 4.9MW provided by FBC in BCUC IR 7.1 of Exhibit B-2 filed in the FBC 2023–2027 DSM Expenditures Application.

4.3.1 If FBC has adjusted the estimated Winter and Summer capacity savings as shown in the Application from the estimates included in the FBC 2023–2027 DSM Expenditures Application for 2023, please explain the basis (including inputs, assumptions, and methodology) for any adjustments.

Response:

Similar to the explanation provided in the response to BCUC IR1 3.1, the DSM capacity savings forecast for winter and summer shown in Appendix A2 of the Application are not directly comparable with the capacity savings estimates provided by FBC in the response to BCUC IR1 7.1 in the FBC 2023-2027 DSM Expenditures Plan Application. The difference is primarily a result of the way that the capacity savings are presented in the DSM Plan savings and also a result of the inclusion of new capacity savings measures that are not accounted for in the forecasts shown in Appendix A2 of the Application.

For example, if a project with 50 kW of summer capacity savings and 0 kW of winter capacity savings was completed in December 2023, the DSM Plan would show these savings occurring in that DSM Plan year (i.e., 2023). However, for the purposes of the capacity forecast in the current year (i.e., 2023) shown in Appendix A2 of the Application, those summer capacity savings would not be accounted for until the following summer (i.e., 2024).

Furthermore, the 2023-2027 DSM Expenditures Plan Application includes new capacity savings measures that were not accounted for in the capacity savings forecast in the Application. For example, certain measures that are proposed in the 2023-2027 DSM Plan, such as the proposed air conditioning offers within the Commercial Prescriptive and Residential Home Renovation programs (as described in the response to BCUC IR1 3.3 in the FBC 2023-2027 DSM

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 15

1 Expenditures Application), are not included in the capacity savings forecast for the 2023 Annual
2 Review due to the timing of program development. Additionally, the proposed permanent Demand
3 Response program area in the 2023-2027 DSM Plan was not reflected as part of the capacity
4 savings forecast in the 2023 Annual Review, also due to the timing of program development. The
5 incremental capacity savings from the additional measures are not expected to have a material
6 impact until 2024.

7

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 16

5.0 Reference: LOAD FORECAST

Exhibit B-2, Section 3.4, Table 3-2, p. 17

Impact of Load Forecast on Proposed Rate Increase

On page 17 of the Application, FBC provides Table 3-2 showing the normalized after-savings gross load by customer class for 2023F.

5.1 Please provide, for 2023 total load and each customer class, with supporting calculations, the impact on the revenue requirements and the requested rate increase for the 2023 test year if the 2023 forecast load were to vary by: (i) plus five percent; (ii) minus five percent; (iii) plus 10 percent; and (iv) minus 10 percent.

Response:

FBC notes that, based on the approved treatment of revenue and power supply variances under the MRP, variances in load (and therefore variances in revenue and power supply) are captured in the Flow-through deferral account; therefore, the impact of 2023 load variances would be captured in 2024 rates, not 2023 rates. However, for the purposes of responding to this IR, please refer to Table 1 below for the calculation of the 2023 revenue requirements (i.e., Line 42) and proposed 2023 rate increase (i.e., Line 46) for FBC if the 2023 forecast load were to vary by: (i) plus five percent; (ii) minus five percent; (iii) plus 10 percent; and (iv) minus 10 percent.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 17

Table 1: Summary of FBC 2023 Rate Increase if Load Forecast is +/- 5% and +/- 10%

Line	Particular	10% Increase	5% Increase	No Change	5% Decrease	10% Decrease	Reference
1	Load Before DSM Savings (MWh)						
2	Residential	1,440,607	1,375,125	1,309,643	1,244,161	1,178,679	
3	Commercial	1,095,186	1,045,405	995,624	945,843	896,062	
4	Wholesale	644,738	615,431	586,125	556,819	527,513	
5	Industrial	650,179	620,626	591,072	561,518	531,965	
6	Lighting	10,650	10,166	9,682	9,198	8,714	
7	Irrigation	43,515	41,537	39,559	37,581	35,603	
8	Net	3,884,876	3,708,290	3,531,705	3,355,120	3,178,535	Sum of Line 2 to Line 7
9	Losses	332,535	318,011	303,487	288,962	274,438	
10	Gross Load (MWh)	4,217,411	4,026,301	3,835,192	3,644,082	3,452,973	Line 8 + Line 9
11							
12	Load After DSM Savings (MWh)						
13	Residential	1,432,433	1,366,951	1,300,714	1,235,987	1,170,504	
14	Commercial	1,072,690	1,022,909	973,073	923,347	873,565	
15	Wholesale	637,169	607,863	578,470	549,250	519,944	
16	Industrial	633,049	603,496	574,920	544,388	514,835	
17	Lighting	10,057	9,573	9,385	8,605	8,120	
18	Irrigation	43,338	41,360	39,382	37,404	35,426	
19	Net	3,828,736	3,652,152	3,475,944	3,298,981	3,122,394	Sum of Line 13 to Line 18
20	Losses	327,949	313,425	298,900	284,376	269,852	
21	Gross Load (MWh)	4,156,685	3,965,577	3,774,844	3,583,357	3,392,246	Line 19 + Line 20
22							
23	Revenue at Existing 2022 Approved Rate (\$million)						
24	Residential	214.670	206.316	197.962	189.608	181.253	
25	Commercial	115.023	110.687	106.230	102.014	97.678	
26	Wholesale	55.398	53.715	52.031	50.348	48.664	
27	Industrial	51.352	49.604	47.856	46.108	44.360	
28	Lighting	2.435	2.321	2.207	2.093	1.979	
29	Irrigation	3.867	3.710	3.554	3.398	3.242	
30	Total (\$million)	442.744	426.352	409.840	393.569	377.177	Sum of Line 24 to Line 29
31							
32	2023 Revenue Requirement (\$million)						
33	Cost of Energy						
34	Power Purchase	203.188	182.290	163.575	148.942	138.940	Updated Based on Gross Load on Line 21
35	Wheeling Expense & Water Fees	18.530	18.530	18.530	18.530	18.530	Section 11, Schedule 19, Line 23 + Line 28
36	O&M Expense (Net)	61.871	61.871	61.871	61.871	61.871	Section 11, Schedule 19, Line 11
37	Depreciation & Amortization	61.316	61.316	61.316	61.316	61.316	Section 11, Schedule 19, Line 12
38	Property Taxes	18.260	18.260	18.260	18.260	18.260	Section 11, Schedule 19, Line 13
39	Other Revenue	(12.241)	(12.241)	(12.241)	(12.241)	(12.241)	Section 11, Schedule 19, Line 14
40	Income Taxes	6.005	6.005	6.005	6.005	6.005	Section 11, Schedule 19, Line 17
41	Earned Return	108.892	108.892	108.892	108.892	108.892	Section 11, Schedule 19, Line 19
42	Total (\$million)	465.821	444.923	426.208	411.575	401.573	Sum of Line 34 to Line 41
43							
44	Revenue Deficiency / (Surplus)	23.077	18.571	16.368	18.006	24.396	Line 42 - Line 30
45							
46	2023 Rate Increase	5.21%	4.36%	3.99%	4.58%	6.47%	Line 44 / Line 30

As the table above shows, under the scenarios where the load increases by 10 percent or 5 percent, the 2023 rate also increases. This is due to the impact of the increased load on FBC's power supply cost. Access to BC Hydro's embedded cost energy (at a rate of \$50.94 per MWh; Tranche 1 Energy Price as of April 1, 2022) under the BC Hydro Power Purchase Agreement (PPA) is based on an annual nominated amount. For any amount that exceeds the annual nominated amount⁷, the energy price will increase to 150 percent of the Tranche 1 Energy Price up to a maximum amount of 1,041 GWh. Above 1,041 GWh and up to the maximum of 1,752 GWh, the energy cost increases to \$109.35 per MWh (Tranche 2 Energy), which is equal to BC Hydro's RS 1823 Tier 2 rate. For both the scenarios of plus 5 percent and plus 10 percent, the increase in total load would exceed the Tranche 1 Energy limit of 1,041 GWh. As such, the

⁷ Nominated for October 2022 to September 2023.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 18

- 1 increase in power purchase expense would outweigh the increase in revenue, resulting in an
- 2 overall increase to the proposed 2023 rate.
- 3 For the scenarios of minus 5 percent and minus 10 percent, the loss of revenue due to the
- 4 reduced load outweighs the reduced power purchase expense, resulting in an overall increase to
- 5 the proposed 2023 rate as well.
- 6

6.0 Reference: LOAD FORECAST

Exhibit B-2, Appendix A2, Section 6.1, p. 9

Customer Count Variance

In Section 6.1 of Appendix A2 to the Application, FBC states that the percent variance for the industrial customer count for 2021 is -40.5 percent.

6.1 Please explain the attributable factors for the negative customer count variance for industrial customers for 2021.

6.1.1 Please explain which of the factors provided in response to IR 6.1 are anticipated to persist in 2022 and/or 2023 and how they have been accounted for in the 2023 industrial load forecast.

6.1.1.1 If the factors provided in response to IR 6.1 above have not been accounted for in the applicable load forecast, please explain why not.

Response:

The 2021 Actual industrial customer count was lower than forecast by 17 customers due to the following:

- Nine customers were moved from the industrial class to the commercial class because their loads were no longer meeting the industrial load thresholds in FBC's Electric Tariff;
- Six cannabis operations did not materialize as industrial loads;
- One customer ceased operation; and
- One customer that had previously been considered two customers due to receiving two types of service on a single invoice is now counted as a single customer and account.

Key account managers work throughout the year to identify any changes to the industrial customers, and these changes are entered into the industrial forecast. In 2023, customers may still fail to meet the industrial load thresholds and others may close their businesses, so these factors could persist. At this time FBC is not aware of any industrial customers likely to be impacted by these factors.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 20

1 **7.0 Reference: LOAD FORECAST**

2 **Exhibit B-2, Section 3.4, p.23, Section 3.5, p.28, Appendix A2,**
3 **Section 6.2, p. 10**

4 **Industrial Load**

5 In Section 6.2 of Appendix A2 to the Application, FBC states that the percent variance for
6 industrial load for 2021 is -13.6 percent.

7 On page 23 of the Application, with regards to the industrial load forecast, FBC explains:

8 [...] after-savings industrial load is forecast to decrease by 4 GWh in 2023F when
9 compared to 2022S and increase by 105 GWh in 2023F compared to 2022
10 Approved. The increased forecast in 2022S and 2023F compared to 2022
11 Approved is primarily due to projected increases in data centre loads.

12 Figure 3-7 on page 23 of the Application shows a 2022 Approved forecast industrial
13 customer load after savings of 579 GWh and a 2022 expected load of 470 GWh.

14 7.1 Please explain the attributable factors that led to a load forecast variance of -13.6
15 percent in 2021.

16 7.1.1 For the industrial segment, please explain which of the attributable
17 factors for the load forecast variance in 2021, as provided in IR 7.1, are
18 anticipated to persist into 2022 and/or 2023 and how they have been
19 accounted for in the applicable load forecast for 2023.

20 7.1.1.1 If the factors provided in IR 7.1 above have not been accounted
21 for in the applicable load forecast(s) in 2022 and/or 2023,
22 please explain why not.

23
24 **Response:**

25 The -13.6 percent variance between the 2021 Forecast and 2021 Actual normalized industrial
26 load (i.e., 64 GWh variance) was due to the aggregate impact in a number of customer segments,
27 including the following:

- 28 • cannabis load did not materialize as forecast (68 GWh variance);
- 29 • forestry load was lower than forecast primarily due to a single customer (9 GWh variance);
- 30 • approximately 10 GWh of the variance was due to industrial customers removed from the
31 industrial class and into the commercial class because they no longer met the industrial
32 load requirement; and
- 33 • approximately 2 GWh of the variance was in aggregate from the rest of the industrial
34 customers.

35 The above-described decreases were partially offset by a data centre customer exceeding its
36 forecast by 25 GWh.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 21

The industrial forecast is prepared based on the results of load surveys received from FBC's industrial customers. FBC believes that each industrial customer accounts for the specific factors that will affect their individual load and assumes that all relevant factors were included and considered when the 2023 load surveys were completed but cannot speculate on how customers considered those factors.

The cannabis load referred to above is not included in the industrial forecast for 2023, so any factors affecting that industry segment are not expected to impact the industrial forecast for 2023. Additionally, FBC is not aware of any current customers at risk of being switched out of the industrial rate class in 2022. FBC is unable to speculate about potential future rate class switches in 2023.

7.2 Please explain the attributable factors that led to the lower-than-expected industrial customer load for 2022.

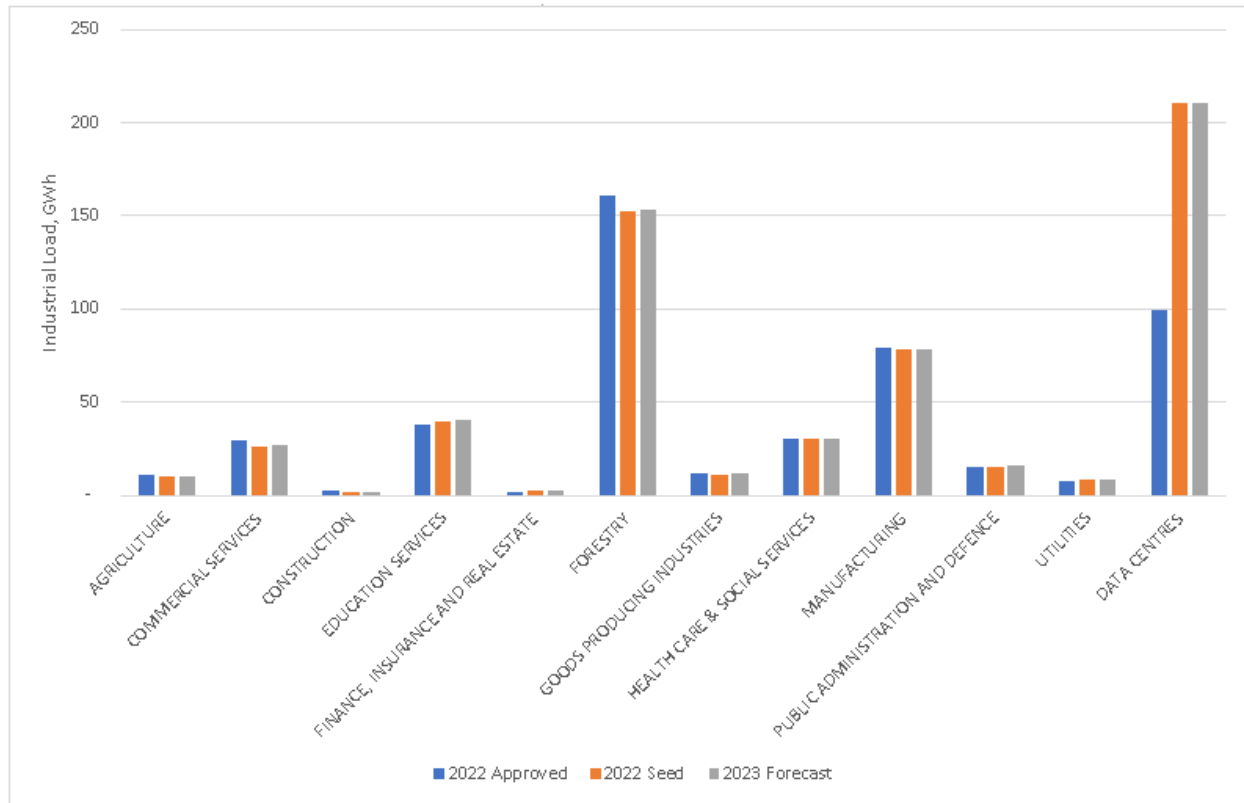
7.2.1 For the industrial segment, please explain which of the attributable factors for the load forecast variance in 2022 provided in IR 7.2 are anticipated to persist into 2023 and how they have been accounted for in the applicable load forecast for 2023.

7.2.1.1 If the factors provided in IR 7.2 above have not been accounted for in the applicable load forecast(s) in 2023, please explain why not.

Response:

FBC notes that the BCUC stated in the preamble to this IR that Figure 3-7 of the Application shows a 2022 Approved industrial load of 579 GWh and a 2022 expected load of 470 GWh. To clarify, the 2022 Approved industrial load (as shown by the green line in Figure 3-7) is 470 GWh, while the 2022 Seed (expected) industrial load is 579 GWh (as shown by the blue bar). Therefore, the 2022 industrial load is expected to be higher than originally forecast, not lower.

As shown in the following figure, the increase in the 2022 Seed Year industrial forecast compared to the 2022 Approved forecast is due to increased expected data centre load. The data centre load accounts for a 111 GWh increase in load compared to the 2022 Approved forecast, which is somewhat offset by a 2 GWh decrease due to other small variances from the 2022 Approved forecast and DSM adjustments. This increase in data centre load is projected to continue into 2023 and therefore has been accounted for in the 2023 Forecast.



7.3 Please explain whether the 2023F industrial loads are based on firm contracts with data centre customers.

7.3.1 If not, please explain the likelihood of the data centre loads materializing in 2023.

Response:

The 2023F industrial loads are not based on firm contracts. FBC anticipates the likelihood of the data centre loads materializing in 2023 to be high, as the 2023F industrial loads include an official forecast from an existing data centre customer, which aligns with the customer's growing usage over the past year.

7.4 Please provide the percentage of the 105 GWh increase in 2023F industrial load that is derived from data centre loads.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 23

1 **Response:**

2 The data centre load accounts for 100 percent of the 105 GWh increase in the 2023F industrial
3 forecast from the 2022 Approved level. For clarity, the increase of 111 GWh discussed in the
4 response to BCUC IR1 7.2 is between the 2022 Seed and 2022 Approved while the 105 GWh
5 discussed in this information request is between 2023 Forecast and 2022 Approved.

6
7 7.5 Please discuss the impact on load forecast, proposed revenue requirement, and
8 rate increase if the projected additional increase in the 2023 industrial load were
9 to vary by: (i) minus 50 percent; (ii) minus 25 percent; and (iii) plus 10 percent.

10
11 **Response:**

12 FBC notes that, based on the approved treatment of revenue and power supply variances under
13 the MRP, variances in load (and therefore variances in revenue and power supply) are captured
14 in the Flow-through deferral account; therefore, the impact of 2023 load variances would be
15 captured in 2024 rates, not 2023 rates. However, for the purposes of responding to this IR, please
16 refer to Table 1 below for the load forecast (i.e., Line 21), revenue requirement (i.e., Line 42), and
17 proposed 2023 rate increase (i.e., Line 46) if the projected additional increase in industrial load
18 from 2022 Approved to 2023 Forecast (i.e., 105 GWh) were to vary by: (i) minus 50 percent; (ii)
19 minus 25 percent; and (iii) plus 10 percent.

