Diane Roy
Vice President, Regulatory Affairs

Gas Regulatory Affairs Correspondence
Email: gas.regulatory.affairs@fortisbc.com

Electric Regulatory Affairs Correspondence
Email: electricity.regulatory.affairs@fortisbc.com

FortisBC
16705 Fraser Highway
Surrey, B.C. V4N 0E8
Tel: (604)576-7349
Cell: (604) 908-2790
Fax: (604) 576-7074
www.fortisbc.com

October 5, 2021

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

Attention: Mr. Patrick Wruck, Commission Secretary

Dear Mr. Wruck:

Re: FortisBC Inc. (FBC)

Project No. 1599231

Annual Review for 2022 Rates (Application)

Response to the British Columbia Utilities Commission (BCUC) Information Request (IR) No. 1

On August 6, 2021, FBC filed the Application referenced above. In accordance with the regulatory timetable established in BCUC Order G-226-21 for the review of the Application, FBC respectfully submits the attached response to BCUC IR No. 1.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC INC.

Original signed:

Diane Roy

Attachments

cc (email only): Registered Parties

Table of Contents **Page No.**

A. GENERAL

1.0 Reference: REVENUE REQUIREMENT AND RATE CHANGES FOR 2022
Exhibit B-2 (Application), Section 1.4.9, p. 6
Revenue Deficiency/Surplus

On page 6 of FortisBC Inc.'s Annual Review for 2022 Rates (Application), FortisBC Inc. (FBC) states:

> The largest driver of FBC's 2022 revenue deficiency is the elimination of the prior years' accumulated revenue surplus of $5.420 million before tax, which equates to approximately 40.8 percent of the total forecast rate increase of 3.46 percent.

1.1 Please provide the rate increase for 2022 under the scenario that the prior years' accumulated revenue surplus of $5.420 million was not applied to the 2021 delivery rates.

Response:

As there are no delivery rates in FBC's tariffs, FBC understands this information request to be referring to FBC's general rate increases.

Please refer to the table below for the annual rate increases (Line 14) and revenue deficiencies/surpluses (Line 13) from 2018 to 2021, if FBC had not received approval to defer any deficiencies/surpluses over those years. The rate change shown for 2022 is accordingly based on the assumption that there were no deferred deficiencies/surpluses applied in the previous years. FBC did not include 2017 in the table below as there were no deferred deficiencies or deferred surpluses impacting rates for 2017.

As the table below shows, without the accumulation of the revenue deficiencies/surpluses in prior years and the use of the accumulated surplus balance in 2021, the 2022 rate increase would be 3.13 percent.

The analysis below demonstrates the key benefit of FBC's approved approach of deferring the deficiencies/surpluses between 2018 and 2021, as it has resulted in smoother rate changes than the alternative of not deferring the deficiencies/surpluses in those years. Line 14 below shows that, had FBC not received deferral treatment, the year-to-year rate changes over the period from 2018 to 2022 would have been more volatile, ranging from a rate <u>decrease</u> of 1.12 percent in 2019 to a rate <u>increase</u> of 4.86 percent in 2021, with a difference of 5.98 percent between these two rate changes. Conversely, by deferring and accumulating the deficiencies/surpluses over the same period, the rates (as approved from 2018 to 2021, and proposed for 2022) were smoother, ranging from a zero percent increase in 2018 and 2019 to a 4.36 percent increase in 2021, with a difference of 4.36 percent between these two rate changes.

Line	Particular	Reference	2018	2019	2020	2021	2022
1	Revenue @ Existing Rate	Prev Yr: Line 18 x Cur Yr: Line 16	356,340	369,022	362,153	374,857	385,140
2							
3	Revenue Requirement ($000s)						
4	Cost of Energy	Schedule 16 (2017-2021: See Note 1; 2022: Section 11)	148,450	160,765	155,487	161,559	161,830
5	O&M	Schedule 16 (2017-2021: See Note 1; 2022: Section 11)	49,802	50,321	52,870	55,506	57,668
6	Depreciation & Amortization	Schedule 16 (2017-2021: See Note 1; 2022: Section 11)	52,667	48,473	53,899	64,670	63,775
7	Property Tax	Schedule 16 (2017-2021: See Note 1; 2022: Section 11)	16,684	16,713	16,993	18,242	17,887
8	Other Revenue	Schedule 16 (2017-2021: See Note 1; 2022: Section 11)	(8,416)	(9,268)	(10,645)	(12,221)	(11,832)
9	Income Tax	Schedule 16 (2017-2021: See Note 1; 2022: Section 11)	9,633	7,827	4,919	8,519	7,574
10	Earned Return	Schedule 16 (2017-2021: See Note 1; 2022: Section 11)	88,417	90,071	92,446	96,787	100,288
11	Total Expenses ($000s)	Sum of Line 4 to 10	357,237	364,902	365,969	393,062	397,191
12							
13	**Deficiency/(Surplus) ($000s)**	**Line 1 - Line 11**	**897**	**(4,120)**	**3,815**	**18,205**	**12,050**
14	**Rate Increase (%)**	**Line 13 / Line 1**	**0.25%**	**-1.12%**	**1.05%**	**4.86%**	**3.13%**
15							
16	Sales Volume (GWh)	Schedule 16 (2017-2021: See Note 1; 2022: Section 11)	3,213	3,319	3,294	3,374	3,306
17	Revenue Requirement ($000s)	Line 1 + Line 13	357,237	364,902	365,969	393,062	397,191
18	Effective Revised Rate ($/GWh)	Line 17 / Line 16	111.185	109.943	111.102	116.497	120.142
19							
20	**Approved Deficiency/(Surplus) ($000s)**	**Schedule 1 (2017-2021: See Note 1; 2022: Section 11)**	**-**	**-**	**3,631**	**16,196**	**13,295**
21	**Approved Rate Increase (%)**	**Schedule 1 (2017-2021: See Note 1; 2022: Section 11)**	**0.00%**	**0.00%**	**1.00%**	**4.36%**	**3.46%**

1.2 Please provide the respective annual rate increases and revenue deficiencies/surpluses for the last 5 years (i.e., 2017 to 2021) in the absence of any application of the Revenue Surplus deferral account to manage the rate changes in those years. In other words, please explain what the rate increases or decreases and the revenue deficiencies/surpluses for 2017 to 2021 would have been if there were no prior years' accumulated revenue deficiency/surplus

.

Response:

Please refer to the response to BCUC IR1 1.1.

2.0 Reference: REVENUE REQUIREMENT AND RATE CHANGES FOR 2022

Exhibit B-2, Section 1.4, p. 3

Rate Increase

On page 3 of the Application, FBC states "[t]he rates for 2022 flowing from the revenue requirement components set out in the Application result in a 3.46 percent increase from 2021 rates."

2.1 Please provide the annual bill impact of the proposed 2022 rate increase, in dollars, for the average customer.

Response:

Please refer to the table below for the annual bill impact of the proposed 2022 rate increase, in dollars and in percentage, for the average customer in each rate class. As FBC's bills are not unbundled between the cost of electricity and transmission/distribution services, the bill impact in percentage is equal to the proposed rate increase in percentage.

Rate Schedule	Average MWh	Annual Bill Impact ($)	Annual Bill Impact (%)
Residential	10	51	3.46%
Commercial	57	209	3.46%
Wholesale	50,909	155,909	3.46%
Industrial	10,930	31,767	3.46%
Lighting	7	57	3.46%
Irrigation	34	104	3.46%

2.2 If possible, please provide a forecast of the annual rate changes expected until the end of the current Multi-Year Rate Plan (MRP) period (i.e., 2023 and 2024). If not possible, please explain why not.

Response:

FBC has not prepared a forecast of the annual rate changes expected for 2023 and 2024 at this time as they require detailed development of each component of the revenue requirement, including the power supply costs, demand forecast, taxes, O&M expenses, interest rates, and capital additions in those years. Further, as directed by the BCUC in the MRP Decision and Order G-166-20[1], FBC must file an updated forecast of its 2023 and 2024 regular forecast capital

[1] MRP Decision, p. 131.

expenditures (i.e., growth, sustainment, and other capital) as part of the 2023 Annual Review. This updated forecast will impact 2023 and 2024 rates and has not yet been developed.

To provide the requested rate increases with information known today, the table below provides a high level estimate of 2023 and 2024 rate changes assuming no changes to any components of FBC's revenue requirement, including power supply and demand forecasts, from the 2022 forecast, except for the following:

- Adjustment to FBC's formula O&M for 2023 and 2024 based on the 2022 net inflation factor of 4.089 percent;
- Forecasts of growth, sustainment, and other capital for 2023 and 2024 based on the original forecasts provided in FBC's MRP Application. As explained above, the regular forecast capital for 2023 and 2024 will be updated as part of the 2023 Annual Review; and
- Rate base additions in 2023 and 2024 from approved CPCNs and major capital projects, which include the Corra Linn Dam Spillway Gate Replacement Project, the Kelowna Bulk Transmission Addition (KBTA) Project, and the Playmor Substation Upgrade Project.

	2023	2024
High Level Forecast Rate Change (%)	2.83%	2.20%

2.3 Please provide a table that compares FBC's approved and achieved annual return on equity (before and after earnings sharing), in dollars, for 2020 actual, 2021 projected and 2022 to 2024 forecast.

Response:

Please refer to the table below for FBC's approved and achieved return on equity (ROE), before and after earnings sharing, for 2020 Actual. For 2021 Projected and 2022 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. Therefore, before and after sharing amounts are equal in each of these years.

As discussed in Section 10 of the Application, earnings sharing will have a two-year lag. For example, the 2020 actuals are trued-up in the proposed 2022 rates. This is consistent with the calculations of formula O&M, where the true-up of the formula inputs happens only once actuals are known.

Line	Particular	Reference	2020	2021	2022	2023	2024
1	Approved/Forecast Equity Portion of Rate Base ($000s)	See Note 1	564,861	591,694	631,794	660,276	683,345
2	Approved/Forecast ROE ($000s)	Line 1 x Line 3	51,685	54,140	57,809	60,415	62,526
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				
6	Actual ROE Before-Sharing ($000s)	See Note 2	53,677				
7	Actual ROE Before-Sharing (%)	Line 6 / Line 5	9.46%				
8							
9	Actual Earnings Sharing ($000s)	See Note 2	(872)				
10	Actual ROE After-Sharing ($000s)	Line 6 + Line 9	52,804				
11	Actual ROE After-Sharing (%)	Line 10 / Line 5	9.30%				

Notes to table:

1) Approved/Forecast Equity Portion of Rate Base:
   - For 2020 & 2021 – approved by Order G-42-21;
   - For 2022 – see Section 11 of the Application, Schedule 26; and
   - For 2023 & 2024 – rate base forecast based on assumptions as discussed in the response to BCUC IR1 2.2.

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

B. FORMULA DRIVERS

3.0 Reference: FORMULA DRIVERS

Exhibit B-2, Section 2.2, p. 8; FBC Annual Review for 2020 and 2021 Rates proceeding (FBC 2020 and 2021 Annual Review), Exhibit B-2, p. 10; FBC 2020 and 2021 Annual Review, Exhibit B-14 (Evidentiary Update), p. 3

Average Weekly Earnings for BC (AWE-BC)

On page 8 of the Application, FBC provides Table 2-1: I-Factor Calculation showing the BC AWE from July 2019 to June 2020, which has been reproduced in part below:

Table 2-1: I-Factor Calculation

Line No.	Date	*Table: 18-10-0004-01* BC CPI index	*Table: 14-10-0223-01* BC AWE $	12 Mth Average CPI index	AWE $	CPI %	AWE %	Last Completed Year Non labour %	Labour %	I-Factor %	MRP Year
1	Jul-2019	132.4	995.70								
2	Aug-2019	132.2	1,003.20								
3	Sep-2019	132.0	1,007.69								
4	Oct-2019	132.2	1,015.61								
5	Nov-2019	131.8	1,012.26								
6	Dec-2019	131.7	1,014.87								
7	Jan-2020	132.1	1,025.98								
8	Feb-2020	132.9	1,024.80								
9	Mar-2020	132.3	1,029.14								
10	Apr-2020	131.2	1,105.84								
11	May-2020	131.5	1,127.73								
12	Jun-2020	132.6	1,097.00	132.1	1,038.32						

On page 10 of the FBC 2020 and 2021 Annual Review, FBC provided Table 2-1: I-Factor Calculation. The following is an extract from that table:

Table 2-1: I-Factor Calculation

Line No.	Date	*Table: 18-10-0004-01* BC CPI index	*Table: 14-10-0223-01* BC AWE $	12 Mth Average CPI index	AWE $	CPI %	AWE %	Last Completed labour %	Labour %	I-Factor %	MRP Year
25	Jul-2019	132.4	996.11								
26	Aug-2019	132.2	1,003.60								
27	Sep-2019	132.0	1,008.09								
28	Oct-2019	132.2	1,015.74								
29	Nov-2019	131.8	1,012.40								
30	Dec-2019	131.7	1,014.52								
31	Jan-2020	132.1	1,025.61								
32	Feb-2020	132.9	1,025.17								
33	Mar-2020	132.3	1,029.38								
34	Apr-2020	131.2	1,106.54								
35	May-2020	131.5	1,123.79								
36	Jun-2020	132.6	1,123.79	132.1	1,040.40	1.596%	5.946%	38%	62%	4.293%	2021

On page 3 of the FBC Evidentiary Update (Exhibit B-14) in the FBC 2020 and 2021 Annual Review, FBC stated:

At the time of filing the Application, the latest available AWE-BC result was for May 2020, which was used as a placeholder for June 2020. The June AWE-BC result is now available, and is $1,097.39 compared to $1,123.79 used in the Application (June 2020 placeholder). When issuing the June AWE-BC results, Statistics Canada also updated the May AWE-BC result to $1,126.59, as compared to $1,123.79. These changes have been included in FBC's I-Factor calculation, resulting in a zero impact to Formula O&M.

3.1 Please explain why the BC AWE data from July 2019 through June 2020 provided, as provided in Table 2-1 of the Application, is different from the BC AWE data for the same period, as provided in the FBC 2020 and 2021 Annual Review.

<u>Response:</u>

The monthly BC AWE amounts from July 2019 to June 2020 have changed because Statistics Canada periodically revises their AWE results. FBC uses the most current set of AWE results in each year's Annual Review filing.

4.0 Reference: FORMULA DRIVERS

Exhibit B-2, Section 2.3, p. 9; FBC 2020 and 2021 Annual Review, Exhibit B-2, p. 11

Growth Factor Calculation

On page 9 of the Application, FBC provides the following table:

Table 2-2: Calculation of 2022 Average Customer (AC) Growth Factor

Line No.	Data	Actual 2020	Projected 2021	Forecast 2022	Total for 2022 Rate Setting	Reference
1	Prior Year Ending Customer Count	141,027	143,714	145,695		Appendix A2 - Section 3.1 Customers
2						
3	Additions:					
4	January	292	257	231		
5	February	174	89	238		
6	March	8	123	229		
7	April	110	113	231		
8	May	173	119	222		
9	June	172	86	227		
10	July	522	165	230		
11	August	129	166	232		
12	September	83	167	293		
13	October	545	164	169		
14	November	294	165	231		
15	December	245	167	232		
16	Total Additions	2,687	1,981	2,766		Appendix A2 - Section 3.2 Customer Additions
17	12-month Weighted Average Additions	1,294	1,045	1,504		
18						
19	Current Year Ending Customer Count	143,714	145,695	148,461		Line 1 + Line 16; Appendix A2 - Section 3.1 Customers
20						
21	Actual/Projected Prior Year Average Customers	139,916	142,321	144,759		2020: G-42-21; Sch 8, Line 19; 2021 and 2022: Prior Year Ending, Line 22
22	Average Customers for the Year	142,321	144,759	147,199		Line 1 + Line 17
23	Change in Average Customers	2,405	2,438	2,440	7,283	Sum of Annual Change in Average Customers on Line 23
24						
25	Growth Factor Multiplier				75%	G-166-20
26	Change in Average Customers for Rate Setting Purposes				5,462	Line 25 x Line 23
27						
28	Average Customers Used to Determine the Starting UCOM				139,916	Line 21, Yr 2020
29	Average Customer Forecast for Rate Setting				145,378	Line 28 + Line 26
30						
31	2020 Approved Average Customers for Rate Setting	141,594				2020: G-42-21; Sch 8, Line 22
32	2020 Actual Average Customers for Rate Setting	141,720				Line 21 + (Line 23 x 0.75)
33	2020 True Up	126				Line 32 - Line 31

On page 11 of the FBC 2020 and 2021 Annual Review, FBC provided the following table:

Table 2-2: Average Customer (AC) Growth Factor Calculation[4]

Line No.	Description	2020	2021	Reference
1	Average Customer Forecast - Prior Year	139,916	141,189	
2	Average Customer Forecast - Test Year	141,189	142,754	Section 11, Schedule 18, Row 8
3	Average Customer Change	1,273	1,565	Line 2 - Line 1
4	Customer Growth Factor Multiplier	75%	75%	Order G-166-20
5	Change in Customers - Rate Setting Purposes	955	1,174	Line 3 x Line 4
6				
7	*Average Customer Continuity for Rate Setting Purposes*			
8	Average Customer Forecast - Prior Year	139,916	140,871	Prior Year Line 10
9	Change in Customers - Rate Setting Purposes	955	1,174	Line 5
10	Average Customer Forecast - Rate Setting Purposes	140,871	142,045	Line 8 + Line 9

4.1 Please explain and provide the calculations for the 12-month weighted average additions shown in Line 17 in Table 2-2 of the Application.

