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 6, 2022

British Columbia Public Interest Advocacy Centre
Suite 803 470 Granville Street
Vancouver, B.C.
V6C 1V5

Attention: Ms. Leigha Worth, Executive Director

Dear Ms. Worth:

Re: FortisBC Inc. (FBC)

Annual Review for 2023 Rates (Application)

Response to the British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre *et al.* (BCOAPO) Information Request (IR) No. 1

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

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

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC INC.

Original signed:

Diane Roy

Attachments

cc (email only): Commission Secretary
Registered Parties

1.0 Reference: Exhibit B-2, page 1

Preamble: The Application requests the following approval:

"The level of forecast growth, sustainment and other capital to be incorporated in rates for the years 2023 and 2024, as set out in Section 7.2.1."

1.1 Does FBC anticipate updating the forecast for 2024 growth, sustainment and other capital in its annual review for 2024 rates?

Response:

As the BCUC has not yet approved any forecast of regular capital expenditures for 2023 or 2024, FBC is seeking approval of the level of forecast sustainment and other capital to be incorporated in rates for the years 2023 and 2024 in this Application. Consistent with the forecast of the 2020-2022 regular capital forecasts that was approved in the MRP Decision and Order G-166-20 (page 131), FBC will not update its 2024 regular capital forecast in the Annual Review for 2024 Rates. Any variances between 2023 and 2024 forecast and actual regular capital expenditures will be subject to the approved Earnings Sharing Mechanism.

2.0 Reference: Exhibit B-2, page 3

Preamble: The Application states:

"For 2021, FBC achieved formula O&M savings in addition to meeting the embedded productivity improvement factor in the O&M formula. Total formula O&M savings before earnings sharing were approximately $3.4 million".

"Please refer to Section 6.2.1 for further details. While some of the savings are one-time in nature (e.g., delay in filling vacancies), some of the savings are expected to continue into the future, recognizing that cost pressures in the future may offset the savings."

2.1 Please provide a schedule that sets out the calculation of the $3.4 M in formula O&M savings based on forecast approved vs. actual O&M.

Response:

Please refer to page 20 of the FBC 2021 Annual Report which FBC has provided as Attachment 37.1 to the response to BCOAPO IR1 37.1. The schedule on page 20 of the Annual Report shows the formula (i.e., Approved) O&M for 2021 compared to the 2021 Actual formula O&M, resulting in the O&M savings for 2021 of $3.4 million. Since formula O&M is determined at an aggregate level, FBC cannot provide any more detailed information than what is shown in the Annual Report.

2.2 Please provide a breakdown of the $3.4 M in formula O&M savings as between one-time savings and ongoing savings.

Response:

Excluding the approximate $0.9 million of savings in employee expenses due to the COVID-19 pandemic as shown in Table 12-1 of the Application, $2.4 million of the remaining formula O&M savings of $2.5 million are considered one-time in nature, consisting mostly of labour savings in various departments.

The labour vacancies savings are considered one-time in nature as the positions and related funding are expected to be required in future years and are important to continuing operations, including connecting new customers, providing high quality service to existing customers and ensuring that FBC is meeting environmental and safety standards and regulations, among other goals.

Approximately $0.1 million of the total $2.5 million formula O&M savings are considered ongoing and are from reduced postage and printing costs resulting from an increase in the number of customers on paperless billing. Please refer to page 6 of the Application for a discussion of the Paperless Billing Campaigns.

FBC is currently evaluating and implementing opportunities (please refer to Section 1.4.2 of the Application) to generate efficiency savings to sustain the $2.4 million one-time O&M savings achieved in 2021 into 2022 and 2023, while maintaining overall operations and service quality levels. Such opportunities may result in an increased proportion of recurring savings compared to one-time savings. However, while O&M savings are likely to continue to be achieved, the reasons for the net overall savings realized in future years may be different as there may be cost pressures that offset the current overall level of savings achieved in future years.

3.0 Reference: Exhibit B-2, pages 4-6

Preamble: The Application outlines seven productivity initiatives from different parts of the organization FortisBC reviewed this past year and/or is investigating.

3.1 For each of the first six initiatives described please indicate: i) whether the review is completed or ongoing at this point in time, ii) if completed, what saving ($/year) were identified and when the realization of the savings will start, and iii) if not completed, when the investigation will be completed and FBC's current expectation as to when any annual savings will start and what the annual savings will be.

Response:

FBC provides the following requested information on the seven initiatives:

1. Field Operations Improvement

The activities described in Section 1.4.2 of the Application relating to investigating improvements to field operations are still in progress. Once complete, the main efficiency improvements from this initiative will be improved functionality in the sharing of information between FBC's Operations groups and the elimination of the need to manually intervene in the various workflows.

The investigations into and review of this initiative are scheduled to be completed in December 2022, enabling FBC to avoid the need to hire an incremental FTE at an annual cost of approximately $146 thousand per year.

2. Use of Unmanned Aerial Vehicles (UAVs – Drones)

FBC is continuing its evaluation of drone use. At this time, FBC is deferring a request for pricing to assess the potential efficiencies associated with a conditional assessment program that relies on drone-collected data until 2023 or later in order to understand the benefits of using drones to augment the current manual condition assessment program. Please refer to the responses to ICG IR1 1.1 to 1.3 for a discussion of the recent use of drones for inspections.

At this time, FBC is unable to quantify the benefits or provide the timing of when the benefits will be realized.

3. Technology Investments to Support Enhanced Communications

The recent enhancements and the introduction of the mobile app as discussed in Section 1.4.2 are complete. FBC plans to invest in further enhancements to enable employees to work more productively.

At this time, FBC is not able to quantify any expected permanent lower employee costs as a result of using Microsoft Teams. While there have been reduced costs to date with the adoption

of the technology, higher costs for employee travel related costs experienced recently due to high inflation may serve to offset some of the lower costs observed. Also, FBC may be required to reprioritize some of the funding to help with managing other cost pressures that the Company may experience in other parts of its business. In accordance with the approved treatment under the current MRP, should there be any remaining cost reductions, these will be shared equally with customers through the Earnings Sharing Mechanism.

4. Data Analytics

The Enterprise Data and Analytics System (EDAS) project was approved internally in late Q2 2022 following a process which included an RFP to identify an implementation approach and architecture and initial use cases to be implemented. The EDAS environment will support data virtualization, data cataloging, data governance and cloud-based data storage, all of which are required to enable a robust data analytics program. The Customer Service area has been chosen as the first usage case with the focus on Call Management and reduction in average handle time.

The implementation of the Data Analytics initiative will occur over time, with initial usage cases prioritized for those that enable cost savings. The Customer Service and Finance areas will be the near-term focus with work starting in Q4 2022. FBC will be in a better position to provide an update on the results of the work completed and the efficiencies achieved at next year's Annual Review.

Please refer also to the response to ICG IR1 2.1 for additional details regarding the project.

5. Streamlining and Automating Reporting Process

As indicated in the Application, this initiative is one of the earlier usage cases being considered for the Data Analytics initiative. FBC will be in a better position to provide an update on the results of the work completed and the efficiencies achieved at next year's Annual Review.

6. Robotics Process Automation

FBC is in the early stages of implementing Robotics Process Automation on several processes within Finance, with additional processes in both Finance and Engineering still in the investigation and evaluation phase, which FBC expects to continue over the next several years.

FBC expects that processes will continue to be investigated and evaluated over the next several years, with efficiency benefits being realized as the implementation of each process is completed. The efficiency benefit is dependent on the individual process; therefore, until such time as the review and implementation of a process is complete, FBC is not in a position to quantify the benefits achieved.

7. Paperless Billing Customer Campaigns

Please refer to the response to BCOAPO IR1 2.2 for additional information on this initiative.

4.0 Reference: Exhibit B-2, pages 4-6

Preamble: The Application outlines seven productivity initiatives from different parts of the organization FortisBC reviewed this past year and/or is investigating.

4.1 Please provide a summary of any other productivity initiatives FBC has investigated since the start of the current 2020-2024 Multi-Year Rate Plan period.

4.1.1 Please identify any of these initiatives that have led to ongoing savings and, in each case, indicate the level of savings achieved historically (i.e., up to 2021) and forecast to be achieved in 2022 and 2023.

Response:

As part of its productivity focus, FBC continuously looks for initiatives to create efficiencies and potential savings. Initiatives are reviewed at a summary level first and pursued further if potential benefits warrant further investigation. FBC does not keep track of such early-stage productivity initiatives as some do not proceed beyond the very preliminary stage of investigation. For broader, larger scale impact initiatives and which may span multiple departments, FBC tracks such efforts more formally once the initiatives have progressed sufficiently in development. For smaller scale initiatives which include process improvements and efficiencies within departments, FBC does not require the initiatives to be tracked specifically as it is part of the ongoing productivity focus and improvements which departments are responsible for.

As a result, FBC does not have a list of other productivity initiatives to report on at this time other than the initiatives listed in the Application. Generally, the listing of initiatives in the Application represents initiatives that have been prioritized, are broader in scope and offer financial and customer service benefits and leverage technology and innovation to achieve benefits. Should additional key initiatives progress to the development stage during the current MRP term, FBC will provide details of the initiative(s) in the next annual review application.

5.0 Reference: Exhibit B-2, pages 10-11

Preamble: The Application states:

"As shown in Table 2-1 below, the I-Factor has been calculated utilizing actual CPI-BC and AWE BC data. Applying the actual 2021 labour weighting of 60 percent, the calculation of the 2023 I Factor is (4.940 percent x 40 percent) + (4.235 percent x 60 percent) = 4.517 percent".

"The latest available month of April 2022 for AWE-BC has been used as a placeholder, as results to June 2022 have not been released by Statistics Canada. Once results for these periods are available, this placeholder will be replaced with actuals and included in an Evidentiary Update or Compliance Filing".

5.1 Please provide the derivation of the actual 2021 labour weighting of 60%.

Response:

The following table provides the numbers for the calculation of the 2021 Actual labour to non-labour ratio of 60 percent to 40 percent.

2021 Labour / Non-Labour Operating Expenses
($000's)

Labour	37,310	60%
Non-Labour	24,821	40%
Gross O&M	**62,131**	**100%**

5.2 If AWE-BC data is now available for any of the months after April 2022, please update Table 2-1 accordingly.

Response:

A revised Table 2-1 including AWE-BC data to June 2022 is included below. Using the data currently available, the I-Factor would change to 4.336 percent, a decrease of 0.181 percent from the 4.517 percent included in the Application. FBC notes this data could be revised by Statistics Canada before FBC files its Compliance Filing to the BCUC's decision on the 2023 Annual Review. FBC will use the most current data available at that time for its Compliance Filing and will update the 2023 rates accordingly.