20 As explained in the response to BCUC IR1 5.1, FBC's access to BC Hydro's embedded cost
21 energy under the PPA is based on an annual nominated amount. For the scenario where the
22 projected incremental increase to the 2023 industrial load (i.e., 105 GWh) were to increase by
23 10 percent, it would result in FBC's total load exceeding the nominated amount and FBC being
24 charged at 150 percent of the Tranche 1 Energy Price for any amount that exceeds the nominated
25 amount but is less than the maximum of 1,041 GWh. As such, the increase in power purchase
26 expense would outweigh the increase in revenue, resulting in an overall increase in the proposed
27 2023 rate.

28 In contrast, for the scenarios where the projected incremental industrial load (i.e., 105 GWh) is
29 lower by 50 percent or 25 percent, the reduced power purchase expense would outweigh the loss
30 in revenue, resulting in an overall decrease from the proposed 2023 rate.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 24

Table 1: Summary of FBC 2023 Rate Increase if the Increase from 2022 Approved to 2023 Forecast in Industrial Load Forecast is -50%, -25%, and +10%

Line	Particular	Forecast Increase in Industrial Load (104.5 GWh) from 2022A to 2023F to vary by:				Reference
		50% Decrease	25% Decrease	No Change	10% Increase	
1	<u>Load Before DSM Savings (MWh)</u>					
2	Residential	1,309,643	1,309,643	1,309,643	1,309,643	
3	Commercial	995,624	995,624	995,624	995,624	
4	Wholesale	586,125	586,125	586,125	586,125	
5	Industrial	538,802	564,937	591,072	601,526	Adjusted based on Scenario
6	Lighting	9,682	9,682	9,682	9,682	
7	Irrigation	39,559	39,559	39,559	39,559	
8	Net	3,479,435	3,505,570	3,531,705	3,542,159	Sum of Line 2 to Line 7
9	Losses	299,187	301,337	303,487	304,346	
10	Gross Load (MWh)	3,778,622	3,806,907	3,835,192	3,846,505	Line 8 + Line 9
11						
12	<u>Load After DSM Savings (MWh)</u>					
13	Residential	1,300,714	1,300,714	1,300,714	1,300,714	
14	Commercial	973,073	973,073	973,073	973,073	
15	Wholesale	578,470	578,470	578,470	578,470	
16	Industrial	522,650	548,785	574,920	585,374	Adjusted based on Scenario
17	Lighting	9,385	9,385	9,385	9,385	
18	Irrigation	39,382	39,382	39,382	39,382	
19	Net	3,423,674	3,449,809	3,475,944	3,486,398	Sum of Line 13 to Line 18
20	Losses	294,601	296,751	298,900	299,760	
21	Gross Load (MWh)	3,718,275	3,746,560	3,774,844	3,786,158	Line 19 + Line 20
22						
23	<u>Revenue at Existing 2022 Approved Rate (\$million)</u>					
24	Residential	197.962	197.962	197.962	197.962	
25	Commercial	106.351	106.351	106.230	106.351	
26	Wholesale	52.031	52.031	52.031	52.031	
27	Industrial	44.900	46.378	47.856	48.447	
28	Lighting	2.207	2.207	2.207	2.207	
29	Irrigation	3.554	3.554	3.554	3.554	
30	Total (\$million)	407.005	408.483	409.840	410.552	Sum of Line 24 to Line 29
31						
32	<u>2023 Revenue Requirement (\$million)</u>					
33	Cost of Energy					
34	Power Purchase	159.251	161.413	163.575	164.438	Updated Based on Gross Load on Line 21
35	Wheeling Expense & Water Fees	18.530	18.530	18.530	18.530	Section 11, Schedule 19, Line 23 + Line 28
36	O&M Expense (Net)	61.871	61.871	61.871	61.871	Section 11, Schedule 19, Line 11
37	Depreciation & Amortization	61.316	61.316	61.316	61.316	Section 11, Schedule 19, Line 12
38	Property Taxes	18.260	18.260	18.260	18.260	Section 11, Schedule 19, Line 13
39	Other Revenue	(12.241)	(12.241)	(12.241)	(12.241)	Section 11, Schedule 19, Line 14
40	Income Taxes	6.005	6.005	6.005	6.005	Section 11, Schedule 19, Line 17
41	Earned Return	108.892	108.892	108.892	108.892	Section 11, Schedule 19, Line 19
42	Total (\$million)	421.884	424.046	426.208	427.071	Sum of Line 34 to Line 41
43						
44	Revenue Deficiency / (Surplus)	14.879	15.563	16.368	16.519	Line 42 - Line 30
45						
46	2023 Rate Increase	3.66%	3.81%	3.99%	4.02%	Line 44 / Line 30

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 25

1 **D. OTHER REVENUE**

2 **8.0 Reference: OTHER REVENUE**

3 **Exhibit B-2, Section 5.3, p. 39**

4 **Contract Revenue**

5 On Page 39 of the Application, FBC states: “The 2023 Forecast is higher than 2022
6 Approved due to expected increases in the average cost of work and materials recovered
7 from third-party customers.”

8 8.1 Please discuss the specific items driving the increased average cost of work and
9 materials in the 2023 Forecast. Please discuss considerations made for economic
10 conditions, if any.

11
12 **Response:**

13 The rate drivers for pole attachments differ between contracts, and include items such as pole
14 costs, financing and tax costs, maintenance costs (which could include labour, materials, and
15 vehicles), and administration costs. The 2023 Forecast was not derived on a per contract basis,
16 using underlying assumptions for each item, but instead was estimated based on an expected
17 overall increase. At the time of preparing the 2023 Forecast, there were no specific considerations
18 related to economic conditions included in the expected overall increase.

19

9.0 Reference: OTHER REVENUE

Exhibit B-2, Section 5.6, pp. 39–40, Section 12.2.1.4, p. 121

Late Payment Charges

On pages 39 to 40 of the Application, FBC states:

Late Payment Charges have historically been forecast based on the average of the most recent three years of actual Late Payment Charges earned. However, due to the impact of the COVID-19 pandemic and FBC's implementation of customer relief measures, which included the suspension of Late Payment Charges until March 2021, the actual amounts collected have fluctuated from year to year [...]

In consideration of the continued fluctuations being experienced, the 2023 Forecast has been calculated based on the average of 2021 Actual and 2022 Projected Late Payment Charges of \$0.892 million and \$1.095 million, respectively. This results in an increase in Late Payment Charges of \$0.119 million compared to 2022 Approved.

On Page 121 of the Application, FBC states: "With the Company's transition to normal operations, FBC does not anticipate further impacts on its costs in 2022 requiring [COVID-19 Pandemic] exogenous factor treatment."

9.1 Please explain why using the average of 2021 Actual and 2022 Projected Late Payment Charges to forecast the 2023 late payment charges is reasonable when the Company has transitioned to normal operations.

Response:

FBC has adjusted the forecast approach for Late Payment Charges to account for the abnormal reduction in 2020 recoveries from the pause on typical collections related activities in that year. As shown in the table below, the inclusion of the 2020 Actual Late Payment Charges in the calculation would result in a 2023 Forecast amount that is lower than the forecast reflected in the Application and one that embeds the impact of atypical operations. Thus, by excluding the impact of 2020 from the calculation, the forecast reflected in the Application more appropriately reflects the return to normal operations and collections related activities.

Table 1: 2023 Forecast Late Payment Charges based on Last Three Years of Actuals from 2019 to 2021 and Changes to Proposed 2023 Rate Increase

Late Payment Charges (\$000s)	2019 Actual	2020 Actual	2021 Actual	2022 Projected	2023 Forecast	2023 Proposed Rate Increase
Based on Average of Three-Year Actual	929	203	892		675	4.07%
Based on Average of 2021 Actual and 2022 Projected (As-Filed)			892	1095	994	3.99%

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 27

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9.2 Please provide the 2023 forecast using the historical average of the last three years for late payment charges and the resulting rate impact.

Response:

Please refer to the response to BCUC IR1 9.1.

10.0 Reference: OTHER REVENUE

Exhibit B-2, Section 5.8, pp. 40–41; Ministry of Energy, Mines and Low Carbon Innovation, Low Carbon Fuel Credit Market Report – Quarterly dated July 2022, p. 1⁸

Electric Vehicle Direct Current Fast Chargers (EV DCFC) Stations Carbon Credits

On page 40 of the Application, FBC states:

At the time of the 2022 Annual Review, FBC did not have any carbon credits validated by the British Columbia Low Carbon Fuel Standard (BC-LCFS); as such, [...] FBC did not forecast any revenue from the sales of the credits for 2022 Approved. However, as of the end of the first quarter of 2022, the BC-LCFS has validated approximately 1,337 carbon credits for FBC that have accumulated since 2019, with an approximate market value of \$0.625 million. FBC anticipates monetizing these credits prior to the end of 2022 and has therefore reflected them in the 2022 Projected [amount], and also included the \$0.625 million credit in the Flow-through deferral account, to be returned to customers in 2023. [*Emphasis added*]

In Footnote 21 on page 40 of the Application, FBC states that the approximate market value of \$0.625 million is calculated based on “1,337 credits x \$467.32 average Q1-2022 sales price”.

Further, on page 41 of the Application, FBC states: “Consistent with the practice from the 2022 Annual Review, FBC does not forecast revenue from the sale of credits that are pending validation; FBC is therefore not forecasting any of these revenues in 2023.”

Page 1 of the Low Carbon Fuel Credit Market Report revised as of July 2022 shows the following table:

Time Period ²	Transfers (number)	Total Volume (credits)	Average Price (\$ per credit)	Minimum Price (\$ per credit)	Maximum Price (\$ per credit)
Q2 2022	8	28,060	\$402.59	\$340.00	\$485.00
Q1 2022	27	247,755	\$467.32	\$345.00	\$497.77

10.1 Given that FBC anticipates monetizing these credits prior to the end of 2022, please provide an update on what portion of these credits has been sold and what portion is still remaining to be sold in 2022.

⁸ Retrieved on September 1, 2022 from: https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/electricity-alternative-energy/transportation/renewable-low-carbon-fuels/rlcf017_-_low_carbon_fuel_credit_market_quarterly_report-july_2022.pdf.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 29

10.1.1 For credits that have been sold, please provide the price and volume sold.

10.1.2 For credits still unsold, please discuss the volatility of the market value based on an average price per credit of \$467.32 in Q1 2022, given that the average price per credit in Q2 2022 fell to \$402.59 per credit. Please discuss how this volatility will affect rates for 2023.

Response:

As of the end of Q3 2022, FBC has not sold any of its credits. The drop in credit price from \$467.32 in Q1 2022 to \$402.59 in Q2 2022 is also associated with a significant reduction in credits sold during the quarter, from 247,755 in Q1 2022 to 28,060 in Q2 2022.⁹ Given the significantly lower volume of transactions, it is difficult to provide an assessment on the market value volatility, as it may not be a true reflection of market conditions. FBC anticipates monetizing these credits prior to the end of 2022; however, it will depend on market conditions at the time and actual offers received from potential buyers.

Any variances between 2022 Projected Other Revenue – Carbon Credits and 2022 Actual will be captured in the Flow-through deferral account and will be returned to/recovered from customers in 2024 rates.

10.2 Please confirm, or explain otherwise, that all credits are treated homogenously for valuation purposes. Please explain why or why not.

Response:

Confirmed, all credits are treated homogenously for valuation purposes. Once a carbon credit has been validated there are no distinguishable characteristics; it is uniform and interchangeable with other carbon credits in the market. The market price for carbon credits will be determined by supply and demand.

10.3 Please provide the number of credits earned in each year from 2019 to 2022 that reconciles to the total of 1,337 carbon credits.

⁹ [https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/electricity-alternative-energy/transportation/renewable-low-carbon-fuels/rclf017_low_carbon_fuel_credit_market_quarterly_report-july_2022.pdf](https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/electricity-alternative-energy/transportation/renewable-low-carbon-fuels/rclf017_low_carbon_fuel_credit_market_quarterly_report_july_2022.pdf).

1 **Response:**

2 The 1,337 carbon credits are the number of approved credits earned up to the year 2020 as
3 follows (all consumption prior to 2019 was included in the 2019 submission):

Year	Carbon Credits
≤2019	587
2020	750
Total	1,337

4 The number of credits currently awaiting validation are as follows:

Year	Carbon Credits
2021	1,210
2022	Unknown*

5 **A 2022 compliance report has not been submitted as the report is not generated until a calendar year has*
6 *finished.*

7
8
9
10 10.4 Please discuss any factors considered, such as the likelihood of recoverability and
11 reliability of measurement, when determining whether to forecast EV Stations
12 Carbon Credits revenue for 2023.

13
14 **Response:**

15 For clarity, FBC is not forecasting any carbon credit revenue being monetized in 2023. As
16 discussed in Section 5.8 of the Application, FBC is only forecasting to monetize the 1,337 credits
17 in 2022 that have been validated by the BC-LCFS. The forecast revenue from the sale of these
18 credits is recorded in Other Revenue for 2022, and therefore, will be included as a credit to the
19 2022 projected additions to the Flow-through deferral account, to be returned to customers in
20 2023. FBC does not forecast revenue from any carbon credits that have not yet been validated
21 by BC-LCFS, which is why FBC has not included any forecast revenue in 2023 from carbon credits
22 (as shown in Table 5-1 of the Application).

23 Regarding the reliability of measurement, FBC notes there should be no risk or concern with
24 respect to the amount of EV stations carbon credits that FBC can monetize. As noted above and
25 shown in the response to BCUC IR1 10.3, the 1,337 carbon credits that FBC is expected to
26 monetize in 2022 are already validated by BC-LCFS. The number of validated credits will not
27 change. The carbon credits that are submitted to BC-LCFS for validation are based on the total
28 kWh measured by FBC revenue-grade, standard-power meters upstream of all charging
29 equipment. FBC has a high degree of certainty in the accuracy of the kWh measurement from
30 the DCFC stations.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 31

1 Regarding the likelihood of recoverability of the credits in 2022, this will depend on market
2 conditions at the time and actual offers received from potential buyers. FBC notes that the carbon
3 credit market is still relatively new, but the overall total volume of credits transferred as well as
4 the average prices for the credits as reflected in the Province Market Report have been increasing
5 in the last two years, which indicates that there is a healthy amount of market demand for these
6 carbon credits.

7

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 32

E. OPERATIONS AND MAINTENANCE EXPENSE

11.0 Reference: O&M EXPENSE

Exhibit B-2, Section 6.2.1, Table 6-7, p. 45

Formula O&M

On page 45 of the Application, FBC states:

For the first two years of the MRP, FBC spent \$0.449 million more than the formula amount. Over the term of the MRP, FBC anticipates the total new/incremental spending required in the combined categories of System Operations, Integrity and Security will continue to be higher than the amount embedded in the formula. FBC will continue to manage this spending within its overall O&M spending envelope.

11.1 Please discuss the main economic or operational drivers that have caused System Operations, Integrity, and Security costs to be systematically over formula amounts in the first two years of the MRP.

Response:

On a cumulative basis for the first two years of the MRP term, FBC spent \$0.449 million more than the formula amount for new/incremental spending related to System Operations, Integrity and Security. The three areas that have contributed to this cumulative over-spending are: (i) tree and vegetation management; (2) generation dam safety; and (3) cyber security.

Tree and vegetation management activities relate to reducing the incidents of damage and related outages to the system resulting from trees and tree debris falling on the power lines and consist of costs to define the right of way perimeters, clear and maintain the right of ways and protect the system from danger trees by removing them. These activities are critical to the safe and reliable operation of FBC's system and have a direct impact on FBC's service quality (i.e., SAIDI and SAIFI). In 2020, as discussed in the FBC Annual Review for 2022 Rates, increased vegetation management activities costing \$0.265 million were undertaken to better define the right of ways and protect the system from danger trees and other vegetation issues. This increased spending continued in 2021 with an additional \$0.199 million more than the formula amount to address an increased number of unhealthy trees as part of the right-of-way management program.

The drivers of the increased generation dam safety costs in the first two years of the MRP term are described in the current Application (page 45) and in the 2022 Annual Review application (page 40). These activities included dam rock trap clearing and dam safety reviews to ensure the overall safe and reliable operation of FBC's generation system.

With regard to cyber security, the increased spending was isolated to 2020 and, as explained in the 2022 Annual Review application (page 40), included activities to build out the governance and controls for operational technology in response to increasing cyber threats on operational systems as well as to update the Company's business continuity plans for each business area.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 33

1 FBC expects that some of the above-described O&M categories, and in particular, tree and
2 vegetation management, will likely continue to experience higher-than-formula spending, as these
3 activities are critical to system reliability and safety. However, over the MRP term, FBC will
4 continue to manage this total/new incremental spending within its overall formula O&M spending
5 envelope. FBC notes that on an overall basis, it has achieved formula O&M savings in both 2020
6 and 2021.

7 Further, while FBC has reported on the cumulative variance between formula and actual O&M
8 spending in Table 6-3 in compliance with the BCUC's direction in the MRP Decision (page 118),
9 FBC notes that O&M spending variances do not actually accumulate over the term of the MRP.
10 The variances between formula and actual O&M are shared 50/50 with customers annually
11 through the Earnings Sharing Mechanism.

12

12.0 Reference: O&M EXPENSE

Exhibit B-2, Section 6.3.4, p. 48

Non-Formula O&M – EV DCFC Stations

On page 48 of the Application, FBC states:

As shown in Table 6-7 below, the 2022 Projected EV DCFC station O&M expense is expected to be consistent with 2022 Approved, and consists of network management, repairs and maintenance, inspection fees and FBC labour costs. The 2023 Forecast EV DCFC station O&M expense is anticipated to be similar to the 2022 Projected level, with an approximate increase of \$6 thousand primarily due to inflation.

On page 48 of the Application, FBC provides Table 6-7: Clean Growth Initiative – EV DCFC Stations, which is reproduced below:

Table 6-7: Clean Growth Initiative – EV DCFC Stations (\$ millions)

Line No.	Description	Approved 2022	Projected 2022	Forecast 2023	Reference
1	Clean Growth Initiative - EV DCFC	\$ 0.187	\$ 0.187	\$ 0.193	Section 11, Schedule 20, Line 19
2	Total	\$ 0.187	\$ 0.187	\$ 0.193	

12.1 Please provide a breakdown of the Clean Growth Initiative – EV DCFC O&M expense amount into network management, repairs and maintenance, inspection fees and FBC labour costs for each column shown in Table 6-7.

Response:

Please refer to Table 1 below for the breakdown of the EV DCFC O&M expenses by category.

While responding to this information request, FBC noticed that the 2023 Forecast O&M cost shown in Table 6-7 of the Application for the EV DCFC stations was incorrect. FBC had inadvertently included FBC's EV DCFC Stations that are under third-party utilities (i.e., City of Penticton, Grand Forks, and Nelson for 2022 and 2023 as well as New Denver and Nakusp under BC Hydro¹⁰ for 2022) as FBC's cost of energy under RS 21 in Table 5-2 of the Application. These third-party utility bills should be included as O&M instead of cost of energy under FBC's RS 21. FBC notes that Table 1 below already included the revised O&M expense for 2023 with the third-party utilities' costs. Please also refer to Table 2 below for the revised Table 5-2 of the Application which reflects both the revised cost of energy and O&M due to the third-party utilities' costs. To be clear, only the 2023 Forecast O&M was revised as the 2022 Projected O&M shown in Table 6-7 of the Application already included the third-party utilities costs. However, the cost of energy for both 2022 and 2023 were revised in Table 5-2. FBC notes the changes will result a small reduction in the 2023 rate increase from 3.99 percent to 3.97 percent. Given the small change in

¹⁰ As discussed in FBC's Revised EV DCFC Application, the New Denver and Nakusp sites are to be transferred to BC Hydro in exchange for the Keremeos and Princeton sites. This occurred in 2022; therefore, there is no BC Hydro charge included in the forecast starting in 2023.