Response:

Please refer to the table below for the calculation of the 12-month weighted average additions. Because the additions occur on a monthly basis, a 12-month weighted average is a more accurate reflection of the average number of customer additions over a year than a straight average. For example, the January additions are weighted for a full year (i.e., 12 months or a weighting of 12/12) while December additions are weighted for one month only (i.e., a weighting of 1/12). A weighted average is consistent with how FBC has calculated its average customer additions in its past annual review applications.

			2020 Actual			2021 Projected			2022 Forecast		
Line	Particular	Reference	Additions	Monthly Weighting	Weighted Additions	Additions	Monthly Weighting	Weighted Additions	Additions	Monthly Weighting	Weighted Additions
	(1)	(2)	(3)	(4)	(5) = (3) x (4)	(6)	(7)	(8) = (6) x (7)	(9)	(10)	(11) = (9) x (10)
1	January		292	12/12	292	257	12/12	257	231	12/12	231
2	February		174	11/12	160	89	11/12	82	238	11/12	218
3	March		8	10/12	7	123	10/12	103	229	10/12	190
4	April		110	9/12	83	113	9/12	85	231	9/12	174
5	May		173	8/12	115	319	8/12	213	222	8/12	148
6	June		172	7/12	100	86	7/12	50	227	7/12	132
7	July		522	6/12	261	165	6/12	82	230	6/12	115
8	August		129	5/12	54	166	5/12	69	232	5/12	97
9	September		83	4/12	28	167	4/12	56	293	4/12	98
10	October		545	3/12	136	164	3/12	41	169	3/12	42
11	November		234	2/12	39	165	2/12	28	231	2/12	38
12	December		245	1/12	20	167	1/12	14	232	1/12	19
13	**12-Mth Weighted Average**	**Sum of Ln 1 to 12**			**1,294**			**1,079**			**1,504**

4.2 Please confirm whether FBC has changed the average customer (AC) growth factor calculation methodology for 2022 in the Application compared to the methodology used in the FBC 2020 and 2021 Annual Review.

4.2.1 If confirmed, please provide the following:

(i) The rationale for the change in methodology;

(ii) The reasoning as to why the methodology to calculate the change in customers for rate setting purposes in the Application (Line 26 in Table 2-2) is calculated as 75% of a three-year average in Line 23, versus in the FBC 2020 and 2021 Annual Review (Line 9 in Table 2-2) it is calculated as 75% of a prior year and test year difference in Line 3.

(iii) The 2022 AC forecast for rate setting purposes and rate impact using the calculation methodology in the FBC 2020 and 2021 Annual Review.

4.2.2 If not confirmed, please explain how the two calculation methodologies to calculate the AC growth factor are the same.

Response:

FBC has not changed the methodology for calculating the average customer (AC) growth factor in 2022. FBC has only changed the presentation of the calculation in Table 2-2.

Table 2-2 of the Application is an expanded version of Table 2-2 from the FBC Annual Review for 2020 and 2021 Rates Application (2020 and 2021 Annual Review). The purpose of the expanded version is to provide additional calculations and cross-referencing to Appendix A2 for the average customer forecast numbers (i.e., Line 22 of Table 2-2 of the Application vs. Line 2 of the 2020 and 2021 Annual Review version of the table). This was done to provide assurance to the BCUC that a consistent customer forecast was applied throughout the Application.

Please refer to Table 1 below for the AC growth factor calculation using the data from this Application presented in the format of Table 2-2 from the 2020 and 2021 Annual Review.

Both versions of the table produce the same average customer forecast for rate-setting purposes, which is 145,378, as shown in Line 29 of Table 2-2 of the Application and Line 10 in Table 1 below.

Table 1: 2022 Data Presented in 2020 and 2021 Annual Review Table 2-2 Format

Line No.		Actual 2020	Projected 2021	Forecast 2022	Reference
1	Average Customer Forecast - Prior Year	139,916	142,321	144,793	
2	Average Customer Forecast - Test Year	142,321	144,793	147,199	Schedule 18, Line 7, Col 6
3	Average Customer Change	2,405	2,471	2,406	Line 2 - Line 1
4	Customer Growth Factor Multiplier	75%	75%	75%	
5	Change in Customers - 2022 Rate Setting Purposes	1,804	1,853	1,805	Line 3 x Line 4
6					
7	*Average Customer Continuity for 2022 Rate Setting Purposes*				
8	Average Customer Forecast - Prior Year	139,916	141,720	143,573	Prior Year Line 10
9	Change in Customers - 2022 Rate Setting Purposes	1,804	1,853	1,805	Line 5
10	Average Customer Forecast - 2022 Rate Setting Purposes	141,720	143,573	145,378	Line 8 + Line 9

The "change in average customers for rate setting purposes" in the expanded Table 2-2 of the Application is not based on a three-year average. It is still based on prior years and uses the same methodology that was used in Table 2-2 of the 2020 and 2021 Annual Review. However, instead of multiplying the individual year's "change in customers" by the 75 percent growth factor multiplier and then presenting it as a cumulative continuity of "average customers for rate setting purposes", as was done in the 2020/2021 version of Table 2-2, the new expanded Table 2-2 shown in this Application calculates the total average customer change over the three years from 2020 to 2022 first, before applying the 75 percent growth factor multiplier to the total. The end result is the same between the two formats; the difference is simply in the presentation of how the end result is derived.

C. LOAD FORECAST AND REVENUE AT EXISTING RATES

5.0 Reference: LOAD FORECAST AND REVENUE AT EXISTING RATES

Exhibit B-2, Section 3.3, p. 13; Exhibit B-2, Appendix A3, Section 1.2.7, p. 6; FortisBC Inc. 2019-2022 Demand Side Management Expenditures Application (FBC 2019–2022 DSM Expenditures Application), Exhibit B-1, p. 14

Demand Side Measures (DSM) Savings

On page 13 of the Application, FBC provides Table 3-1 showing the breakdown of its 2022 Forecast Demand Side Management (DSM) savings:

Table 3-1: Forecast Incremental 2022 DSM Savings (GWh)

Line No.	Description	DSM 2022
1	Residential	(8)
2	Commercial	(22)
3	Wholesale	(8)
4	Industrial	(17)
5	Lighting	(1)
6	Irrigation	(0)
7	Net	(56)
8	Losses	(5)
9	Gross Load	(61)

On page 6 of Appendix A3 of the Application, FBC states that "[t]he forecast of DSM savings is consistent with the Company's approved 2019-2022 DSM Plan."

On page 14 of the FBC 2019–2022 DSM Expenditures Application, FBC showed the forecast DSM savings from years 2019 to 2022 in Table 5-1, as follows:

Table 5-1: 2019-2022 DSM Plan Proposed Expenditures (inflation adjusted)

Program Area (Sector)	2018 Plan	Expenditures ($000s)					Energy savings (GWh)					TRC 2019-2022
	Approved	2019	2020	2021	2022	Total	2019	2020	2021	2022	Total	Ratio
Residential	$1,591	$2,086	$2,304	$2,519	$2,795	$9,703	6.0	5.6	6.0	6.5	24.1	1.8
Low Income	$731	$843	$873	$899	$930	$3,545	1.0	1.0	1.0	1.1	4.1	1.5
Commercial	$3,592	$3,178	$3,031	$3,052	$3,047	$12,308	15.5	15.5	15.3	15.5	61.8	1.7
Industrial	$377	$1,762	$1,788	$1,813	$1,815	$7,178	10.0	10.0	10.1	10.1	40.2	1.7
Program sub-total	*$6,291*	*$7,870*	*$7,995*	*$8,284*	*$8,587*	*$32,735*	*32.6*	*32.1*	*32.4*	*33.1*	*130.3*	*1.7*
Education and Outreach	$165	$566	$497	$595	$666	$2,324						
Supporting Initiatives	$742	$1,218	$838	$1,024	$1,044	$4,124						
Portfolio	$743	$776	$913	$1,019	$956	$3,663						
Demand Response		$477	$324	$130	$133	$1,064						
Total	**$7,940**	**$10,900**	**$10,600**	**$11,100**	**$11,400**	**$44,000**	**32.6**	**32.1**	**32.4**	**33.1**	**130.3**	**1.5**
LT DSM Plan	**$7,900**	**$8,100**	**$8,200**	**$9,400**	**$10,600**	**$36,300**	**26.4**	**26.4**	**28.4**	**30.4**	**111.6**	**1.9**

5.1 Please reconcile the DSM savings forecasted for each customer class in 2022 in the Application with the energy savings estimates provided in Table 5-1 of the FBC 2019–2022 DSM Expenditures Application.

Response:

The DSM savings forecast for each customer class in 2022 in the Application and the energy savings estimates provided in Table 5-1 of FBC's Application for Approval of 2019-2022 Demand Side Management Expenditures Plan (DSM Plan) are not directly comparable. However, the forecast in 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 the Application presents the DSM savings numbers 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.

The DSM Plan represents annual incremental energy savings for the DSM projects, by customer type, 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 were 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 commercial customers, the commercial customers in Wholesale, and the "[Street] Lighting" and "Irrigation" rate class values, which are each shown separately in the load forecast.

5.1.1 If FBC has adjusted the estimated DSM savings as shown in Table 3-1 in the Application from those included in Table 5-1 in the FBC 2019–2022 DSM Expenditures Application, 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 Table 5-1 referenced above.

Please refer to the response to BCUC IR1 5.1 for an explanation of the differences between the approved 2019-2022 DSM Plan and the DSM forecast presented in the Application.

6.0 Reference: LOAD FORECAST AND REVENUE AT EXISTING RATES

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

Customer Count Variance

In Section 6.1 of Appendix A2 to the Application, FBC presents the customer count variance. The percent variance for the commercial customer count for 2018, 2019 and 2020 was -2.8%, -2.8%, and -0.3%, respectively.

6.1 Please explain the attributable factors (e.g. COVID-19 pandemic) for the negative customer count variance for commercial customers over the 2018 to 2020 period.

6.1.1 Please explain which of the factors explained above are anticipated to persist in 2021 and/or 2022 and how they have been accounted for in the 2022 commercial load forecast.

6.1.1.1 If the factors explained above have not been accounted for in the applicable load forecast, please explain why not.

Response:

Many factors influence the commercial customer count forecast, such as economic conditions, availability of retail space and other factors such as the COVID-19 pandemic. Additionally, the commercial customer forecast is based on GDP projections supplied by the CBOC, and this can also be a source or variance. FBC assumes these and all other factors are intrinsic in the data used to develop the forecast and assumes all factors influencing the recent actual customers additions will persist in the short-term. There are no known factors that remain unaccounted for in the load forecast.

With regard to the COVID-19 pandemic specifically, the forecast uses full year data to the end of 2020 and, therefore, the impact of the pandemic is reflected in this data point. As it is difficult to predict the timeframe or pattern of economic recovery, it is possible that the COVID-19 pandemic may continue to be a source of variance, either positive or negative, in future forecasts.

In Section 6.1 of Appendix A2, FBC states that the percent variance for the industrial customer count for 2020 is -32.6%.

6.2 Please explain the attributable factors for the negative customer count variance for industrial customers for 2020.

6.2.1 Please explain which of the factors explained above are anticipated to persist in 2021 and/or 2022 and how they have been accounted for in the 2022 industrial load forecast.

6.2.1.1 If the factors explained above have not been accounted for in the applicable load forecast, please explain why not.

Response:

The 2020 industrial customer count declined by 14 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;
- Four customer were cannabis operations that did not materialize; and
- One customer closed their business.

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 2022, customers may still fail to meet the industrial load thresholds and others may close their business, so these factors could persist. At this time FBC is not aware of any industrial customers likely to be impacted by these factors.

7.0 Reference: LOAD FORECAST AND REVENUE AT EXISTING RATES

Exhibit B-2, Section 3.4.4, p. 19; Exhibit B-2, Appendix A2, Section 6.2, p. 10

Normalized Actual to Forecast Load

In Section 6.2 of Appendix A2 to the Application, FBC presents the normalized actual to forecast load by customer class for each year from 2015 through 2020 and includes the forecast variance in terms of volume and percentage.

7.1 With respect to the information provided in Section 6.2 of Appendix A2, for the industrial segment, please explain the attributable factors that led to a load forecast variance of -2.7% in 2020.

7.1.1 For the industrial segment, please explain which of the attributable factors for the load forecast variance in 2020 are anticipated to persist into 2021 and/or 2022 and how they have been accounted for in the applicable load forecast for 2022.

7.1.1.1 If the factors explained above have not been accounted for in the applicable load forecast(s) in 2021 and/or 2022, please explain why not.

Response:

Approximately 10 GWh or 83 percent of the variance in the 2020 load forecast was due to cannabis loads not materializing as planned. The majority of the remaining 2 GWh (17 percent) of the variance is due to industrial customers that were moved out of the industrial class and into the commercial class because they no longer met the industrial load requirements.

Other variances from forecast were, in aggregate, minor. The industrial forecast is prepared based on the aggregation 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 2022 load surveys were completed, but cannot speculate on how customers considered those factors.

The cannabis loads referred to above are not included in the industrial forecast for 2022, so any factors affecting that industry segment are not expected to impact the industrial forecast for 2022. Additionally, FBC is not aware of any current customers at risk of being switched out of the industrial rate class in 2021. FBC is unable to speculate about potential future rate switches in 2022.

In Section 3.4.4, with regard to the industrial load forecast, FBC explains:

> … after-savings industrial load is forecast to decrease by 3 GWh in 15 2022F when compared to 2021S and by 67 GWh in 2022F compared to 2021 Approved. The lower forecast in 2021S and 2022F compared to 2021 Approved is primarily due to cannabis loads not materializing in 2021 as planned. FBC's 2021 Approved included 68 GWh of additional cannabis load; however, at this time, none of those customers have taken service in the industrial class. As a result, those loads have been removed from the current forecast.

7.2 Please explain why FBC included the cannabis loads in its 2021 industrial load forecast when the loads were not firm.

Response:

FBC added the cannabis load to the 2021 industrial forecast because FBC had a strong expectation that the loads would materialize, based on discussions with potential customers. Some of the customers did commence limited operations and are in the commercial class, and some did not materialize. FBC still anticipates these loads will materialize; however, as the timing is uncertain (due in part to the COVID-19 pandemic), FBC has not added them to the industrial forecast for 2022.

Cannabis is a new industry that is more volatile than other industries due to regulations and timing of projects. This issue of unpredictability in cannabis loads was also experienced by BC Hydro in its 2020 forecast. BC Hydro stated in its Fiscal 2023 to Fiscal 2025 Revenue Requirement Application that "[t]he December 2020 Load Forecast for incremental cannabis loads is lower than previous forecasts due to revised expectations and timing for specific projects." (BC Hydro F2023-F2025 RRA, Exhibit B-2, Section 3.5.6, Line 1-3)

7.3 Please explain the reasoning behind the cannabis loads not materializing in 2021 that led to a decrease in expected load forecast for the industrial segment.