Revised 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	12 Mth Average AWE $	CPI %	AWE %	Last Completed Year Non Labour %	Last Completed Year Labour %	I-Factor %	MRP Year
1	Jul-2020	132.6	1,093.72								
2	Aug-2020	132.4	1,089.35								
3	Sep-2020	132.5	1,093.75								
4	Oct-2020	132.9	1,095.32								
5	Nov-2020	133.3	1,102.95								
6	Dec-2020	132.8	1,110.36								
7	Jan-2021	133.6	1,113.22								
8	Feb-2021	134.1	1,114.21								
9	Mar-2021	134.9	1,107.66								
10	Apr-2021	135.2	1,112.04								
11	May-2021	135.1	1,118.59								
12	Jun-2021	135.8	1,115.40	133.8	1,105.55						
13	Jul-2021	136.7	1,140.52								
14	Aug-2021	137.0	1,142.40								
15	Sep-2021	137.2	1,139.64								
16	Oct-2021	137.9	1,136.85								
17	Nov-2021	138.1	1,132.25								
18	Dec-2021	138.0	1,134.84								
19	Jan-2022	139.4	1,157.19								
20	Feb-2022	140.4	1,153.88								
21	Mar-2022	143.0	1,161.22								
22	Apr-2022	144.2	1,164.49								
23	May-2022	146.1	1,159.92								
24	Jun-2022	146.5	1,165.15	140.4	1,149.03	4.940%	3.933%	40%	60%	4.336%	2023

5.3 With respect to Table 2-1, can FBC explain the significant increases in the AWE-BC for: i) July 2021 vs. June 2021 (1140.52 vs. 1115.40) and ii) January 2022 vs. December 2021 (1157.19 vs. 1134.84)?

Response:

FBC cannot specifically explain the AWE-BC increases seen between June and July 2021 and between December 2021 to January 2022. It is likely the COVID-19 pandemic restrictions put in place throughout 2021 had an impact on the AWE-BC results; however, FBC has no way of calculating that impact. Statistics Canada notes in their AWE-BC publications that, generally, changes in average weekly earnings are the result of a number of factors, including wage growth, changes in the composition of employment by industry, occupation and level of job experience, and average hours worked per week.

5.4 Please provide the equivalent of Table 2-1 as used for purposes of setting the approved 2022 rates (i.e. with values from July 2019 to June 2021).

5.4.1 Please identify any changes in the values used for July 2020 to June 2021 for purposes of setting the approved 2022 rates vs. those used in the current Application.

5.4.2 Please explain any changes in the above-identified values for the July 2020 to June 2021 time period for the purposes of setting the approved 2022 rates vs. those used in the current Application.

Response:

A revised Table 2-1 comparing the data used for setting the 2022 approved rates[1] to the revised data published by Statistics Canada (as included in the Application) is provided below. The monthly AWE-BC results from July 2019 to June 2021 have changed because Statistics Canada periodically revises their AWE-BC results. FBC uses the most current set of AWE-BC results in each year's Annual Review filing.

2022 Approved Rates						2022 Restated						Variance	
		Table: 18-10-0004-01	*Table: 14-10-0223-01*	**12 Mth Average**				*Table: 18-10-0004-01*	*Table: 14-10-0223-01*	**12 Mth Average**		Changes	
Line No.	**Date**	**BC CPI index**	**BC AWE $**	**CPI index**	**AWE $**	Line No.	**Date**	**BC CPI index**	**BC AWE $**	**CPI index**	**AWE $**	**CPI**	**AWE**
1	Jul-2019	132.4	995.70			1	Jul-2019	132.4	995.12			-	(0.58)
2	Aug-2019	132.2	1,003.20			2	Aug-2019	132.2	1,003.44			-	0.24
3	Sep-2019	132.0	1,007.69			3	Sep-2019	132.0	1,008.46			-	0.77
4	Oct-2019	132.2	1,015.61			4	Oct-2019	132.2	1,017.08			-	1.47
5	Nov-2019	131.8	1,012.26			5	Nov-2019	131.8	1,014.99			-	2.73
6	Dec-2019	131.7	1,014.87			6	Dec-2019	131.7	1,014.89			-	0.02
7	Jan-2020	132.1	1,025.98			7	Jan-2020	132.1	1,024.87			-	(1.11)
8	Feb-2020	132.9	1,024.80			8	Feb-2020	132.9	1,024.08			-	(0.72)
9	Mar-2020	132.3	1,029.14			9	Mar-2020	132.3	1,030.77			-	1.63
10	Apr-2020	131.2	1,105.84			10	Apr-2020	131.2	1,106.25			-	0.41
11	May-2020	131.5	1,127.73			11	May-2020	131.5	1,122.80			-	(4.93)
12	Jun-2020	132.6	1,097.00	132.1	1,038.32	12	Jun-2020	132.6	1,096.14	132.1	1,038.24	-	(0.86)
1	Jul-2020	132.6	1,095.17			1	Jul-2020	132.6	1,093.72			-	(1.45)
2	Aug-2020	132.4	1,089.30			2	Aug-2020	132.4	1,089.35			-	0.05
3	Sep-2020	132.5	1,092.97			3	Sep-2020	132.5	1,093.75			-	0.78
4	Oct-2020	132.9	1,093.25			4	Oct-2020	132.9	1,095.32			-	2.07
5	Nov-2020	133.3	1,098.85			5	Nov-2020	133.3	1,102.95			-	4.10
6	Dec-2020	132.8	1,109.54			6	Dec-2020	132.8	1,110.36			-	0.82
7	Jan-2021	133.6	1,115.13			7	Jan-2021	133.6	1,113.22			-	(1.91)
8	Feb-2021	134.1	1,114.34			8	Feb-2021	134.1	1,114.21			-	(0.13)
9	Mar-2021	134.9	1,104.90			9	Mar-2021	134.9	1,107.66			-	2.76
10	Apr-2021	135.2	1,111.16			10	Apr-2021	135.2	1,112.04			-	0.88
11	May-2021	135.1	1,122.67			11	May-2021	135.1	1,118.59			-	(4.08)
12	Jun-2021	135.8	1,116.76	133.8	1,105.34	12	Jun-2021	135.8	1,115.40	133.8	1,105.55	-	(1.36)

[1] FBC Annual Review for 2022 Rates Decision and Order G-374-21, Compliance Filing dated December 20, 2021, Table 1, p. 2.

6.0 Reference: Exhibit B-2, pages 11-12

6.1 With respect to Table 2-2, are values for actual customer additions for any of the months in 2022 currently available?

6.1.1 If yes, please provide the values.

Response:

The 2022 Projected customer additions shown in Table 2-2 of the Application show the actuals up to and including April 2022, which was the most recent data available at the time when FBC was developing the forecasts for the 2023 Annual Review.

Consistent with the previous years' annual reviews, FBC will not be updating the 2022 Projected average customer count in Table 2-2 to include additional months of actual customer additions in the Evidentiary Update (if one is filed) or in the Compliance Filing. The purpose of the 2022 Projected customer additions shown in Table 2-2 is, for rate-making purposes, to determine the forecast average customer count in 2023. As approved by Order G-166-20, any variances between the actual and forecast average customer counts and the resulting impact to FBC's formula O&M will be trued-up in subsequent years.[2] This is demonstrated on Lines 31 to 33 of Table 2-2 as well as Table 6-2 of the Application which shows the true-up calculations for O&M.

As at the end of August 2022, the actual cumulative customer additions are 1,604 and the actuals continue to trend towards the total projected additions of 3,031 shown in Table 2-2. FBC notes that having a few more months of actual customer additions in 2022 would not change its year-end forecast of customers, and would not result in any material changes to the formula O&M calculations. As there is an approved mechanism for the true-up between actual and forecast average customer counts and formula O&M, updating the average customer growth factor in the Compliance Filing (or Evidentiary Update) for a few additional months of actual customer additions would be inefficient and is unnecessary.

6.2 If an Evidentiary Update is provided, will it incorporate actual 2022 monthly customer additions where available?

Response:

Please refer to the response to BCOAPO IR1 6.1.

[2] The true-up of formula O&M is based on the actual average customer counts from two years prior (i.e., the full-year actual average customer count is not available for 2022 at the time of the 2023 Annual Review, thus the true-up for 2022 will occur in 2024).

6.3 For the purpose of FBC's Compliance Filing, will actual 2022 monthly customer additions be included where available?

Response:

Please refer to the response to BCOAPO IR1 6.1.

7.0 Reference: Exhibit B-2, Appendix A3, pages 1-3

Preamble: The Application states:

"The regressions result in high R2 values for all seasons for the residential, wholesale and commercial load classes; therefore these classes are normalized".

7.1.1 Are the same classes weather normalized in the current Application as in the Annual Review for 2022 Rates?

7.1.1.1 If not, what changed and why?

Response:

Confirmed. The same classes are weather normalized in the current Application as in the Annual Review for 2022 Rates application.

7.1.2 Is the same weather normalization process (per pages 2-3) used in the current Application as in the Application for the Annual Review for 2022 Rates?

7.1.2.1 If not, what changed and why?

Response:

Confirmed. The same weather normalization process is used in the current Application as in the Annual Review for 2022 Rates application.

8.0 Reference: Exhibit B-2, pages 18-20

Exhibit B-2, Appendix A2, page 3, Table 2.3

Exhibit B-2, Appendix A3, pages 3-4

Preamble: The Application states (page 18):

"Normalized historical UPCs are obtained by dividing the weather-normalized residential load by the average customer count in each year. The before-savings UPC is forecast by applying a 10-year trend to the normalized historical UPCs. The before-savings UPC forecast is then multiplied by the forecast average customer count to derive the before-savings load forecast".

Appendix A3 states (page 4):

"The before-savings UPC was based on a 10-year historic trend of annual UPC values from 2012 to 2021. FBC reviews the forecast methods on an annual basis. As FBC found that there was a strong correlation, it therefore applied a 10-year trend."

8.1 Please provide a schedule that sets out, for the years 2012-2021, the weather-normalized residential load and average customer counts that were used to derive the UPC values in Figure 3-3.

Response:

The requested schedule is provided below.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Residential Normalized Load (MWh)	1,228,709	1,398,932	1,296,452	1,298,150	1,295,580	1,320,492	1,312,598	1,266,137	1,346,832	1,330,331
Average Annual Customer Count	99,012	112,079	112,647	113,799	114,969	116,760	119,020	121,378	123,716	125,822
UPC (MWh)	12.41	12.48	11.51	11.41	11.27	11.31	11.03	10.43	10.89	10.57

FBC notes that there was an error in the calculation of the 2021 residential UPC where an updated spreadsheet was not included in the calculation. After correcting this error, the 2021 UPC decreased by 0.01 MWh. The impact to the 2023 forecast residential load is approximately (693) MWh which is an approximately 0.05 percent decrease in residential load. The impact to the 2023 rate increase will be small (i.e., approximately $88 thousand) which will change the 2023 rate increase from 3.99 percent to 4.01 percent. FBC will include an update related to this error in its compliance filing to the 2023 Annual Review Decision.

8.2 Is the approach used in the current Application for forecasting the UPC value for 2023 the same as that used in: i) the Annual Review for 2022 Rates to forecast the UPC for 2022, ii) the Annual Review for 2020 and 2021 Rates to forecast the UPCs for 2020 and 2021, and iii) the Annual Review for 2019 Rate to forecast the UPC for 2019?

8.2.1 If not, please indicate those years where the process differed and what the difference in the process used was.

Response:

The approach for forecasting the residential UPC used in the Application is the same as that used in the Annual Review for 2022 Rates and the Annual Review for 2020 and 2021 Rates. In the Annual Review for 2019 Rates, FBC found that there was no statistically significant trend in the most recent UPC data and therefore applied a three-year average.

8.3 Please provide as schedule that provides: i) the weather normalized UPC values for 2012-2021, ii) the predicted UPC values for 2012-2021 using the results of FBC's trend analysis and iii) the predicted (before 2022 and 2023 DSM savings) UPC values for 2022 and 2023 using the results of FBC's trend analysis.