1 the 2023 rate increase, FBC will include the correction in the compliance filing to the BCUC's
2 decision on the 2023 Annual Review.

3 **Table 1: Breakdown of EV DCFC Stations O&M and Revised 2023 Forecast O&M (\$ millions)**

	Approved 2022	Projected 2022	Forecast 2023
Network Management	\$ 0.046	\$ 0.046	\$ 0.047
Repairs and Maintenance	\$ 0.008	\$ 0.008	\$ 0.009
Inspection Fees ⁽¹⁾	\$ 0.039	\$ 0.039	\$ 0.067
FBC Labour Costs	\$ 0.068	\$ 0.068	\$ 0.070
Third Party Utilities Costs	\$ 0.026	\$ 0.026	\$ 0.026
Total (\$millions)	\$ 0.187	\$ 0.187	\$ 0.219

4 Note to Table:

5 1) The inspection fees increased from 2022 to 2023 as the contract for inspections (waste removal,
6 snow removal, cleaning of stations, etc.) was not awarded until September 2022. Prior to
7 September 2022, these activities were completed as needed and by FBC staff and also at courtesy
8 by the hosts of a few sites.

9
10 **Table 2: Revised Table 5-2 of the Application for EV DCFC Stations Costs and Revenues for 2021**
11 **Actual, 2022 Projected, and 2023 Forecast (\$ millions)**

Line	Particulars	2021 Actual	2022 Projected	2023 Forecast	Cumulative
1	Cost of Energy	0.013	0.215	0.265	
2	Less: Power Purchase Expense	(0.013)	-	-	
3	O&M	0.101	0.187	0.219	
4	Depreciation	0.307	0.456	0.612	
5	Amortization of CIAC	(0.150)	(0.191)	(0.249)	
6	Other Revenue - Carbon Credits	-	(0.625)	-	
7	Income Tax	(0.299)	(0.199)	0.158	
8	Earned Return	0.124	0.172	0.183	
9	Total Cost of Service	0.083	0.015	1.188	
10	RS 96 Revenue	(0.058)	(0.155)	(0.178)	
11	(Surplus) / Deficiency	0.025	(0.140)	1.010	0.894
12	Prior Year 2018-2020 (Surplus)/Deficiency				(0.142)
13	Cumulative (Surplus) / Deficiency				0.752

13.0 Reference: O&M EXPENSE

Exhibit B-2, Section 6.3.5, p. 49; FBC 2022 Annual Review, Exhibit B-3, BCUC IR 24.2.2

Non-Formula O&M – Mandatory Reliability Standards (MRS) Incremental Operation Expenses

On Page 49 of the Application, FBC states: “The 2023 Forecast is based on the expected costs in 2022 Projected and is therefore less than the 2022 Approved level. These costs are annual and will continue in future years.”

On page 49 of the Application, FBC provides Table 6-8: Incremental O&M for MRS AR13 [Assessment Report No. 13], which is reproduced below:

Table 6-8: Incremental O&M for MRS AR13 (\$ millions)					
Line No.	Description	Approved 2022	Projected 2022	Forecast 2023	Reference
1	Labour	\$ 0.335	\$ 0.200	\$ 0.490	
2	Non-Labour	0.280	0.250	0.095	
3	Contingency	0.150	0.050	-	
4	Total	\$ 0.765	\$ 0.500	\$ 0.585	Section 11, Schedule 20, Line 18

In response to BCUC IR 24.2.2 in the 2022 Annual Review, FBC stated:

The \$0.650 million of annual O&M costs in 2023 and beyond is a high level estimate of on-going effort to maintain compliance after the effective date. This estimate will be refined in the next annual review application when FBC has more information available.

13.1 Please explain why the 2023 forecast O&M for MRS AR13 has decreased from \$0.650 million in the 2022 Annual Review to \$0.585 million in this Application. Please provide the factors that have contributed to the forecast revision.

13.1.1 Please explain whether the on-going annual cost to maintain compliance with MRS AR13 is now expected to decrease, remain flat, or increase in future years as compared to the 2023 forecast.

Response:

The \$650 thousand identified in the 2022 Annual Review was a preliminary high-level estimate and, as indicated in the IR response in the 2022 Annual Review (as provided in the preamble), FBC intended to refine this forecast in the 2023 Annual Review.

As FBC executed the one-time capital and O&M work (combined total of \$1.435 million) to develop and modify processes, procedures and tools to meet compliance to the standards, FBC was able to refine its estimate of the expected ongoing annual costs and accordingly is forecasting \$585 thousand for 2023. The 2023 Forecast amount of \$585 thousand is expected to remain relatively flat in future years, notwithstanding the potential future impacts of inflation and other similar external cost pressures.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 37

- 1 FBC notes that since these costs are approved to receive flow-through treatment, FBC will provide
- 2 its forecast for the incremental O&M annually and any variances between forecast and actual
- 3 costs will be captured in the Flow-through deferral account.

4

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 38

1 **F. RATE BASE**

2 **14.0 Reference: REGULAR CAPITAL EXPENDITURES**

3 **Exhibit B-2, Section 7.2, pp. 54–56, Appendix C2, pp. 2–3, 5, 9, 11–12**

4 **Growth and Sustainment Capital**

5 On pages 54 to 55 of the Application, FBC states:

6 FBC's Updated Forecasts for growth capital have increased by \$4.690 million in
7 2023 and \$1.398 million in 2024 compared to the Original Forecasts. FBC is
8 forecasting increases in all three growth capital portfolios in 2023. For 2024, the
9 increase is primarily in the New Connects portfolio, with FBC reducing the
10 expenditures for the Distribution Growth portfolio to offset some of the required
11 increases. ...

12 FBC's Updated Forecasts for sustainment capital have increased by \$1.420 million
13 in 2023 and \$5.203 million in 2024 compared to the Original Forecasts. For 2023,
14 the increases are primarily in the Transmission Sustainment and the Stations
15 Sustainment portfolios, with FBC proposing to reduce the expenditures for the
16 Distribution Sustainment and the Telecommunications portfolios to offset some of
17 the required increases. For 2024, increases are primarily in the Transmission
18 Sustainment and telecommunications portfolios, with FBC proposing to reduce the
19 expenditures for the Distribution Sustainment and the Stations Sustainment
20 portfolios to offset some of the required increases.

21 On Page 56 of the Application, FBC states: "FBC has experienced significant inflationary
22 pressures during the first three years of the MRP term and expects these pressures will
23 continue into 2023 and 2024."

24 14.1 Given the inherent uncertainties due to significant inflationary pressures, please
25 discuss how FBC determines which expenditures can be reduced or delayed and
26 which must be completed. Please include discussion of whether FBC has
27 considered delaying some of the required increases in growth and sustainment
28 capital to the next MRP term. If not, please explain why not.

29 **Response:**

31 FBC continually manages a portfolio of hundreds of active growth and sustainment capital
32 projects at various stages of the project lifecycle (from inception through to project closing). As
33 outlined in Section C3.2 of the 2020-2024 MRP Application, FBC has implemented an Asset
34 Investment Planning (AIP) process to support risk informed decision-making in capital planning.
35 This process supports the creation of consistent, defensible and optimized decisions on which
36 projects to invest growth and sustainment capital dollars. The foundation of the AIP tool is the
37 value framework that is used to quantify the value, or the risk reduction, of potential investments.
38 Investments are quantitatively valued through the value framework, and projects that provide the
39 greater value, or greater risk reduction, are prioritized over projects that provide a lesser value or

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 39

1 risk reduction. It is important to note that FBC does not manage risk to a specific figure, but the
2 Company is committed to making optimized, risk-informed decisions, in order to best allocate
3 limited sustainment and growth capital funds.

4 Some growth and sustainment capital projects throughout the MRP term thus far have been
5 deferred so as to re-prioritize projects that provide a greater value (in accordance with FBC's AIP
6 process); however, projects can be deferred for several other reasons as well. For example, in
7 some cases, projects may be deferred based on the load forecast. Additionally, projects may be
8 tied to third party timelines, or there may be difficulties securing land or necessary permits,
9 resulting in project delays.

10 Based on the risk-informed prioritization process described above, FBC determined which growth
11 and sustainment capital projects could reasonably and safely be deferred to future years (i.e., to
12 2025 and beyond) and these adjustments have already been reflected in the Updated Forecasts
13 for 2023 and 2024. For instance, as explained in the response to BCUC IR1 14.4, FBC has
14 deferred the planned installation of dam safety instrumentation at Corra Linn (COR) until after the
15 current MRP term. Additionally, individual transmission line work has been prioritized and staged
16 across multiple years within the Transmission Line Rehabilitation program. This has resulted in
17 some carry over beyond 2024.

18 FBC has provided descriptions of the projects that are planned to be undertaken during the
19 remainder of the MRP term in Appendix C2 to the Application. Deferring these growth and
20 sustainment projects would potentially compromise the integrity and reliability of the FBC power
21 system.

22
23
24
25 On page 2 of Appendix C2 to the Application, with regards to Transmission Growth Capital
26 Expenditures, FBC updates total project cost for the Beaver Park Substation Upgrade
27 Project from \$5.195 million in the MRP Application (Table C2-1) to \$6.223 million in the
28 Application (Table C2-2).

29 On page 3 of Appendix C2 to the Application, FBC explains: "the total project costs have
30 increased since the MRP Application filing in 2019 due to several factors, including
31 archaeological requirements and increases in engineering, materials and construction
32 costs. Commodity cost increases have placed significant pressure on materials."

33 14.2 Please provide a breakdown of the cost increase for each of the factors described
34 above, totalling to a cumulative cost increase of \$1.028 million (\$6.223 million -
35 \$5.195 million).
36

37 **Response:**

38 The Beaver Park Substation Upgrade estimate provided in the 2020-2024 MRP Application was
39 an AACE Class 5 level. The updated estimate in this Application is a combination of actuals and

1 the updated AACE Class 3 level cost estimate. As such, the cumulative cost increase cannot be
2 broken down into the specific categories described in the Application and referenced in the
3 preamble to this IR.

4
5
6
7 14.3 Please confirm, or explain otherwise, that the Project scope remains unchanged
8 since the MRP Application filing in 2019.

9 14.3.1 If not confirmed, please explain key differences in Project scope since
10 the filing of the MRP Application.

11
12 **Response:**

13 Confirmed. The scope of the project remains unchanged since the 2020-2024 MRP Application.

14
15
16
17 On Page 6 of Appendix C2 to the Application, FBC states: "The installation of the dam
18 safety instrumentation at Corra Linn (COR) has been delayed with only the engineering
19 being planned to occur in 2023-2024."

20 14.4 Please explain the reasons for the delay in installation of the dam safety
21 instrumentation at COR.

22
23 **Response:**

24 FBC deferred this project by two years after considering it holistically with FBC's overall
25 sustainment capital portfolio using its AIP process described in the response to BCUC IR1 14.1.

26 FBC has had dam instrumentation installed at Corra Lin (COR) since 1991, consisting of eight
27 piezometers which are used to assess the uplift pressures acting at the concrete bedrock interface
28 of the dam. The project that is being deferred to 2025 includes adding 14 more piezometers and
29 other related modifications to develop a dam stability analysis. Dam safety instrumentation
30 installation projects such as this are complex and involve long lead time materials, and access to
31 COR to install dam safety instrumentation has been impeded by the Corra Linn Dam Spillway
32 Gates Replacement Project.

33 FBC plans to complete the engineering related to the installation of the dam safety instrumentation
34 in 2023, procure materials in 2024 and plans to begin the installation in 2025. Based on the
35 information from the existing dam safety related instrumentation installed at COR, there is a low
36 risk to the dam by deferring this project to this timeframe.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 41

On page 9 of Appendix C2 to the Application, with regards to AS Mawdsley Transformer Replacement Project, FBC states that it “is now planning to file a Certificate of Public Convenience and Necessity (CPCN) application for this project as the cost is forecast to be above the \$20 million materiality threshold.”

14.5 Please discuss when FBC expects to apply to the BCUC for a CPCN for the AS Mawdsley Transformer Replacement Project.

Response:

FBC anticipates filing a CPCN application for the AS Mawdsley Transformer Replacement Project in December 2022 or January 2023.

14.6 Please explain, in detail, the factors that led AS Mawdsley Transformer Replacement Project costs to exceed the materiality threshold of \$20 million.

14.6.1 Please confirm, or explain otherwise, that the scope of the project remains the same.

Response:

In 2019, FBC planned two individual projects to replace the AS Mawdsley transformers (ASM T1 and ASM T2). It was anticipated ASM T1 would be replaced in 2024-2025 and ASM T2 would be replaced at a later date. The high-level estimate provided in Table C3-35 of the 2020-2024 MRP Application represents the cost of purchasing the ASM T1 only with installation happening in 2025. When responding to this IR, FBC discovered that the reference in the MRP Application to the AS Mawdsley Transformer Replacement project being \$5.0 million (page C-92) was an error. The correct estimated cost of the ASM T1 replacement at the time of filing the MRP Application was \$14.5 million. This error does not impact the Original 2024 Forecast (or the Updated 2024 Forecast) as the Original Forecast for 2024 of \$3.8 million was correct; FBC had inadvertently excluded some of the future years' costs in the total estimated project cost stated in the MRP Application narrative.

Due to the growth in the Boundary and Kootenay areas since the filing of 2020-2024 MRP and the Transmission Planning Criteria of N-1, AS Mawdsley requires higher MVA transformers (both ASM T1 and T2) to be replaced within a three-year window. Therefore, the scope of the project now includes replacing both transformers (ASM T1 and T2) under one project to meet system needs and provide the necessary control and protection to the system and the assets for long-term operability, reliability, and maintainability.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 42

On page 11 of Appendix C2 to the Application, FBC provides table C-12 showing three updated telecommunications sustainment capital expenditures on projects greater than \$1 million.

On page 11 to page 12 of Appendix C2 to the Application, FBC provides a description of the three projects: Backbone Transport Technology Migration, SCADA System Replacement and VHF Radio System Replacement.

14.7 Please explain the need for each of the three projects.

14.7.1 Please explain whether FBC is able to defer some of the required expenditures for telecommunications sustainment projects to the next MRP term.

Response:

FBC provides further explanation of the need for each of the three telecommunications projects below. FBC does not believe deferring these projects is prudent, as the risks and complexities associated with continuing to operate this aging technology infrastructure are increasing with time. Along with the associated increase in system risk, it will be more costly to defer these projects both in terms of projects costs and foregone operational savings.

Backbone Transport Technology Migration

The existing GE JungleMUX SONET system (JMUX) was put into service in the mid 1990s and is more than 25 years old. Life expectancy for electronic communications technology is accepted to be less than 20 years.

While the technology remains functional, the equipment is becoming more expensive to source (including parts that are no longer manufactured or available) and the vendor support expertise for the system is declining due to retirement of expert staff. FBC expects overall support for the program may end in the next few years as it becomes uneconomical for the vendor to continue. Furthermore, significant system updates and reconfigurations are required for the existing system to meet modern best practices for redundancy as well as to mitigate the risks of not complying with mandatory compliance standards during system events.

VHF Radio System Replacement

The existing analog VHF radio system deployed in FBC's electric division is comprised of aging equipment, much of it more than 20 years old and therefore beyond the expected life for electronic communication equipment, stated above as less than 20 years. The manufacturer was located in Victoria, BC but that company was purchased in 2012 and moved to Australia. Many spare and replacement parts are no longer available or manufactured. Upgrading to a newer digital system will allow FBC to reduce the total number of sites within its service area while improving

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 43

1 communications throughout the region and ensuring the equipment at all sites continues to be
2 functional.

3 The project will also align FBC's system with FEI's system which enable efficiencies through
4 common deployment of "like for like" equipment, leading to reduced effort to maintain and support
5 two systems.

6 ***SCADA System Replacement***

7 The existing SCADA system has been in service since the late 1980s. It has seen upgrades and
8 enhancements through its time in-service. Much of the system was custom developed (common
9 in the past but no longer best practice) and is no longer supported by the vendor. The system
10 has been experiencing stability issues for several years, due in large part to these customizations
11 and workarounds that have been implemented over many years to modify a legacy product to suit
12 FBC's changing needs, including for mandatory system reliability requirements. The vendor has
13 been unable to identify and rectify these instabilities and they are impacting FBC's ability to
14 operate the system safely and efficiently while maintaining compliance.

15

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 44

15.0 Reference: REGULAR CAPITAL EXPENDITURES

Exhibit B-2, Section 7.2.1.2.2., p. 60; FEI 2023 Annual Review of Delivery Rates, Exhibit B-2, Section 7.2.1.2.2., p. 64

Other Capital

On Page 60 of the Application, FBC states: [...] the Kelowna Space Project is a combined project for FEI and FBC, and the cost of the project has therefore been allocated between the two utilities accordingly. The total cost of the Kelowna Space Project is \$13.930 million. Of this total, approximately \$2.934 million is allocated to FBC based on employee count, with \$1.209 million and \$1.000 million reflected in FBC's Updated Forecasts for 2023 and 2024, respectively. *[Footnote omitted; emphasis added]*

As part of the Kelowna Space Project, both FEI and FBC Shared Services Departments (Support Services) located in Kelowna will relocate to a new office lease facility approximately 25,000 ft² in size. Tenant improvements will be completed in 2023 [...] *[Emphasis added]*

On Page 64 of Exhibit B-2 of the FEI 2023 Annual Review of Delivery Rates proceeding states: "The total cost of the Kelowna Space Project is \$13.996 million." *[Emphasis added]*

15.1 Please explain whether the total cost of the Kelowna Space Project is \$13.930 million or \$13.996 million and the proportional cost attributable to FBC.

Response:

FBC clarifies that the correct total cost of the Kelowna Space Project is \$13.930 million. The \$13.996 million was a typographical error in FEI's Annual Review for 2023 Delivery Rates application and was clarified/corrected in FEI's response to BCUC IR1 18.3 in the FEI 2023 Annual Review proceeding. FBC confirms that the proportional cost attributable to FBC of \$2.934 million (as stated in the Application and referenced in the preamble to this IR) is correct.

15.2 Please confirm, or explain otherwise, that tenant improvement costs are included in the total cost of the Kelowna Space Project.

15.2.1 If not confirmed, please provide the 2023 forecast tenant improvement costs and clarify how they are captured in the 2023 forecast revenue requirement and the impact on 2023 rates.

Response:

FBC confirms that tenant improvement costs are included in the total cost of \$13.930 million for the Kelowna Space Project.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 45

15.3 Please describe the nature of the tenant improvements, including a breakdown of the costs that are one-time in nature and costs that are expected to continue into the future, if any.