Response:

Most of the customers in this sector were new businesses and were impacted by the COVID-19 pandemic in numerous ways. Some of the customers had delays in construction that did not allow them to complete construction of their facilities, while others could not start or ramp up production.

The cannabis sector has also seen significant consolidation. The intense competition and overproduction of cannabis has meant that many projects were delayed, others were descaled or converted into outdoor operations, and several were cancelled.

7.4 Please explain the future likelihood of new cannabis loads in FBC's service territory and how this has been accounted for in the 2022 industrial load forecast, if at all.

Response:

Please refer to the response to BCUC IR1 7.1.

8.0 Reference: LOAD FORECAST AND REVENUE AT EXISTING RATES

Exhibit B-2, Section 11, p. 71, pp. 91–93

Revenue requirement and rate changes for 2022

FBC presents the summary of rate change for 2022 in Schedule 1 in Section 11 of the Application. FBC provides further details regarding energy volume sold and revenue at existing rates for 2022 in Schedule 17, the revenue at existing and revised rates for the year ending December 31, 2022 in Schedule 18, and the cost of energy for 2022 in Schedule 19.

8.1 In the table format below, please calculate the impact on FBC's revenue surplus/deficiency in $-dollars and the requested rate change for 2022, if the gross load forecast was -10%, -5%, 0%, +5%, and +10% less/more than the forecast presented in the Application, respectively, assuming all else being equal. Please explain all inputs and assumptions made.

YEAR	10% Decrease	5% Decrease	No Change	5% Increase	10% Increase
Revenues at Existing Rates					
Power Purchase Expense					
Revised Margin					
Rate Impact:					
Deficiency at 1% Rate Change					
Increase (Decrease) in Deficiency					
Revised Deficiency (Surplus)					
Revenues at Existing Rates					
Rate Increase (Decrease)					

8.1.1 Please provide a revised Schedule 1, and Schedules 17 through 19 for year 2022 respectively, in a functional excel spreadsheet with the above sensitivity analysis, if possible.

<u>Response:</u>

Please refer to the table below for the impact of varying load forecasts on FBC's revenue surplus/deficiency and requested rate change for 2022. For the purpose of this table:

- Revenue adjustments were made on an annual basis and only impacted the energy revenue portion for each class, not fixed costs or demand changes.
- Power purchase expense was also adjusted on an annual basis, in order to reflect the varying gross load forecast.
- The average PPA energy rate for the calendar year was used as a proxy to determine the value of the increase/decrease to power purchase expense.

2022	10% Decrease	5% Decrease	No Change	5% Increase	10% Increase
Revenues at Existing Rates ($millions)	353.130	368.513	383.895	399.278	414.660
Power Purchase Expense ($millions)	125.357	134.568	143.779	152.990	162.201
Revised Margin ($millions)	227.773	233.945	240.116	246.288	252.459
Rate Impact:					
Deficiency at 3.46% Rate Change	13.295	13.295	13.295	13.295	13.295
Increase (Decrease) in Deficiency	12.343	6.171	-	(6.171)	(12.343)
Revised Deficiency (Surplus)	25.638	19.466	13.295	7.124	0.952
Revenues at Existing Rates	353.130	368.513	383.895	399.278	414.660
Rate Increase (Decrease)	7.26%	5.28%	3.46%	1.78%	0.23%

As variances between the forecast and actual margin are captured in the Flow-through deferral account, the resulting revenue requirement impacts are returned to or recovered from customers through the amortization of the Flow-through deferral account in subsequent years. In other words, customers are kept whole for any gross load forecast variances with the deferral account.

With regard to the request for revised Schedules 1 and 17 through 19 for each scenario in a functional excel spreadsheet, as the financial schedules provided in Section 11 are system-generated, there is not a readily available working excel model to provide the requested information. It would require extensive effort to manually create the requested functional excel models for each scenario for each of the four financial schedules. However, in order to be responsive, FBC has created the attached excel spreadsheets (please refer to Attachment 8.1.1) with the requested schedules for each scenario but without any functional formulas for other revenue requirement items such as load forecast, power supply, O&M, depreciation, amortization, taxes, financing costs, etc.

D. POWER SUPPLY

9.0 Reference: POWER SUPPLY

Exhibit B-2, Section 4.8–4.9, pp. 32–33

Wheeling Expense and Water Fees

In Table 4-5 of the Application, FBC presents the Approved 2021, Projected 2021 and Forecast 2022 Wheeling Expenses as follows:

Table 4-5: Wheeling Expense ($ millions)

Line No.	Description	Approved 2021	Projected 2021	Forecast 2022
1	Wheeling Nomination (MW Months)			
2	Okanagan Point of Interconnection	2,400	2,400	2,475
3	Creston	420	420	420
4				
5	Wheeling Expense			
6	Okanagan Point of Interconnection	$ 4.694	$ 4.654	$ 4.903
7	Creston	0.535	0.531	0.542
8	Other	0.485	0.651	0.648
9	Total Wheeling Expense	$ 5.714	$ 5.836	$ 6.093

9.1 Please explain, in detail, the factors that led to the increased wheeling expense forecasts for 2021 and 2022, respectively. As part of the response, please explain the factors that led to an increase in the wheeling expense forecasts for Okanagan Point of Interconnection on Line 2 of Table 4-5 and the "Other" on Line 8 of Table 4-5 categories.

Response:

FBC's 2021 Projected Total Wheeling Expense increased over 2021 Approved primarily due to increased use of Open Access Transmission Tariff (OATT) Wheeling, which falls under the "Other" category. OATT wheeling use increased as a result of higher actual and anticipated transmission outages on the FBC transmission system, requiring external wheeling to be booked on the BC Hydro system.

FBC's 2022 Forecast Total Wheeling Expense increased mainly as a result of an increased Amended and Restated Wheeling Agreement (ARWA) Wheeling Nomination to the Okanagan Point of Interconnection for the 2022/23 contract year, and also as a result of increased ARWA rates. FBC is required to submit its ARWA Wheeling Nominations five years in advance. The increased 2022/23 Okanagan load forecast in FBC's 2018 wheeling nomination drove the requirement to nominate more wheeling to that point of interconnection.

In Table 4-6 of the Application, FBC presents the Approved 2021, Projected 2021 and Forecast 2022 Water Fees:

Table 4-6: Water Fees ($ millions)

Line No.	Description	Approved 2021	Projected 2021	Forecast 2022
1	Plant Entitlement in Previous Year (GWh)	1,559	1,558	1,679
2				
3	Water Fees	$ 10.868	$ 10.878	$ 11.958

On page 33 of the Application, FBC states that the increase in water fees is due to increased entitlement use and rates.

9.2 Please explain, in detail, the factors that led to the increased water fees forecasts for 2022. As part of the response, please explain the factors contributing to a higher Plant Entitlement in Previous Years (GWh) for Forecast 2022.

Response:

Forecast water fees are based on FBC's Plant Entitlement usage in Previous Year, and the Water Power Rental Rates as published by the British Columbia Gazette, which are adjusted annually to reflect the change in the BC CPI. The key driver of the increased 2022 Water Fees is increased Plant Entitlement in Previous Year. This is mainly a result of increased stored entitlement energy in the CPA Balancing Pool, but also from decreased energy loss due to maintenance outages. The CPA balancing pool storage increased in 2021 for several reasons. First, entitlement energy was shifted into 2021 from 2020 to help manage resources against lower loads experienced in 2020. Second, increased market contracts executed in the first quarter of 2022 allowed FBC to shift entitlement energy from that period into the winter of 2021, helping to smooth resource requirements. Additionally, in terms of rates, FBC has also forecast a Water Rental Rate increase based on an estimated CPI increase of 2.1 percent for 2022.

E. OTHER REVENUE

10.0 Reference: OTHER REVENUE

Exhibit B-2, Section 5.2, p. 36

Apparatus and Facilities Rental

On page 36 of the Application, FBC states “2022 Forecast is higher than 2021 Approved due to expected escalations in unit rental rates for continuing contracts.”

10.1 Please explain the drivers of the unit rental rates for continuing contracts and discuss how much rates have gone up for continuing contracts in the 2022 Forecast.

Response:

FBC has agreements for pole attachments with several different entities, with rate drivers differing between contracts, including one contract that is a flat fee contract. Each contract includes formulas that contemplate items such as pole costs, financing and tax costs, maintenance costs (which could include labour, materials, and vehicles), and administration costs. The unit rental rates are calculated each year, instead of prescribed by agreement.

Rates for continuing contracts are forecast to increase by approximately 1.5 percent for 2022.

10.2 Please explain the forecast methodology for 2022 Forecast Apparatus and Facilities Rental Revenues. As part of the response, please explain if FBC took into consideration the average revenue from 2020 and 2021 and discuss any notable assumptions or events (such as the COVID-19 pandemic) that impacted the forecast.

Response:

FBC based the 2022 Forecast Apparatus and Facilities Rental Revenues on continuing contracts in place with third parties and considered average revenue from 2020 Actual (after normalizing adjustments) and 2021 Projected. The COVID-19 pandemic has not had an impact on Apparatus and Facilities Rental Revenue and is not expected to have an impact in 2022.

11.0 Reference: OTHER REVENUE

Exhibit B-2, Section 5.3, p. 36

Contract Revenue

On page 36 of the Application, FBC states:

> The 2022 Forecast is lower than 2021 Approved due to the expiry of revenues received from a three-year asset refurbishment project for a third party that began in 2020, based on customer requirements.

11.1 Please provide further detail regarding the asset refurbishment project (e.g., original versus estimated revised timeline of work (year) and the contract amount [$]).

Response:

The asset refurbishment project relates to an upgrade and life extension of a generating unit at one of the hydro facilities FBC manages. The work includes a generator stator replacement, rotor refurbishment, and turbine runner replacement as well as upgrading or replacing auxiliary systems, including governor, excitation, protection and control, station service and generator step-up unit transformers. The total value of work is approximately $30 million, on which FBC charges a management fee that is included in Contract Revenue. The work began in 2020 and will end in 2022. There have been no significant changes in scope, timeline, or value of work from what was initially forecast.

11.2 Please explain the forecast methodology for the 2022 Forecast Contract Revenues. As part of the response, please explain if FBC took into consideration the average revenue from 2020 and 2021 and discuss any notable assumptions or events (such as the COVID-19 pandemic) that impacted the forecast.

Response:

FBC based the 2022 Forecast Contract Revenues on continuing contracts in place with third parties. The forecast for contract revenues takes into account average revenues from prior years, as well as work expected to be performed in the forecast year. The amount of work expected to be performed is based on the approved work plan for the year, which is based on customer requirements. However, variances from forecast can arise due to the timing of when work is completed between years, as well as unscheduled work that is carried out when and if needed. Other than revenues received from the three-year asset refurbishment project that will end during 2022, there are no notable assumptions or events that impact the forecast. The COVID-19 pandemic has not had an impact on Contract Revenue and is not expected to have an impact in 2022.

12.0 Reference: OTHER REVENUE

Exhibit B-2, Section 5.1, p. 35; Exhibit B-2, Section 5.4, p. 36

Transmission Access Revenue

On page 35 of the Application, FBC states:

> 2021 Projected Other Revenue is $0.327 million higher than 2021 Approved. The main drivers of this increase are higher Transmission Access Revenue due to a wheeling customer exceeding their nomination at the beginning of 2021, as well as higher Late Payment Charges and Connection Charges based on amounts charged to date.

On page 36 of the Application, FBC states:

> The 2021 Projected revenue is higher than 2021 Approved due to a transmission customer exceeding their nomination at the beginning of 2021. The 2022 Forecast is higher than 2021 Approved due to the phased increase in rates over three years beginning January 1, 2020, as approved by Order G-40-19.

12.1 Please explain the drivers of the higher Late Payment Charges and Connection Charges for 2021 Projected Other Revenue compared to the 2021 Approved.

Response:

Late Payment Charges are applied to overdue customer accounts, but were suspended as a COVID-19 pandemic relief measure throughout 2020. The 2021 Approved Late Payment Charges were forecast during 2020 and were based on an average of actual Late Payment Charges for 2017 to 2019, knowing at the time that it was not clear when late fees would resume in 2021. When FBC resumed charging late fees on March 1, 2021, the balance of accounts attracting late fees was higher than historical averages, and therefore actual Late Payment Charges applied on overdue accounts up to the end of May 2021 that were used to estimate across the remainder of 2021 resulted in a calculated 2021 Projected amount that is higher than the average of 2017-2019 that was used for 2021 Approved.

Please see the response to BCUC IR1 13.1 for an explanation of the variance between the 2021 Projected and 2021 Approved Connection Charges.

12.2 Please explain the drivers of why the wheeling customer exceeded their nomination at the beginning of 2021 which contributed to the 2021 Projected revenue. As part of the response, please provide the amount ($) the wheeling customer is expected to contribute to the 2021 Projected Other Revenue, if any.

Response:

The wheeling customer exceeded their nomination due to higher than expected transmission use as a result of unseasonably cold weather during February 2021. In total, the customer is expected to contribute $0.992 million to the 2021 Projected Other Revenue.

12.3 Please explain the forecast methodology for 2022 Transmission Access Revenues. As part of the response, please explain if FBC took into consideration any expectations for nominations to continue to be exceeded in 2022.

Response:

FBC forecast the 2022 Transmission Access Revenue on an individual customer basis depending on the contract in place. In the case where a customer is required to nominate a specific amount of transmission usage, the applicable annual nomination is multiplied by FBC's current rates and escalated by the forecast BC CPI. In the case where customers use short-term, ad-hoc amounts of point-to-point wheeling, FBC forecast the revenue by looking at historical use and applying FBC's current rates. FBC did not take into consideration any expectations to exceed nominations in 2022, as this event was atypical and the nominations made by customers are what FBC expects to be used.

13.0 Reference: OTHER REVENUE

Exhibit B-2, Section 5.7, p. 37

Connection Charges

On page 37 of the Application, FBC states:

> The 2021 Projected is higher than 2021 Approved based on amounts charged so far in 2021. The 2022 Forecast is expected to be higher than 2021 Approved but lower than 2021 Projected based on customer growth and forecast customer reconnections.

13.1 Please explain the drivers of higher amounts charged which have led 2021 Projected Connection Charges to be higher than 2021 Approved.

Response:

The 2021 Approved Connection Charges were based on an average of 2017 to 2019 actual charges and customer growth to develop an estimate for 2021. For 2021 Projected, the actual Connection Charges up to the end of May 2021 were used to estimate for the remainder of 2021, which resulted in an amount higher than 2021 Approved.

The drivers of the higher amounts charged are related to increased customer connections and reconnections compared to the amounts included in the 2021 Approved forecast, as well as changes in the mix of connection fees charged. There are several different connection fees charged in different circumstances, ranging from $13 to $902, as outlined in Section 17.2 of the FBC Electric Tariff. As a result, the Connection Charges cannot be estimated solely by multiplying forecast customer growth by a rate.

13.2 Please provide further detail of the customer growth and forecast customer reconnections to explain why the 2022 Forecast for Connection Charges is expected to be higher than 2021 Approved but lower than 2021 Projected.

Response:

The 2022 Forecast Connection Charges have been estimated based on the average of 2019 and 2020 actuals. The 2022 Forecast is generally consistent with how the 2021 Approved Connection Charges were estimated, but results in a different amount due to the years used and a movement in the average. As explained in the response to BCUC IR1 13.1, the 2021 Projected is higher than the 2021 Approved; hence the 2022 Forecast is higher than 2021 Approved but lower than 2021 Projected.

14.0 Reference: OTHER REVENUE

Exhibit B-2, Section 5.8, p. 37

Other Recoveries

On page 37 of the Application, FBC states:

> The 2022 forecast is expected to be slightly lower than 2021 Approved due to an expected reduction in AMI radio-off meter read fees from a lower volume of customers choosing the radio-off option.

14.1 Please explain the drivers of lower volume of customers choosing the radio-off option. As part of the response, please provide i) the percentage of customers who are currently using the radio-off option, ii) the historical percentage of customers who used the radio-off option for the past 3 years and iii) the percentage of customers forecasted to choose the radio-off option in 2022 and why.