Response:

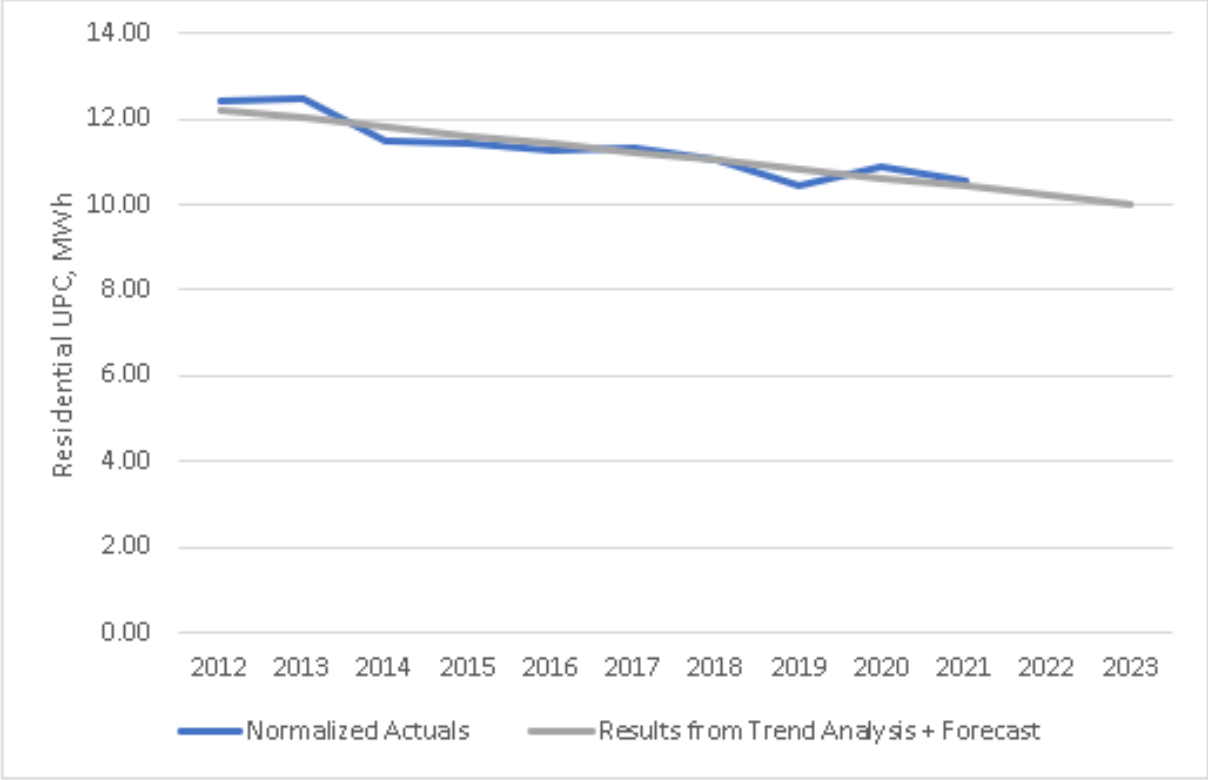
In the response to BCOAPO IR1 8.1, FBC noted that there was a small error in the 2021 UPC value which has been corrected for in this table and in the trend analysis equation. Please refer to Table 1 below for the information requested.

Table 1: Weather Normalized UPC for 2012 to 2021 and Weather Normalized UPC based on FBC's Trend Analysis for 2012 to 2023

											iii) Before DSM Savings	
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
i) Weather Normalized FBC UPC (MWh)	12.41	12.48	11.51	11.41	11.27	11.31	11.03	10.43	10.89	10.57		
ii) UPC Using the FBC 2023 Annual Review UPC Trend Results	12.22	12.02	11.82	11.62	11.42	11.22	11.02	10.82	10.62	10.42	10.22	10.02

FBC also provides the following figure which demonstrates how the data in Table 1 was developed. The blue line represents the actual weather normalized UPC (i.e., item (i) in the table), and the grey line represents the historical results of FBC's trend analysis as well as the forecast UPC for 2022 and 2023 (i.e., items (ii) and (iii) in the table).

Figure 1: Historical Weather Normalized UPC based on Actual Results and FBC's Trend Analysis, and the 2022S and 2023F UPC



9.0 Reference: Exhibit B-2, pages 15-16 and 18-20

Exhibit B-2, Appendix A3, pages 3-4

FBC's Annual Review for 2022 Rates, Exhibit B-5, BCOAPO 8.3

9.1 Please provide a revised version of Table 3-1 that sets out: i) the incremental DSM savings for 2022 over and above those included in the actual 2021 values and ii) the incremental DM savings for 2023 over and above those included in the actual 2021 values?

Response:

Please refer to the response to BCUC IR1 3.3.

9.2 Please provide an updated version of the response to BCOAPO 8.3 (from the Annual Review for 2022 Rates) that includes i) 2021 actual values, and ii) extends the table to include the forecast values for 2022 and 2023.

Response:

The following table sets out the annual cumulative Residential Program Area DSM savings per customer (using 2011 as the base year) and the forecast for 2022 and 2023. DSM savings per customer are first calculated on an annual basis then added to previous years' values to show cumulative savings per customer.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022F	2023F
Residential Program Savings (MWh)	12,758	16,200	8,686	5,639	12,538	10,154	6,553	7,850	7,202	7,896	4,427	4,502
Residential Customer Count	99,228	111,862	113,431	114,166	115,772	117,748	120,291	122,465	124,966	126,678	129,336	132,015
Annual Savings per Customer (kWh)	129	145	77	49	108	86	54	64	58	62	34	34
Cumulative savings per customer (kWh)	129	274	351	400	508	594	648	712	770	832	866	900

The cumulative savings per customer is embedded in the historical actuals used to forecast future UPC. As a result, the before-savings forecast UPC slope as shown in Table A3-5 includes the impact of the cumulative DSM. The slope assumes that DSM programs and adoption will continue at historical levels. New DSM programs are accounted for with incremental DSM, which is subtracted from the before-savings forecast to arrive at the after-savings forecast.

9.3 Please provide a schedule that sets out for the years 2012 to 2021: i) the actual normalized UPC value, ii) the cumulative DSM savings per customer (per the previous question 9.2)) and iii) the normalized UPC assuming no DSM savings after the 2010 base year (i.e., the sum of (i) and (ii)).

Response:

The requested schedule is presented in the table below.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
i) Residential Normalized UPC (MWh)	12.41	12.48	11.51	11.41	11.27	11.31	11.03	10.43	10.89	10.58
ii) Cumulative Savings Per Customer (MWh)	0.13	0.27	0.35	0.40	0.51	0.59	0.65	0.71	0.77	0.83
iii) UPC Assuming No Cumulative DSM Savings	12.54	12.76	11.86	11.81	11.78	11.90	11.68	11.14	11.66	11.42

9.4 Please provide the results (similar to Table A3-6) based on a trend analysis of the result from question 9.3, part (iii).

9.4.1 Based on this trend analysis, please provide a forecast for the UPC value for 2022 and 2023 (i.e., UPC assuming no DSM savings after the 2010 base year).

Response:

Please refer to the Table 1 below for the requested trend results using the residential UPC before all cumulative DSM savings from 2012 to 2021 as shown in the response to BCOAPO IR1 9.3. Based on this trend analysis, the 2022 and 2023 before-savings UPC values would be 11.13 MWh and 11.00 MWh, respectively.

Table 1: Residential UPC Trend Analysis based on BCOAPO IR1 9.3

Regression	UPC
Start Year	2012
End Year	2021
R^2	0.69
Adjusted R^2	0.65
df	9
Intercept	276
Slope UPC	-0.13

Using the trend analysis for residential UPC (before cumulative DSM savings from 2012 to 2021) as shown in Table 1 above, and subtracting the cumulative DSM savings per residential customer from the response to BCOAPO IR1 9.2, the residential UPC after DSM savings would be 10.26 MWh and 10.1 MWh for 2022 and 2023, respectively. As shown in Table 2 below, the difference compared to the residential after-savings UPC as shown in Section 4 of Appendix A2 of the Application is small, at 0.07 MWh and 0.15 MWh for 2022S and 2023F, respectively.

Table 2: Comparison of Residential After-Savings UPC between FBC's Forecasting Method and BCOAPO IR1 9.4

Residential After-Savings UPC (MWh per customer)	2022S	2023F
Section 4 of Appendix A2 (As-Filed)	10.19	9.95
BCOAPO IR1 9.4	10.26	10.1
Difference	**+0.07**	**+0.15**

FBC notes that the two approaches are similar and produce similar results for forecasting the 2023 residential UPC. The small difference is that the regression in FBC's approach would be based on residential load that includes DSM savings already embedded in the historical load in actual while the regression using the approach suggested in BCOAPO IR1 9.2 to 9.4 would be based on a calculated historical load without DSM savings but with the DSM savings added back in afterward (i.e., no regression on the historical DSM savings). FBC also notes that any variance between the actual and forecast use rates will be captured in the Flow-through deferral account and will be recovered from/returned to customers in subsequent years, thus customers will be held whole regardless.

Despite the small differences, FBC notes the following between the two approaches:

- The regression based on the approach suggested in BCOAPO IR1 9.2 to 9.4 would have a worse R^2 value than the regression in FBC's approach. As shown in Table A3-5 of Appendix A3 (reproduced in Table 3 below), the regression under FBC's approach would be 0.84, compared to 0.69 as shown in Table 1 above; and
- The approach suggested by BCOAPO, which is a regression without all cumulative DSM savings where the DSM savings are instead added back later, would require an assumption that there is no change related to those DSM savings in all years since 2012. For instance, if certain DSM measures were implemented in 2012 such as a new LED light bulb, it is entirely possible that the LED light bulb could have been removed or replaced with a newer LED light bulb over the years. If the regression is completed before the DSM savings, then any changes to the DSM savings would not have been captured in the regression. On the other hand, FBC's approach would be a regression on all historical load, which would capture all changes embedded in the historical load, including any changes related to the DSM savings.