Response:

The tenant improvements to be completed in 2023 as referenced in the preamble above are related to the new leased facility in Kelowna. FBC's portion of the tenant improvement costs are estimated to be \$0.970 million, where \$0.855 million is estimated for leasehold improvements and \$0.115 million for furniture and equipment. FBC notes that, although not identified in the preamble above, there is also approximately \$0.250 million of leasehold improvement costs and \$0.050 million of furniture and equipment costs to be incurred by FBC in 2024 for the move to the Pole Yard lease property. The tenant improvements (including both leasehold improvements and new furniture/equipment) are specific to meeting the space programming requirements of the multiple departments and include, but are not limited to:

- Design and engineering consulting and permitting fees;
- Additions of wall partitions;
- Painting;
- Flooring, lighting, electrical, data and mechanical improvements to suit floor plan layouts;
- Structural improvements for the file room; and
- Furniture and equipment acquisition and installation.

All of the above costs are considered one-time in nature.

FBC also notes that, while responding to this IR, it was identified that the \$0.855 million of leasehold improvements were incorrectly shown as additions to the asset class 390.1 Structures - Masonry (i.e., Section 11 – Schedule 6.1, Line 17) instead of asset class 390.9 Leasehold Improvement (i.e., Section 11 – Schedule 6.2, Line 19). FBC determined the impact of this change to the proposed 2023 rate increase would be 0.01 percent (i.e., an increase from the proposed 3.99 percent to 4.00 percent). Given the small impact to the proposed 2023 rate increase, FBC will correct this as part of its Compliance Filing.

16.0 Reference: MAJOR PROJECT CAPITAL EXPENDITURES

Exhibit B-2, Appendix B2, pp. 5–6

Upper Bonnington Unit Refurbishment Project Final Report

On page 5 of Appendix B2 to the Application, FBC provides Table B2-2 showing final project expenditures for the Upper Bonnington (UBO) Unit Refurbishment Project and states:

Table B2-2: Cost Summary

Description	Application/ Control Budget	Final Costs	Variance	Variance
		(\$000s)		(%)
Unit 4	6,634	8,058	1,424	21%
Unit 3	4,079	6,529	2,450	60%
Unit 2	5,641	6,806	965	17%
Unit 1	8,050	8,287	237	3%
Balance of Plant	880	1,657	797	93%
Subtotal - Construction	25,264	31,137	5,873	23%
Cost of Removal	1,880	1,840	-40	-2%
Project Contingency	3,771	-	-3,771	-
Subtotal - Construction & Removal	30,916	32,997	2,082	7%
AFUDC	867	1,174	307	35%
Total Project Cost	31,783	34,151	2,369	7%

The Project's cost estimate was at an AACE Class 4 estimate class because of the difficulty in defining the full scope without dismantling the units. Final Project costs (including \$1.174 million of AFUDC and \$1.840 million of removal costs) are \$34.151 million, which is 7 percent or approximately \$2.4 million over the control budget. This is well within the typical accuracy range of an AACE Class 4 cost estimate as stated in AACE Recommended Practice 69R-12, Cost Estimate Classification System – As Applied in Engineering, Procurement, and Construction for the Hydropower Industry. As reported in the August 2020 status report, this approximately \$2.4 million variance resulted primarily from higher than planned costs to rewind the generators and to refurbish the concealed turbine components.

On Page 6 of Appendix B2 to the Application, FBC states, with regards to project contingency costs: "Project contingency has been utilized to offset the variances that were encountered among the different Units."

16.1 Please provide a breakdown of the project contingency budget and provide sufficient detail to describe and explain each cost driver for project contingency, totalling \$3.771 million (highlighted in yellow). As part of the response, please provide percentage of costs utilized to offset the variances among the different units.

Response:

A total of \$6.140 million (\$3.771 million contingency + \$2.369 million over budget) was used to address various risk items that materialized during the Upper Bonnington (UBO) Unit Refurbishment project. The amount over budget was managed in the same manner as the

1 contingency, therefore a reference to contingency in this response refers to the overall \$6.140
2 million.

3 Contingency utilized on the project can be grouped into two categories: (1) contingency to absorb
4 cost fluctuations; and (ii) contingency to capture changes to the scope of work. These categories
5 are further described below.

6 **Cost Fluctuations**

7 The Work Breakdown Structure (WBS) for the project was managed to the system level for each
8 generating unit resulting in approximately 300 cost elements capturing costs. Most of the project
9 activities were not captured through a fixed price arrangement which naturally implies that the
10 costs captured against each cost element fluctuated above and below what was estimated. As
11 costs were observed on the Project, contingency was applied towards the total project cost
12 forecast and not applied or allocated towards each of the 300 independent activities. As such,
13 FBC reports cost variances at the unit level.

14 The following table provides an overview of the larger cost fluctuations.

	Title	Cost (\$ thousands)	Comment
1	Generator rewind costs	1,442	Tendered costs were higher than budgeted.
2	As found condition of concealed components	1,310	As each of the generating unit's concealed components were inspected, the condition was worse than expected requiring increased budget to address.
3	Protection and control material changes	932	After detailed engineering, the material and labor requirements for the protection and control systems exceeded the estimated costs.
4	Unit 1 generator step- up transformer and containment	(813)	The Project realized a positive variance on the GSU transformer and oil containment replacement.
5	Balance of plant	801	The installation of new equipment and removal of old equipment within an operating facility presented unanticipated challenges that could not be defined during the planning stage.
6	AFUDC	316	Advancing some of the engineering and procurement activities to de-risk the project required increased AFUDC.
	Total	3,988	

15 **Scope Changes**

16 As outlined in the Upper Bonnington (UBO) Unit Refurbishment project progress reports filed in
17 previous Annual Reviews, as the project progressed, FBC adjusted the project scope to address
18 unforeseen challenges or issues which were either not considered or not accessible during the

- 1 planning stage. These adjustments totalled approximately \$2.015 million and a table highlighting
 2 change orders exceeding \$50 thousand is provided below.

	Title	Cost (\$ thousands)	Comment
1	Revised Protection & Control Costs	102	Detailed design required changes to equipment.
2	Rotor and Stator Quality Control	70	3 rd party quality assurance oversight for generator rewind work.
3	Specialized Tool Purchase	223	Dismantling the generators required pedestals and specialty tools.
4	Turbine Condition Assessments	125	To reduce procurement risk, the turbines were inspected prior to refurbishment.
5	Additional Tailrace Gate	50	The tailrace gates were required to isolate the unit during higher than anticipated water levels encountered during freshet.
6	Washcar Trailer	112	The washcar planned for the Project was condemned due to structural and infestation issues.
7	Trash Rack Upper Beam Repair	198	Main deck support beam was deteriorated on all four units.
8	Governor Interface, Actuators and Gate Locks	551	The governor actuator and its interface to existing equipment required redesign.
9	Runner Plate Replacement Unit 4 Thrust Assembly	93	The as found condition of the runner plate did not meet specification and required replacement.
10	Unit 2 Generator Modifications	239	Equipment relocation and reconfiguration to facilitate new brakes and controls.
11	Unit 3 Rotor Leak Repair	252	Oil leak developed after commissioning.
	Total	2,015	

- 3 While there are other cost variances both above and below what was budgeted, they are minor
 4 and effectively offset each other. The tables provided above highlight the more significant
 5 variances which generally make up the \$6.140 million.

- 6
 7
 8
 9 16.2 Please provide a breakdown of the \$2.4 million increase in total project costs and
 10 explain all cost drivers behind the cost increase. As part of the response, please
 11 provide percentage of costs utilized to offset the variances among the different
 12 units.

13
 14 **Response:**

- 15 Please refer to the response to BCUC IR1 16.1.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 49

16.3 Please explain whether the seven percent increase in total project costs compared to the budget is acceptable project cost performance to FBC.

Response:

Given the complexity associated with refurbishing turn-of-the-century equipment within an operating facility, FBC considers this project and the final project cost to be a successful outcome. AACE International prescribes a range of possible outcomes for each class of cost estimate. For a Class 4 cost estimate, the accuracy range is typically between -30 percent to +50 percent. The final project cost for the Upper Bonnington (UBO) Unit Refurbishment project is +7 percent higher than the control budget, which is well within the typical accuracy range for an AACE Class 4 estimate.

16.4 Please discuss whether the challenges FBC encountered when completing the UBO Unit Refurbishment Project could have been foreseen without the benefit of hindsight.

Response:

The majority of the challenges encountered during execution pertained to the as-found condition of each of the generating unit's concealed components. As explained when applying for approval of the Upper Bonnington (UBO) Unit Refurbishment project in the FBC Annual Review for 2016 Rates, FBC did not assess the concealed components during the planning phase of the project because each of the generating units would have needed to be dismantled, inspected (Cleaned/Sand Blasted, NDT, etc) and re-assembled. To conduct this work would have taken a minimum of 6-8 weeks per unit, resulting in significant additional costs and delay to the Project schedule. Thus, while the challenges associated with the concealed components could have been foreseen during the planning phase, FBC deemed it more appropriate to assess the equipment as each unit was dismantled and then determine if the components could be refurbished or would require replacement.

There are four main reasons why the concealed components were not inspected as part of the planning work:

1. All of the work required to dismantle, inspect and assemble the units would need to be duplicated in executing the project.
2. As the units were at the end of life, there was risk associated with removing and inspecting the components as they may get damaged during the inspection and not be useable.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 50

3. The costs required to correct the concealed components would have remained the same even if the inspection had taken place during the planning phase.

4. FBC had historical inspection reports available which provided an indication of the condition of the concealed components.

One challenge that FBC considers could potentially have been foreseen was related to the washcar trailer. FBC could have assessed the washcar trailer during the planning phase of the project to factor in the work required to make the washcar trailer suitable for the project and could then have factored those costs into the project cost estimate. FBC considers this to be a lesson learned from the project and in the future for a similar project, FBC would complete an assessment of the washcar trailer during the planning phase to ensure the costs captured in the project's cost estimate align with the work required to make the washcar trailer suitable for the UBO Unit Refurbishment project.

FBC is of the view that the project scope was suitably defined given the information available at the time and the effort/costs/delay associated with obtaining better information to allow for better scope definition. The UBO Unit Refurbishment project was planned in accordance with AACE 69R-12 and the final costs are well within the prescribed bounds of an AACE Class 4 cost estimate.

The contingency assigned to the project reflected the risk analysis conducted at that point in time. Given the project risk profile, FBC considered that the allotted contingency was appropriate and would have had no basis to forecast a higher contingency other than what was allocated. As the project progressed, it became evident that the contingency funding was not adequate and FBC reported to the BCUC in the 2020-2024 MRP Application proceeding¹¹ that the UBO Unit Refurbishment project was going to be approximately \$2.4 million higher than forecast.

Moving forward, FBC will continue to develop project-specific risk analysis to assess the risks specific to each project and seek an appropriate allotment of contingency and management reserve to manage the risks should they materialize.

16.5 Please discuss any lessons learned by FBC, such as those to address key challenges associated with defining the full project scope earlier for more accurate cost estimation on future similar projects. As part of the response, please discuss whether FBC would use a larger project contingency on similar projects in future.

Response:

Please refer to the response to BCUC IR1 16.4.

¹¹ BCUC IR1 60.1.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 51

17.0 Reference: FLOW THROUGH CAPITAL EXPENDITURES

Exhibit B-2, Section 7.2.2.1 pp. 63–64

EV DCFC Stations

On Page 63 of the application, FBC states: “the total number of DCFC stations in service to 42 across the 23 sites.”

On page 64 of the Application, FBC states:

The two new DCFC stations were installed at the existing Naramata and Grand Forks sites [...]. Both Naramata and Grand Forks were identified in FBC’s Revised Application for EV DCFC Service, and construction of these two additional stations was completed in late 2021. As directed by Order G-341-21, FBC is to include evaluation of any additional EV charging stations that were not originally identified in the Revised EV DCFC Service Application in FBC’s Annual Review process, including review of whether the additional stations meet the criteria to be a prescribed undertaking under the GRRR and assessment of whether the levelized rate under RS 96 EV DCFC service will need to be recalculated as a result of the additional EV charging stations. [...]

FBC is required to file a detailed assessment of the EV DCFC service by the end of December 31, 2022, which includes an update of the financial models with actual and forecast information as well as a detailed assessment of RS 96 and alternative rate design options. For the purposes of regulatory efficiency, FBC will address the review of the levelized rate under RS 96 EV DCFC service in the assessment report.

17.1 Please clarify whether Naramata and Grand Forks sites were identified in FBC’s Revised Application for EV DCFC Service, or whether the construction of the two additional stations at the Naramata and Grand Forks sites were identified in FBC’s Revised Application for EV DCFC Service.

Response:

FBC identified Naramata and Grand Forks as sites in the Revised Application for EV DCFC Service (Revised EV DCFC Application), but each with a single station only,¹² which were included in the 40 DCFC stations identified across the sites in the Revised EV DCFC Application. Please note that FBC did not proceed with a second site in Penticton as initially identified in the Revised EV DCFC Application, resulting in a total of 22 sites as opposed to the 23 sites initially identified. However, FBC moved the station originally intended in the second Penticton site to the first Penticton site, as such, there are still 40 DCFC stations as identified in the Revised EV DCFC Application.

¹² Table 2-2 of the Revised Application for EV DCDC Service and BCUC IR1 1.1 of the Revised Application for EV DCDC Service.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 52

As discussed in Section 7.2.2 of the Application, FBC installed two additional stations at the Naramata and Grand Forks sites in late 2021 (one additional station at each site), which were not identified in the Revised EV DCFC Application. Table 7-12 of the Application shows these two additional stations meet the criteria to be a prescribed undertaking under the GGRR. Including these two additional stations, there will be a total of 42 DCFC stations across 22 sites.

Due to flooding in 2021, FBC decided to relocate the two 50 kW DCFC stations originally intended for Keremeos and Princeton to Naramata and Grand Forks, so construction could be completed in 2021. The construction of the two stations at Keremeos and Princeton, which were already identified in the Revised EV DCFC Application and approved by Order G-215-21, were delayed to 2022, which explains the variance in capital expenditure between 2022 Approved and 2022 Projected as shown in Table 7-11 of the Application.

17.2 Please explain whether FBC expects the assessment of the new EV charging stations as prescribed undertakings under the GGRR will be assessed as part of this proceeding or as a part of the assessment report due December 31, 2022.

Response:

FBC believes that the new stations qualify as a prescribed undertaking under the GGRR. FBC considers it reasonable for this assessment to occur in the current Annual Review proceeding. FBC notes, as directed under BCUC Order G-341-21 and referenced in the preamble above, FBC is to include evaluation of any additional EV charging stations that were not originally identified in the Revised EV DCFC Service Application in FBC's Annual Review process.

17.3 Please confirm, or explain otherwise, that forecast costs and revenues for the 42 DCFC stations have been included as part of the 2023 rates.

17.3.1 If confirmed, please explain whether the two new stations are 100 kW or 50 kW stations and the impact to the revenue requirement and rates, if any.

17.3.2 If not confirmed, please explain: (i) why not; (ii) which stations are not included; (iii) when FBC plans to include these in its revenue requirement; and (iv) what the impact would be to 2023 rates if they were included.

Response:

Confirmed, the forecast costs and revenues for the 42 stations have been included as part of 2023 rates. As discussed in the response to BCUC IR1 17.1, the additional stations at Naramata

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 53

and Grand Forks were installed at the end of 2021 while the stations at Keremeos and Princeton (which were originally identified in the Revised EV DCFC Application), were delayed to the end of 2022 due to flooding in 2021. As such, the 2023 rates include the cost of service of the 40 stations already in-service and the two stations (Keremeos and Princeton) projected to be in-service by the end of 2022. The two new stations installed at the end of 2021 at Naramata and Grand Forks were 50 kW stations while the delayed stations at Keremeos and Princeton will be 100 kW stations.

For the two new 50 kW stations installed in 2021 at Naramata and Grand Forks, the incremental revenue requirement (including the offsetting revenue under RS 96) and the equivalent rate impact in 2023 is approximately \$35 thousand and 0.008 percent, respectively.

For the two delayed 100 kW stations expected to be installed by the end of 2022 at Keremeos and Princeton, the incremental revenue requirement and the equivalent rate impact in 2023 is approximately \$28 thousand and 0.007 percent, respectively.

For clarity, although the capital cost of a 100 kW charger is higher than a 50 kW charger, the sites at Naramata and Grand Forks required more capital expenditures for other site work such as electrical service, paving, lighting and signages, as such, the two delayed 100 kW stations to be installed at Keremeos and Princeton have a lower rate impact than the two new 50 kW stations at Naramata and Grand Forks.

17.4 Please confirm, or explain otherwise, that FBC will assess whether the levelized rate under RS 96 EV DCFC service needs to be recalculated as part of the assessment report due December 31, 2022.

17.4.1 If not confirmed, please explain when FBC expects to assess whether the levelized rate under RS 96 needs to be recalculated as a result of the two additional EV charging stations.

Response:

Confirmed. FBC will assess whether the levelized rate under RS 96 EV DCFC service needs to be recalculated as part of the assessment report due December 31, 2022. As referenced in the preamble, since the assessment report will include a review of the current levelized rate under RS 96, it would be inefficient to review the levelized rates in the current Annual Review proceeding and to be review them again in the assessment report which will be filed with the BCUC within three months.

18.0 Reference: EXISTING DEFERRAL ACCOUNTS

Exhibit B-2, Section 7.6.2.1, pp. 72–75

COVID-19 Customer Recovery Fund Deferral Account

On pages 72 to 73 of the Application, FBC provides continuity schedules for the 2020 and 2021 Actual, 2022 Projected, and 2023 Forecast for each of the three items approved by Order G-133-20 for inclusion in the COVID-19 Customer Recovery Fund Deferral Account:

(i) Bill payment deferral forecast amounts (Table 7-16);

(ii) Bill credits amounts (Table 7-17); and

(iii) Unrecoverable revenue amounts (Table 7-18).

On page 73 of the Application, FBC explains that the unrecoverable revenue portion of the COVID-19 Customer Recovery Fund Deferral Account “represents the amount of customer balances owing (i.e., accounts receivables) that are recognized as unrecoverable due to the COVID-19 pandemic. As such, these amounts are in excess of the normal course forecast bad debt expense that is recognized in index-based O&M.”

Related to unrecoverable revenues, in Footnote 51 on page 73 of the Application, FBC states:

The actual 2020 unrecoverable revenue additions of \$0.015 million consist of \$0.014 million of small commercial customer balances and \$0.001 million of residential customer balances. The actual 2021 unrecoverable revenue additions of \$0.054 million consist of \$0.004 million of small commercial customer balances and \$0.050 million of residential customer balances.

18.1 Please explain and provide a breakdown of the 2022 Projected unrecoverable revenue additions (\$0.325 million in Table 7-18) similar to that provided in Footnote 51 on page 73 of the Application. As part of the response, please discuss the driver(s) related to each of the small commercial customer and residential customer additions and explain FBC’s forecast methodology for each.