<u>Response:</u>

A lower number of customers choosing the radio-off option has been a trend FBC has observed since advanced meters were first installed. The table below provides the number of customers choosing radio-off, number of customers eligible, and a percentage representation as of the first week of January for each of the years 2017 to 2021.

Year	Radio-off Option	Total Eligible	Percentage
2017	2,750	132,196	2.08%
2018	2,611	134,444	1.94%
2019	2,459	137,315	1.79%
2020	2,287	139,738	1.64%
2021	2,173	142,298	1.53%

FBC does not know the reasons for the trend, but it is likely related to broader acceptance of the technology by those customers who were initially hesitant. The 2022 Forecast Other Recoveries was prepared based on the fees charged, not the customers enrolled, and assumed a further 3 percent decrease in Other Recoveries from 2021 Approved.

F. OPERATIONS AND MAINTENANCE EXPENSE

15.0 Reference: OPERATIONS AND MAINTENANCE EXPENSE

Exhibit B-2, Section 6.3.2, p. 43; FBC 2020 and 2021 Annual Review, Exhibit B-6, BCUC IR 12.1

Insurance

On page 43 of the Application, FBC states:

> The 2021 Projected insurance premium expense of $2.022 million is $0.106 million higher than 2021 Approved, as it incorporates FBC's actual July 2021 to June 2022 insurance renewals of $2.033 million. The higher premiums experienced in 2021 are expected to continue into 2022. The forecast for 2022 insurance is $2.223 million, an increase of $0.201 million from 2021 Projected. The 2022 Forecast is calculated as the amount of the first six months of actual annual insurance premiums for January 2022 to June 2022 of $1.017 million, applying a 5 percent increase for the remaining six months, plus the fire fighting premium of $138.5 thousand.
>
> FBC has experienced significant increases in insurance expense in the last two renewals as a result of the following factors:
>
> - Insurers reducing their insurance capacity, which means reducing the limit that an insurance company agrees to assume from underwriting a risk. This results in the need for other insurers of the existing policies to increase their capacity or the need to seek new insurers who are willing to participate in the existing insurance program, which can lead to changes in pricing philosophies and higher premiums being charged;
> - Insurers limiting their risks by adding new exclusions to exclude or restrict coverages for a particular event; and
> - Increases in policy deductibles or self-insured retentions, which raises the threshold of an insured event for indemnification under a policy.

In response to British Columbia Utilities Commission (BCUC) Information Request (IR) 12.1 in the FBC 2020 and 2021 Annual Review, FBC described various actions it planned to undertake or has undertaken to control increases in insurance expense:

> To manage insurance premiums, FBC (through Fortis Inc.) works each year with its insurance broker Aon to market its insurance program to achieve the lowest premiums and most favourable terms
>
> […]
>
> Various insurance markets are approached each year in order to achieve optimal pricing. FBC has and continues to operate and conduct business in a way that represents a healthy and favourable account for insurers.

To manage insurance risk, FBC implements the necessary processes for various aspects of our operations to minimize potential exposures which may result in a loss. Insurance obligations are transferred to contractors and vendors where possible to avoid an impact to FBC's insurance program in the event of a loss.

15.1 Please explain the fire fighting premium of $138.5 thousand and whether FBC can make an insurance claim for any damages related to the wildfires referred to in Section 12.2 of the Application.

Response:

The fire fighting premium of $138.5 thousand is an annual retainer paid to BC Wildfire Services which obligates them to respond to incidents on or near FBC's infrastructure. It is not insurance coverage against the value of FBC's assets and therefore is not applicable to any damages related to the wildfires referred to in Section 12.2 of the Application.

Although FBC does have insurance coverage for legal liability for third party damage as a result of wildfires, coverage for property damage to owned poles/wires (i.e., first party property) is excluded except within 1,000 ft of an insured power station / substation.

15.2 Please discuss whether the actions taken to control costs described in BCUC IR 12.1 from the FBC 2020 and 2021 Annual Review had an impact on the 2021 projected insurance expense and if so, to what extent.

Response:

Yes. The actions described in BCUC IR1 12.1 from the 2020 and 2021 Annual Review enabled FBC (through Fortis Inc.) to secure required insurance coverage with the lowest available premiums for the required terms, despite the general insurance market remaining tight from a buyer's perspective as premium rates continue to rise while retentions are increasing and coverage is being restricted.

15.3 Please explain whether FBC has changed or intends to change its 2022 strategy for controlling insurance expense as a result of the increase insurance expense factors listed on page 43 of the Application.

Response:

No. FBC will continue to manage insurance risk through necessary processes and controls for various aspects of its operations to minimize potential exposures which may result in a loss.

16.0 Reference: OPERATIONS AND MAINTENANCE EXPENSE

Exhibit B-2, Section 6.3.4, p. 44; FortisBC Energy Inc. (FEI) and FBC Application for Approval of a Multi-year Rate Plan for the Years 2020 through 2024 Decision and Orders G-165-20 and G-166-20 (FortisBC 2020-2024 MRP Decision), p. 73

Charging Stations

On page 73 of the FortisBC 2020-2024 MRP Decision, the BCUC stated:

> Subject to approval by the BCUC for inclusion of FBC's EV charging stations in rate base, the Panel approves FBC's request to forecast costs associated with EV charging stations and to <u>record the related forecast cost of service variances in the Flow-through deferral account. The Panel also approves flow-through treatment for revenues related to EV Charging stations</u>. While the cost of service associated with these charging stations may be somewhat controllable, these stations will generate new incremental tariff revenue and there is uncertainty associated with the amount of revenues and costs. [Emphasis Added]

On page 44 of the Application, FBC states:

> The cost of service associated with EV charging stations is subject to flow-through treatment, contingent upon approval by the BCUC for inclusion of EV charging stations in rate base.
>
> […]
>
> [T]he BCUC issued Order G-215-21 finding that FBC's EV direct current fast charging (DCFC) stations are prescribed undertakings under section 5 of the GGRR and approving FBC to include the assets in FBC's rate base. However, the BCUC did not provide determinations on certain related approvals sought by FBC, including approval of a straight-line 10 percent depreciation rate for FBC's EV DCFC stations and approval to include related revenues and expenses associated with the EV DCFC stations in FBC's regulated accounts; as such, the revenue requirement impacts of the decision are not clear at this time. FBC will provide an Evidentiary Update if required once FBC has clarity on these matters.

16.1 In the event that approval to include related revenues and expenses associated with the electric vehicle (EV) direct current fast charging (DCFC) stations in FBC's regulated accounts is granted, please provide the potential impact on the proposed 2022 rate increase.

<u>Response:</u>

Assuming FBC receives the BCUC's final determinations in 2021, the variance between the forecast of zero and actual/projected amounts for EV DCFC stations' revenues and expenses up to the end of 2021 would be captured in the Flow-through deferral account and would be recovered from or returned to customers in 2022; in addition, the 2022 impacts would be included in FBC's 2022 forecasts and would impact the proposed 2022 rates.

Table 1 below shows the (surplus)/deficiency amounts for each year from 2018 to 2022. Table 2 is the rate impact analysis for the deficiency to be recovered through a combination of the amortization of the Flow-through deferral account (for 2018 to 2021 impacts) and updates to 2022 rates (for 2022 impacts).

Table 1: Forecast of EV Charging Station (50 kW) Deficiency 2018 – 2022 ($000s)

Line	Particulars	2018 Actual	2019 Actual	2020 Actual	2021 Projected	2022 Forecast
1	Cost of Energy	2	7	7	10	209
2	Less: Power Purchase Expense	(2)	(7)	(7)	(10)	(45)
3	O&M	0	2	46	66	187
4	Depreciation	-	60	197	311	401
5	Amortization of CIAC	-	(35)	(70)	(150)	(211)
6	Property Taxes	-	-	-	-	2
7	Income Tax	(9)	(361)	(72)	(25)	81
8	Earned Return	6	53	95	102	101
9	Total ($000s)	(2)	(282)	197	304	725
10						
11	Revenue (@ Interim/Approved Rates)	(4)	(24)	(28)	(54)	(224)
12	(Surplus) / Deficiency	(6)	(306)	169	250	501

FBC notes the 2020 amounts shown in BCUC IR1 15.2 of the EV Application were projected numbers for that year, whereas the 2020 amounts shown in Table 1 above are actuals. The actual 2020 deficit in Table 1 above is lower than the projected deficit from BCUC IR1 15.2 of the EV Application by $186 thousand, mainly due to FBC being able to confirm that no NRCan repayment was required in 2020. The repayment was shown in BCUC IR1 15.2 as $193 thousand. Furthermore, FBC has not yet sold any of the carbon credits related to its public DCFC stations; therefore, carbon credit revenues are not shown in this summary (consistent with BCUC IR1 15.2 of the EV Application).

FBC also notes that it has excluded power purchase expense from the calculation of the amount to be recovered from customers, as these amounts are already embedded in the power purchase expense that has been included in FBC's revenue requirements each year. FBC further clarifies that the cost of energy embedded in the interim rate as approved by Order G-9-18 was based on BC Hydro's Rate Schedule 3808; therefore, the cost of energy for 2018 to 2021 shown in Table 1 above equals the power purchase expense as these years are still under the interim rate for EV charging stations. However, as discussed in Section 3.2.2.3 of the EV Application, FBC's proposed permanent rates for the EV charging stations will be based on FBC's commercial service under RS 21. As such, the cost of energy for 2022 shown in Table 1 above is based on FBC's RS 21, assuming FBC receives the BCUC's final determinations in 2021.

Table 2: Estimated Rate Impact in 2022

Line	Particular	Reference	2022
1	2018 - 2021 (Surplus)/Deficiency, to be recovered via amortization of the flow-through deferral account	BCUC IR1 16.1, Table 1, Year 2018 to 2021, Sum of Line 12	107
2	2022 (Surplus)/Deficiency	BCUC IR1 16.1, Table 1, Year 2022, Line 12	501
3	**Total**	**Line 1 + Line 2**	**608**
4			
5	Revenue at Existing Rates ($000s)	Section 11 of Application, Schedule 1, Line 34	383,895
6	**Rate Change (%)**	**Line 1 / Line 5**	**0.16%**

16.2 In the event that approval to include related revenues and expenses associated with the EV DCFC stations in FBC's regulated accounts is not granted, please explain FBC's proposal to record revenues and expenses from EV DCFC charging stations in 2022.

Response:

In the event that approval to include related revenues and expenses associated with the EV DCFC stations in its regulated accounts is not granted, FBC would review the BCUC's decision and rationale carefully and determine at that time the appropriate next steps.

FBC expects, however, that the approval will be granted. Pursuant to Order G-215-21, the BCUC found that FBC's EV DCFC stations as set out in FBC's EV Application meet the definition in section 5 of the GGRR to be considered prescribed undertakings. Per section 18(2) of the *Clean Energy Act*: "In setting rates under the *Utilities Commission Act* for a public utility carrying out a prescribed undertaking, the commission must set rates that allow the public utility to collect sufficient revenue in each fiscal year to enable it to recover its costs incurred with respect to the prescribed undertaking".

G. RATE BASE

17.0 Reference: AMORTIZATION OF DEFERRAL ACCOUNTS

Exhibit B-2, Section 7.6.2.3, p. 60

2020 Cost of Service Analysis (COSA) Deferral Account

On page 60 of the Application, FBC states:

> While no regulatory process was established to review the 2020 COSA, FBC incurred costs of $0.043 million ($0.032 million after tax) to date for consultant fees related to updating the COSA model and providing input to the information filed with the BCUC. In this Application, FBC is seeking approval to amortize these costs over one year commencing January 1, 2022.

17.1 Please provide the rationale for a one-year amortization period for costs associated with the 2020 COSA deferral account.

Response:

FBC believes a one-year amortization period for the 2020 COSA deferral account is appropriate given the relatively small amount of additions to the account and the minimal rate impact to customers. The one-year amortization period also minimizes the amount of carrying costs accrued on the deferral account balance. Any variances between the forecast additions and the actual incurred costs will be amortized into rates in the following year.

17.2 Please discuss whether any alternative amortization periods for costs associated with the 2020 COSA deferral account were considered by FBC.

17.2.1 If yes, please discuss these alternative amortization periods and their resulting rate impact including why they were not chosen.

17.2.2 If no alternatives were considered, please discuss why not.

Response:

FBC did not consider alternative amortization periods for costs in the 2020 COSA deferral account as the forecast additions, and the resulting rate impact associated with amortization of the deferred costs, are relatively minimal.

18.0 Reference: AMORTIZATION OF DEFERRAL ACCOUNTS

Exhibit B-2, Section 7.6.2.4, p. 60

Mandatory Reliability Standards (MRS) 2021 Audit deferral account

On page 60 of the Application, FBC states:

> FBC's triennial MRS audit will conclude in August 2021. Notification of the audit was received on April 19, 2021 and the scope of the audit includes both Critical Infrastructure Protection (CIP) and Operations and Planning (O&P) standards. The formal audit with the Western Electricity Coordinating Council (WECC) auditors is over a three-week period from July 19 to August 6.
>
> […]
>
> The projected additions to the deferral account in 2021 are $0.350 million. FBC requests approval to amortize the actual costs over three years beginning January 1, 2022. This amortization period is appropriate as it reflects the period until the next MRS triennial audit.

18.1 Please confirm whether $0.350 million represents the total balance of the MRS 2021 Audit deferral account related to the triennial MRS audit concluding in August 2021. If not, please provide the expected total amount.

Response:

FBC forecast costs of $0.350 million, before tax, in the MRS 2021 Audit deferral account; however, upon the conclusion of the audit in August 2021, the actual costs incurred were $0.323 million, with no further costs anticipated. FBC will update the actual additions to this deferral account and the resulting amortization expense for 2022 in the Final Compliance Filing. This will result in a slight reduction to the 2022 amortization expense.

19.0 Reference: DEFERRED CHARGES

Exhibit B-2, Section 7.6.2.1, pp. 56–57

COVID-19 Customer Recovery Fund Deferral Account

On page 56 of the Application, FBC provides the following table that shows revenues that are considered unrecoverable due to the COVID-19 pandemic, which have been added to the COVID-19 Customer Recovery Fund deferral account.

Table 7-8: Unrecoverable Revenue Amounts ($ millions)

	2020 Actual	2021 Projected	2022 Forecast
Opening Balance	-	0.011	0.193
Transfers	-	-	0.108
Additions[24]	0.015	0.250	0.442
Tax	(0.004)	(0.068)	(0.149)
Ending Balance	0.011	0.193	0.594

On page 56 of the Application, FBC states that these amounts are in excess of the normal course forecast bad debt expense that is recognized in indexed-based operations and maintenance (O&M).

Further, on page 56 of the Application, FBC states:

> The unrecovered revenue recorded in the deferral account includes:
>
> - any remaining balances associated with the bill payment deferral program, described in section (a), that resulted from customers' inability to pay; and
> - any unrecovered revenue from all customer classes due to COVID-19, including industrial and large commercial customers and those residential and small commercial customers that did not participate in the bill payment deferral or bill credit relief offerings.

On page 57 of the Application, FBC states:

> During the pilot, 150 customers with past due balances were contacted to determine impacts of the pandemic. 15 percent of the customers with an average balance of $800 confirmed that they were financially impacted by COVID-19 and will require support to bring their accounts in good standing. This result was applied to the estimated 690 customers with outstanding balances as at June 1, 2021 to derive the forecast COVID-19 related unrecoverable revenue deferral account additions.

19.1 Please discuss how the 2022 forecast additions of $0.442 million as per Table 7-8 was calculated given that 15% of the 150 customers contacted (out of an estimated 690 total customers with outstanding balances) confirmed that they were financially impacted by COVID-19, and the average balance was $800. If the $0.442 million is derived from a calculation, please provide the calculation.

Response:

The forecast addition of $0.442 million for 2022 to the COVID-19 Customer Recovery Fund deferral account was based on findings from the pilot project and adjusted to reflect bill payment deferral amounts already accounted for.

Please refer to the table below for the detailed calculation.