1 **Table 3: FBC's Residential UPC Trend Analysis as shown in Table A3-5 of Appendix A3**

Regression	UPC
Start Year	2012
End Year	2021
R^2	0.84
Adjusted R^2	0.82
df	9
Intercept	414
Slope UPC	-0.20

2

3

10.0 Reference: Exhibit B-2, Appendix A3, page 4

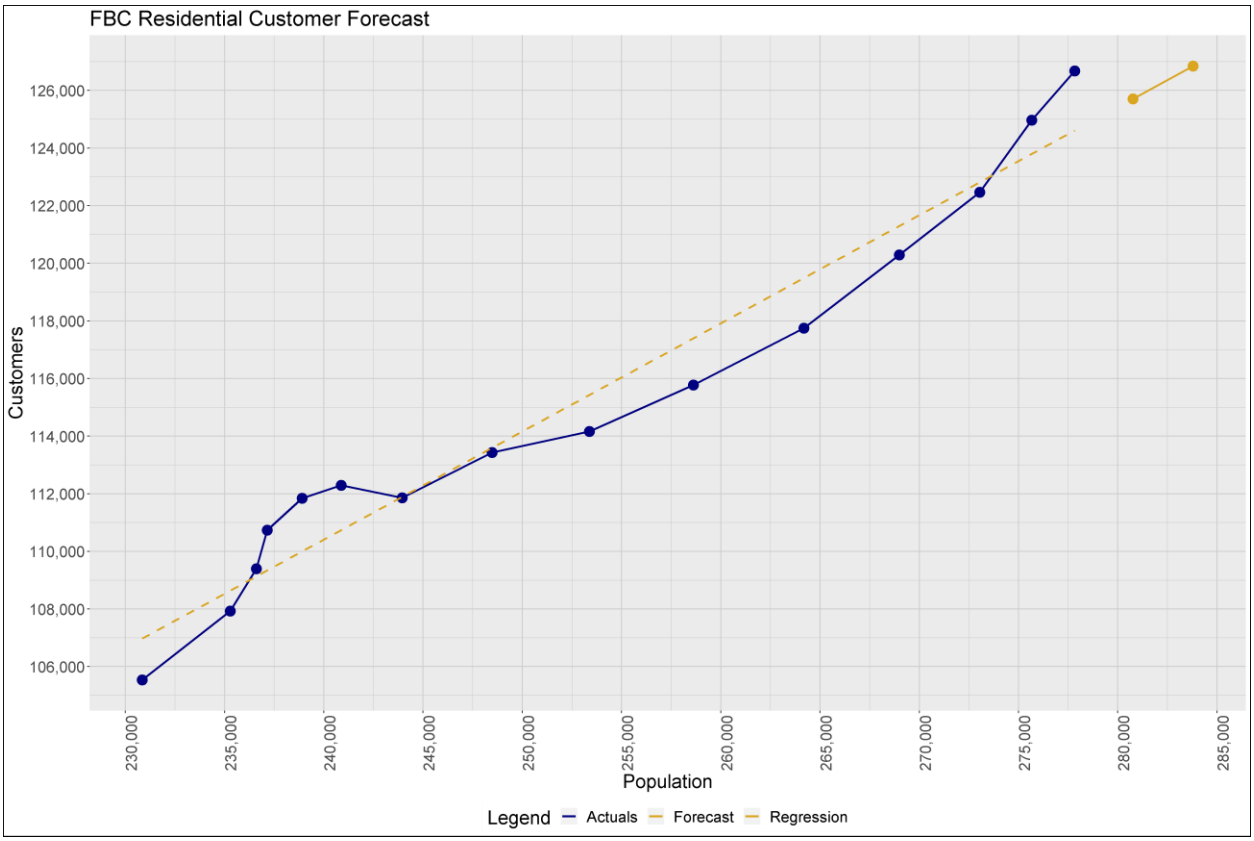
10.1 Please explain why the regression equation used to forecast Residential customer count is based on only 3 years (i.e., 2019, 2020 and 2021).

Response:

FBC used a three-year regression period to reflect the fact that the slope of the correlation between population and customers has been increasing in recent years. This increase in the customer count forecast is also validated with FBC's projections of expected new residential builds.

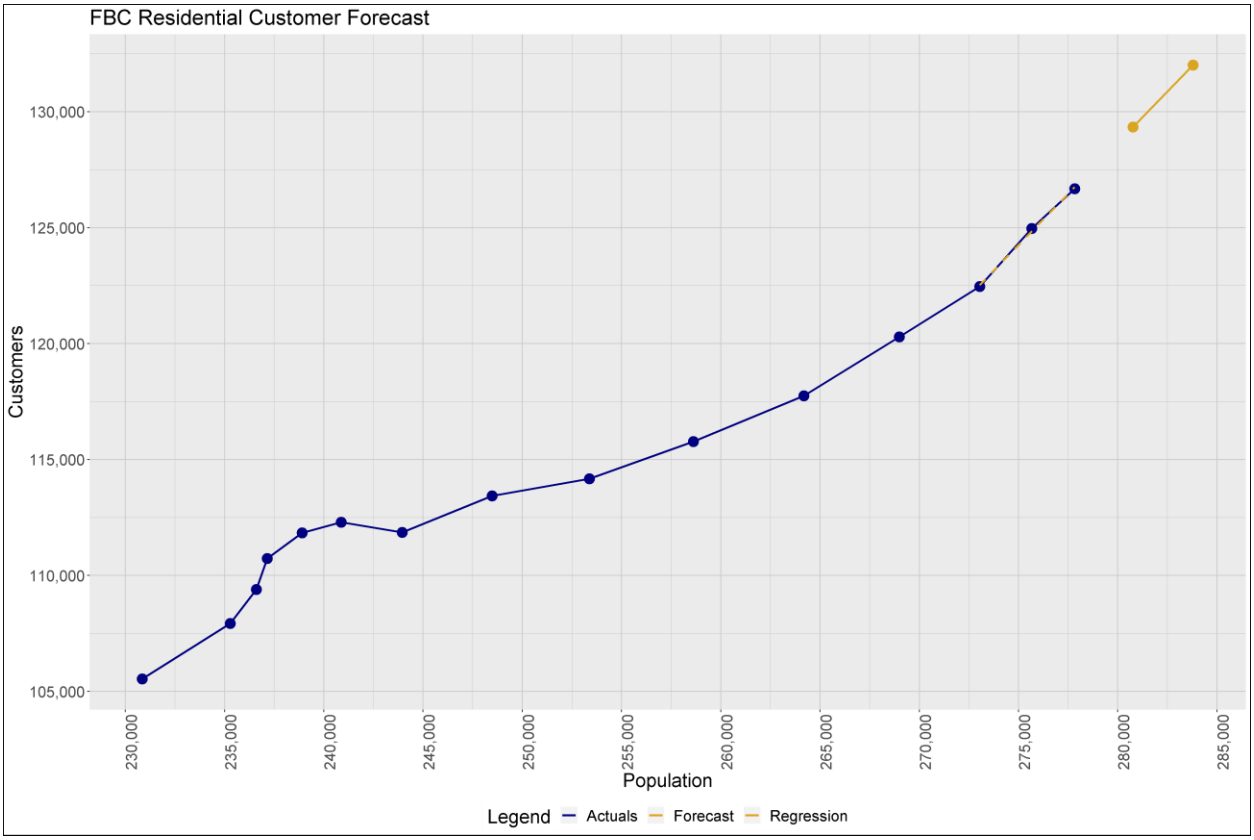
Figure 1 (below) shows how the use of a longer regression period would result in an unreasonably low customer forecast. The blue line represents the actual data while the gold dashed line shows the linear regression and the solid gold line is the resulting forecast. As shown in Figure 1, using the longer regression period would result in the 2022 forecast being lower than the 2021 actual customer count. The slope of the forecast matches the long-term regression, but is not reflective of current trends and is not reasonable.

Figure 1: Impact of Longer Regression Period on 2023 Forecast Residential Customer Count



The following figure shows the result when the most recent three years are used to create the regression model. The solid gold line now more closely matches the recent trend, and the 2022 and 2023 customer forecasts are reasonable.

Figure 2: Residential Customer Count Forecast Based on Three-Year Regression (as used in the Application)



This change in the correlation between population and customers is indicative of a trend toward fewer occupants per dwelling. The implication is that, for a given increase in population, FBC adds more customers today than in the past. A possible contributing factor to this trend may be due to a greater share of residential developments comprised of multi-family dwellings, which tend to be smaller and are occupied by smaller family units.

10.2 Please provide the results for the regression equation if estimated using 5 years of actual data (i.e., 2017-2021).

10.2.1 Using the results of this equation please provide a forecast of the year end residential customer count for 2022 and 2023.

Response:

The results of the residential customer count regression equation using five years of actual data from 2017 to 2021 are shown below.

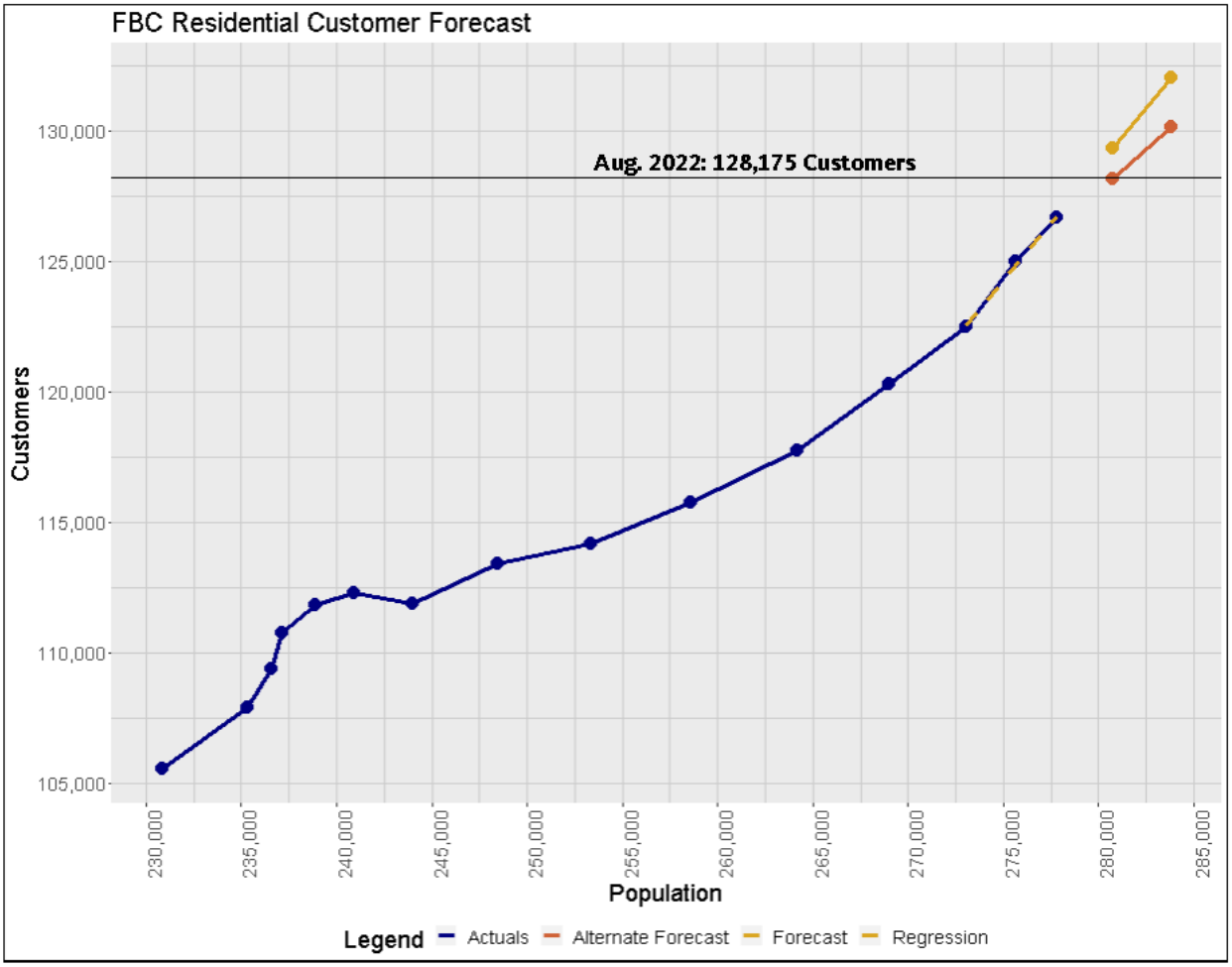
Regression of RES on Load Drivers

Regression	Residential
Start Year	2017
End Year	2021
R^2	0.98
Adjusted R^2	0.98
df	5
Intercept	(54,378)
Slope Population	0.65

Using this regression, the 2022 and 2023 year-end residential customer forecasts would have been 128,163 and 130,136, respectively.

FBC notes that as of August 2022 the residential customer count was 128,175 customers.