Response:

The 2022 Projected unrecoverable revenue additions of \$0.325 million consist of \$0.032 million of small commercial customer forecast balances and \$0.293 million of residential customer forecast balances.

The forecast addition of \$0.325 million for 2022 to the COVID-19 Customer Recovery Fund Deferral Account was based on the number of total customers with past due balances as of March 1, 2022, and findings from the pilot project completed in 2021. During the pilot, customers with past-due balances were contacted to determine whether the COVID-19 pandemic had influenced their ability to pay their outstanding balances. Of the customers contacted, 15 percent confirmed that they were financially impacted by COVID-19 and will require support to bring their accounts

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 55

1 into good standing. These customers, of which approximately 90 percent are residential
2 customers, had an average outstanding balance of \$1,100.

3 Please refer to the table below for the detailed calculation:

Line	Particulars	Notes
1	Total Customers Past Due at March 1, 2022	2,000
2	Estimated Percentage Unrecoverable	15% As determined based on pilot program customers contacts
3	Estimated Number of Customers	300 Line 1 x Line 2, rounded down to nearest hundred
4		
5	Average Outstanding Balance	\$ 1,100 Average outstanding account balance for customers in pilot group
6	Estimated Total Balance	\$000s 330 (Line 3 x Line 5) / 1,000
7	Less: Bill Payment Deferrals	\$000s \$ 5 Embedded in Line 6; however, already accounted for in the deferral account
8	Less: Rounding	\$000s
9	Estimated Unrecoverable Revenue Addition	\$000s \$ 325 Line 6 - Line 7 - Line 8
10		
11	Breakdown by Rate Class:	
12	Residential	\$000s 293 Allocation is equivalent to 90% residential and 10% small commercial based on
13	Small Commercial	\$000s 32 responses from the pilot program.

5
6
7
8 18.2 Please provide FBC's 2019 to 2021 Actual, 2022 Projected, and 2023 Forecast
9 bad debt expense as it relates to unrecoverable revenue from customers in the
10 normal course of business (i.e. not deemed unrecoverable due to COVID-19).

12 **Response:**

13 Please refer to the table below for the actual, projected and forecast bad debt expense amounts
14 for the years requested. These amounts do not include unrecoverable revenue due to the COVID-
15 19 pandemic as those amounts are included in the COVID-19 Customer Recovery Fund Deferral
16 Account.

17 **Table 1 - FBC Bad Debt Expense (\$ millions) – 2019 through 2023**

	2019 Actual	2020 Actual	2021 Actual	2022 Projected	2023 Forecast
Bad Debt Expense	0.543	0.539	0.630	0.451	1.221

18
19
20
21 On pages 74 to 75 of the Application, FBC states:

22 FBC does not anticipate any further additions to the deferral account after 2022
23 and proposes to commence amortization of the balance in the deferral account on
24 January 1, 2023 using a three-year amortization period. FBC considers a three-
25 year amortization period to be appropriate because it matches the number of years

during which the COVID-19 Customer Recovery Fund Deferral Account was active (i.e., 2020 through 2022). Should public health and economic conditions deteriorate significantly due to the resurgence of the COVID-19 pandemic later this year or in the future [...] FBC may seek BCUC approval again for deferral account treatment for the same purpose and reasons set out in the 2020 application.

18.3 Please discuss whether FBC considered any alternative amortization periods for the COVID-19 Customer Recovery Fund Deferral Account .

18.3.1 If yes, please discuss each of the alternatives considered and why they were rejected.

18.3.2 If not, please explain why not.

Response:

FBC considered amortization periods ranging from one year to five years, but ultimately determined that three years was the most reasonable. As Table 1 below shows, all of the amortization periods have a similar impact on rates, with the exception of the one-year period which is greater. FBC concluded that a three-year period achieved a good balance between minimizing 2023 rate pressure and requesting an overly long amortization period. Additionally, a three-year amortization period aligns well with the length of time the deferral account was active (i.e., the number of years that additions were recorded in the deferral account, which was 2020 through 2022).

Please refer to Table 1 below which shows the rate impact as well as changes to the proposed 2023 rate increase of 3.99 percent if the amortization period for the COVID-19 Customer Recovery Fund Deferral Account is one, two, four, or five years.

Table 1: Rate Impact and Changes to Proposed 2023 Rates of One to Five Year Amortization Periods for the COVID-19 Customer Recovery Fund Deferral Account

	Amortization Period				
	1 Year	2 Years	3 Years	4 Years	5 Years
Annual Rate Impact to 2022 Approved (%)	0.174%	0.092%	0.065%	0.051%	0.043%
Changes to Proposed 2023 Rate Increase (%)	0.110%	0.027%	0.000%	-0.014%	-0.022%
Proposed 2023 Rate Increase (%)	4.10%	4.02%	3.99%	3.98%	3.97%

18.4 Please provide the 2023 rate impact of the COVID-19 Customer Recovery Fund Deferral Account for each of the following amortization periods: (i) one-year and (ii) two-years.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 57

1 **Response:**

2 Please refer to the response to BCUC IR1 18.3.

3

4

5

6 18.5 Please confirm, or explain otherwise, that FBC is not requesting closure of the
7 COVID-19 Customer Recovery Fund Deferral Account.

8 18.5.1 If confirmed, please clarify whether FBC will seek BCUC approval again
9 for deferral account treatment should further additions related to the three
10 items approved for inclusion in the COVID-19 Customer Recovery Fund
11 Deferral Account be needed and if not, please explain why not.

12 18.5.2 If not confirmed, please explain why not.

13

14 **Response:**

15 Confirmed. Due to the uncertainty related to the potential for a deterioration in public health or
16 economic conditions due to a resurgence in COVID-19, FBC is not requesting closure of the
17 COVID-19 Customer Recovery Fund Deferral Account in this Application. FBC confirms that, if in
18 the future this deferral account is once again required to record the three items approved by Order
19 G-133-20 (i.e., unrecovered revenue, bill payment deferrals, and bill credits due to the COVID-19
20 pandemic), FBC would seek approval from the BCUC to recover any amounts recorded in the
21 account.

22

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 58

19.0 Reference: NEW DEFERRAL ACCOUNTS

Exhibit B-2, Section 7.6.1.1, p. 69, Section 7.6.2.1.1, p. 71; FBC 2018 Annual Review for Rates Decision and Order G-38-18, Directive 3

Joint Pole Use Audit Rate Base Deferral Accounts

On page 69 of the Application, FBC states:

Consistent with past treatment of costs for joint pole use audits, FBC is seeking approval to establish a rate base deferral account to capture costs incurred for the 2023 Joint Use Pole Audit, which are estimated at \$0.435 million (\$0.318 million after tax) to be incurred in 2023.

FBC is also requesting approval to amortize these costs over a five-year period beginning January 1, 2023, which represents the time period between the required audits. *[Emphasis added]*

On page 71 of the Application, for Item X on Table 7-15, FBC states: “Rate base deferral accounts are included in rate base and are therefore implicitly financed using the weighted average cost of capital (WACC).” *[Emphasis added]*

In Directive 3 of Order G-38-18, the BCUC stated: “The following non-rate base deferral accounts and corresponding financing charges as described in the Application are approved as filed: [...] 2018 Joint Use Pole Audit, financed at FBC's [Weighted Average Cost of Debt] WACD.” *[Emphasis added]*

19.1 Given that the 2018 Joint Use Pole Audit Deferral Account was approved as a non-rate base deferral account financed at FBC's WACD, please explain why FBC requests that the 2023 Joint Use Pole Audit Deferral Account be approved as a rate base deferral account financed at FBC's WACC.

19.1.1 Please provide the rate impact if the requested deferral account were approved as a non-rate base account, financed at FBC's WACD.

Response:

FBC clarifies that the statement from the Application “Consistent with past treatment of costs for joint pole use audits...” referenced in the above preamble was meant to convey that the request is consistent with the past treatment of capturing the costs for joint pole use audits in a deferral account, not specific to whether the deferral account is rate base or non-rate base.

FBC requests approval to capture these costs in a rate base deferral account because this is the most appropriate treatment for deferred costs and is consistent with the approved treatment of FBC's deferral accounts established in recent years, including for all new deferral accounts requested in the 2020-2021 Annual Review and the 2022 Annual Review.

In the FBC 2020-2021 Annual Review Decision and Order G-42-21 (page 22) the BCUC stated:

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 59

FBC incurs costs to finance its deferral accounts. A deferral account creates a timing difference between when funds are spent and when those costs are returned to or recovered from ratepayers, and that timing difference leads to financing costs for the utility. Rate base treatment is comparable to other circumstances where FBC's recovery of costs are deferred, such as capital expenditures included in rate base as well as a working capital component. The Panel accepts FBC's justification for rate base treatment for these deferral accounts since it results in the amounts expended on behalf of customers being financed for rate making purposes at the same rate they are financed by the utility. Furthermore, rate base treatment is consistent with recent BCUC decisions, including the MRP Decision as well as the FEI 2020-2021 Annual Review Decision, which is based on the same MRP Decision. [Emphasis added]

Consistent with the determination above, and as FBC stated in the response to BCOAPO IR1 27.1 in the 2020-2021 Annual Review proceeding, FBC plans to request rate base treatment for new deferral accounts in most circumstances.

The costs FBC forecasts to incur for the 2023 audit of the joint use pole agreements will be financed, for rate-making purposes, at the same rate as they are financed by the utility. As such, and as stated by the BCUC Panel in the FBC 2020-2021 Annual Review Decision, a rate base deferral account for the 2023 joint pole use audit is the appropriate treatment.

FBC also notes that the difference between rate base treatment and non-rate base treatment financed at WACD for the forecast costs of the 2023 joint pole use audit is small. Please refer to Table 1 below which shows that the difference in terms of the levelized rate impact (when compared to the 2022 Approved rates) over the five-year amortization period between the two treatments is only 0.001 percent, and there is no change to the proposed 2023 rate increase of 3.99 percent when rounded to two decimal places.

Table 1: Comparison of the Rate Impact for the 2023 Joint Pole Use Audit Deferral Account between Rate Base Treatment and Non-Rate Base Treatment Financed at WACD

	Rate Base deferral	Non-Rate Base Deferral @ WACD
Levelized Rate Impact, 5-year (%)	0.024%	0.023%
2023 Incremental Revenue Requirement (\$000s)	97	87
Changes to Proposed 2023 Rate Increase (%)	0%	-0.002%
Proposed 2023 Rate Increase (%) - Rounded to two decimal places	3.99%	3.99%

G. FINANCING AND RETURN ON EQUITY

20.0 Reference: FINANCING AND RETURN ON EQUITY

Exhibit B-2, Section 8.3.3, pp. 77–79

Interest Rate Forecast

On pages 78 to 79 of the Application, FBC states:

FBC plans to issue additional long-term debt of approximately \$75 million in 2023[...]. The 2023 debt issuance is reflected in the financial schedules in July 2023 at a rate of 4.90 percent.

[...]

FBC is in a rising interest rate environment due to high inflation, Russia's invasion in Ukraine, and the removal of monetary policy actions that were prevalent during the initial years of the COVID-19 pandemic (i.e., 2020 and 2021). In addition, on July 13, 2022 the Bank of Canada completed its fourth rate hike of the year, raising the benchmark interest rate to 2.5 percent from 0.25 percent at the beginning of 2022 and signalling that more rate hikes will be announced in 2022. The market volatility is expected to persist given many ongoing elevated risk variables.

20.1 Given the rising interest rate environment, please discuss the alternatives available, if any, to manage interest expense and financing costs in consideration of FBC's plans to issue long-term debt of approximately \$75 million in 2023. Are there options available to FBC which would allow it to forgo issuing the long-term debt or to issue a smaller amount?

Response:

Broadly speaking, FBC has two ways to mitigate the impact of a rising interest rate environment: greater reliance on its low-cost commercial paper program and, under certain circumstances, issuing long-term debt at shorter tenors.

FBC's last long-term debt issuance was completed in March 2022 and since then FBC has been utilizing its Credit Facility to support its commercial paper program, which is a low-cost and flexible approach to raising financing. FBC has currently more than \$60 million drawn on its Credit Facility, which is adequate; however, FBC's funding needs are expected to exceed its Credit Facility capacity of \$150 million over the next 12 months at which point FBC will need to issue long-term debt. As noted in the Application, FBC is not planning to complete any more debt issuances this year and the next debt issuance is planned for 2023. The exact timing, amount and rate of the 2023 issuance will depend on future market conditions which are difficult to predict so far in advance. In circumstances where the issuance rate of long-term debt at shorter tenors will be markedly lower than rates at longer tenors, FBC will consider issuing shorter tenor bonds such as 5-, 7- and 10-year maturities compared to 30 years to mitigate the impact of higher borrowing rates.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 61

20.2 Please provide the sensitivity of the 2023 forecast financing costs and proposed 2023 rates to a +1 percent to +3 percent rise in interest rates.

Response:

FBC has interpreted this question as asking for the impact of a 1 percent, 2 percent, and 3 percent rise in both the 2023 short-term debt rate and the 2023 forecast long-term debt issuance rate.

The 2023 financing costs are currently forecast to increase by \$8.448 million and the proposed rate increase is 3.99 percent.

1. An increase of 1 percent would increase the change in 2023 financing costs to \$9.737 million and increase the proposed rate increase to 4.31 percent.
2. An increase of 2 percent would increase the change in 2023 financing costs to \$11.025 million and increase the proposed rate increase to 4.62 percent.
3. An increase of 3 percent would increase the change in 2023 financing costs to \$12.308 million and increase the proposed rate increase to 4.94 percent.

In Section 11 of the Application, FBC shows Schedule 27 – Embedded Cost of Long-Term Debt, which has been reproduced in part below:

FORTISBC INC.				FBC Annual Review for 2023 Rates - August 5, 2022			Section 11
EMBEDDED COST OF LONG TERM DEBT FOR THE YEAR ENDING DECEMBER 31, 2023 (\$'000s)							Schedule 27
Line No.	Particulars (1)	Issue Date (2)	Maturity Date (3)	Average Principal Outstanding (4)	Interest Rate (5)	Interest Expense (6)	Cross Reference (7)
10	2023 Debt Issue - MTN - 23	July 1, 2023	July 1, 2053	37,808	4.900%	1,853	

20.3 Please clarify whether FBC plans to issue long-term debt of approximately \$75 million in 2023 as discussed on pages 78 to 79 of the Application, or \$37,808,000 in 2023 as reflected in Lines 10 in Schedule 27.

Response:

FBC plans to issue long-term debt of \$75 million in 2023. The \$37.808 million reflected for 2023 on Line 10 of Schedule 27 is the average balance outstanding for the year. If the debt is issued

on July 1, 2023, the average balance is calculated as $((365 \text{ days} - 181 \text{ days}) / 365 \text{ days}) * \$75 \text{ million} = \$37.808 \text{ million}$.

On pages 79 to 80 of the Application, FBC states:

FBC's interest rate forecasts are based on CDOR [Canadian Deposit Overnight Rate]. [...] CDOR's regulated administrator announced that CDOR will cease to be published after June 28, 2024. The Canadian Alternative Reference Rate Working Group (CARR) was established to coordinate the transition to a new risk-free rate benchmark. It is anticipated that CDOR will transition to the Canadian Overnight Repo Rate Average (CORRA), a transaction-based overnight risk-free interest rate benchmark in existence since 1997. FBC will work with its banking syndicate

members to transition its credit facility agreement to CORRA and will revisit the methodology for short-term interest rate forecasting when such a transition is complete.

20.4 Please explain whether there are any expected costs to FBC associated with the transition from CDOR to CORRA and if so, please provide an estimate of the expected cost and impact on rates.

Response:

FBC does not expect any material costs related to transitioning from CDOR to CORRA. While FBC will need to incur legal fees to amend the credit facility agreement to incorporate CORRA, FBC would plan to group that amendment with other regularly scheduled amendments to the agreement, which should result in no material incremental legal costs as a result of the transition.

However, there are still some uncertainties with the new benchmark, such as whether the CORRA rate is needed in Canada. If the results of the public consultation show a strong need for such a rate, and the creation of a 1- and 3-month term CORRA is determined to be feasible, the rate could begin to be published by the end of Q3 2023.¹³ While FBC expects that the transition to a new benchmark will not result in any material cost, some of the intricacies of the new benchmark are still being worked through by the Bank of Canada and CARR. As discussed in the Application, CDOR rates will be calculated and published until June 28, 2024, at which point all loan agreements in Canada will transition to the new benchmark.

¹³ [Recommended fallback language for loans referencing CDOR \(bankofcanada.ca\).](https://www.bankofcanada.ca/recommended-fallback-language-for-loans-referencing-cdor/)

21.0 Reference: FINANCING AND RETURN ON EQUITY

Exhibit B-2, Section 8.3.3, Table 8-1, pp. 79; FBC 2022 Annual Review proceeding, Exhibit B-3, BCUC IR 21.2

Other Financing Fees

On page 79 of the Application, FBC provides Table 8-1, which is reproduced in part below and states:

For 2023, FBC forecasts a similar level of other financing fees to the 2022 Approved amount. [Emphasis added]

Table 8-1: Short Term Interest Rate Forecast

FBC Short Term Interest Rate	Approved 2022	Projected 2022	Forecasted 2023
Fixed Financing Fees ²			
Standby fee on Undrawn Credit ³	0.44%	0.39%	0.44%
Renewal Fee on Undrawn Credit	0.17%	0.11%	0.12%
Other Financing Fees	0.26%	0.35%	0.44%
ST Interest Rate on Fixed Financing Fee	0.87%	0.84%	1.00%

Notes to Table:

¹ 3-Month T-Bill Rate for 2023 is a weighted average rate based on forecasts provided by Canadian Chartered banks in July 2022.

² Fixed financing fees represent the costs of maintaining the \$150 million credit facility and letter of credit facility, which are fixed fees incurred regardless of whether FBC draws from the credit facility. The fees have been converted into a short-term rate for forecast purposes.

In response to BCUC IR 21.2 in the 2022 Annual Review proceeding, FBC stated:

FBC converts the fixed financing fees from dollar amounts into rates for rate-setting purposes. The formula for the rate conversion is shown as below:

Short-term Interest Rate on Fixed Financing Fees = Fixed Financing Fees / Average Short-term Debt Balance

21.1 Given that FBC forecasts a similar level of other financing fees to the 2022 Approved amount, please provide the calculation and dollar amounts that result in other financing fees increasing from 0.26 percent in the 2022 Approved to 0.44 percent in the Forecasted 2023.