Line	Particulars			Notes
1	Total Customers Past Due as at June 2, 2021		4,600	
2	Estimated Percentage Unrecoverable		15%	As determined based on pilot program customer contacts
3	Estimated Number of Customers		690	Line 1 x Line 2
4				
5	Average Outstanding Balance	*$*	$ 800	Average outstanding account balance for customers in pilot group
6	Estimated Total Balance	*$ 000s*	$ 552	(Line 3 x Line 5) / 1,000
7	Less: Bill Payment Deferrals	*$ 000s*	$ 108	Embedded in Line 6; however, already accounted for in the deferral account
8	Estimated Unrecovered Revenue Addition	*$ 000s*	**444***	Line 6 - Line 7

* Difference is Estimated Unrecovered Revenue Addition between table above and Table 7-8 due to rounding.

The average outstanding balance per customer inherently includes bill payment deferral amounts; however, this amount has been added as transfers to the deferral account (please refer to the Transfers line identified in Table 7-8 of the Application). As such, an adjustment is required to remove the bill payment deferral amount from the calculation to avoid double counting in the forecast balance of the deferral account.

19.2 Please provide the actual or projected annual bad debt expense for 2018 to 2021 and the forecast for 2022 in the normal course of business (i.e., not deemed unrecoverable due to COVID-19).

19.2.1 If there is more than a 10% difference between the 2022 and the pre-pandemic (i.e., 2018 and 2019) non-COVID-19 related bad debt expense provided in the response to the preceding I, please explain the cause of the differences.

Response:

Please refer to the table below for the actual, projected and forecast bad debt expense amounts for the years requested.

Table 1: FBC Bad Debt Expense ($ million) – 2018 - 2022

	2018 Actual	2019 Actual	2020 Actual	2021 Projected	2022 Forecast
Bad Debt Expense	0.471[1]	0.543	0.539	0.700	1.175

Note to table:

[1] Starting in 2018, bad debt expense was low relative to the previous five years. From 2013 to 2018, the average bad debt expense was approximately $1 million per year.

FBC does not have a detailed estimate of what 2022 bad debt expense will be at this time. FBC refers the BCUC to its response to BCOAPO IR1 28.3 that discusses FBC's bad debt experience for 2020 and 2021 (which both varied by more than 10 percent from the 2018 and 2019 amounts); at this time, FBC has no reason to believe that 2022 will be greater than the notional index-based bad debt expense.

Note that the COVID-19 pandemic related bad debt expense is accounted for in the COVID-19 Customer Recovery Fund deferral account and is not included in the numbers provided in the table above.

H. FINANCING AND RETURN ON EQUITY

20.0 Reference: FINANCING AND RETURN ON EQUITY

Exhibit B-2, Section 8.3.1, p. 62; Exhibit B-2, Section 8.4, p. 65

Long-term Debt

On page 62 of the Application, FBC states "The 2021 debt issuance is reflected in the financial schedules in November 2021 at a rate of 3.60 percent."

On page 65 of the Application, FBC states:

> FBC's debt financing costs on rate base are primarily determined by embedded rates on long-term debt, and to a lesser degree by short-term debt rates; the embedded rate on long-term debt is forecast to decrease in 2022 as compared to 2021 Approved.

20.1 Please explain why the embedded rate on long-term debt is forecast to decrease in 2022.

Response:

The embedded rate on long-term debt is forecast to decrease slightly in 2022 compared to the 2021 Approved[2] rate (2022 forecast rate of 4.79 percent[3] compared to the 2021 forecast rate of 4.93 percent[4]) due to the forecast issuance of long-term debt at interest rates lower than the current embedded rate and the maturity of long term debt that had interest rates higher than the current embedded rate.

The interest rate on the forecast $75 million long-term debt issuance in 2021 is projected to be 3.6 percent, which is below the average embedded cost of 4.79 percent. In addition, FBC will repay approximately $25 million in long-term debt with an interest rate of 7.81 percent, which is scheduled to mature on December 1, 2021 and which will further contribute to the lower forecast 2022 average embedded cost of long-term debt, compared to 2021.

---

[2] Evidentiary Update to the 2020 and 2021 Annual Review dated October 28, 2020, Schedule 27 (2021).

[3] Section 11, Schedule 27, Line 13.

[4] October 28, 2020 Evidentiary Update to the FBC Annual Review for 2020 and 2021 Rates, Schedule 27 (2021), Line 13.

21.0 Reference: FINANCING AND RETURN ON EQUITY

Exhibit B-2, Section 8.3.3, p. 64.

Short-term Debt

On page 64 of the Application, FBC shows its Approved 2021, Projected 2021 and Forecasted 2022 short-term interest rates in Table 8-1: Short Term Interest Rate Forecast, as reproduced in part below:

Table 8-1: Short Term Interest Rate Forecast

FBC Short Term Interest Rate	Approved 2021	Projected 2021	Forecasted 2022
3-Month T-Bill Rate [1]	0.45%	0.13%	0.47%
Spread to CDOR	0.44%	0.39%	0.39%
CDOR Rate	0.89%	0.52%	0.86%
Spread to CP	-0.22%	-0.32%	-0.32%
CP Dealer Commission	0.10%	0.10%	0.10%
ST Interest Rate on Credit Facilities	**0.77%**	**0.30%**	**0.64%**
Fixed Financing Fees [2]			
Standby fee on Undrawn Credit [3]	0.77%	0.37%	0.44%
Renewal Fee on Undrawn Credit	0.29%	0.14%	0.17%
Other Financing Fees	0.40%	0.22%	0.26%
ST Interest Rate on Fixed Financing Fee	**1.45%**	**0.73%**	**0.87%**
FBC Short Term Rate	**2.22%**	**1.03%**	**1.51%**

21.1 Please describe what "Other Financing Fees" in Table 8-1 entail.

Response:

Other Financing Fees include commercial paper issuance fees, letter of credit fees and customer deposit interest expense.

21.2 Please explain the variances between the Approved 2021 and Forecasted 2022 interest rates for: i) Standby fee on Undrawn Credit; ii) Renewal Fee on Undrawn Credit; and iii) Other Financing Fees.

Response:

As explained in Note 2 to Table 8-1 of the Application, fixed financing fees represent the costs of maintaining the credit facility and letter of credit facility, which are generally consistent year over year regardless of whether FBC draws from the credit facility.

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

FBC forecasts no dollar amount changes in fixed financing fees from 2021 to 2022. Therefore, the variances in the 2022 Forecast compared to the 2021 Approved fixed financing fee interest rates result from a change in average short-term debt balances forecast for 2021 compared to 2022.

21.3 Please explain the variance between the Projected 2021 Forecasted 2022 interest rate for the 3-month T-Bill Rate.

Response:

The 2021 Projected and 2022 Forecast 3-month T-Bill rates were based on the forecast rates provided in June 2021 by the five major chartered Canadian banks, as shown in the table below.

Source	Projected 2021	Forecasted 2022
TD Bank Group	0.10%	0.30%
RBC Economics	0.20%	0.80%
Scotiabank Economics	0.15%	0.90%
BMO Capital Markets	0.10%	0.12%
CIBC Economics	0.10%	0.24%
Equal weighted rate used by FBC	**0.13%**	**0.47%**

In forecasting the rates, the banks will typically incorporate a number of assumptions including expectations around Bank of Canada rate setting, available liquidity and other economic factors.

I. TAXES

22.0 Reference: TAXES

Exhibit B-2, Section 9, pp. 66–67

Property Taxes

On page 66 of the Application, FBC states that property taxes in 2022 are forecast to increase 3.8% compared to 2021 Projected primarily due to construction activities, market value changes, and changes in tax policies of local taxing authorities. FBC's assumptions for the drivers of the changes, including changes in tax rates, changes in revenues to calculate grants in lieu of taxes and changes in assessed values, are provided on pages 66 to 67.

22.1 Please provide the rationale for the expected increases and decreases to the drivers of property tax cost discussed on pages 66 to 67.

<u>Response:</u>

Property tax rates vary from jurisdiction to jurisdiction, and may vary even within a jurisdiction depending on the property type. In addition, tax rates change annually, and are usually set sometime between March and the middle of May during the taxing authorities' annual budgeting processes. Tax rate estimates rely largely on anecdotal evidence, such as prior experience, expected assessment increases and media reports related to municipal budgets. While properties may fall into one of nine property classes, the majority of FBC's properties are classified as Class 2 – Utility. FBC therefore predicts general tax rate increases based on changes to this class of property. The COVID-19 pandemic has created some unique challenges for predicting tax rates but, for the most part, utility properties did not receive exemptions or temporary reductions in tax rates received in other property classes.

Tax rate changes in 2022 reflect the following:

a) **Municipal Rates.** These include all taxes levied directly by municipalities. Under B.C. Regulation 329/96, General Municipal taxes are capped at $40.00 / $1,000 of assessment or 2.5x the Business / Other Rate, whichever is greater. Tax rate calculations used to generate estimates apply the cap when estimates are created. FBC estimated municipal rates would increase 0.50 percent (as compared to 0.25 percent estimated for more urban areas), as the municipalities it serves tend to be smaller with more room to increase rates under the cap.

b) **School taxes** are set by the Province and are expected to decrease by 1 percent, essentially to reflect a decrease in the actual Class 2 - Utility rate from 2021 rates of $12.86 / $1,000 of assessment to $12.73 / $1,000. While utilities saw no relief in school taxes when compared to Class 4 - Major Industry or Class 6 - Business/Other, they have been on a downward trend over the past six years and FBC's expectation is that this will continue in a moderate way in 2022.

School tax Rates 2016 to 2021

	02 Utility	04 Major Industry	06 Business/Other
2021	12.86000	3.86000	3.86000
2020	13.03000	0.00010	1.10700
2019*	13.20000	3.70000	3.70000
2018*	13.40000	4.20000	4.20000
2017*	13.40000	4.80000	4.80000
2016*	13.50000	5.40000	5.40000

Data from Provincial Municipal Statistics Schedule702

* Major Industry provides 60% Credit not included in posted rates

c) **Rural general tax rates** are set by the Province as well, and are legislated as a ratio of 3.5:1 to the Class 1 Residential Rate. Given the significant appreciation in Residential property market values during the pandemic, it is expected residential rates will decrease. Based on experience and past rate changes, FBC assumed a 2 percent decrease to be reasonable.

d) **Tax Rates on First Nations Lands.** First Nations land taxes rates are set locally by each taxing authority and are forecast to increase in aggregate 0.25 percent.

e) **Other tax rates** include taxes paid to regional districts, hospital districts, transit authorities, and the BC Assessment and Municipal Finance Authority (MFA) levy. While the BC Assessment and MFA levy are set provincially, the others are set separately for each municipality and regional district electoral area. There are expected to be some increases and some decreases in these rates, but overall no change has been forecast.

Changes in Assessed Values

Whenever possible, FBC relies on actual changes in the assessed values of FBC's property, however, because of the diversity of assets and locations, a degree of judgment is also required.

The following explains the basis for the FBC forecast on assessed values:

a) **Distribution and Transmission lines** were expected to increase by 5 percent based on FBC's best judgement of input price inflation combined with the construction activities discussed in the response to BCUC IR1 22.2.

b) **Generation assets** were assumed to increase by 2.5 percent based on FBC's best judgement. Rates for Dams and Generation assets are updated using five-year averages. Based on the table below, the five-year average was assumed to be 3.0 percent and, allowing for 0.5 percent for depreciation, FBC used 2.5 percent for its forecast assessment increase.

BC Assessment Update Factors

Roll Year	EPG Dams	EPG Generating
2016	1.90%	1.70%
2017	0.75%	1.00%
2018	3.47%	2.62%
2019	4.88%	3.57%
2020	3.41%	2.69%
2021*	3.11%	2.45%
2022	3.00%	2.00%
5-Year Average (2018 to 2022)	**3.57%**	**2.67%**

* Estimate based on actual folio

Average Rates on Dams & Generation 3.0%

c) **Substation equipment** was assumed to increase 3 percent using FBC's best judgement. Similar to dams and generation assets, substations are derived using a five-year average. FBC assumed steel prices would be a significant driver that would increase costs in 2022 significantly. This resulted in a five-year average of 3.54 percent. Deducting approximately 0.5 percent for additional depreciation resulted in the 3.0 percent estimate.

BC Assessment Update Factors

Roll Year	EPG Substations
2016	2.25%
2017	0.90%
2018	2.37%
2019	2.96%
2020	2.94%
2021*	2.42%
2022	7.00%
5-Year Average (2018 to 2022)	**3.54%**

* Estimate based on actual folio

d) **Land values** were expected to increase 3 percent for right of ways and 2 percent to 4 percent for properties owned in fee simple. Properties owned by FBC tend to be in smaller centers or in remote rural areas with lower expected property value escalation than in more urban centres.

22.2 Please provide a breakdown of the forecast increase in property taxes from construction activities including a description of these activities.

Response:

Construction activity consists of anticipated new distribution and/or transmission line construction. Net additions are based on 2020 preliminary data from the FBC Geographic Information System (GIS) that will be used for reporting purposes to BC Assessment for the 2022 assessment year.

Additions are expected to add $4 million to the assessment roll, resulting in new taxes amounting to $100 thousand as shown in the following table:

Impact of Forecast Additions

Total Forecast New Assessment from Additions	$ 4,090,000

General Taxes from Additions	$ 21,646
School Taxes from Additions	46,499
Other Taxes from Additions	32,253
Total Taxes from Additions	$ 100,398

J. FINANCIAL SCHEDULES

23.0 Reference: FINANCIAL SCHEDULES

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

Unamortized Deferred Charges and Amortization

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

23.1 In the same format as is provided in Schedules 11 and 12 in Section 11 of the Application, please provide the previous years' information on unamortized deferred charges by starting with the actual 2020 ending deferral account balances (i.e., 12/31/2020) and including the projected 2021 deferral account additions and the projected 2021 amortization to arrive at the projected ending balances (i.e., 12/31/2021) as shown in column 2 of Schedules 11 and 12, respectively.

Response:

Please refer to Attachment 23.1 for the projected unamortized deferred charges and amortization for the year ending December 31, 2021.

FBC notes the continuity schedules attached do not include the changes resulting from the wildfire exogenous costs and the cost of removal error. Please refer to the Evidentiary Update filed concurrently with these IR responses for further details on these two items.

K. ACCOUNTING MATTERS AND EXOGENOUS FACTORS

24.0 Reference: ACCOUNTING MATTERS AND EXOGENOUS FACTORS

Exhibit B-2, Section 6.3.5, pp. 44–45; Exhibit B-2, Section 7.2.2, p. 48; Exhibit B-2, Section 12.2, p. 102; Exhibit B-2, Section 12.2.1, p. 103; FBC 2020 and 2021 Annual Review Decision and Order G-42-21 dated February 12, 2021; BC Hydro Mandatory Reliability Standards Assessment Report No. 13 (MRS AR13) Addressing Reliability Standards for Adoption in BC Order R-19-20 dated September 8, 2020

Mandatory Reliability Standards

On page 102 of the Application, FBC states "FBC has identified one new exogenous factor related to MRS Assessment Report No. 13 that affects 2021, 2022 and future years."

On page 103 of the Application, FBC states:

> For 2021, the incremental MRS costs that qualify for exogenous factor treatment are projected to be $0.100 million and are all O&M expenditures. For 2022, the incremental MRS costs that qualify for exogenous factor treatment are forecast to be $1.700 million, comprised of $0.765 million in incremental O&M expenses and $0.935 million in incremental capital expenditures.

On pages 44 and 45 of the Application, FBC states:

> The adoption of these standards will require ongoing effort and cost resulting from additional staffing requirements. FBC notes that it was unable to provide information on the 2021 Projected incremental costs for AR13 in the Annual Review for 2020 and 2021 Rates as Order R-19-20 was issued subsequent to the annual review application being filed.
>
> […]
>
> FBC will continue to evaluate and determine how to best achieve compliance with AR13. Future expenditures associated with AR13 in 2023 and beyond are preliminarily forecast to be approximately $0.650 million of incremental O&M annually.

On page 48 of the Application, FBC states:

> FBC forecasts that it will incur $0.935 million in incremental capital related to the adoption of new revised MRS standards for Assessment Report No. 13 (AR13), as explained in Section 6.3.5. The treatment of this amount as an exogenous factor is discussed in Section 12.2.1. During Q4 of 2021 and in 2022, FBC will be evaluating, scoping and implementing changes/additions, including the development and implementation of methods to monitor network traffic and

software tools to support the changes/additions to the standards. It will require the purchase and installation of hardware and software to assess and evaluate network traffic and the development of software tools to track risk assessments of any product or service procured for Bulk Electrical System assets.