The following figure shows the original forecast (gold), the forecast proposed in this IR (orange) and a thin black line for the current actual customer count. FBC notes that the 2022 year-end customer count using the method proposed by this IR (128,163) has already been exceeded. As a result, FBC considers the forecast as filed is more reasonable.



10.3 What was the actual Residential customer count as of June 30, 2022?

Response:

As of June 30, 2022, the residential customer count was 127,665. As stated in response to BCOAPO IR1 10.2, the residential customer count as of August 2022 was 128,175.

11.0 Reference: Exhibit B-2, pages 17 and 20

Exhibit B-2, Appendix A1, page 3

Exhibit B-2, Appendix A2, page 6

Exhibit B-2, Appendix A3, pages 4-5

Preamble: The Application states (page 20):

"The commercial class is forecast based on a regression of load on the provincial GDP forecast obtained from the CBOC. The load for Electric Vehicle Direct Current Fast Chargers (EV DCFC) serviced by FBC are then added to 2022S and 2023F and account for less than a 1 GWh increase in both 2022S and 2023F".

11.1 What is the basis for the 2022 and 2023 forecast commercial class customer count?

Response:

The expected commercial customer count in year *t* is forecast based on the provincial GDP supplied by the CBOC. The relationship was estimated from the following equation.

$$\textit{Commercial Customer Count}_t = b_0 + b_1 \times GDP_t$$

Coefficients' b0 and b1 are obtained from an ordinary least squares (OLS) regression analysis on the 2012 to 2021 data. The regression results are below.

Table 1: Results of Commercial Customer Count Regression

Regression	Commercial
Start Year	2012
End Year	2021
R^2	0.93
Adjusted R^2	0.92
df	9
Intercept	527
Slope GDP	0.1

11.2 What was the actual commercial class customer count as of June 30, 2022?

Response:

As of June 30, 2022, the actual commercial customer count was 16,677 customers.

11.3 Table A1-3 sets out the values for GDP determined on various bases. Which basis/definition was used for purposes of forecasting Commercial load?

Response:

For the purposes of forecasting the Commercial load, the GDP at basic prices (2012$ millions) was used from Table A1-3.

11.4 With respect to Table A1-3, please update for more recent actuals and indicate which values have been updated.

Response:

Below is an updated Table A1-3 from the Conference Board of Canada (CBOC), British Columbia Three Year Outlook, August 2022. The differences between the original table A1-3 (February 2022) and the updated version are provided in the second table below (i.e., Table 1 below). Cells that show "0" in Table 1 indicate no change between the CBOC forecasts.

Updated Table A1-3: British Columbia Three Year Outlook 2022 (Aug)

Key Economic Indicators: British Columbia, 2021-24
(forecast completed August 4, 2022)

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4	2021	2022	2023	2024
GDP at market prices ($ millions)	333,543	336,062	338,241	346,447	348,674	359,490	363,859	368,472	372,985	377,285	381,592	384,900	385,453	388,562	391,523	394,523	338,573	360,124	379,191	390,015
	3.0	*0.8*	*0.6*	*2.4*	*0.6*	*3.1*	*1.2*	*1.3*	*1.2*	*1.2*	*1.1*	*0.9*	*0.1*	*0.8*	*0.8*	*0.8*	*9.5*	*6.4*	*5.3*	*2.9*
GDP at market prices (2012 $ millions)	281,748	279,928	282,230	284,961	287,338	289,176	290,287	291,684	292,346	294,025	296,042	297,637	298,590	300,298	301,780	303,198	282,217	289,621	295,013	300,967
	1.8	*-0.6*	*0.8*	*1.0*	*0.8*	*0.6*	*0.4*	*0.5*	*0.2*	*0.6*	*0.7*	*0.5*	*0.3*	*0.6*	*0.5*	*0.5*	*6.2*	*2.6*	*1.9*	*2.0*
GDP at basic prices (2012 $ millions)	260,829	260,416	262,497	265,006	267,263	268,802	269,648	270,760	271,433	273,015	274,904	276,382	277,325	278,929	280,328	281,665	262,187	269,118	273,933	279,562
	1.8	*-0.2*	*0.8*	*1.0*	*0.9*	*0.6*	*0.3*	*0.4*	*0.2*	*0.6*	*0.7*	*0.5*	*0.3*	*0.6*	*0.5*	*0.5*	*6.2*	*2.6*	*1.8*	*2.1*
Consumer price index (2002 = 1.000)	1.342	1.354	1.370	1.380	1.409	1.456	1.484	1.492	1.503	1.514	1.525	1.533	1.542	1.550	1.557	1.565	1.361	1.460	1.519	1.554
	0.9	*0.9*	*1.2*	*0.8*	*2.1*	*3.3*	*2.0*	*0.5*	*0.7*	*0.8*	*0.7*	*0.5*	*0.6*	*0.5*	*0.5*	*0.5*	*2.8*	*7.3*	*4.0*	*2.3*
Implicit price deflator—GDP at market prices	1.184	1.201	1.198	1.216	1.213	1.243	1.253	1.263	1.276	1.283	1.289	1.293	1.291	1.294	1.297	1.301	1.200	1.243	1.285	1.296
(2012 = 1.000)	*1.1*	*1.4*	*-0.2*	*1.4*	*-0.2*	*2.4*	*0.8*	*0.8*	*1.0*	*0.6*	*0.5*	*0.3*	*-0.2*	*0.2*	*0.3*	*0.3*	*3.1*	*3.6*	*3.4*	*0.8*
Wages and salary per employee ($ 000s)	54.7	55.8	57.3	57.6	58.9	57.6	57.8	57.9	58.6	59.5	60.4	61.1	61.5	62.0	62.5	62.9	56.4	58.1	59.9	62.2
	1.1	*2.0*	*2.7*	*0.5*	*2.2*	*-2.2*	*0.3*	*0.3*	*1.2*	*1.6*	*1.4*	*1.2*	*0.8*	*0.8*	*0.8*	*0.7*	*4.8*	*3.0*	*3.2*	*3.9*
Primary household income ($ millions)	234,182	238,600	245,915	249,622	258,498	258,942	260,112	262,137	265,058	268,803	272,888	276,427	279,096	281,863	284,777	287,590	242,080	259,922	270,794	283,332
	2.7	*1.9*	*3.1*	*1.5*	*3.6*	*0.2*	*0.5*	*0.8*	*1.1*	*1.4*	*1.5*	*1.3*	*1.0*	*1.0*	*1.0*	*1.0*	*10.2*	*7.4*	*4.2*	*4.6*
Household disposable income ($ millions)	214,510	214,053	215,692	214,297	221,864	223,693	225,031	226,631	227,826	230,927	234,128	237,223	239,234	241,735	244,323	246,842	214,638	224,305	232,526	243,034
	3.3	*-0.2*	*0.8*	*-0.6*	*3.5*	*0.8*	*0.6*	*0.7*	*0.5*	*1.4*	*1.4*	*1.3*	*0.8*	*1.0*	*1.1*	*1.0*	*2.9*	*4.5*	*3.7*	*4.5*
Household net savings rate (per cent)	9.7	9.1	4.3	1.1	3.4	2.6	2.0	2.0	2.1	2.8	3.2	3.5	3.5	3.5	3.4	3.3	6.1	2.5	2.9	3.4
Population (000s)	5,164	5,186	5,215	5,250	5,264	5,287	5,302	5,317	5,335	5,353	5,372	5,391	5,410	5,429	5,448	5,467	5,204	5,292	5,363	5,438
	0.1	*0.4*	*0.6*	*0.7*	*0.3*	*0.4*	*0.3*	*0.3*	*0.3*	*0.3*	*0.4*	*0.4*	*0.4*	*0.4*	*0.3*	*0.3*	*1.0*	*1.7*	*1.3*	*1.4*
Employment (000s)	2,632	2,631	2,666	2,699	2,724	2,741	2,745	2,740	2,739	2,740	2,749	2,754	2,759	2,764	2,769	2,774	2,657	2,738	2,745	2,766
	1.7	*0.0*	*1.3*	*1.2*	*0.9*	*0.6*	*0.2*	*-0.2*	*0.0*	*0.0*	*0.3*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*6.6*	*3.0*	*0.3*	*0.8*
Labour force (000s)	2,838	2,824	2,843	2,859	2,867	2,880	2,876	2,877	2,887	2,887	2,893	2,897	2,901	2,905	2,911	2,916	2,841	2,875	2,891	2,908
	1.3	*-0.5*	*0.7*	*0.6*	*0.3*	*0.4*	*-0.1*	*0.0*	*0.4*	*0.0*	*0.2*	*0.2*	*0.1*	*0.1*	*0.2*	*0.2*	*3.8*	*1.2*	*0.6*	*0.6*
Labour force participation rate (per cent)	65.6	65.1	65.2	65.2	65.1	65.1	64.8	64.5	64.5	64.3	64.2	64.1	63.9	63.8	63.7	63.6	65.3	64.9	64.3	63.8
Unemployment rate (per cent)	7.3	6.8	6.2	5.6	5.0	4.8	4.5	4.7	5.1	5.1	5.0	4.9	4.9	4.9	4.9	4.8	6.5	4.8	5.0	4.9
Retail sales ($ millions)	98,572	99,535	98,095	98,066	99,531	101,783	102,136	101,910	101,615	101,840	102,489	103,479	104,530	105,445	106,062	106,674	98,567	101,340	102,356	105,677
	3.3	*1.0*	*-1.4*	*0.0*	*1.5*	*2.3*	*0.3*	*-0.2*	*-0.3*	*0.2*	*0.6*	*1.0*	*1.0*	*0.9*	*0.6*	*0.6*	*12.6*	*2.8*	*1.0*	*3.2*
Housing starts (units, 000s)	52,902	49,795	45,224	42,507	38,242	46,000	40,000	38,647	36,951	36,618	36,284	35,951	34,247	33,927	33,606	33,286	47,607	40,722	36,451	33,767
	29.9	*-5.9*	*-9.2*	*-6.0*	*-10.0*	*20.3*	*-13.0*	*-3.4*	*-4.4*	*-0.9*	*-0.9*	*-0.9*	*-4.7*	*-0.9*	*-0.9*	*-1.0*	*25.6*	*-14.5*	*-10.5*	*-7.4*
Net interprovincial migration (000s)	37.0	61.2	23.1	13.3	12.2	10.4	7.1	5.2	7.9	7.5	7.1	6.8	6.6	6.4	6.3	6.1	33.7	8.7	7.3	6.4
Net international migration (000s)	52.6	52.2	113.3	50.4	83.4	38.8	51.1	54.1	61.6	64.4	66.4	67.6	68.3	68.6	68.9	69.2	67.1	56.9	65.0	68.8

Shaded area represents forecast data, *italics indicate percentage change* .
All data are in millions of dollars, seasonally adjusted at annual rates, unless otherwise specified.
For each indicator, the first line is the level and the second line is the percentage change from the previous period.
Sources: The Conference Board of Canada; Statistics Canada; CMHC Housing Time Series Database.