Response:

The table below shows the calculation and dollar amounts for the other financing fees rate. The higher 2023 Forecast rate is the result of a higher prime loan interest rate used for the interest on customer deposits, in which the customer deposit balances are kept at a similar level compared to 2022 Approved. For clarity, FBC collects security deposits from certain customers as required and accrues interest payable to those customers at the prime rate of FBC's bank. Those interest expenses are then converted into a rate by dividing the total forecast expenses by the forecast short-term debt balance. Without including this forecast rate applicable to these interest expense costs within Table 8-1 in the Application, the interest expense costs would otherwise be excluded from the calculation of customer rates.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 64

	Approved 2022	Forecasted 2023	
Fixed Financing Fee			
Short-Term Debt Issuance fees	5	5	
Letter of credit fees	2	2	
Customer deposit interest expense ¹	225	390	
Total Fixed Financing Fee	232	397	
Short Term Debt Balance	88,932	91,081	per Schedule 26 line 2, column 3
Convert to Short-Term Debt Rate	0.26%	0.44%	

Note to Table:

1. Calculated based on the forecast prime loan interest rates for the 2022 and 2023 Annual Reviews, which are 2.45 percent and 4.70 percent, respectively, multiplied by the 2022 and 2023 forecast average balance of customer deposits received by FBC. The interest on customer deposits is not associated with the short-term debt balance used to finance rate base; however, it is a part of interest expense. Consequently, FBC converts the customer deposit interest expense into a rate and this rate is included within the short-term debt rate in Table 8-1 for Annual Review purposes.

1 **H. TAXES**

2 **22.0 Reference: TAXES**

3 **Exhibit B-2, Section 9.2, pp. 81–82**

4 **Property Taxes**

5 On pages 81 to 82 of the Application, FBC outlines that tax rates pertaining to municipal,
6 school, rural and other rates are expected to change in 2023 (e.g. increase or decrease).

7 22.1 Please provide the rationale for the expected increases and decreases in tax rates
8 as described on pages 81 to 82 of the Application.

9
10 **Response:**

11 The 2023 Forecast changes in tax rates are determined based on the following:

- 12 • Municipal tax rates are set individually by each municipality, on an annual basis. Changes
13 to the municipal assessment base, changes in the classification of actual properties,
14 and/or budget requirements can drive changes to municipal tax rates. FBC used the
15 compounded average annual growth rate from 2016 to 2021 to forecast the percentage
16 changes in municipal tax rates.
- 17 • School tax rates and rural general rates are set annually by the provincial government.
18 FBC used the compounded average annual growth rate from 2016 to 2021 to forecast the
19 percentage changes in school tax and rural general tax rates.
- 20 • First Nations tax rates are set by each First Nation Band Council and approved by the
21 First Nations Tax Commission. Typically, First Nations base their tax rate on the rate
22 charged by a neighbouring municipality. FBC used the compounded average annual
23 growth rate from 2016 to 2021 to forecast the percentage change in First Nations tax rates.
- 24 • Other tax rates are an amalgamation of six or more tax rates that are set by varying
25 authorities with taxation powers including, but not limited to, regional districts, hospital
26 districts, transit, BC Assessment, the Municipal Finance Authority, Police taxes, special
27 benefiting areas, parcel taxes, etc., that may be levied on a property tax folio. FBC used
28 the compounded average annual growth rate from 2017 to 2021 to forecast the
29 percentage change in other taxes.

30

31

32

33 Further on page 81 of the Application, FBC states: "... in 2023 property taxes are forecast
34 to increase by 2.1 percent from 2022 Approved and increase by 3.6 percent compared to
35 2022 Projected. In general, the 2023 increase from 2022 Projected is due to construction
36 activities, market value changes, and changes in tax policies of local taxing authorities."

22.2 Please provide a breakdown of the forecast increase in property taxes from construction activities, including a description of these activities, market value changes, and changes in tax policies of local taxing authorities.

Response:

FBC provides the following breakdown of the incremental new taxes between 2022 Projected and 2023 Forecast:

Table 1: Breakdown of Incremental New Property Taxes (\$000s)

Tax Rate	In-Lieu	Construction Activity	Market Value Changes	Tax Policy	Total
General Taxes	\$ 173	\$ 1	\$ 165	\$ 35	\$ 375
School Taxes	-	7	260	(93)	174
Other Taxes	-	2	163	(75)	90
Total Taxes	\$ 173	\$ 10	\$ 589	\$ (133)	\$ 639

In-lieu taxes are paid on certain improvements, other than buildings that are used solely within a municipality or group of adjoining municipalities for local generation, transmission or distribution. These improvements are exempted from general municipal taxes and tax is paid based on 1 percent of revenues from gas consumed within the municipality in-lieu of the general municipal taxes.

Construction activities consist of new distribution lines, which FBC is required to report annually to BC Assessment. For the 2023 assessment year, additions are expected to add approximately \$10 thousand in new taxes.

The *Assessment Act* requires BC Assessment to determine the “actual value” of all assessable property in the Province. Most commonly, market value is defined as the fee simple interest in land and improvements, but also includes properties such as dams, substations and power lines, which are valued using legislated rates because they do not normally trade in the market. The breakdown is reflected in the “Changes to Assessed Values” section on page 82 of the Application.

Tax policy is reflected in the “Changes in Tax Rates” section on pages 81 and 82 of the Application, and are set based on the legislated authority given to the particular taxation authority. These authorities include:

- Community Charter and Local Government Act (for municipalities);
- School Act (school taxes);
- Taxation (Rural Area) Act (rural general tax rates);
- Regional District Act (regional districts);
- Hospital District Act (hospitals);
- British Columbia Transit Act (transit); and

- Assessment Authority Act (BC Assessment).

Further on page 82 of the Application, FBC states that forecast changes in the assessed values of FBC's property include the following:

- a) A 5.2 percent increase in assessed values of distribution lines and a 2.5 percent increase in transmission lines;
- b) A 2.5 percent increase in assessed values for generating facilities calculated using legislated cost manuals for valuing generating facilities;
- c) A 0.5 percent decrease in assessed values for substations calculated using legislated cost manuals for valuing substations; and
- d) Land values are expected to increase between 4.3 percent to 11.4 percent for right of ways and properties owned in fee simple.

22.3 Please provide the rationale for the expected increases and decreases in assessed values as described on page 82 of the Application.

Response:

FBC's expectations for the forecast increases and decreases in assessed values are based on the compounded average annual growth rate (CAGR) over the period from 2016 to 2022, with certain adjustments where applicable. FBC further breaks down and describes the changes in annual assessed values for each property category below.

Distribution Lines

Assessment values on improvements have increased from \$148.3 million in 2016 to \$179.7 million in 2022, a compounded average growth rate of 3.2 percent. FBC included an additional 2.0 percent forecast increase based on additional expected costs due to inflation and supply chain issues, resulting in the forecast 5.2 percent increase in distribution lines assessed values.

Year	Average Distribution Line Improvements	% Change
2022	179,703,600	2.1%
2021	175,965,600	3.0%
2020	170,826,800	4.5%
2019	163,495,100	3.8%
2018	157,489,600	1.7%
2017	154,909,300	4.4%
2016	148,311,000	

1 **Transmission Lines**

2 Assessment values on improvements increased from \$74.3 million in 2016 to \$86.0 million in
3 2022, a compounded average growth rate of 2.46 percent. From 2016 to 2022, increases in
4 transmission lines appear more muted than distribution lines and therefore no additional factoring
5 was applied.

Year	Total Transmission Line Improvements	% Change
2022	85,980,300	1.5%
2021	84,689,300	4.0%
2020	81,411,000	3.3%
2019	78,793,400	2.4%
2018	76,968,100	1.1%
2017	76,161,900	2.5%
2016	74,326,000	

7 **Generation Facilities**

8 Assessment values on improvements increased from \$99.1 million in 2016 to \$113.1 million in
9 2022, a compounded average growth rate of 2.23 percent. FBC rounded this up to 2.5 percent
10 for the purposes of the 2023 Forecast.

Year	Total Generation Improvements	% Change
2022	113,119,000	2.8%
2021	110,090,000	2.8%
2020	107,126,900	2.7%
2019	104,326,100	2.4%
2018	101,906,500	1.8%
2017	100,125,400	1.0%
2016	99,111,100	

12 **Substations**

13 Improvement values have decreased from \$112.8 million in 2016 to \$111.4 million in 2022, a
14 decrease in the compounded average growth rate of 0.20 percent. For the 2023 Forecast, FBC
15 assumed that substations would increase by 0.50 percent when accounting for increased
16 inflationary pressures, but that this would be offset by additional depreciation of around 1 percent,
17 thus arriving at the 0.50 percent decrease.

Year	Total Substation Improvements	% Change
2022	111,422,100	-4.6%
2021	116,802,768	0.5%
2020	116,226,996	-0.2%
2019	116,423,046	3.9%
2018	112,042,842	-2.1%
2017	114,474,407	1.5%
2016	112,800,000	

Land

In 2022, land values represented about 11.9 percent of the total assessment value. The forecast for land values relies on the compounded average compounded growth rates of actual assessed land values from 2017 to 2022.

	2017	2018	2019	2020	2021	2022	Compounded Average Growth Rate
Generation	2,368,500	2,682,700	2,759,500	2,788,300	3,012,800	3,612,900	8.81%
Distribution Lines	2,200,027	2,003,336	2,153,248	2,321,457	2,602,288	2,717,075	4.31%
Transmission Lines	17,316,825	18,042,916	19,276,800	20,338,865	21,696,427	22,456,960	5.34%
Substations	20,625,100	22,675,400	24,883,900	26,684,500	27,617,000	31,165,400	8.61%
Offices	6,840,800	7,277,600	7,583,300	8,246,500	8,395,600	9,534,100	6.86%
Other	564,477	552,980	554,486	576,992	684,995	968,699	11.41%

22.4 Please provide the sensitivity of the assessed values of FBC's property to (i) a +/- 1 percent change in interest rates, and (ii) general real estate market conditions.

Response:

FBC land and property assessments are subject to changes that affect the local real estate market in the areas they are located. As such, as interest rate changes affect the value of property in a given taxing jurisdiction, FBC's valuations would likewise be affected. For example, if a 1 percent decrease in interest rates increases demand for real estate in a market segment, FBC would expect prices in that segment to increase. This increase in prices will increase assessments (since assessment data is based, in part, on market transaction data) in that segment. Similarly, FBC would expect that a 1 percent increase in interest rates would have the effect of reducing demand and putting downward pressure on prices, therefore decreasing assessed values. If FBC has assessable property in that segment, it is expected that FBC's assessments would be reflected accordingly. However, FBC cannot provide a direct correlation between a specific change in interest rates (i.e., +/- 1 percent) to a specific change in the assessed values of FBC's property.

23.0 Reference: TAXES

Exhibit B-2, Section 9.3, p. 82

Income Tax

On page 82 of the Application, FBC states:

Income tax for 2023 is forecast to decrease by \$1.494 million or 19.9 percent compared to 2022 Approved. The 2023 Forecast decrease is primarily due to higher deductible temporary differences associated with amortization of deferred charges and property, plant and equipment, and lower taxable temporary differences associated with pension and OPEB, partially offset by higher rate base.

23.1 Please provide a breakdown of the 2023 forecast deductible temporary differences by the items noted on page 82 (i.e. amortization of deferred charges and property, plant and equipment, pension, and other post-employment benefits (OPEB)).

Response:

The amounts and explanations provided on page 82 of the Application are based on the amounts provided in the financial schedules in Section 11, Schedule 24 of the Application. For the variance explanation on page 82 of the Application, FBC grouped the amounts on Schedule 24 into the following categories shown in the table below.

		Change per Schedule 24, Column 4	Taxable Income Change ¹	Tax Rate	Change in Tax	
Earned Return Less Interest on Debt		3,387	4,640	27%	1,253	Schedule 24, Line 1 + Line 2, Column 4
Depreciation	2,752					Schedule 24, Line 18, Column 4
Capital Cost Allowance	(3,456)					Schedule 24, Line 25, Column 4
CIAC amortization	(210)					Schedule 24, Line 26, Column 4
Overheads Capitalized Expensed for Tax Purpose	(741)					Schedule 24, Line 29, Column 4
Total Taxable Temporary Differences Associated with Property, Plant and Equipment		(1,655)	(2,267)	27%	(612)	
Pension Expense	(612)					Schedule 24, Line 21, Column 4
OPEB Expense	(488)					Schedule 24, Line 22, Column 4
Pension Contribution	216					Schedule 24, Line 27, Column 4
OPEB Contribution	(50)					Schedule 24, Line 28, Column 4
Total Taxable Temporary Differences Associated with Pension and OPEB		(934)	(1,279)	27%	(345)	
Deductible Temporary Differences Associated with Amortization of Deferred Charges		(4,835)	(6,623)	27%	(1,788)	Schedule 24, Line 19, Column 4
		(4,037)	(5,530)		(1,493)	

¹ Taxable Income Change is equal to Change x (1-current tax rate @ 27%)

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 71

I. EARNING SHARING

24.0 Reference: EARNING SHARING

Exhibit B-2, Section 10, p. 84; FBC Annual Review of 2022 Rates, Decision and Order G-374-21 dated December 15, 2021 (FBC 2022 Annual Review Decision), p. 17

Earnings Sharing

On page 84 of the Application, FBC states:

Since FBC is unable to determine final earnings sharing until all items required for the ROE calculation are known, ... there is a lag in when FBC distributes earnings sharing amounts. [...] Thus, for 2023 rates, it is the 2021 formula O&M and 2021 earnings sharing amounts that are calculated and impact rates in 2023.

[...] FBC proposes to distribute \$0.911 million to customers in 2023 as a reduction in 2023 revenue requirements through amortization of the projected 2023 opening after-tax balance of \$0.665 million in the MRP Earnings Sharing deferral account.

On Page 17 of the FBC 2022 Annual Review Decision, the BCUC stated:

The Panel notes that FBC did not request any approvals related to using the Earnings Sharing Deferral Account to record one-half of the revenue deficiency resulting from either the 2020 Error or 2021 Error as FBC submits that these amounts are subject to sharing in accordance with the ESM as approved in the MRP Decision [...] FBC has confirmed that it has already accounted for the 2020 Error in the calculation of the earnings sharing component in the proposed 3.46 percent rates increase for 2022. The Panel finds that FBC's proposed treatment of the 2020 Error is reasonable and consistent with the broad language of the ESM as approved in the MRP Decision. While the earnings sharing component of the 2020 Error is amortized in 2022 rates, the Panel notes that the earnings sharing for 2021 will be subject to BCUC assessment in a future Annual Review as it does not form part of rates for 2022. [*Emphasis added*]

24.1 Please confirm, or explain otherwise, that the 2021 Error, as discussed in the 2022 Annual Review Decision, is included in the after-tax balance of \$0.665 million in the MRP Earnings Sharing deferral account in the same manner as the 2020 Error was included in 2022 rates.

24.1.1 If not confirmed, please explain why not and where the 2021 Error is included, if at all.

Response:

Confirmed. To be clear, the 2021 portion of the cost of removal error would be reflected as part of the rate base variance between approved and actual on Line 23 of page 26.2 of FBC's 2021 Annual Report for the purpose of calculating the 2021 earnings sharing amount. FBC also clarifies

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 72

1 that, as approved by Order G-374-21, FBC is “to capture the revenue deficiency resulting from
2 the 2021 Error, which is not already recorded in the Earnings Sharing Deferral Account from
3 August 6, 2021 (the date of filing of this Annual Review Application) to December 31, 2021, and
4 to amortize that amount in FBC’s 2022 rates.” As such, the portion of the 2021 Error that would
5 be reflected in the rate base variance will naturally become part of the 2021 earnings sharing
6 calculation. Only the portion of the 2021 Error that is not recovered through earnings sharing is
7 captured in the new non-rate base deferral account for recovery in 2022.

1 **J. FINANCIAL SCHEDULES**

2 **25.0 Reference: FINANCIAL SCHEDULES**

3 **Exhibit B-2, Section 11, Schedules 11–12**

4 **Unamortized Deferred Charges and Amortization**

5 FBC includes in Section 11 of the Application: Schedule 11 (Unamortized Deferred
6 Charges and Amortization – Rate Base) and Schedule 12 (Unamortized Deferred Charges
7 and Amortization – Non-Rate Base).

8 25.1 In the same format as provided in Schedules 11 and 12 in Section 11 of the
9 Application, please provide the previous years' information on unamortized
10 deferred charges by starting with the actual 2021 ending deferral account balances
11 (i.e. 12/31/2021) and including the projected 2022 deferral account additions and
12 the projected 2022 amortization to arrive at the projected ending balances (i.e.
13 12/31/2022) as shown in column (2) of Schedules 11 and 12, respectively.

14
15 **Response:**

16 Please refer to Attachment 25.1 for the projected deferral continuity schedules for the year ending
17 December 31, 2022.

18

1 **K. ACCOUNTING MATTERS**

2 **26.0 Reference: ACCOUNTING MATTERS AND EXOGENOUS FACTORS**

3 **Exhibit B-2, Section 12.2.1, pp. 120–122**

4 **COVID-19 Pandemic**

5 On pages 121 to 122 of the Application, FBC seeks a variance to Directive 6 of Order G-
6 42-21 such that FBC is approved to record COVID-19 incremental costs and related
7 savings from 2020 and 2021 into the Flow-through deferral account, rather than the
8 COVID-19 Customer Recovery Fund Deferral Account, for the following reasons:

- 9 1. It is consistent with the treatment of other exogenous items;
- 10 2. It will allow the O&M reported in the Annual Reports to be more reflective of the
11 actual amounts incurred, as using the Flow-through deferral account does not
12 result in direct adjustments to O&M, but rather one catch-all account for all flow-
13 through adjustments. Alternatively, transferring the actual O&M savings directly to
14 the COVID-19 Customer Recovery Fund Deferral Account would result in those
15 O&M actual amounts being effectively booked back to the forecast amounts; and
16 *[Emphasis added]*
- 17 3. The COVID-19 incremental savings will be returned to customers immediately in
18 2023, as opposed to over three years, which is the amortization period being
19 proposed for the COVID-19 Customer Recovery Fund Deferral Account in Section
20 7.6.2.1.

21 On pages 120 to 121 of the Application, FBC states:

22 The variances for the 2020 and 2021 net incremental O&M (costs less cost
23 reductions) total to a net decrease of approximately \$1.03 million. Accordingly,
24 FBC requests approval to return the exogenous factor savings of \$1.03 million to
25 customers in 2023 [...].

26 26.1 With reference to the two approaches in the statements below, please provide
27 sample journal entries in 2020, 2021 and 2023 for each approach as it relates to
28 the 2020 and 2021 direct costs and cost reductions. Please specify what accounts
29 (i.e. the COVID-19 Customer Recovery Fund Deferral Account, Flow-through
30 deferral account, or other) are debited and credited in each journal entry in order
31 to explain the difference between the two approaches.

- 32 (i) “Using the Flow-through deferral account does not result in direct
33 adjustment to O&M or Late Payment Charge Revenue, but rather one
34 catch-all account for all flow-through adjustments”; and
- 35 (ii) “Alternatively, transferring the actual O&M savings or Late Payment
36 Charge shortfall directly to the COVID-19 Customer Recovery Fund
37 Deferral Account would result in those respective O&M and Other Revenue
38 actual amounts being effectively booked back to the forecast amounts.”

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 75

26.1.1 Please explain why the respective O&M actual amounts would not need to be adjusted with the Flow-through deferral account approach.

Response:

Please see the requested journal entries below, including the journal entries for 2022 to show the full continuity of the actual and expected adjustments. FBC has also included the related tax and earnings sharing journal entries to demonstrate how customers are held whole under either scenario.