24.1 Please explain why it is appropriate for FBC to recover $0.100 million incremental O&M expenditures from 2021 in 2022 rates.

Response:

As explained in Section 6.3.5 of the Application, FBC was unable to provide a forecast for the incremental O&M and capital costs associated with complying with MRS Assessment Report No. 13 (AR13), and in particular, the forecast 2021 O&M costs, as part of 2020 and 2021 Annual Review because the BCUC did not issue Order R-19-20 until September 8, 2020. Accordingly, by the time the order was issued and FBC had reviewed the implications of complying with the applicable standards, 2020 and 2021 Annual Review proceeding had concluded.

The 2021 estimated O&M costs form part of the total costs related to complying with AR13 and thus are appropriately included as part of the exogenous factor costs. AR13 is considered a single exogenous factor event and there will be costs incurred over multiple years related to this event. The total one-time estimated costs for AR13 are $1.8 million ($0.865 million of O&M costs and $0.935 of capital costs), which are aggregated costs from that event, and it is the event which is the exogenous factor. This approach was confirmed by the BCUC in FBC's Annual Review for 2017 Rates Decision and Order G-38-18.[5]

The work identified is the effort to achieve compliance by the effective date of April 1, 2023 and in order to meet the effective date, work has to commence in 2021. Consistent with the treatment of past exogenous factor events, the O&M and capital costs are forecast outside of the formula (for O&M) and regular capital forecasts (for capital) annually, and any variances between forecast and actual are trued-up through the Flow-through deferral account. As with any flow-through expenditures where there is a variance between approved and actual/projected results, the variance is captured in the Flow-through deferral account and is amortized in future years' rates. It is therefore appropriate and consistent with the treatment of exogenous factors and flow-through expenditures to recover the $0.100 incremental MRS O&M expenses in 2022 rates.

24.2 Please provide a breakdown of the forecast incremental costs for the following years and please explain how they are attributable to the MRS AR13:

- $0.765 million incremental O&M expenditures in 2022;
- $0.935 million incremental capital expenditures in 2022; and

[5] FBC Annual Review for 2018 Rates Decision and Order G-38-18, p. 8.

- $0.650 million incremental O&M expenditures in 2023 and beyond

24.2.1 Please explain the variability in the incremental O&M costs including why forecasted 2022 incremental O&M cost are higher than Projected 2021 costs but less than the incremental O&M costs for 2023 and beyond.

24.2.2 Please explain whether there are any incremental capital costs forecasted for 2023 and beyond. If not, please explain why not.

Response:

The costs for assessment reports are segregated into two components as per the process – one-time costs and ongoing costs. One-time costs are attributable to the effort to achieve compliance with the changes/additions to the standards by the defined effective date. Ongoing costs are attributable to the effort to maintain compliance once the changes/additions to the standards come into effect. The reason for the variance between 2021 and 2022 O&M costs is due to the timing of when work will be commencing. As explained further below, the work in 2021 is related to assessing and determining the detailed scope and strategy, whereas the work in 2022 will be related to the actual implementation of additions/changes. With regard to 2023 and beyond, the nature of these activities is different as the activities will be related to ongoing compliance; thus, the forecast for these annual activities is not directly comparable to the planning and implementation O&M costs.

The total one-time estimated costs for AR13 are as follows:

	2021		2022	
	O&M ($000s)	Capital ($000s)	O&M ($000s)	Capital ($000s)
Labour	100	0	335	580
Non-Labour	0	0	280	205
Contingency	0	0	150	150
Total	100	0	765	935

Labour includes incremental employee wages. Non-Labour includes costs related to contractors, consultants and incremental expenses.

In order to meet the effective date of April 1, 2023, FBC will need to commence work in 2021 to assess and determine the detailed scope and strategy required to implement additions/changes in 2022. FBC estimates that expenditures in 2021 will be $0.100 million of the overall one-time O&M estimate. The remaining $0.765 million of O&M costs are forecast to occur in 2022.

The work FBC will be undertaking in 2021 and 2022 includes:

- developing and implementing a supply chain cyber security risk management plan for any product or service procured that are related to Bulk Electric System assets;

- implementing and maintaining a new secure software storage tool to verify the identity and integrity of software sources and ensure they are unaltered and secure;
- adding hardware and software to address devices coming into scope with the addition of new requirements; and
- developing criteria to evaluate and define attempts to compromise as well as analyze and report attempts.

The work above will also require creating and/or updating associated documentation as well as additional training to introduce and communicate newly developed or updated processes.

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.

There are no anticipated incremental capital costs forecast for 2023 and beyond at this time as the capital costs are mainly related to new material purchases and development of software tools to achieve compliance. However, there may be costs identified in the initial implementation phase through 2022 that have not been identified. Capital costs, if any, will be identified and described in the next annual review application.

24.3 Please explain whether the “purchase and installation of hardware and software to assess and evaluate network traffic” and the “development of software tools to track risk assessments of any product or service procured for Bulk Electrical System assets” are included in the $0.935 million. If not, please provide the total cost and breakdown of the purchase, installation, and development of the hardware and software.

<u>Response:</u>

The “purchase and installation of hardware and software to assess and evaluate network traffic” and the “development of software tools to track risk assessments of any product or service procured for Bulk Electrical System assets” are new hardware and software tools and are included in the $0.935 million.

25.0 Reference: ACCOUNTING MATTERS AND EXOGENOUS FACTORS

Exhibit B-2, Section 1.2, p. 2; Exhibit B-2, Section 12.2, p. 102

Wildfires

On page 2 of the Application, FBC states it seeks the following BCUC approval:

> Approval to recover the 2022 revenue requirement and resultant rate changes on a permanent basis, effective January 1, 2022, as filed in the Application and subject to any adjustments identified by FBC during the regulatory process and from any directives or determinations made by the BCUC in its decision on the Application.

On page 102 of the Application, FBC lists the exogenous factor treatment criteria and states:

> FBC is also currently evaluating the impact on its O&M and capital costs from ongoing wildfires in its service area and, similar to the Z-factor treatment approved for the costs of repair associated with wildfires in 2015, if the wildfires result in costs exceeding the materiality threshold, FBC will be updating its Application to include these costs.

25.1 Given that FBC is requesting rates effective January 1, 2022, please explain the expected timing for when FBC will update this Application if costs from wildfires exceed the materiality threshold of $0.150 million.

Response:

FBC has incurred costs in excess of the materiality threshold and is applying for exogenous factor treatment for costs related to one wildfire event in 2021. FBC is filing an Evidentiary Update concurrently with these IR responses with updated financial schedules and the impact on 2022 rates.

25.2 Please provide i) the cost of the wildfires as of August 30, 2021, ii) the forecast cost for the remainder of the year and iii) by how much ($) FBC expects that costs from wildfires will exceed the materiality threshold.

Response:

Please refer to Appendix A of the Evidentiary Update filed concurrently with these IR responses for the forecast costs demonstrating that the wildfire costs meet the materiality threshold.

25.3 Please confirm whether FBC is requesting Z-factor treatment for O&M and capital costs from ongoing wildfires for 2022.

25.3.1 If confirmed, please explain how this event meets the exogenous factor treatment criteria listed on page 102 of the Application and a description of the damages the wildfires caused to the FBC's assets.

25.3.2 If confirmed, please provide the potential impact of including O&M and capital costs from ongoing wildfires in 2022 rates.

Response:

Please refer to Appendix A of the Evidentiary Update filed concurrently with these IR responses.

25.4 Please provide all occurrences of wildfires in FBC's service areas since 2015, including the capital spending on these events.

Response:

Please refer to Appendix A of the Evidentiary Update filed concurrently with these IR responses.

26.0 Reference: ACCOUNTING MATTERS AND EXOGENOUS FACTORS

Exhibit B-2, Section 12.4.1.1, p. 108;

EV DCFC Service Application Deferral Account

On page 108 of the Application, FBC states:

> In the Annual Review for 2019 Rates Decision and Order G-246-18, FBC received approval to establish a non-rate base deferral account to capture the regulatory proceeding costs associated with the FBC Rate Design and Rates for Electric Vehicle (EV) Direct Current Fast Charging (DCFC) Service proceeding.
>
> […]
>
> However, as part of Order G-215-21, the BCUC sought submissions on a potential adjournment of the proceeding and established a regulatory timetable for these submissions. FBC filed its submission on August 3, 2021 and also sought clarity on the directives contained in Order G-215-21.
>
> The forecast opening 2022 balance in the Rate Design and Rates for EV DCFC Service Application deferral account is $0.203 million ($0.148 million after-tax). At this time, given the uncertainty regarding the potential adjournment of the proceeding and the potential future regulatory process, FBC anticipates that further additions to the deferral account may be required in 2021 and 2022 but is unable to estimate the amounts. The actual costs for 2021 and 2022 will be added to the deferral account and the updated balance will be reported on in the next annual review.
>
> FBC seeks approval to amortize the Rate Design and Rates for EV DCFC Service Application deferral account over three years, commencing January 1, 2022.

26.1 Please explain why FBC is seeking to amortize the Rate Design and Rates EV DCFC Service Application deferral account as part of the 2022 Annual review considering that the related proceeding is on-going.

<u>Response:</u>

Order G-215-21 determined that FBC's EV DCFC assets are prescribed undertakings and granted FBC approval to include the EV DCFC assets in its rate base; FBC has requested clarification on certain items and is awaiting a further decision from the BCUC. Therefore, FBC believes it is appropriate to begin amortization of the Rate Design and Rates for EV DCFC Service Application deferral account, regardless of whether the clarification has been provided, as it allows for the costs to begin being collected as closely as possible to the time the costs are incurred, which allows for better matching of benefits and costs. The remaining process to clarify the BCUC's order will affect the amount of regulatory proceeding costs recorded in the deferral account, but not the recommended amortization period. Additionally, any variances between actual and forecast costs would be trued-up and amortized in future years.

Given that the costs incurred to date were prudent and that customers will ultimately only pay for the actual costs recorded in the deferral account over time, delaying amortization of the account will only serve to add further carrying costs to the deferral account for future recovery from customers.

26.2 Please explain why FBC considers a three-year amortization period to be appropriate for the Rate Design and Rates EV DCFC Service Application deferral account.

Response:

FBC considers a three-year amortization period to be appropriate because it minimizes the rate impact to customers by spreading the costs over multiple years while also minimizing the amount of carrying costs that would be accrued on the balance.

The following table provides the rate impacts resulting from amortizing the deferral account over one to five years. As shown in the table, there is no difference in percentage rate impact when rounded to two decimal places for amortization periods between three and five years. In the end, FBC believes a three-year amortization period is the most appropriate given the potential for future costs as discussed in the response to BCUC IR1 26.1.

Amortization Period	1 Year	2 Years	3 Years	4 Years	5 years
Amortization Expense in 2022 ($000s)	149	74	50	37	30
Rate Impact in 2022 (%)	0.04%	0.02%	0.01%	0.01%	0.01%

26.3 Please discuss whether any alternative amortization periods for costs associated with Rate Design and Rates EV DCFC Service Application deferral account were considered by FBC.

26.3.1 If yes, please discuss these alternative amortization periods and their resulting rate impact including why they were not chosen.

26.3.2 If no alternatives were considered, please discuss why not. As part of the response, please provide the resulting rate impact for one year and two year amortization periods.

Response:

Please refer to the response to BCUC IR1 26.2.

27.0 Reference: ACCOUNTING MATTERS AND EXOGENOUS FACTORS

Exhibit B-2, Section 12.4.1.2.2, pp. 111–114

Cost of Removal Error

On pages 111 to 113 of the Application, FBC states:

> The Cost of Removal amounts shown on Schedules 7 and 7.1, for both 2020 and 2021, were incorrectly shown as positive amounts, when they were in fact negative amounts.
>
> […]
>
> The inadvertent error by FBC in its 2020 and 2021 financial schedules resulted in a reduction to the approved rate base amounts for both 2020 and 2021, and resulted in an under-forecasting of the related revenue requirement amounts and an under-collection of rate revenues. The impact of the under-collection of rate revenues is partially mitigated by FBC's approved earnings sharing mechanism, which will recover half the rate base revenue requirement impacts of the error and record them in the Earnings Sharing deferral account to be recovered in future revenue requirements.
>
> FBC incurred a revenue shortfall of $228 thousand in 2020 due to the error. FBC is not proposing any mechanism to recover this amount given that 2020 actuals have been finalized. FBC is, however, requesting approval to recover its unrecovered revenue in 2021 of $859 thousand through a one-time adjustment to the Flow-through deferral account.
>
> […]
>
> While correcting for the impacts of the error in 2021 requires the collection of unrecovered 2021 revenue in FBC's proposed 2022 rates, the unrecovered revenue was due to an unintentional clerical error, rather than any inaccuracy in FBC's forecast that would properly be the responsibility of FBC to manage.
>
> […]
>
> It is also relevant that FBC is applying to correct the error in 2021 rates during 2021, before 2021 actuals have been finalized and as part of the flow-through of other variances that occurred in 2021. In these circumstances, FBC submits that its proposal to remedy the impacts of the error in 2021 through a one-time adjustment to the Flow-through deferral account reflects a just balancing of interests between FBC and its customers.

On page 114 of the Application, FBC provided the calculation of 2020 and 2021 Unrecovered Revenue in Table 12-3. The following is an extract from Table 12-3:

63	Total	97,365	97,821	102,614	104,331
64	Surplus / (Deficiency)		(456)		(1,717)
65	Sharing %		50%		50%
66	Customers share of Surplus / (Deficit) Earnings (net of tax)		(228)		(859)

27.1 In the absence of FBC's proposal to remedy the impacts of the error in 2021 through a one-time adjustment to the Flow-through deferral account, please explain and provide a calculation of how FBC's approved earnings sharing mechanism (ESM) would partially mitigate the impacts of an under-collection of rate revenues from the perspective of the shareholder and the customer.

Response:

FBC's proposal already accounts for the fact that the earnings sharing mechanism mitigates half of the variance; that is, the requested remedy is for half of the impact of the error.

FBC notes that through the process of preparing the response to this IR, some minor errors were identified in Table 12-3. As such, FBC has provided a revised Table 12-3 below, with the revised items highlighted in orange. Specifically, FBC had incorrectly used the 2020 income tax deduction for 2021 on Line 51, and inadvertently had the customer share of surplus/(deficit) on Line 66 as after-tax dollars when it should instead be in pre-tax dollars. The correction of the error on Line 51 did not result in any changes to the amount of customers sharing of revenue/earnings; however, the correct of the error on Line 66 results in the customers' share of the deficit being reduced from $859 thousand to $627 thousand. FBC has included these corrections in the Evidentiary Update filed concurrently with these IR responses.