1 **Table 1: British Columbia Two Year Outlook 2022 (Feb) compared to British Columbia Three Year Outlook 2022 (Aug)**

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4	2021	2022	2023	2024
GDP at market prices ($ millions)	4,966	6,677	3,690	6,774	5,257	11,445	13,186	14,537	16,538	17,697	19,673	20,721					5,527	11,106	18,657	
	1	1	-1	1	0	2	0	0	1	0	0	0					2	2	2	
GDP at market prices (2012 $ millions)	2,770	2,704	2,665	3,686	3,441	1,147	-263	-1,667	-2,914	-3,097	-2,097	-1,421					2,956	664	-2,382	
	1	0	0	0	0	-1	0	0	0	0	0	0					1	-1	-1	
GDP at basic prices (2012 $ millions)	2,604	2,809	3,673	5,029	4,612	2,124	373	-1,347	-2,395	-2,552	-1,619	-970					3,528	1,440	-1,884	
	1	0	0	1	0	-1	-1	-1	0	0	0	0					1	-1	-1	
Consumer price index (2002 = 1.000)	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	
	0	0	0	0	1	3	1	0	0	0	0	0					0	3	2	
Implicit price deflator—GDP at market prices	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	
(2012 = 1.000)	0	1	-1	1	0	3	1	1	1	0	0	0					0	2	3	
Wages and salary per employee ($ 000s)	0	0	1	0	2	0	0	0	1	1	2	2					0	1	2	
	0	0	0	0	2	-2	0	0	1	1	1	1					1	1	1	
Primary household income ($ millions)	1,841	3,344	3,491	902	8,608	7,881	7,378	7,212	8,138	9,586	11,648	13,045					2,395	7,770	10,604	
	1	1	0	-1	3	0	0	0	0	1	1	0					1	2	1	
Household disposable income ($ millions)	4,430	2,846	-217	-2,628	6,037	7,139	6,968	6,650	7,067	7,944	9,238	10,337					1,108	6,699	8,647	
	2	-1	-1	-1	4	0	0	0	0	0	1	0					1	3	1	
Household net savings rate (per cent)	2	1	0	-3	0	0	-1	-1	-1	0	1	1					0	-1	0	
Population (000s)	0	0	0	0	5	19	26	32	39	46	52	59					0	21	49	
	0	0	0	0	0	0	0	0	0	0	0	0					0	0	1	
Employment (000s)	3	0	-3	3	30	56	55	42	36	25	30	32					1	46	31	
	0	0	0	0	1	1	0	0	0	0	0	0					0	2	-1	
Labour force (000s)	2	-1	-4	7	18	22	9	5	10	5	6	5					1	13	7	
	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	
Labour force participation rate (per cent)	0	0	0	0	0	0	0	0	0	0	0	-1					0	0	0	
Unemployment rate (per cent)	0	0	0	0	0	-1	-2	-1	-1	-1	-1	-1					0	-1	-1	
Retail sales ($ millions)	-159	302	-171	1,751	4,037	5,797	6,052	4,861	3,865	3,509	3,349	3,591					431	5,187	3,578	
	0	0	0	2	2	2	0	-1	-1	0	0	0					1	5	-2	
Housing starts (units, 000s)	0	0	0	0	-1,758	6,464	3,829	2,796	1,421	1,408	1,396	1,383					0	2,833	1,402	
	-1	0	0	0	-4	21	-5	-2	-3	0	0	0					-1	6	-3	
Net interprovincial migration (000s)	20	44	5	-18	-3	0	0	0	0	0	0	0					13	-1	0	
Net international migration (000s)	0	0	94	32	62	17	27	27	26	26	26	26					31	33	26	

2

3

11.5 What are the historical (i.e., 2021 and earlier) loads associated with EV DCFC Stations?

11.5.1 Are these loads reported as part of the historical commercial class load?

11.5.2 If not part of the historical commercial class load, where are they reported in Table 3-2?

Response:

As explained in the response to BCOAPO IR1 13.1 from FBC's 2022 Annual Review, the load from all of FBC's EV charging stations, including the DCFC stations, is included as Company Use up to and including 2021 as well as the 2022 Forecast at that time. This is because FBC's EV DCFC Service Application was not approved until November 2021.

For 2023 and onward, the load from FBC's EV DCFC stations is included in the commercial customer class as, per Order G-341-21 approving FBC's EV DCFC Service Application, the permanent rate for RS 96 is based on FBC's commercial service RS 21.

Please refer to Table 1 below for the load from FBC's EV DCFC stations from 2018 to 2021 Actual, 2022 Projected, and 2023 Forecast.

Table 1: EV DCFC Stations Load for 2018-2023

Year	Energy (GWh)
2018 Actual	0.04
2019 Actual	0.08
2020 Actual	0.16
2021 Actual	0.25
2022 Projected	0.51
2023 Forecast	0.59

FBC notes that while responding to this IR, it discovered an error in the information provided in the response to BCOAPO IR1 13.1 in the 2022 Annual Review. The actual loads in 2019 and 2020 should have been 0.08 GWh and 0.16 GWh, respectively, as shown in Table 1 above, instead of 0.13 GWh and 0.14 GWh as shown in that IR response. This error is immaterial when compared to FBC's total Company Use, which ranges from 12 to 13 GWh as shown in Figure 3-10 of the Application (i.e., the error amounts to approximately 0.4 percent in 2019 and 0.2 percent in 2020 of the Company Use load).

11.6 Please provide the 2022 and 2023 forecast load associated with EV DCFC Stations and explain how the forecast was developed.

Response:

Please refer to the response to BCOAPO IR1 11.5 for the 2022 Projected and 2023 Forecast load associated with FBC's EV DCFC stations. The forecast was developed by replicating the usage curve of previous years and factoring in a short-term growth rate consistent with the first five months of the year (i.e., 2022), which was known at the time the forecast was created.

12.0 Reference: Exhibit B-2, pages 21-22

Exhibit B-2, Appendix A3, page 5

Preamble: The Evidence states (A3, page 5):

"The Company forecasts the wholesale load based on load surveys from the wholesale customers. For this forecast, FBC received surveys from all the wholesale customers except one. This customer was contacted multiple times but did not respond. Since there was no response, FBC kept their load at 2021 levels."

12.1 With respect to the wholesale customer that did not respond to the survey, what percentage of the actual 2021 wholesale customer load did this one customer account for?

Response:

The wholesale customer that did not respond to the survey accounted for six percent of the actual 2021 normalized wholesale load.

12.2 For the one customer that did not respond, why was the forecast kept at 2021 levels?

Response:

When the customer was contacted for the 2022 Annual Review, they said that they expected their usage would be similar to the previous year (i.e., 2022 usage would be similar to 2021). As there was no response from this customer for the 2023 Annual Review and their load has been relatively consistent since 2019, FBC assumed that, consistent with the feedback received last year, the customer's usage would remain consistent with prior years. In lieu of more specific information, FBC considers maintaining the 2023 Forecast at 2021 Actual levels for this customer to be the most reasonable approach. Please also refer to the responses to CEC IR1 6.2 and 6.3.

12.3 With respect to the meeting(s) held with wholesale customers regarding their load forecasts, did these take place before or after the customers submitted their survey responses?

12.3.1 If after, were the forecasts for any of the wholesale customers that participated in the meetings revised as a result of the meeting and, if yes, how?

Response:

The load forecasting meetings with the wholesale customers took place before the customers submitted their survey responses.

13.0 Reference: Exhibit B-2, pages 22-23

Exhibit B-2, Appendix A2, page 6

Exhibit B-2, Appendix A3, page 5

Preamble: The Application states:

"As shown in Figure 3-7 below, after-savings industrial load is forecast to decrease by 4 GWh in 2023F when compared to 2022S and increase by 105 GWh in 2023F compared to 2022 Approved. The increased forecast in 2022S and 2023F compared to 2022 Approved is primarily due to projected increases in data centre loads".

13.1 Please provide a schedule that compares: i) the industrial class load forecast for 2021 and 2022 as approved for purpose of the Annual Review for 2022 Rate with ii) the actual 2021 load and the current projection for 2022.

13.1.1 Please explain the variance for each year.

Response:

Please refer to Table 1 below which compares the 2021 Seed Year and 2022 Approved forecasts in the 2022 Annual Review to the 2021 Actual and 2022 Seed Year results in the current Application.

Table 1: Industrial Load Comparison from 2022 and 2023 Annual Reviews

Industrial Loads (GWh)	2021		2022	
i) Annual Review for 2022 Rates	473	Seed	470	Approved
ii) Annual Review for 2023 Rates	472	Actual	579	Seed
Difference	-1		109	

FBC considers the variance between the 2021 Seed Year forecast provided in the 2022 Annual Review and the 2021 Actual results provided in the current Application to be immaterial.

Please refer to the response to BCUC IR1 7.2 for an explanation of the 109 GWh increase in 2022 industrial load forecast in the current Application compared to the 2022 Approved industrial forecast provided in the 2022 Annual Review.

14.0 Reference: Exhibit B-2, pages 23-24

Exhibit B-2, Appendix A2, page 6

14.1 What accounts for the historical and forecast annual decrease in number of Lighting customers?

Response:

FBC believes the lighting customer count has been declining due to:

- New developments including stratas and gated communities which were developed on old infrastructure and have amalgamated multiple streetlights into a single customer account; and
- An effort to save energy by downsizing of lighting in certain areas and communities that were believed to be over-lit.

Both of these factors are likely to continue.

15.0 Reference: Exhibit B-2, pages 26-28

Preamble: The Evidence states (page 26):

> "The peak demand forecast is produced using the 10-year average of historical peaks, including peaks from the June 2021 "heat dome" event. The historical peak data is escalated by the gross load growth rate before it is averaged to account for the growth of demand on the FBC system."

15.1 What impact did the inclusion of the June 2021 "heat dome" event have on the forecast summer peak load for 2022 and 2023?

Response:

The inclusion of the June 2021 heat dome event increased the after-savings summer peaks for 2022 and 2023 by 8 MW (1.2 percent) and 9 MW (1.3 percent), respectively.

16.0 Reference: Exhibit B-2, page 29

16.1 Which industrial sectors accounted for 2022 Projected industrial load being higher than 2022 Approved?

Response:

Please refer to the response to BCUC IR1 7.2.

16.2 Which industrial sectors account for the 2023 Forecast industrial load being higher than 2022 Approved?

Response:

Please refer to the response to BCUC IR1 7.4.

17.0 Reference: Exhibit B-2, page 30

17.1 Please provide a revised version of Table 4-1 that includes the Approved and Actual amounts for 2021.

Response:

Please see below the revised version of Table 4-1 that includes the Approved and Actual amounts for 2021.

Line No.	Description	Approved 2021	Actual 2021	Approved 2022	Projected 2022	Forecast 2023
1	Power Purchase Expense	$ 144.977	$ 152.472	$ 143.779	$ 153.164	$ 163.575
2	Wheeling Expense	5.714	$ 6.000	$ 6.093	$ 6.330	$ 6.987
3	Water Fees	10.868	$ 10.741	$ 11.958	$ 11.916	$ 11.543
4	Total Power Supply Cost	$ 161.559	$ 169.214	$ 161.830	$ 171.409	$ 182.105
5						
6	Gross Load (GWh)	3,664	3,764	3,591	3,786	3,775

18.0 Reference: Exhibit B-2, pages 32-33

Preamble: The Evidence states (page 32) states:

> "The increase in 2022 Projected PPE is primarily due to the increase in gross load above the 2022 Approved value. This increase in gross load drives increases in both the BC Hydro PPA and wholesale market expense to meet the additional load. In addition, increases in both the purchase price under the BC Hydro PPA and the average cost of purchases from the market further contributed to the increase in PPE".

18.1 What was the PPA nominated energy for the period October 1, 2021 to September 30, 2022?

18.1.1 What was the actual PPA energy taken during this period?

18.1.2 If the amount taken was more than 75% of the nominated amount please explain why FBC did not offset more of the PPA with market purchases.