As the two scenarios demonstrate, the journal entries for 2020 and 2021 are the same, and only begin to deviate in 2022 as a result of either using the Flow-through deferral account or the COVID-19 Customer Recovery Fund Deferral Account. In reviewing the summary account balances at the end of each scenario, specifically for O&M, it is evident that in Scenario 1, the cumulative balances from 2020-2023 reflect the actual O&M cost reductions (shown in Table 12-1 in the Application) while in Scenario 2, the actual cumulative balance is zero, effectively meaning the O&M account would be booked back to the cumulative approved amount for this exogenous item.

FBC believes using the Flow-through deferral account approach is more advantageous as the account will reflect actual activity over the years, rather than approved, which provides a more accurate basis for future rate-setting applications.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 76

1

(\$millions)	Scenario 1 - Using the Flowthrough Deferral Account		Scenario 2 - Using the COVID-19 Customer Recovery Fund Deferral Account	
2020 Journal Entries	DR Formula O&M Expense (shared)	\$ 0.944	DR Formula O&M Expense (shared)	\$ 0.944
	CR Cash	\$ (0.944)	CR Cash	\$ (0.944)
	<i>To record actual direct O&M costs</i>		<i>To record actual direct O&M costs</i>	
	DR Cash	\$ 1.046	DR Cash	\$ 1.046
	CR Formula O&M Expense (shared)	\$ (1.046)	CR Formula O&M Expense (shared)	\$ (1.046)
	<i>To recognize O&M cost reductions</i>		<i>To recognize O&M cost reductions</i>	
	DR Tax Expense (shared)	\$ 0.028	DR Tax Expense (shared)	\$ 0.028
	CR Taxes Payable	\$ (0.028)	CR Taxes Payable	\$ (0.028)
	<i>To record tax @ 27% on the two entries above</i>		<i>To record tax @ 27% on the two entries above</i>	
	DR Other Revenue-Earnings Sharing	\$ 0.037	DR Other Revenue-Earnings Sharing	\$ 0.037
	CR Earnings Sharing Deferral	\$ (0.037)	CR Earnings Sharing Deferral	\$ (0.037)
	<i>To record earnings sharing on the three entries above</i>		<i>To record earnings sharing on the three entries above</i>	
2	DR Earnings Sharing Deferral	\$ 0.010	DR Earnings Sharing Deferral	\$ 0.010
	CR Taxes Payable	\$ (0.010)	CR Taxes Payable	\$ (0.010)
	<i>To record the Earnings Sharing Deferral net-of-tax</i>		<i>To record the Earnings Sharing Deferral net-of-tax</i>	

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 77

1

2021 Journal Entries	DR Formula O&M Expense (shared)	\$ 0.362	DR Formula O&M Expense (shared)	\$ 0.362
	CR Cash	\$ (0.362)	CR Cash	\$ (0.362)
	<i>To record actual direct O&M costs</i>		<i>To record actual direct O&M costs</i>	
	DR Cash	\$ 1.290	DR Cash	\$ 1.290
	CR Formula O&M Expense (shared)	\$ (1.290)	CR Formula O&M Expense (shared)	\$ (1.290)
	<i>To recognize O&M cost reductions</i>		<i>To recognize O&M cost reductions</i>	
	DR Tax Expense (shared)	\$ 0.250	DR Tax Expense (shared)	\$ 0.250
	CR Taxes Payable	\$ (0.250)	CR Taxes Payable	\$ (0.250)
	<i>To record tax @ 27% on the two entries above</i>		<i>To record tax @ 27% on the two entries above</i>	
	DR Other Revenue-Earnings Sharing	\$ 0.339	DR Other Revenue-Earnings Sharing	\$ 0.339
2022 Journal Entries	CR Earnings Sharing Deferral	\$ (0.339)	CR Earnings Sharing Deferral	\$ (0.339)
	<i>To record earnings sharing on the three entries above</i>		<i>To record earnings sharing on the three entries above</i>	
	DR Earnings Sharing Deferral	\$ 0.092	DR Earnings Sharing Deferral	\$ 0.092
	CR Taxes Payable	\$ (0.092)	CR Taxes Payable	\$ (0.092)
	<i>To record the Earnings Sharing Deferral net-of-tax</i>		<i>To record the Earnings Sharing Deferral net-of-tax</i>	
	DR Formula O&M Expense (shared)	\$ 1.030	DR Formula O&M Expense (shared)	\$ 1.030
	CR Flow-through O&M Expense	\$ (1.030)	CR COVID-19 Customer Recovery Fund Deferral	\$ (1.030)
	<i>To reclass 2020/2021 O&M direct costs and cost reductions from formula to flow-through</i>		<i>To reclass 2020/2021 O&M direct costs and cost reductions from formula to deferral</i>	
	DR Tax Expense (flow-through)	\$ 0.278	DR Taxes Payable	\$ 0.278
	CR Tax Expense (shared)	\$ (0.278)	CR Tax Expense (shared)	\$ (0.278)
2022 Journal Entries	<i>To reclass tax @ 27% on the entry above from sharing to flow-through</i>		<i>To record tax @ 27% on the entry above</i>	
	DR Other Revenue-Flowthrough Costs	\$ 0.752	DR COVID-19 Customer Recovery Fund Deferral	\$ 0.278
	CR Flowthrough Deferral	\$ (0.752)	CR Taxes Payable	\$ (0.278)
	<i>To recognize the flow-through items in the two entries above in the Flowthrough Deferral</i>		<i>To record the COVID-19 Customer Recovery Fund Deferral net-of-tax</i>	
	DR Earnings Sharing Deferral	\$ 0.376	DR Earnings Sharing Deferral	\$ 0.376
	CR Other Revenue-Earnings Sharing	\$ (0.376)	CR Other Revenue-Earnings Sharing	\$ (0.376)
	<i>To record earnings sharing on the 2022 items subject to sharing in the entries above</i>		<i>To record earnings sharing on the 2022 items subject to sharing in the entries above</i>	
	DR Taxes Payable	\$ 0.102	DR Taxes Payable	\$ 0.102
	CR Earnings Sharing Deferral	\$ (0.102)	CR Earnings Sharing Deferral	\$ (0.102)
	<i>To record the Earnings Sharing Deferral net-of-tax</i>		<i>To record the Earnings Sharing Deferral net-of-tax</i>	

2

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 78

1	2023 Journal Entries	DR Flowthrough Deferral	\$ 0.752	DR COVID-19 Customer Recovery Fund Deferral	\$ 0.752
		CR Amortization Expense	\$ (0.752)	CR Amortization Expense	\$ (0.752)
		<i>To amortize the balance in the Flowthrough Deferral into customer rates</i>		<i>To amortize the balance in the COVID-19 Customer Recovery Fund Deferral into customer rates</i>	
		DR Revenue	\$ 1.030	DR Revenue	\$ 1.030
		CR Cash	\$ (1.030)	CR Cash	\$ (1.030)
		<i>To return amortization in customer rates, grossed-up for tax</i>		<i>To return amortization in customer rates, grossed-up for tax</i>	
		DR Taxes Payable	\$ 0.278	DR Taxes Payable	\$ 0.278
		CR Tax Expense	\$ (0.278)	CR Tax Expense	\$ (0.278)
		<i>To record tax @ 27% on the entry above</i>		<i>To record tax @ 27% on the entry above</i>	
	Summary of Balances	Cash	\$ -		\$ -
2		Taxes Payable	-		-
		Earnings Sharing Deferral	-		-
		Flowthrough Deferral	-		N/A
		COVID-19 Customer Recovery Fund Deferral	N/A		-
		Revenue	1.030		1.030
		Other Revenue-Earnings Sharing	-		-
		Other Revenue-Flowthrough Costs	0.752		N/A
		O&M Expense	(1.030)		-
		Amortization Expense	(0.752)		(0.752)
		Tax Expense	-		(0.278)
3					
		Total	\$ -		\$ -

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 79

26.2 Please explain why FBC considers COVID-19 incremental savings should be returned to customers immediately in 2023, whereas amounts recorded in the COVID-19 Customer Recovery Fund Deferral Account should be recovered over three years.

Response:

There is no inconsistency between the two proposals.

With regard to the COVID-19 Customer Recovery Fund Deferral Account, FBC is proposing an amortization period for an account which currently does not have an amortization period, and the rationale for the proposed three years is described in the response to BCUC IR1 18.3.

With regard to the COVID-19 exogenous factor savings, FBC is not proposing an amortization period for a deferral account, but is proposing to change where the exogenous factor savings are recorded (i.e., the Flow-through deferral account instead of the COVID-19 Customer Recovery Fund Deferral Account). The rationale for doing so is not based on whether a one- or three-year amortization period is more appropriate; rather, it is related to the most reasonable approach for recording these savings from a regulatory accounting perspective and consistency with the treatment of all other exogenous factor events. The fact that the exogenous factor savings will be returned to customers immediately is a benefit which indirectly results from the inclusion of the savings in the Flow-through deferral account, which has an existing amortization period of one year. FBC notes that while the resulting benefit is indirect, the additional rate mitigation that results from the exogenous factor savings being returned to customers in 2023 is also a consideration.

26.3 In the event that FBC's request to vary Order G-42-21 is denied, please provide the 2023 rate impact if the \$1.03 million net incremental O&M were to be amortized over each of the following amortization periods: (i) one-year; (ii) two-years; and (iii) three-years.

Response:

Please refer to Table 1 below which shows the changes to the proposed 2023 rate if the \$1.03 million net incremental O&M (costs less cost reductions) was to be returned to customers over an amortization period of one, two or three years. FBC notes there is no change to the 2023 rate increase if the net incremental O&M is amortized over a one-year period instead of captured in the Flow-through deferral account as proposed. Both approaches will return the full amount to customers in 2023. If the net amount is directed to be amortized over a two-year period or three-

year period, the 2023 rate impact will increase from 3.99 percent to 4.17 percent or 4.22 percent, respectively.

Table 1: Changes to 2023 Rate Increase if Net incremental O&M is Amortized over One, Two or Three Years

	Amortization Period		
	1 Year	2 Years	3 Years
Changes to Proposed 2023 Rate Increase (%)	0.00%	0.18%	0.23%
Proposed 2023 Rate Increase (%)	3.99%	4.17%	4.22%

On page 120 of the Application, FBC states:

The cost reductions that FBC achieved consist primarily of lower employee expenses, in part as a response to the travel restrictions, including in and out of Province travel, and the effect that the COVID-19 pandemic has had on social interactions. Employee expenses that were not incurred include course fees, travel, meals and accommodation, Company function expenses, and employee hiring and relocation expenses.

For the years 2020 and 2021, the reduced employee expenses were estimated at approximately \$2.34 million.

26.4 Please explain how FBC tracks and quantifies the cost reductions related to the COVID-19 pandemic for 2020 and 2021.

Response:

For estimating the employee expense O&M cost reductions related to the COVID-19 pandemic, FBC compared the actual O&M employee expenses in 2020 and 2021 to the average of the actual O&M employee expenses observed for the three years prior to the start of the pandemic, including years 2017, 2018 and 2019. This provided a reasonable basis to estimate the approximate amount of O&M employee related cost reductions during the COVID-19 pandemic, as using the most recent three years of data prior to the COVID-19 pandemic smooths out the fluctuations of employee expenses that may occur from year to year, providing a representative baseline for comparison.

26.5 Please provide a breakdown of the cost reductions that FBC achieved by each of the categories noted on page 120 (i.e. course fees, travel, meals and

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 81

accommodation, Company function expenses, and employee hiring and relocation expenses).

Response:

The following table provides the breakdown of 2020 and 2021 cost reductions by the categories referenced in the above preamble.

Table 1: Employee Expense Cost Reductions by Category for 2020 and 2021

	<i>\$millions</i>	
	2020 Reductions	2021 Reductions
Course Fees	(0.13)	0.00
Travel	(0.38)	(0.48)
Meals and Accommodation	(0.52)	(0.75)
Company Function	0.02	(0.01)
Employee Hiring and Relocation	(0.05)	(0.06)
Total	<u>(1.05)</u>	<u>(1.29)</u>

Sum of 2020 and 2021 Reductions (2.34)

In Directive 6 of Order G-42-21, the BCUC stated: "The COVID-19 incremental costs and related savings from 2020 and 2021 be recorded in the previously approved COVID-19 Customer Recovery Fund deferral account, as discussed in Section 12.2.1 of the Application." [Emphasis added]

26.6 Please confirm, or explain otherwise, that the requested variance to Order G-42-21 is as follows: "FBC is approved to record COVID-19 incremental costs and related savings from 2020 and 2021, as discussed in Section 12.2.1 of the Application, into the Flow-through deferral account."

26.6.1 If confirmed, please explain whether FBC seeks to amend either of the 2021 or 2022 permanent rates approved by Orders G-42-21 and G-374-21, respectively, given that amounts captured in the Flow-through deferral account are typically recovered from/returned to customers in rates by way of a projected variance in the prior year's ending deferral account balance and a true-up of the projected variances from two years prior. Please explain why or why not.

26.6.2 If not confirmed, please provide FBC's proposed wording for the requested variance to Order G-42-21.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 82

Response:

The suggested wording for the variance to Order G-42-21 is confirmed.

FBC is not seeking to amend 2021 or 2022 permanent rates, nor is there any reason to do so. As shown in the journal entries provided in the response to BCUC IR1 26.1, no amounts have been recorded in either the Flow-through deferral account or the COVID-19 Customer Recovery Fund Deferral Account in 2020 or 2021 related to these exogenous items, with the actual amounts to be recorded in 2022, pending the BCUC's decision on this Application. These amounts were not recorded in either of the deferral accounts in 2020 or 2021 as FBC was unsure whether the cumulative amounts would exceed the exogenous factor materiality threshold. It is only in this Application, now that actuals are known, that FBC is confirming the cumulative combined amounts exceed the threshold and should be returned to customers. Therefore, FBC will reflect the adjustment in the 2022 financial statements and, given these amounts will be recorded in 2022 and are projected in the 2022 Flow-through deferral account calculation in Table 12-3 of the Application, they will be returned to customers in 2023 rates.

26.7 Please discuss whether FBC considered alternatives to varying Directive 6 of Order G-42-21, such as requesting approval to transfer the ending balance at December 31, 2022 of COVID-19 incremental costs and related savings in the COVID-19 Customer Recovery Fund Deferral Account to the Flow-through deferral account as a January 1, 2023 opening balance adjustment. Please explain why or why not.

Response:

To clarify, as demonstrated in the response to BCUC IR1 26.1, the 2020 and 2021 net savings amounts are not currently recorded in the COVID-19 Customer Recovery Fund Deferral Account, and instead remained in the respective income statement accounts in those years.

While FBC did consider making the adjustment to move the income statement amounts to the Flow-through deferral account in 2023 instead of 2022, FBC did not believe such an approach was necessary and would only have served to delay the return of the exogenous amounts to customers by another year (i.e., the Flow-through deferral account 2023 opening balance adjustment would have been projected in 2023 in the Annual Review for 2024 Rates and returned to customers in 2024 via amortization of the Flow-through deferral account). Given the final amount of net savings is known in 2022, FBC believes it is most appropriate and beneficial to customers to include the net savings in the Flow-through deferral account in 2022 and return the savings to customers in 2023.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 83

L. SERVICE QUALITY INDICATORS

27.0 Reference: Service Quality Indicators (SQI)

Exhibit B-2, Section 13.2.2, pp. 136, 139

Average Speed of Answer (ASA)

On page 139 of the Application, with regards to the (ASA SQI, FBC states:

The 2021 result was 65 seconds, and the June 2022 year-to-date performance is 98 seconds. As with previous years, 2021 remained within a reasonable range from a customer experience perspective in that, on average, calls to the contact centre were answered in and around the one minute mark. With respect to 2022, the year-to-date performance reflects the challenging circumstances in the first quarter of the year described above for the Telephone Service Factor (Non-Emergency). Recovery of the ASA back towards normal performance is expected to continue through the remainder of the year.

On page 136 of the Application, with regards to the Telephone service Factor (TSF) SQI, FBC states:

Customer Service is experiencing higher than expected levels of attrition, having lost approximately 20 percent of its Customer Service Representatives in 2021. All exits were in the last half of 2021, resulting in fewer and less experienced employees prepared to support call volumes in the first quarter of 2022. To mitigate the impact of this, FBC accelerated the timing of planned new hire classes as well as the size of new hire classes in both 2021 and 2022.

27.1 Please discuss the circumstances leading to higher-than-expected levels of attrition of customer service representatives in 2021.

27.1.1 Please discuss whether FBC expects attrition levels in the future to remain consistent with 2021 levels. If yes, please explain how FBC plans to mitigate the impact of attrition of customer service representatives on the ASA and TSF SQIs.

Response:

As described in the response to CEC IR1 26.1, FBC has limited information on the specific circumstances that have led to the higher than expected levels of attrition of customer service representatives in 2021. Furthermore, FBC is unable to determine at this time whether the higher than forecast attrition levels experienced in 2021 and 2022 will continue in future years. FBC will continue to monitor attrition and service levels and adjust its recruitment activities and targeted staffing levels accordingly to support the achievement of the desired performance for TSF and ASA.

Due to the presence of multiple factors that may impact service at any given time, FBC is unable to isolate the specific impacts of attrition on TSF and ASA. Generally speaking, due to the timing

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 84

of the attrition experienced in 2021, impacts on service associated with attrition appear to be largely focused on the last half of 2021. That is, despite the attrition in 2021, the 2021 annual non-emergency TSF performance of 70 percent met the benchmark and is considered acceptable, the 2021 First Contact Resolution (FCR) metric was greater than the benchmark at 82 percent, the Billing Index was better than the benchmark at 0.12 and with respect to informational indicators, both the Customer Service Index (CSI) and the ASA were within normal range.

With respect to 2022, FBC continues to focus on improving the TSF and mitigating impacts to customers of longer than typical wait times. As stated in the Application, FBC is expecting to recover to the threshold level of 68 percent within the fourth quarter, which is considered acceptable under the MRP, with no loss in service levels to customers. Similarly, FBC expects the monthly ASA to be in the 60 seconds range in the fourth quarter. However, various factors, such as higher than expected attrition and variances in call volumes and call types from forecast, may impact the results achieved.

In all cases, to mitigate the impact of attrition on service to customers, FBC adjusts hiring and training plans, makes use of overtime where possible, informs customers of self-service options available and continues to offer customers the call back feature. In addition, FBC continues to focus on FCR to ensure that overall service quality remains high. Thus, despite the challenges faced in 2022, customers continue to identify a high level of quality service received as supported by the 2022 year-to-date FCR and CSI results that are at the benchmark and within the normal range, respectively.

27.2 Please discuss whether FBC expects a recovery of the ASA to within the one-minute mark by the fourth quarter of 2022.

27.2.1 If not, please explain why not.

Response:

Please refer to the response to BCUC IR1 27.1.