Table 1: Revised Table 12-3 – Calculation of 2020 and 2021 Unrecovered Revenue ($ thousands)

Line	Particular	2020 Approved	2020 Corrected	2021 Approved	2021 Corrected
1	Gross Plant in service, Beginning	$ 2,112,240	$ 2,112,240	$ 2,162,849	$ 2,162,849
2	Opening Balance Adjustment	(47,893)	(47,893)	-	-
3	CPCN's	20,427	20,427	40,407	40,407
4	Additions	97,027	97,027	103,626	103,626
5	Disposals/Retirements	(18,951)	(18,951)	(17,208)	(17,208)
6	Gross Plant in service, Ending	2,162,849	2,162,849	2,289,676	2,289,676
7					
8	Accumulated Depreciation Beginning - Plant	(664,986)	(664,986)	(641,268)	(626,392)
9	Opening Balance Adjustment	72,871	72,871	-	-
10	**Cost of Removal**	**(7,438)**	**7,438**	**(12,182)**	**12,182**
11	Additions and Retirements	(41,715)	(41,715)	(46,583)	(46,583)
12	Accumulated Depreciation Ending - Plant	(641,268)	(626,392)	(700,033)	(660,793)
13					
14	Contributions in aid of construction, Beginning	(209,719)	(209,719)	(220,826)	(220,826)
15	Opening Balance Adjustment	-	-	-	-
16	Contributions in aid of construction, Ending	(220,826)	(220,826)	(232,291)	(232,291)
17					
18	Accumulated Amortization Beginning - CIAC	75,672	75,672	79,867	79,867
19	Opening Balance Adjustment	-	-	-	-
20	Accumulated Amortization Ending - CIAC	79,867	79,867	84,283	84,283
21					
22	Net plant in service, Mid-year	$ 1,359,404	$ 1,366,842	$ 1,411,129	$ 1,438,187
23	Adjustment for timing of Capital additions	10,214	10,214	20,204	20,204
24	Capital Work in Progress, No AFUDC	11,228	11,228	11,228	11,228
25					
26	Sub-total	1,380,846	1,388,284	1,442,560	1,469,618
27					
28	Unamortized Deferred Charges	20,398	20,398	25,696	25,696
29	Working Capital	5,788	5,788	6,044	6,044
30	Utility Plant Acquisition Adjustment	5,121	5,121	4,935	4,935
31	**Mid-Year Utility Rate Base**	**1,412,153**	**1,419,591**	**1,479,236**	**1,506,294**
32					
33	**Revenue Requirement Impact**				
34	Capital Structure				
35	STD Rate	1.86%	1.86%	2.22%	2.22%
36	STD Ratio	4.55%	4.55%	2.84%	2.84%
37	LTD Rate	5.05%	5.05%	4.93%	4.93%
38	LTD Ratio	55.45%	55.45%	57.16%	57.16%
39	ROE	9.15%	9.15%	9.15%	9.15%
40	Equity Thickness	40.00%	40.00%	40.00%	40.00%
41					
42	**Earned Return**				
43	Short Term Debt (assumes corrected amount would have impacted ST debt only)	1,195	1,278	933	1,294
44	Long Term Debt	39,566	39,566	41,714	41,714
45	ROE	51,685	51,957	54,140	55,130
46	**Total Earned Return**	**92,446**	**92,801**	**96,787**	**98,138**
47					
48	**Income Taxes**				
49	Earned Return	92,446	92,801	96,787	98,138
50	Deduct - Interest on Debt	(40,761)	(40,844)	(42,647)	(43,008)
51	Net Additions (Deductions)	(38,386)	(38,386)	(31,107)	(31,107)
52					
53	Tabable Income before Tax	13,299	13,571	23,033	24,023
54					
55	Income Tax Rate (Current Tax)	27%	27%	27%	27%
56	1 - Current Income Tax Rate	73%	73%	73%	73%
57					
58	**Income Tax Expense**	**4,919**	**5,019**	**8,519**	**8,885**
59					
60	**Revenue Requirement**				
61	Earned Return	92,446	92,801	96,787	98,138
62	Income Tax	4,919	5,019	8,519	8,885
63	**Total**	**97,365**	**97,821**	**105,306**	**107,023**
64	**Surplus / (Deficiency)**		**(456)**		**(1,717)**
65	Sharing %		50%		50%
66	**Customers share of Surplus / (Deficit) Revenue/Earnings (Pre-tax)**		**(228)**		**(859)**
67	Less: Income Tax		62		232
68	**Customers share of Surplus / (Deficit) Revenue/Earnings (After-tax)**		**(166)**		**(627)**

Similar to the amounts shown in the "2021 Corrected" column in the revised Table 12-3 above, which are meant to reflect what the 2021 revenue requirements would have been had the Cost of Removal error not occurred, 2021 actuals will also reflect similar impacts, all else equal. To clarify, using rate base as an example, assuming all other actual rate base amounts are equal to the approved rate base amounts and the actual costs of removal end up being $12.182 million, FBC's actual rate base would be $1,506.294 million, equal to the "2021 Corrected" rate base. This variance between actual and approved would be reflected in FBC's actual earnings sharing calculation. An example of the 2021 actual earnings sharing calculation, using a similar template to that used in preparing the 2020 FBC BCUC Annual Report, is provided below:

Table 2: 2021 Actual Earnings Sharing Calculation

Line No.	Description	Reference	Amounts
1	Approved Equity Return	Table 12-3, Line 45	$ 54,140
2	Less: Projected additional interest expense (after-tax)	Table 12-3, Line 50 variance x (1-27% tax rate)	(264)
3	Projected Equity Return	Line 1 + Line 2	53,876
4			
5	Projected Rate Base	Table 12-3, Line 31	1,506,294
6	Approved Equity Thickness	G-139-14	40.00%
7	Projected Equity Component of Rate Base	Line 5 x Line 6	602,518
8			
9	Projected ROE on Common Equity	Line 3 / Line 7	8.94%
10	Approved ROE on Common Equity	G-75-13/G-47-14	9.15%
11	ROE Surplus / (Deficit)	Line 9 - Line 10	-0.21%
12			
13	After-Tax Surplus / (Deficit) Earnings available for Sharing	Line 7 x Line 11	(1,254)
14	Sharing %	G-165-20	50%
15	**Customers share of Surplus / (Deficit) Earnings (net of tax)**	Line 13 x Line 14	**(627)**
16			
17	**Customers share of Surplus / (Deficit) Earnings (pre-tax)**	Line 15 / (1 - 27% tax rate)	**(859)**

As shown in Table 2 above, the variances between the actual and approved revenue requirement amount and rate base amounts will result in a lower actual ROE than approved. This, in turn, will result in a calculated deficit of $627 thousand after-tax, matching Line 68 of the revised Table 12-3 above, to be added as an amount recoverable from customers in the earnings sharing deferral account. This effectively recovers half the lost revenue deficiency from customers, with the other half being requested for recovery in this Application via the Flow-through deferral account. (As part of the Evidentiary Update, FBC has amended Table 12-2 to reflect the revised requested 2021 after-tax net salvage forecast adjustment of $627 thousand).

27.2 Please provide the impact on FBC's approved ESM from the perspective of the shareholder and the customer resulting from not correcting for the impacts of the error in 2020.

Response:

Using the revised Table 12-3 provided in the response to BCUC IR1 27.1, and using similar assumptions that were used in that response, where the “2020 Corrected” approved amounts are assumed to equal actuals, FBC has provided a similar 2020 earnings sharing table below.

Effectively, the shareholder under-recovered $333 thousand in after-tax revenue (Line 13 in the table below) from the 2020 approved rates. Through the 2020 actual earnings sharing calculation, FBC was able to recover half of the under-recovered after-tax revenue of $166 thousand through inclusion in the Earnings Sharing deferral account. The other $167 thousand remains as unrecovered revenue and effectively results in a shareholder expense or, alternatively, a customer windfall.

Line No.	Description	Reference	Amounts
1	Approved Equity Return	Table 12-3, Line 45	$ 51,685
2	Less: Projected additional interest expense (after-tax)	Table 12-3, Line 50 variance x (1-27% tax rate)	(61)
3	Projected Equity Return	Line 1 + Line 2	51,624
4			
5	Projected Rate Base	Table 12-3, Line 31	1,419,591
6	Approved Equity Thickness	G-139-14	40.00%
7	Projected Equity Component of Rate Base	Line 5 x Line 6	567,836
8			
9	Projected ROE on Common Equity	Line 3 / Line 7	9.09%
10	Approved ROE on Common Equity	G-75-13/G-47-14	9.15%
11	ROE Surplus / (Deficit)	Line 9 - Line 10	-0.06%
12			
13	After-Tax Surplus / (Deficit) Earnings available for Sharing	Line 7 x Line 11	(333)
14	Sharing %	G-165-20	50%
15	**Customers share of Surplus / (Deficit) Earnings (net of tax)**	Line 13 x Line 14	**(166)**
16			
17	**Customers share of Surplus / (Deficit) Earnings (pre-tax)**	Line 15 / (1 - 27% tax rate)	**(228)**

27.3 Please elaborate on the reasons why FBC is only requesting to recover the error from 2021 and not also the 2020 error. As part of the response, please provide the regulatory justification for why different approaches to treating the error in 2020 and 2021 is appropriate given that the nature of the error is the same for both years.

Response:

FBC agrees that the nature of the error is the same for both 2020 and 2021, and FBC would be amenable to also recovering the 2020 impact of the error from customers.

FBC considers there to be a difference in the two years because 2021 is not yet complete and adjustments to other components of FBC’s 2021 revenue requirement will still be made through the truing up of 2021 flow-through revenues and expenses. Please refer to the response to BCUC IR1 27.4 for further discussion.

27.3.1 Please provide a calculation of the rate impact if the 2020 error was also granted Flow-through deferral account treatment in 2022 rates.

Response:

Please refer to the table below which shows the rate impact will be 0.059 percent in 2022 if the 2020 error was also included in the Flow-through deferral account and amortized into 2022 rates.

Line	Particulars	Reference	2022
1	Non-rate base Flow-through Amortization (Due to 2020 Net Salvage Adjustment)	BCUC IR1 27.1, Revised Table 12-3, Line 68, 2020 Corrected	166
2			
3	**Income Tax**		
4	Adjustments to Taxable Income ($000s)	Line 1	166
5	Current Tax Rate		27%
6	Income Tax Expense ($000s)	Line 4 / (1 - Line 5) x Line 5	62
7			
8	**Revenue Requirement**		
9	Amortization of non-rate base deferral	Line 1	166
10	Income Tax Expense	Line 6	62
11	Total ($000s)	Line 9 + Line 10	228
12			
13	2022 Revenue at 2021 Approved Rates ($000s)	Schedule 1, Line 34, Col 3	383,895
14	**Rate Impact due to 2020 Net Salvage Adjustment (%)**	**Line 11 / Line 13**	**0.059%**

27.4 Please identify and discuss any considerations with respect to retroactive ratemaking as it relates to FBC's proposal to recover the 2021 error in 2022 proposed rates.

Response:

FBC's proposal to recover the 2021 error in 2022 proposed rates does not amount to retroactive ratemaking for the following reasons.

First, FBC is seeking to correct a clerical mathematical error that resulted in an under-collection of rate revenues in 2021. As explained in Section 12.4.1.2.2 of the Application, this error was not the result of any inaccuracy in FBC's forecast; rather, the Cost of Removal shown on Schedules

7 and 7.1 were inadvertently recorded as a positive amount. Had this been correctly recorded as a negative amount, the under-collection of rate revenues would not have occurred. An error of this kind is fundamentally different than seeking to recover a past loss incurred due to a failure of the utility to accurately forecast its costs. As FBC noted in the Application, a standard of perfection in the ratemaking process is unachievable in light of the complexity of modern regulatory processes.

Second, FBC has proposed to recover the under-collection amount with other variances captured through the existing Flow-through deferral account, rather than requesting that the BCUC replace or substitute the 2021 permanent rate approved by Order G-42-21. By Order G-166-20, the BCUC approved the continuation of the general Flow-through deferral account for the current MRP term of 2020 to 2024 to "capture revenue and cost items where FortisBC did not already have an approved deferral mechanism or separate deferral account."[6] Variances between forecast and actual are flowed-through to ratepayers in the utilities' revenue requirements in the following year (i.e., 2022 rates). Given this "trueing up" process, FBC's 2021 rates are not yet truly finalized and there is an existing approved mechanism to correct for the error.

Third, FBC has identified and is proposing to correct the error during 2021, the year in which the error impacts rates. In the ordinary course, FBC could have applied in 2021 for a new deferral account to recover the under-collection of rate revenue, and doing so within 2021 would have not given rise to retroactive ratemaking concerns. Given the existence of FBC's flow-through mechanism, a new deferral account is not needed, and the Flow-through deferral account is an efficient, effective and transparent means of recovering the error that does not constitute retroactive ratemaking.

27.4.1 In the event that the BCUC does not approve the proposal to remedy the impacts of the error in 2021 through a one-time adjustment to the Flow-through deferral account, please explain and provide the impact on 2022 proposed rates. As part of the response, please separately show the impacts on FBC's 2021 earnings and the amortization of the Earnings Sharing deferral account in 2022.

Response:

Please refer to the table below which shows that if the proposed one-time adjustment to the Flow-through deferral account is not approved, the proposed 2022 deficiency would be reduced by approximately $859 thousand before tax (which is half of the lost revenue deficiency of $627 thousand net of tax plus $232 thousand of tax as shown in the revised Table 12-3 in BCUC IR1 27.1). This is equivalent to a rate reduction of 0.22 percent to 3.24 percent. As also noted in

[6] FortisBC Multi-Year Rate Plan Application for 2020 to 2024 Decision, p. 75. Online: https://www.bcuc.com/Documents/Decisions/2020/DOC_58466_2020-06-22-FortisBC-MRP-2020-2024-Decision.pdf.

BCUC IR1 27.1, the earnings sharing mechanism effectively recovers the other half of the lost revenue deficiency, however, FBC notes that the 2021 earnings sharing amounts are subject to true-up in 2023 rates; therefore, there is no impact to the amortization of the Earning Sharing deferral account in 2022.

Line	Particulars	Reference	2022
1	Amortization Due to 2021 Net Salvage Adjustment ($000s)	BCUC IR1 27.1 Revised Table 12-3, Line 68 (Also see Evidentiary Update, Revised Table 12-2, Line 38)	627
2	Tax Expense	Line 1 / (1 - 27%) x 27%	232
3	Total Reduction in 2022 Deficiency	Line 1 + Line 2	859
4			
5	2022 Revenue at 2021 Approved Rates	Schedule 1, Line 34, Col 3	383,895
6	**Rate Impact to 2022 Proposed Rates (%)**	**-Line 3 / Line 5**	**-0.22%**
7			
8	**Updated 2022 Rate Change without 2021 Net Salvage Adjustment (%)**	**3.46 % + Line 6**	**3.24%**

27.5 Please explain the rationale for requesting recovery of this error through the non-rate base Flow through deferral account as opposed to a separate new or existing deferral account.

Response:

FBC is not opposed to recovering the error through a separate new or existing deferral account. However, given the Flow-through deferral account is non-rate base (avoiding any circular rate base impacts potentially caused by this adjustment) and designed to recover the variances from many different revenue requirement items, FBC believes this account is the most appropriate account to use of its existing accounts. The only potential difference between FBC's proposed treatment and establishing a new deferral account is that the amortization period could be extended beyond one year if a new deferral account was established. However, FBC believes the proposed treatment of utilizing the Flow-through deferral account and amortizing the cost of removal amount over one year is appropriate, as the error is related to 2021 amounts and should therefore be corrected (through amortization) as close to the relevant year as possible. Further, despite the amount of the error being relatively large, when combined with the other flow-through variances projected for 2021 such as revenue and power purchase expense, the net impact of the cost of removal error is still a credit amortization amount (i.e., the net Flow-through amortization is being returned to customers).

27.6 Please explain why an unintentional clerical error would not be the responsibility of FBC to manage.

Response:

While FBC takes accountability for the error, FBC re-iterates that an unintentional clerical error is fundamentally different than submitting an inaccurate forecast. Clerical errors are not the result of a lack of due diligence in preparing the forecast or actual costs exceeding the forecast for reasons within FBC's control, but rather the result of common errors such as typos, transpositions, errors in linking files correctly, etc. Given the size and complexity of these proceedings and the amount of information put on record, it should be expected that these type of errors will occur from time to time, even with a diligent regulatory review process in place.

27.7 Please discuss whether FBC considers it would be appropriate if the ESM did not apply to either the 2020 or 2021 error.

Response:

It would not be appropriate to exclude a portion of the ESM calculation related to this error. To re-iterate, the error has actually caused FBC to under-collect $0.456 million in pre-tax revenue in 2020 and $1.717 million in pre-tax revenue in 2021 from customers which, all else equal, effectively results in a lower actual ROE than the allowed ROE in each of the years. Order G-166-20 specifically stated, "The Panel approves the Proposed ESM for FEI and FBC resulting in a 50 percent sharing of the achieved ROE above or below the allowed ROE.[7]" Therefore, as this error directly results in a lower actual ROE than allowed in each of 2020 and 2021, it should be subject to sharing as per the approved MRP.

27.8 Please discuss the steps FBC has taken to mitigate the risks of future unintentional clerical errors (e.g., in this Application and future annual reviews during the MRP term).