Response:

FBC nominated 645 GWh of PPA energy for the period October 1, 2021 to September 30, 2022 (the 2021/22 contract year). As of September 19, 2022, FBC has taken 641.3 GWh of PPA energy in the 2021/22 contract year. FBC has therefore taken more than 75 percent of the nominated amount (75 percent of the nominated amount is 483.7 GWh).

Once the nomination is set for a contract year, FBC seeks to use the 25 percent flexibility in the PPA Energy Take to manage reductions to forecast load and to create additional market savings if the wholesale market is economic. However, for the 2021/22 contract year, FBC used more than 75 percent of the PPA nomination because gross load was much higher than anticipated, which required an overall increase in the volume of energy purchased, and there was limited opportunity to purchase power from the market at economic rates.

During the 2021/22 contract year, spot market prices were more economic compared to the PPA rate much less often than in previous years. The table below illustrates this change. Using $40 USD/MWh as an approximate breakeven price for the PPA,[3] the table below provides a count of the number of days where the Mid-C off peak and on peak day ahead prices (i.e., market prices) were less than the PPA breakeven price. As the table demonstrates, there were much fewer days during the 2021/22 contract year where it was more economic to purchase power from the market than it was to take power under the PPA.

[3] Actual breakeven amount varies depending on the transaction adders and FX rate at the time of the transaction.

Table 1: Number of Days where Market Purchase Price was Less than PPA Price

Contract Year	Off Peak	On Peak
2018/19	284	260
2019/20	362	336
2020/21	288	242
2021/22*	164	122

*up to Sept 21, 2022

18.2 Please provide a table similar to Table 4-2 that sets out the Approved and Actual Power Purchase expense for 2021. In doing so please expand the table so as to also show the energy (kWh) associated with each source (adding a row for FBC's own generation) and the average cost per kWh.

18.2.1 Please explain the variance between 2021 Approved and 2021 Actual PPA purchases (kWh and cost) and how much of the variance for each is due to FBC having been able to replace the PPA energy purchases with additional market purchases.

18.2.2 How much of the variance (volume and costs) between 2021 Approved vs 2021 Actual Market and Contract Purchases is due to FBC having been able to replace the PPA energy purchases with additional market purchases?

Response:

Please refer to the table below which provides the 2021 Approved and Actual power purchase expense, as well as the energy in GWh, and average cost per MWh.

The 2021 Approved and Actual BC Hydro PPA expense was $47.440 million and $43.333 million, respectively. FBC notes that the 2021 Approved BC Hydro PPA expense included a reduction of $6.000 million to account for forecast savings related to FBC's expectation that it would be able to displace PPA purchases with lower cost market purchases. Thus, when considering these forecast savings that were embedded in the 2021 Approved forecast, the 2021 Actual PPA expense is $10.106 million less than the 2021 Approved PPA Expense ($4.106 million variance shown in the table below plus the additional $6.000 million savings incorporated into the 2021 Approved forecast). Of this overall reduction in PPA expense, $0.777 million was a result of lower BC Hydro rates, and $9.330 million was due to a 188 GWh reduction in purchase volume.

2021 Actual Market and Contracted purchases increased by $11.701 million and 222 GWh compared to 2021 Approved. Of this total increase, 190 GWh and $7.449 million was

attributable to FBC replacing PPA energy with market contracted purchases. The remaining 32 GWh and $4.252 million variance was due to FBC being required to purchase power in the market over and above what could be supplied by the PPA during June of 2021.

Line No.	Description	Approved 2021	Actual 2021	Difference
1	Brilliant	$ 41.009	$ 41.014	$ 0.005
2	BC Hydro PPA	47.440	43.333	(4.106)
3	Waneta Expansion	41.640	37.560	(4.081)
4	Market and Contracted Purchases	14.751	26.453	11.701
5	Independent Power Producers	0.076	0.069	(0.007)
6	Self-Generators	0.061	0.019	(0.042)
7	CPA Balancing Pool	(0.000)	3.772	3.772
8	Transmission Service Loss Recoveries	-	-	-
9	Special and Accounting Adjustments	-	0.271	0.271
10	Total	$ 144.977	$ 152.472	$ 7.495
11				
12	Gross Load (GWh)	3,664	3,764	100
13				
14	Total Volume			
15	FBC Resources	1600	1598	(2)
16	Brilliant	919	922	3
17	BC Hydro PPA	755	567	(188)
18	Waneta Expansion	-	-	-
19	Market and Contracted Purchases	367	589	222
20	Independent Power Producers	1	1	0
21	Self-Generators	2	1	(1)
22	CPA Balancing Pool	8	75	67
23	Transmission Service Loss Recoveries	14	11	(3)
24	Special and Accounting Adjustments	-	-	-
25	Total	3664	3764	100
26				
27	Average Cost			-
28	FBC Resources	N/A	N/A	N/A
29	Brilliant	$ 44.64	$ 44.50	$ (0.14)
30	BC Hydro PPA	$ 62.83	$ 76.43	$ 13.60
31	Waneta Expansion	N/A	N/A	N/A
32	Market and Contracted Purchases	$ 40.24	$ 44.91	$ 4.68
33	Independent Power Producers	$ 84.29	$ 55.09	$ (29.20)
34	Self-Generators	$ 40.30	$ 32.98	$ (7.32)
35	CPA Balancing Pool	$ (0.01)	$ 50.37	$ 50.38
36	Transmission Service Loss Recoveries	N/A	N/A	N/A
37	Special and Accounting Adjustments	N/A	N/A	N/A
38	Total	$ 39.57	$ 40.51	$ 0.95

1

18.3 Please provide a table similar to Table 4-2 that sets out the 2022 Approved and current Projected Power Purchase expense for 2022 but that shows the energy (kWh) associated with each source (adding a row for FBC's own generation) and average cost per kWh.

18.3.1 Please explain the variance between 2022 Approved and 2022 (current) Projected PPA purchases (kWh and cost) and how much of the variance for each is due to FBC having or expecting to be able to replace the PPA energy purchases with additional market purchases.

18.3.2 How much of the variance (volume and costs) between 2022 Approved vs 2022 Projected Actual Market and Contract Purchases is due to FBC having been able to replace the PPA energy purchases with additional market purchases?

Response:

Please refer to the table below which provides the 2022 Approved and Projected power purchase expense, as well as the energy in GWh, and average cost per MWh.

The 2022 Projected BC Hydro PPA purchases increased by 78 GWh and $5.477 million compared to 2022 Approved. FBC included forecast savings of $4.000 million in the 2022 Approved PPA expense and $3.000 million in the 2022 Projected PPA expense, so, net of forecast savings, the 2022 Projected BC Hydro PPA expense is $4.477 million higher than 2022 Approved. When comparing the two figures, FBC is not expecting to displace additional BC Hydro PPA. Rather, FBC is expecting to take more than was originally forecast in the 2022 Approved. The increase in 2022 Projected PPA is a result of both increased load and less opportunity to purchase power at economic wholesale market prices.

The 2022 Projected Market and Contract Purchases have increased in volume by 149 GWh and the expense has increased by $6.570 million compared to 2022 Approved. Similar to the explanation above, because the PPA volume increased in the 2022 Projected figure, there is no reduction to PPA volume and no displacement beyond what was presented in the 2022 Approved figures. However, had FBC not purchased the additional 149 GWh of Market and Contracted Purchases that are included in the 2022 Projected figures, FBC would have had to purchase the additional, equivalent volume under the BC Hydro PPA.[4]

[4] 2022 Projected BC Hydro PPA volume would have increased from 729 GWh to 878 GWh.

Line No.	Description	Approved 2022	Projected 2022	Difference
1	Brilliant	$ 41.841	$ 42.367	$ 0.526
2	BC Hydro PPA	44.062	49.539	5.477
3	Waneta Expansion	42.701	41.434	(1.267)
4	Market and Contracted Purchases	15.102	21.672	6.570
5	Independent Power Producers	0.073	0.058	(0.015)
6	Self-Generators	-	-	-
7	CPA Balancing Pool	-	(1.252)	(1.252)
8	Transmission Service Loss Recoveries	-	-	-
9	Special and Accounting Adjustments	-	(0.654)	(0.654)
10	Total	$ 143.779	$ 153.164	$ 9.385
11				
12	Gross Load (GWh)	3,591	3,786	195
13				
14	Total Volume			
15	FBC Resources	1608	1596	(12)
16	Brilliant	918	911	(7)
17	BC Hydro PPA	651	729	78
18	Waneta Expansion	-	-	-
19	Market and Contracted Purchases	413	562	149
20	Independent Power Producers	1	1	(0)
21	Self-Generators	-	-	-
22	CPA Balancing Pool	(12)	(25)	(13)
23	Transmission Service Loss Recoveries	12	12	(1)
24	Special and Accounting Adjustments	-	-	-
25	Total	3591	3786	196
26				
27	Average Cost			
28	FBC Resources	N/A	N/A	N/A
29	Brilliant	$ 45.59	$ 46.49	$ 0.90
30	BC Hydro PPA	$ 67.66	$ 67.98	$ 0.32
31	Waneta Expansion	N/A	N/A	N/A
32	Market and Contracted Purchases	$ 36.53	$ 38.55	$ 2.01
33	Independent Power Producers	$ 85.72	$ 79.09	$ (6.63)
34	Self-Generators	N/A	N/A	N/A
35	CPA Balancing Pool	$ -	$ 49.92	$ 49.92
36	Transmission Service Loss Recoveries	N/A	N/A	N/A
37	Special and Accounting Adjustments	N/A	N/A	N/A
38	Total	$ 40.04	$ 40.45	$ 0.41

18.4 Please explain the decrease in Waneta Expansion Power Purchase Expense as between the 2022 Approved and 2022 Projected.

Response:

The decrease in the Waneta Expansion power purchase expense is primarily due to an increase in the surplus sales estimate for the remaining months in 2022 under the Capacity and Energy Purchase and Sale Agreement (CEPSA), as well as slightly higher actual sales for the January through April period. These factors account for $1.200 million of the $1.267 million decrease. The remaining decrease is due to the actual Waneta Expansion capacity expenses coming in lower than forecast for the January through April period, and a slight decrease in the capacity expense estimate for the remaining months in 2022.

19.0 Reference: Exhibit B-2, pages 31-32 and 33-35

Preamble: The Evidence states:

"Prior to the June 30, 2022 nomination deadline, FBC updated its forecast load and resource balance for the 2022/23 contract year and submitted a (PPA) nomination of 774 GWh".

19.1 How much of the nominated 774 GWh does FBC expect to actually use over the contract period?

19.1.1 If the amount is greater than 75% of the nominated amount, please explain why.

Response:

FBC has assumed 976 GWh of PPA energy purchases in the 2022/23 contract year, which is greater than its nomination of 774 GWh and is a result of increased forecast load. As per past practice, FBC forecasts using firm, contracted resources to meet load wherever possible, which in this case is reflected as increased PPA use above the nomination. While FBC does expect that it will displace a portion of this PPA either on a forward basis or in real-time, only market contracts executed[5] at the time of filing have been included.

19.2 Please provide a table similar to Table 4-2 that sets out the 2022 Approved and the 2023 Forecast Power Purchase expense but expands the table so as to also show the energy (kWh) associated with each source (adding a row for FBC's own generation) and average cost per kWh.

19.2.1 It is noted that Gross Load is virtually unchanged so please explain the variance in volumes (kWh) for each of the sources.