28.0 Reference: SQI

**Exhibit B-2, Section 13.2.3, pp. 140–142; MRP Decision, p. 89;
FortisBC 2020–2024 MRP Application proceeding, Exhibit B-10,
BCUC IR 90.8**

Reliability SQI

On page 141 of the Application, FBC provides its historical results for the System Average Interruption Duration Index (SAIDI) SQI:

Table 13-11: Historical SAIDI Results

Description	2014	2015	2016	2017	2018	2019	2020	2021	June 2022 YTD
Annual normalized results	2.32	2.13	2.10	4.05	3.15	2.45	3.17	4.27	2.94
Benchmark	2.22							3.22	
Threshold	2.62							4.52	

On page 140 of the Application, FBC states:

The 2021 result was 4.27 which was better than the threshold of 4.52 but below the benchmark of 3.22. The June 2022 year-to-date performance is 2.94 which is better than the benchmark. The 2021 results were negatively impacted by multiple external factors which did not meet the threshold for normalization.

On Page 140 to 141 of the Application, FBC states:

There were three Major Event Days that met the threshold for normalization in 2021:

- On January 13, a major windstorm across the Okanagan and Kootenays caused approximately 11,000 customer-interruptions and totalled over 155,000 customer-hours of interruption.
- On April 18, a major windstorm across the West Kootenays qualified for a Major Event Day causing approximately 19,800 customer-interruptions and totalled over 200,800 customer-hours of interruption.
- On November 15, a major storm affected multiple areas in the Okanagan causing approximately 27,474 customer-interruptions and totalled over 218,720 customer-hours of interruption. This event is the highest total customer-hours of interruption FBC has on record (back to 2003).

There have been no Major Event Days in 2022 to-date.

28.1 Please explain how FBC determines which weather events and/or external factors meet the threshold for normalization.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 86

1 **Response:**

2 FBC determines the threshold for normalization according to the Institute of Electrical and
3 Electronic Engineers (IEEE) method. The threshold values are calculated by applying a statistical
4 method called the “2.5 Beta” adjustment to historical reliability data, as described in the
5 Application (page 139).

6
7
8
9 28.2 Please explain whether FBC expects the overall SAIDI SQI performance for 2022
10 to meet or exceed the benchmark level.

11
12 **Response:**

13 FBC is forecasting a 2022 SAIDI result of 2.72 which is better than the benchmark of 3.22. This
14 is based on actual SAIDI performance year to date as of August 2022 of 1.58 and adding on the
15 three-year average performance from September to December.

16
17
18
19 28.3 Please discuss whether FBC has established any mitigation measures to reduce
20 the impact of external factors on the performance of the SAIDI SQI for 2022 and
21 2023.

22
23 **Response:**

24 FBC has established several programs to mitigate the impact of external factors on SAIDI
25 performance. To minimize the impact of wildfires, FBC has acquired and deployed equipment and
26 materials to allow for the proactive application of fire retardant to assets ahead of an approaching
27 wildfire. In addition, FBC has a targeted program to increase right-of-way widths on three
28 transmission lines that have a relative higher frequency of tree contacts. To reduce wildlife
29 caused outages, FBC has a program to install animal cover-up protection for substation
30 equipment.

31
32
33
34 On page 89 of the MRP Decision, the BCUC stated:

35 System Average Interruption Duration Index (SAIDI) was a second SQI where
36 metrics exceeded the threshold in multiple years (2017 and 2018). This measures
37 the amount of time the average customer’s power is off during the year. FBC
38 explained that the reasons for the poor performance was the different method for

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 87

data-tracking of its newly implemented Outage Management System (OMS) and wildfires in 2017 and adverse weather (e.g. large snowstorms) in 2018. The BCUC found no evidence to suggest a serious degradation of service and declined to impose a penalty, although it encouraged FBC to incorporate the impact of the OMS in setting a future benchmark for SAIDI.

In response to BCUC IR 90.8 in the FortisBC 2020–2024 MRP Application proceeding, FortisBC stated:

FBC is proposing no changes to the existing approved process for interpreting metric performance that exists in the Current PBR Plan where performance for one or more of FBC’s SQIs do not meet the benchmark and fall outside of the threshold. The process that introduced the use of SQI performance ranges for interpreting metric performance is outlined in the agreement titled the “Consensus Recommendation” approved by the BCUC in Order G-14-15 dated February 4, 2015.

Also, similar to the Current PBR Plan, failure to meet SQI benchmark thresholds, if determined by the BCUC after further process to be considered a serious degradation of service quality in whole or in part due to the actions (or inactions) of FBC, may result in a reduction to the share of earnings sharing retained by FBC, up to a maximum reduction to reflect a 60 percent share to the customer (i.e. penalty of 10 percent of the earnings sharing earned to FBC), instead of the standard 50 percent.

28.4 Please explain whether the historical performance results of the SAIDI SQI below the benchmark and/or threshold levels in four of the past five years (2017, 2018, 2019, and 2021) represents acceptable performance.

28.4.1 Given that performance values for the SAIDI SQI consistently fell below the established benchmark level for the past four out of five years, please explain whether there are any further actions that FBC could take to ensure consistent performance above the benchmark.

Response:

As the historical performance in this IR refers to time periods covering two separate multi-year rate plans (i.e., the 2014-2019 PBR Plan and the current 2020-2024 MRP) with different circumstances and approved benchmarks and thresholds for determining acceptable performance, FBC provides the following response addressing the SAIDI performance under each of the plans and the reasons for why the performance observed is considered satisfactory and not a serious degradation of service.

2014-2019 PBR Plan

During the 2014-2019 PBR Plan term, as indicated in the preamble to this IR, the BCUC reviewed the SAIDI performance as part of the Annual Review for 2019 Rates proceeding, and in the

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 88

BCUC's Decision and Order G-246-18, the Panel found no evidence to suggest a serious degradation of service. As also noted in the preamble above, SAIDI performance was impacted by the different method for data-tracking of the newly implemented Outage Management System (OMS) and wildfires in 2017 and adverse weather (e.g., large snowstorms) in 2018. In its Decision, the Panel encouraged FBC to incorporate the impact of the Outage Management system (OMS) in setting a future benchmark for SAIDI.

2020-2024 MRP

In response to the MRP Decision and Order G-166-20 (Directive 35), as part of its Compliance Filing submitted on July 20, 2020, FBC proposed a new SAIDI benchmark (3.22) and threshold (4.52) incorporating the impact of the OMS. This was approved by the BCUC and is presently being used for interpreting SAIDI results during the MRP term.

Performance since 2020 has been either better than the benchmark or better than the threshold:

5. In 2020, SAIDI performance was better than the benchmark (3.17 actual vs 3.22 benchmark).

6. In 2021, SAIDI performance was better than the threshold (4.27 actual vs 4.52 threshold) and within the approved acceptable performance range of 3.22 (benchmark) and 4.52 (threshold). Please refer to pages 140 to 141 of the Application for discussion of factors impacting SAIDI performance in 2021.

7. For 2022 year-to-date, SAIDI performance is at 2.94 which is better than the benchmark.

Under the Consensus Recommendation approved by the BCUC and the process to review SQI results, performance within the approved acceptable performance range is considered as satisfactory. As discussed, the SAIDI results for 2020 and 2021 both are within the approved performance range and therefore are acceptable.

While SAIDI performance has been acceptable under the MRP to date, FBC has been investigating actions to improve performance to be more consistent with the benchmark. These actions are described in the response to BCUC IR1 28.3.

28.5 Please explain whether FBC's SAIDI SQI results represent a serious degradation of service quality in whole or in part due to the actions or inactions of FBC.

Response:

FBC's SAIDI SQI results do not represent a serious degradation of service quality in whole or in part due to the actions or inactions of FBC. Please refer to the response to BCUC IR1 28.4.

On page 142 of the Application, with regards to the System Average Interruption Frequency Index (SAIFI) SQI, FBC states:

The 2021 result was 2.08 and the June 2022 year-to-date performance is 1.58, with both better than the threshold of 2.19. The 2021 results for SAIFI were similarly impacted by the crane collapse, wildfires and storms that were discussed in the SAIDI section. [...]

On page 142 of the Application, FBC provides Table 13-12: Historical SAIFI Results, reproduced below:

Table 13-12: Historical SAIFI Results									
Description	2014	2015	2016	2017	2018	2019	2020	2021	June 2022 YTD
Annual normalized results	1.64	1.56	1.34	1.78	1.73	1.21	1.64	2.08	1.58
Benchmark	1.64							1.57	
Threshold	2.50							2.19	

28.6 Please discuss whether FBC expects the year-end SAIFI SQI result for 2022 to meet or exceed the benchmark level.

Response:

FBC is forecasting a 2022 SAIFI result of 1.68, which is just above the benchmark of 1.57. This is based on actual SAIFI performance year to date as of August 2022 of 1.06 and adding on the three-year average performance from September to December.

While SAIFI performance has been acceptable under the MRP to date, FBC has been investigating actions to improve performance to be more consistent with the benchmark. These actions include the establishment of several programs to mitigate the impact of external factors on SAIFI performance. Please refer to the response to BCUC IR1 28.3 for additional details.

28.7 Please explain whether the historical results of the SAIFI SQI between benchmark and threshold levels for the years 2017, 2018, 2020, 2021, and June 2022 YTD [Year to Date] represents acceptable performance.

28.7.1 Given that results for the SAIFI SQI consistently fell below the established benchmark level for the past five out of six years, please explain whether there are any further actions that FBC should take on its system to ensure performance consistently meets the established benchmark for future years.

FortisBC Inc. (FBC or the Company) Annual Review for 2023 Rates (Application)	Submission Date: October 6, 2022
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1	Page 90

Response:

As the historical performance in this IR refers to time periods covering two separate multi-year rate plans (i.e., the 2014-2019 PBR Plan and the current 2020-2024 MRP) with different circumstances and approved benchmarks and thresholds for determining acceptable performance, FBC provides the following response addressing performance under each of the agreements and the reasons for why the SAIFI performance observed is considered satisfactory and not a serious degradation of service.

2014-2019 PBR Plan

During the 2014-2019 PBR Plan term, the 2017, 2018 and 2019 SAIFI performance was acceptable, with 2017 and 2018 within the approved acceptable performance range. The 2017 actual was 1.78 and the 2018 actual was 1.73 and within the approved acceptable performance range of 1.64 (benchmark) and 2.50 (threshold). The 2019 performance of 1.21 was better than the benchmark. For the years 2017 and 2018, the BCUC reviewed the SAIFI results along with the SAIDI results and the impact of the implementation of the Outage Management system (OMS) as part of the Annual Review for 2019 Rates proceeding and found no issues with the SAIFI performance.

2020-2024 MRP

In response to the MRP Decision and Order G-166-20 (Directive 35), as part of its Compliance Filing submitted on July 20, 2020, FBC proposed a new SAIFI benchmark (1.57) and threshold (2.19) incorporating the impact of the OMS. This was approved by the BCUC and is presently being used for interpreting SAIFI results during the MRP term.

In 2020, the SAIFI performance was 1.64 which is within the approved acceptable performance range of 1.57 (benchmark) to 2.19 (threshold). In 2021, the SAIFI performance of 2.08 was also within the approved acceptable performance range. Year-to-date performance of 1.58 so far is within the acceptable performance range. Under the Consensus Recommendation approved by the BCUC and the process to review SQI results, performance within the approved acceptable performance range is considered as satisfactory. Additionally, when the “SQI score in two successive calendar years during the term of the MRP has been between the benchmark and the threshold”, the Company is obligated to provide additional information on an SQI at an Annual Review. As FBC explained in its Application, the 2021 SAIFI results were impacted by the crane collapse, wildfires and storms described on pages 140 to 141 of the Application. FBC also completed system upgrades on several radial transmission lines where no alternative supply was available, which impacted a large number of customers.

While SAIFI performance has been acceptable under the MRP to date, FBC has been investigating actions to improve performance to be more consistent with the benchmark. These actions include the establishment of several programs to mitigate the impact of external factors on SAIFI performance. Please refer to the response to BCUC IR1 28.3 for further details.

FORTISBC INC.

Section 11 - 2022

**UNAMORTIZED DEFERRED CHARGES AND AMORTIZATION - RATE BASE
FOR THE YEAR ENDING DECEMBER 31, 2022
(\$000s)**

Schedule 11

Line No.	Particulars	12/31/2021	Opening Bal./ Transfer/Adj.	Gross Additions	Less Taxes	Amortization Expense	12/31/2022	Mid-Year Average	Cross Reference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	<u>1. Forecasting Variance Accounts</u>								
2	BCUC Levies Variance Account	\$ 4	\$ -	\$ 46	\$ (13)	\$ (5)	\$ 32	\$ 18	
3									
4	<u>2. Rate Smoothing Accounts</u>								
5									
6	<u>3. Benefits Matching Accounts</u>								
7	Preliminary and Investigative Charges	\$ 1,106	\$ -	\$ 1,540	\$ -	\$ -	\$ 2,646	\$ 1,876	Note 1
8	Demand Side Management	34,498	-	11,136	(3,007)	(5,408)	37,219	35,859	
9	Deferred Debt Issue Costs	3,558	-	780	(79)	(185)	4,074	3,816	
10	Joint Pole Use Audit 2023	-	-	-	-	-	-	-	
11	2021 Generic Cost of Capital Proceeding	54	-	850	(229)	-	675	364	
12	Annual Reviews for 2020-2024 Rates	140	-	226	(61)	(151)	154	147	
13	2021 Long Term Electric Resource Plan	237	-	150	(40)	(83)	264	250	
14	2020 Cost of Service Analysis	32	-	-	-	(32)	-	16	
15	BCUC Initiated Inquiry Costs	6	-	100	(27)	30	109	58	
16	Mandatory Reliability Standards 2021 Audit	236	-	-	-	(79)	157	197	
17		<u>\$ 39,867</u>	<u>\$ -</u>	<u>\$ 14,782</u>	<u>\$ (3,443)</u>	<u>\$ (5,908)</u>	<u>\$ 45,298</u>	<u>\$ 42,583</u>	
18									
19	<u>4. Retroactive Expense Accounts</u>								
20									
21	<u>5. Other Accounts</u>								
22	Pension and OPEB Liability	\$ (12,779)	\$ -	\$ 2,187	\$ -	\$ -	\$ (10,592)	\$ (11,686)	
23	COVID-19 Customer Recovery Fund	271	-	325	(89)	-	507	389	
24	Indigenous Relations Agreement (Huth Substation)	-	-	-	-	-	-	-	
25		<u>\$ (12,508)</u>	<u>\$ -</u>	<u>\$ 2,512</u>	<u>\$ (89)</u>	<u>\$ -</u>	<u>\$ (10,085)</u>	<u>\$ (11,297)</u>	
26									
27	Total Rate Base Deferral Accounts	<u>\$ 27,362</u>	<u>\$ -</u>	<u>\$ 17,340</u>	<u>\$ (3,545)</u>	<u>\$ (5,913)</u>	<u>\$ 35,245</u>	<u>\$ 31,304</u>	

Note 1: Gross Additions for Preliminary and Investigative Charges are after transfers to Construction Work in Progress. Additions of \$2.442 million - transfer of \$.902 million = \$1.540 million.

FORTISBC INC.

Section 11 - 2022

**UNAMORTIZED DEFERRED CHARGES AND AMORTIZATION - NON-RATE BASE
FOR THE YEAR ENDING DECEMBER 31, 2022
(\$000s)**

Schedule 12

Line No.	Particulars	12/31/2021	Opening Bal./ Transfer/Adj.	Gross Additions	Less Taxes	Amortization Expense	12/31/2022	Mid-Year Average	Cross Reference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Deferral Accounts Financed at Short Term Interest Rate								
2									
3	<u>1. Forecasting Variance Accounts</u>								
4	Pension & Other Post Retirement Benefits (OPEB) Variance	\$ 446	\$ -	\$ 889	\$ -	\$ 158	\$ 1,493	\$ 970	
5									
6	<u>2. Rate Smoothing Accounts</u>								
7									
8	<u>3. Benefits Matching Accounts</u>								
9	Tariff Applications	9	-	\$ 30	(8)	-	\$ 31	\$ 20	
10		\$ 9	\$ -	\$ 30	\$ (8)	\$ -	\$ 31	\$ 20	
11									
12	<u>4. Retroactive Expense Accounts</u>								
13									
14	<u>5. Other Accounts</u>								
15									
16	Total NRB Deferral Accounts at Short Term Interest	\$ 455	\$ -	\$ 919	\$ (8)	\$ 158	\$ 1,524	\$ 990	
17									
18	Financing Costs at STI	\$ (4)	\$ -	\$ 11	\$ -	\$ 1	\$ 8	\$ 2	

Section 11 - 2022

Schedule 12.1

27 Note 1: Gross additions for CPCN Projects Preliminary Engineering after transfers to Construction Work in Progress.

FORTISBC INC.

Section 11 - 2022

UNAMORTIZED DEFERRED CHARGES AND AMORTIZATION - NON-RATE BASE cont'd
FOR THE YEAR ENDING DECEMBER 31, 2022
(\$000s)

Schedule 12.2

Line No.	Particulars	12/31/2021	Opening Bal./ Transfer/Adj.	Gross Additions	Less Taxes	Amortization Expense	12/31/2022	Mid-Year Average	Cross Reference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Deferral Accounts Financed at Weighted Average Cost of Capital								
2									
3	<u>1. Forecasting Variance Accounts</u>								
4	2020 - 2024 Flow-Through Deferral Account	\$ (8,545)	\$ -	\$ (5,007)	\$ -	\$ 3,927	\$ (9,625)	\$ (9,085)	
5									
6	<u>2. Rate Smoothing Accounts</u>								
7									
8	<u>3. Benefits Matching Accounts</u>								
9	On Bill Financing (OBF) Participant Loans	\$ 2	\$ -	\$ (1)	\$ -	\$ -	\$ 1	\$ 2	
10									
11	<u>4. Retroactive Expense Accounts</u>								
12									
13	<u>5. Other Accounts</u>								
14	MRP Earnings Sharing Account	\$ (1,537)	\$ -	\$ -	\$ -	\$ 872	\$ (665)	\$ (1,101)	
15	2021 Forecast Cost of Removal Revenue Deficiency	254	-	-	-	(254)	-	127	
16		<u>\$ (1,283)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 618</u>	<u>\$ (665)</u>	<u>\$ (974)</u>	
17									
18	Total NRB Deferral Accounts at Weighted Average Cost of Capital	<u>\$ (9,826)</u>	<u>\$ -</u>	<u>\$ (5,008)</u>	<u>\$ -</u>	<u>\$ 4,545</u>	<u>\$ (10,289)</u>	<u>\$ (10,058)</u>	
19									
20	Financing Costs at AFUDC	\$ (361)	\$ -	\$ (576)	\$ -	\$ 180	\$ (757)	\$ (559)	
21									
22	Non Rate Base Deferral Accounts Non-Interest Bearing	<u>\$ 50</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 50</u>	<u>\$ 50</u>	
23									
24									
25	Total Non Rate Base Deferral Accounts (including financing)	<u><u>\$ (7,826)</u></u>	<u><u>\$ -</u></u>	<u><u>\$ (3,898)</u></u>	<u><u>\$ (24)</u></u>	<u><u>\$ 4,355</u></u>	<u><u>\$ (7,394)</u></u>	<u><u>\$ (7,795)</u></u>	