Response:

FBC continually seeks to improve the accuracy of its filings and to mitigate the risk of errors. Prior to filing, FBC has multiple reviewers of each section of the Application. Additionally, FBC will identify errors or adjustments required to the Application throughout the proceeding, usually the result of re-review of the Application during the information request process or in preparation for the Workshop, which will result in the utility filing an Evidentiary Update or noting adjustments for the Compliance Filing in IR responses.

---

[7] Page 82.

FBC is unaware of a prior example of it requesting an adjustment to correct previous year amounts for a clerical error. Therefore, FBC considers it is extremely rare for there to be errors that are not caught through the proceeding process.

L. OTHER

28.0 Reference: APPENDIX B-2 PRIOR YEAR DIRECTIVES

Exhibit B-2, Appendix B-2, Section 1.2, p. 3; Exhibit B-2, Appendix B-2, Section 2, p. 10; Exhibit B-2, Appendix B-2, Section 3, p. 11

Upper Bonnington Old Units Refurbishment Project Status Report

On page 3 of Appendix B-2 to the Application, FBC provides Table B2-1 showing the status of each of the generating units, the balance of plant activities and the remaining work that will be completed:

Table B2-1: Project Status

Upper Bonnington Refurbishment	Project Start	Project Duration	In-service Date	Remaining Work
Unit 3	Q1 2017	10 Months	Q4 2017	Painting
Unit 4	Q1 2018	10 Months	Q4 2018	Painting
Unit 1	Q1 2019	10 Months	Q4 2019	Painting
Unit 2	Q1 2020	9 Months	Q4 2020	Painting
Balance of Plant	Q3 2020	7 Months		
	Q2 2021	4 Months		Ventilation access walkway
	Q2 2021	3 Months		Water wheel exciter removal
	Q3 2021	1 Month		Demobilization

On page 10 of Appendix B-2 to the Application, FBC provides Table B2-2 showing the Upper Bonnington Old Units Refurbishment Project (Project) milestone summary:

Table B2-2: Milestone Summary

Milestone	Planned Completion Date	Actual Completion Date	Status
Engineering			
Mechanical Components – Machining and Fabrication Specifications	Q4, 2017	Q4, 2017	Complete
All Units Detailed Engineering	Q1, 2018	Q1, 2018	Complete
Balance of Plant Engineering	Q3, 2020	Q4, 2020	Complete
Procurement of All Major Mechanical/Electrical	Q2, 2020	Q2, 2020	Complete
Construction			
Refurbishment of Unit 3	Q4, 2017	Q4, 2017	Complete
Refurbishment of Unit 4	Q4, 2018	Q4, 2018	Complete
Refurbishment of Unit 1[1]	Q4, 2020	Q4, 2019	Complete
Refurbishment of Unit 2[1]	Q4, 2019	Q4, 2020	Complete
U3 Oil Leak Deficiency Repair	Q1, 2021	Q2, 2021	Complete
Balance of Plant Work	Q2, 2021		In Progress

On page 3 of Appendix B-2 to the Application, FBC states, “Throughout 2021, clean up, balance of plant scope of work (described below in Section 1.3.4), and Project close out activities have progressed well and are scheduled to be complete in Q3.”

28.1 Please explain why Table B2-1 shows that there is painting as remaining work for all four units, but Table B2-2 shows that the status is "Complete" for the refurbishment of the four units.

28.1.1 Please explain the reasons for the delay in completing the painting for each unit.

28.1.1.1 Please explain any impacts, financial or otherwise, of the delay in completing the painting work.

<u>Response:</u>

Table B2-2 highlights milestones that are substantially complete, whereas Table B2-1 highlights the remaining work to be completed on each unit and balance of plant. As the only remaining activity to be completed on each of the 4 units was painting, which is considerably less scope than the overall refurbishment, FBC reported each unit as being substantially complete in Table B2-2.

At the time of preparing the annual status report attached as Appendix B-2 to the Application, the painting work on Units 1 and 4 was complete. The "Remaining Work" on Units 1 and 4 identified in Table B2-1 was incorrectly stated as painting, and instead should have been shown as complete. FBC provides the following revised Table B2-1 which correctly identifies the remaining work.

Upper Bonnington Refurbishment	Project Start	Project Duration	In-service Date	Remaining Work
Unit 3	Q1 2017	10 Months	Q4 2017	Painting
Unit 4	Q1 2018	10 Months	Q4 2018	Complete
Unit 1	Q1 2019	10 Months	Q4 2019	Complete
Unit 2	Q1 2020	9 Months	Q4 2020	Painting
Balance of Plant	Q3 2020	7 Months		
	Q2, 2021	4 Months		Ventilation access walkway
	Q2, 2021	3 Months		Water Wheel Exciter Removal
	Q3 2021	1 Month		Demobilization

The painting work was initially planned to be completed as part of each unit's refurbishment; however, while refurbishing the first unit, the painting work could not be completed without delaying the assembly of the unit and the return to service date. FBC postponed the painting work to maintain the scheduled return to service date and followed the same strategy on all subsequent units.

While some painting work did take place on each unit, painting work that delayed the return to service date or was at risk of becoming damaged during reassembly of the unit was re-scheduled to occur in parallel with the balance of plant work at the end of the Project. Re-scheduling the work to this timeframe was optimal as the crews, tools and equipment were predominantly removed from the plant and the units were offline, creating less dust and eliminating the risk of damaging the paint due to other construction activities.

The impact of delaying the painting work for each generator did not increase costs to complete the work as it was completed concurrently with the Balance of Plant work. By delaying the painting work for all four units, FBC was able to eliminate the inefficiencies of overlapping work groups and realize the efficiencies of consolidating all of the painting work into a single contract.

28.2 Please confirm if there is any scope of work remaining, apart from painting-related work for the four units. Please provide an updated Table B2-2 as required.

Response:

Please refer to the response to BCUC IR1 28.1. The only unit scope remaining is the painting work on Units 2 and 3.

On page 11 of Appendix B-2 to the Application, FBC provides Table B2-3 showing the Project cost summary:

Table B2-3: Cost Summary

Description	Application/ Control Budget	Spent to Date	Estimate to Complete	Forecast Total to Complete	Variance
	(1)	(2)	(3)	(4)=(2)+(3)	(5)=((4)-(1))/(1)
	($000s)				(%)
Unit 4	6,634	8,058	0	8,058	21%
Unit 3	4,079	6,518	10	6,528	60%
Unit 2	5,641	6,587	15	6,602	17%
Unit 1	8,050	8,287	0	8,287	3%
Balance of Plant	860	1,067	593	1,661	93%
Subtotal - Construction	25,264	30,518	618	31,136	23%
Cost of Removal	1,880	1,734	35	1,769	-6%
Project Contingency	3,771	-	92	92	-98%
Subtotal- Construction & Removal	30,916	32,252	745	32,997	7%
AFUDC	867	1,146	36	1,183	36%
Total Project Cost	31,783	33,398	782	34,180	8%

On page 3 of Appendix B-2 to the Application, FBC states, “The balance of plant scope of work, previously reported to be complete in Q2 2021, is behind schedule due to sequencing issues and operational constraints within the operating plant.”

28.3 Given the delay in project completion from Q2 to Q3 2021, please confirm whether there will be any expected increase in overhead or contractor costs from being mobilized at site longer than originally budgeted.

28.3.1 Please list and explain any additional expected costs. Please provide an updated Table B2-3 as required.

Response:

There are no additional contractor costs associated with the schedule delay as those costs were offset entirely by the efficiencies gained from consolidating all of the painting scope of work.

The additional costs incurred due to delaying the project completion work include janitorial, management oversight, project vehicle and telephone costs. These costs will be approximately $5 to $6 thousand per month and are included within the project forecast of $34.180 million provided in Table B2-3 of Appendix B-2 to the Application.

28.4 Please explain why, in Table B2-3 there is no “Estimate to Complete” values for Unit 1 and Unit 4, while Table B2-1 shows there is remaining work to be completed for these units.

28.4.1 If the “Estimate to Complete” values for Unit 1 and Unit 4 are reflected in Table B2-3, please specify the location in the table and the amount and provide an updated Table B2-3 as required.

28.4.1.1 If not, please provide an updated Table B2-3.

Response:

Please refer to the response to BCUC IR1 28.1 explaining that Table B2-1 incorrectly stated that there was remaining painting work for Units 1 and 4 and providing an updated Table B2-1 correctly classifying Units 1 and 4 as “complete”. The cost to complete the painting work on Units 1 and 4 was approximately $8 thousand and $11 thousand, respectively, and these costs are captured within each unit’s respective “Spent to Date” column in Table B2-3.

Attachment 8.1.1

REFER TO LIVE SPREADSHEET MODELS

Provided in electronic format only

(accessible by opening the Attachments Tab in Adobe)

Attachment 23.1

UNAMORTIZED DEFERRED CHARGES AND AMORTIZATION - RATE BASE
FOR THE YEAR ENDING DECEMBER 31, 2021
($000s)

Line No.	Particulars	12/31/2020	Opening Bal./ Transfer/Adj.	Gross Additions	Less Taxes	Amortization Expense	12/31/2021	Mid-Year Average	Cross Reference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	**1. Forecasting Variance Accounts**								
2	BCUC Levies Variance Account	$ (9)	$ -	$ 19	$ (5)	$ -	$ 5	$ (2)	
3									
4	**2. Rate Smoothing Accounts**								
5									
6	**3. Benefits Matching Accounts**								
7	Preliminary and Investigative Charges	$ 790	$ -	$ 592	$ -	$ -	$ 1,382	$ 1,086	
8	Demand Side Management	30,282	-	11,100	(2,997)	(5,040)	33,345	31,814	
9	Deferred Debt Issue Costs	3,805	-	625	(102)	(178)	4,150	3,978	
10	2021 Generic Cost of Capital Proceeding	-	-	-	-	-	-	-	
11	Annual Reviews for 2021-2024 Rates	122	-	180	(49)	(102)	151	137	
12	2021 Long Term Electric Resource Plan	100	-	203	(55)	-	248	174	
13	2020 Cost of Service Analysis	27	-	6	(1)	-	32	30	
14	BCUC-Initiated Inquiries	142	-	-	-	(172)	(30)	56	
15	Mandatory Reliability Standards 2021 Audit	-	-	350	(95)	-	255	128	
16		$ 35,268	$ -	$ 13,056	$ (3,299)	$ (5,493)	$ 39,533	$ 37,403	
17									
18	**4. Retroactive Expense Accounts**								
19									
20	**5.Other Accounts**								
21	Pension and OPEB Liability	$ (13,063)	$ -	$ 42	$ -	$ -	$ (13,021)	$ (13,042)	
22	COVID-19 Customer Recovery Fund	704	-	(202)	(69)	-	433	569	
23	Indigenous Relations Agreement (Huth Substation)	-	-	-	-	-	-	-	
24		$ (12,359)	$ -	$ (160)	$ (69)	$ -	$ (12,588)	$ (12,473)	
25									
26	**Total Rate Base Deferral Accounts**	$ 22,900	$ -	$ 12,915	$ (3,373)	$ (5,493)	$ 26,950	$ 24,928	

UNAMORTIZED DEFERRED CHARGES AND AMORTIZATION - NON-RATE BASE
FOR THE YEAR ENDING DECEMBER 31, 2021
($000s)

Line No.	Particulars	12/31/2020	Opening Bal./ Transfer/Adj.	Gross Additions	Less Taxes	Amortization Expense	12/31/2021	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	**1. Forecasting Variance Accounts**								
4	Pension & Other Post Retirement Benefits (OPEB) Variance	$ (905)	$ -	$ 609	$ -	$ 706	$ 410	$ (247)	
5									
6	**2. Rate Smoothing Accounts**								
7									
8	**3. Benefits Matching Accounts**								
9									
10	**4. Retroactive Expense Accounts**								
11									
12	**5.Other Accounts**								
13									
14	**Total Deferral Accounts at Short Term Interest**	$ (905)	$ -	$ 609	$ -	$ 706	$ 410	$ (247)	
15									
16	Financing Costs at STI	$ (94)	$ -	$ (3)	$ -	$ 96	$ (1)	$ (48)	

FORTISBC INC.

UNAMORTIZED DEFERRED CHARGES AND AMORTIZATION - NON-RATE BASE cont'd
FOR THE YEAR ENDING DECEMBER 31, 2021
($000s)

Line No.	Particulars	12/31/2020	Opening Bal./ Transfer/Adj.	Gross Additions	Less Taxes	Amortization Expense	12/31/2021	Mid-Year Average	Cross Ref
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	**Deferral Accounts Financed at Weighted Average Cost of Debt**								
2									
3	**1. Forecasting Variance Accounts**								
4									
5	**2. Rate Smoothing Accounts**								
6	2018 - 2019 Revenue Surplus	$ (3,956)	$ -	$ 5,419	$ (1,463)	$ -	$ -	$ (1,978)	
7									
8	**3. Benefits Matching Accounts**								
9	CPCN Projects Preliminary Engineering [1]	$ 430	$ -	$ (428)	$ -	$ -	$ 2	$ 216	
10	2016 Long Term Electric Resource Plan	207	-	-	-	(103)	104	155	
11	2017 Rate Design Application	472	-	-	-	(118)	354	413	
12	2020 - 2024 Multi-Year Rate Plan Application	570	-	-	-	(135)	435	503	
13	2019 - 2022 Multi-Year DSM Expenditure Schedule	72	-	-	-	(36)	36	54	
14	2018 Joint Pole Use Audit	53	-	-	-	(26)	27	40	
15	Rate Design and Rates for Electric Vehicle Direct Current Fast Charging Service Application	68	-	110	(30)	-	148	108	
16		$ 1,872	$ -	$ (318)	$ (30)	$ (418)	$ 1,106	$ 1,489	
17									
18	**4. Retroactive Expense Accounts**								
19									
20	**5.Other Accounts**								
21	US GAAP Pension and OPEB Transition Obligation	$ 1,042	$ -	$ (347)	$ -	$ -	$ 695	$ 869	
22	Advanced Metering Infrastructure Radio-Off Shortfall	73	-	-	-	(24)	49	61	
23		$ 1,115	$ -	$ (347)	$ -	$ (24)	$ 744	$ 930	
24									
25	**Total Deferral Accounts at Weighted Average Cost of Debt**	$ (969)	$ -	$ 4,754	$ (1,493)	$ (442)	$ 1,850	$ 441	
26									
27	Financing Costs at WACD	$ (18)	$ -	$ 21	$ -	$ 24	$ 27	$ 5	

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

FORTISBC INC.

Section 11 - 2021

UNAMORTIZED DEFERRED CHARGES AND AMORTIZATION - NON-RATE BASE cont'd
FOR THE YEAR ENDING DECEMBER 31, 2021
($000s)

Schedule 12.2

Line No.	Particulars	12/31/2020	Opening Bal./ Transfer/Adj.	Gross Additions	Less Taxes	Amortization Expense	12/31/2021	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	**1. Forecasting Variance Accounts**								
4	2020 - 2024 Flow-Through Deferral Account	$ 213	$ -	$ (3,501)	$ -	$ -	$ (3,288)	$ (1,538)	
5									
6	**2. Rate Smoothing Accounts**								
7									
8	**3. Benefits Matching Accounts**								
9	On Bill Financing (OBF) Participant Loans	$ 2	$ -	$ (1)	$ -	$ -	$ 1	$ 2	
10									
11	**4. Retroactive Expense Accounts**								
12									
13	**5.Other Accounts**								
14	MRP Earnings Sharing Account	$ (872)	$ -	$ -	$ -	$ -	$ (872)	$ (872)	
15									
16	**Total Deferral Accounts at Weighted Average Cost of Capital**	$ (657)	$ -	$ (3,502)	$ -	$ -	$ (4,159)	$ (2,408)	
17									
18	Financing Costs at AFUDC	$ (28)	$ -	$ (139)	$ -	$ -	(167)	(98)	
19									
20	**Deferral Acconuts Non-Interest Bearing**	$ 50	$ -	$ -	$ -	$ -	$ 50	$ 50	
21									
22									
23	**Total Non Rate Base Deferral Accounts (including financing)**	**$ (2,621)**	**$ -**	**$ 1,740**	**$ (1,493)**	**$ 383**	**$ (1,990)**	**$ (2,305)**	