Response:

FBC notes that the question asks for a comparison between 2022 Approved and 2023 Forecast and states that the gross load is virtually unchanged between the two; however, as shown in Tables 4-2 and 4-3 of the Application, the variance between 2022 Approved and 2023 Forecast gross load is 184 GWh (2022 Approved in Table 4-2 of 3,591 GWh compared to 2023 Forecast in Table 4-3 of 3,775 GWh). Given this large variance, FBC has assumed that the intent of the IR was to ask for a comparison between 2022 Projected and 2023 Forecast, as the variance in gross load is only 11 GWh (as shown in Table 4-3).

[5] The exceptions to this are purchases for Rate Schedule 37, and forecast June/July power purchases that will be required to meet peak demand, over and above what can be served by the PPA.

Accordingly, please refer to the table below which provides the 2022 Projected and 2023 Forecast power purchase expense but expands the table to show energy volumes and average cost.

As the table below shows, the main sources of variance are a reduction of 421 GWh in Market and Contracted Purchases and an increase in BC Hydro PPA use of 371 GWh in 2023 when compared to 2022. When combined, the variances predominately offset each other, resulting in a change in total gross load of only 11 GWh. In the 2022 Projected figures, FBC still had a large amount of forward market contracts executed to cover off requirements. Furthermore, FBC also had an additional 133 GWh of real-time market purchases procured during the first four months of the year. This helped to reduce reliance on the PPA in 2022 Projected, as compared to the 2023 Forecast. At this time, FBC has not been able to procure substantial volumes of forward market energy for 2023 at rates that are economic compared to the PPA; therefore, consistent with past practice, FBC is forecasting the use of firm resources (PPA) to serve load where possible. FBC is continuing to monitor the market for opportunities in order to reduce its PPA take.

Line No.	Description	Projected 2022	Forecast 2023	Difference
1	Brilliant	$ 42.367	$ 44.050	$ 1.683
2	BC Hydro PPA	49.539	71.302	21.763
3	Waneta Expansion	41.434	41.834	0.400
4	Market and Contracted Purchases	21.672	6.326	(15.346)
5	Independent Power Producers	0.058	0.062	0.004
6	Self-Generators	-	-	-
7	CPA Balancing Pool	(1.252)	-	1.252
8	Transmission Service Loss Recoveries	-	-	-
9	Special and Accounting Adjustments	(0.654)	-	0.654
10	Total	$ 153.164	$ 163.575	$ 10.411
11				
12	Gross Load (GWh)	3,786	3,775	(11)
13				
14	Total Volume			
15	FBC Resources	1596	1599	3
16	Brilliant	911	922	11
17	BC Hydro PPA	729	1100	371
18	Waneta Expansion	-	-	-
19	Market and Contracted Purchases	562	141	(421)
20	Independent Power Producers	1	1	0
21	Self-Generators	-	-	-
22	CPA Balancing Pool	(25)	-	25
23	Transmission Service Loss Recoveries	12	12	-
24	Special and Accounting Adjustments	-	-	-
25	Total	3786	3775	-12
26				
27	Average Cost			-
28	FBC Resources	N/A	N/A	N/A
29	Brilliant	$ 46.49	$ 47.75	$ 1.26
30	BC Hydro PPA	$ 67.98	$ 64.82	$ (3.15)
31	Waneta Expansion	N/A	N/A	N/A
32	Market and Contracted Purchases	$ 38.55	$ 44.76	$ 6.21
33	Independent Power Producers	$ 79.09	$ 81.34	$ 2.25
34	Self-Generators	N/A	N/A	N/A
35	CPA Balancing Pool	$ 49.92	$ -	$ (49.92)
36	Transmission Service Loss Recoveries	N/A	N/A	N/A
37	Special and Accounting Adjustments	N/A	N/A	N/A
38	Total	$ 40.45	$ 43.33	$ 2.88

19.3 What has FBC assumed be the nominated PPA amount for the 2023/24 contract period for purposes of the Application?

19.3.1 How has this assumption impacted the 2023 forecast PPA cost (prior to the $7 M reduction to account for potential real-time opportunities to displace PPA purchases with lower cost market purchases)?

Response:

There is no assumed PPA nominated amount for the 2023/24 contract period included in the 2023 Forecast as FBC will not be filing the 2023/24 AECP with the BCUC until Q2 of 2023.

19.4 How did FBC determine that $7.0 M was the appropriate amount to reduce its 2023 Forecast of PPA expense by in order to account for potential real-time opportunities to displace PPA purchases with lower cost market purchases?

Response:

FBC determined that $7.0 million was the appropriate amount to reduce its 2023 Forecast PPA expense by estimating the amount of PPA capacity and energy that it could reasonably expect to offset during the year. First, FBC evaluated the PPA capacity purchases included in its modeling, reduced those capacity purchases to a "target" level, and calculated both the total PPA capacity savings and corresponding increased market expenses that would result from operating at that target level. FBC also estimated the amount of PPA energy purchases it could reasonably expect to offset, along with corresponding market expenses of doing so, given expected market prices and system constraints. FBC then added the two figures together, which equals approximately $7.0 million.

Actual savings that FBC may achieve could be more or less than the $7.0 million embedded within the 2023 Forecast of PPA expense, as savings are dependent on both system and market conditions. The impact of any such variance will be captured in the Flow-through deferral account and included in the calculation of 2024 rates.

20.0 Reference: Exhibit B-2, page 35

Preamble: The Evidence states:

> "Market and Contracted Purchases for 2022 Projected include both fixed price contracted purchases and real time market purchases made using the 25 percent flexibility of the PPA. All of the market purchases included in the 2023 Forecast are based on fixed price contracts executed by the Company, with the exception of forecast real-time market purchases for Rate Schedule 37 load. As discussed above in the BC Hydro PPA variance explanation, there may be opportunities for additional real-time market purchases using the flexibility of the PPA purchases".

20.1 Please confirm that the costs shown for Market and Contract Purchases in Table 4-3 include the cost of the market purchases associated with the $7 M reduction in the PPA costs (per page 34).

Response:

Not confirmed. The costs shown for Market and Contract Purchases in Table 4-3 include only fixed price contracts executed by the Company, with the exception of forecast real-time market purchases for Rate Schedule 37 load. The estimated $7 million reduction is only included within the BC Hydro PPA expense and represents forecast net savings.

20.2 Please provide a breakdown of the Market and Contract Purchases costs and volume for 2023 as between: i) Contracted Purchases, ii) real-time market purchases for Rate Schedule 37 load, and iii) real-time market purchases associated with the $7 M reduction in PPA costs.

Response:

As shown in the response to BCOAPO IR1 19.2, FBC has included 141 GWh of Market and Contracted Purchases in the 2023 Forecast. The breakdown of the volume is shown in the table below. Please note that FBC did not include any forecast volume of real-time market purchases associated with the $7 million reduction in PPA costs in the 2023 Forecast; rather, it is a forecast of net savings that is applied to total BC Hydro PPA costs. FBC forecasts using firm contracted resources wherever possible to meet future load requirements. The exceptions to this are purchases for Rate Schedule 37 and forecast June/July power purchases that will be required to meet peak demand, over and above what can be served by the PPA.

Table 1: Breakdown of Forecast 2023 Market and Contracted Purchases (GWh)

Line No.	Description	2023 Forecast
1	Brilliant Expansion 10 Year Contract	79
2	Forward Market Contracts	47
3	Forecast RS 37 Energy	15
5	Forecast Energy Associated with June/July Capacity	1
4	**Total (GWh)**	**141**

21.0 Reference: Exhibit B-2, page 36

Preamble: The Evidence states:

> "2023 Forecast wheeling expense is $0.657 million higher than 2022 Projected. This is a result of both increased use and rates. FBC increased the Okanagan wheeling nomination to 2,670 MW months in 2023 from 2,475 MW months in 2022".

21.1 Please explain reason for the increased use in 2023.

Response:

FBC increased its Okanagan wheeling nomination in response to increased forecast peak demand requirements at that point of interconnection.

22.0 Reference: Exhibit B-2, page 38

Preamble: The Evidence states:

"The 2023 Forecast is higher than 2022 Approved due to expected escalations in unit rental rates for continuing contracts".

22.1 How many parties does FBC have contracts with?

Response:

FBC has contracts with eight different parties.

22.2 What is the basis for the escalation rates used in the contracts?

Response:

The rate drivers for pole attachments differ 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 2023.

23.0 Reference: Exhibit B-2, page 39

Preamble: The Evidence states:

> "Interest Income is primarily comprised of DSM loan interest income, as well as other banking interest income. The Company is not forecasting significant changes in the amount of DSM loans outstanding; as a result, no significant changes in interest income are expected in 2022 Projected or the 2023 Forecast".

23.1 Are the interest rates on DSM loans fixed or do they vary with current market rates?

Response:

The interest rate on DSM loans is fixed at 1.9 percent.

24.0 Reference: Exhibit B-2, pages 40-42

24.1 Please provide a revised version of Table 5-2 that also shows the revenue and costs for 2018, 2019 and 2020.

Response:

Please refer to the table below which shows the revenue and costs for 2018, 2019 and 2020. FBC notes that, as discussed in the response to BCUC IR1 12.1, the cost of energy shown in Table 5-2 of the Application incorrectly included the third-party utility costs (City of Penticton, Grand Forks, Nelson, and BC Hydro). These costs should have been recorded as O&M. The cost of energy and O&M shown in the table below for 2022 Projected and 2023 Forecast includes this correction. The correction results in the overall cumulative deficiency for FBC's EV DCFC Service being reduced from $828 thousand to $752 thousand. Please also refer to the response to BCOAPO IR1 24.3 for the corrected calculation for cost of energy in the 2022 Projected and 2023 Forecast.

Revised Table 5-2: EV DCFC Stations Costs and Revenues ($ millions)

Line	Particulars	2018 Actual	2019 Actual	2020 Actual	2021 Actual	2022 Projected	2023 Forecast	Cumulative
1	Cost of Energy	0.002	0.007	0.007	0.013	0.215	0.265	
2	Less: Power Purchase Expense	(0.002)	(0.007)	(0.007)	(0.013)	-	-	
3	O&M	0.000	0.002	0.046	0.101	0.187	0.219	
4	Depreciation	-	0.060	0.197	0.307	0.456	0.612	
5	Amortization of CIAC	-	(0.035)	(0.070)	(0.150)	(0.191)	(0.249)	
6	Other Revenue - Carbon Credits	-	-	-	-	(0.625)	-	
7	Income Tax	(0.009)	(0.361)	(0.072)	(0.299)	(0.199)	0.158	
8	Earned Return	0.006	0.053	0.095	0.124	0.172	0.183	
9	Total Cost of Service	(0.002)	(0.282)	0.196	0.083	0.015	1.188	
10	RS 96 Revenue	(0.004)	(0.024)	(0.028)	(0.058)	(0.155)	(0.178)	
11	(Surplus) / Deficiency	(0.006)	(0.306)	0.169	0.025	(0.140)	1.010	0.752

24.2 With respect to Table 5-2, please explain how the "Earned Return" values are calculated. Are they meant to represent the debt and return on equity associated with EV DCFC stations?

Response:

Confirmed, the earned return represents the debt and return on equity (ROE) associated with the EV DCFC stations. Please see the below table for how the earned return is calculated.

Table 1: EV DCFC Stations Earned Return Calculation ($ thousands)

Line	Particulars	Reference	2021 Actual	2022 Projected	2023 Forecast
1	EV Gross Plant in Service - Beginning		3,406	4,895	6,455
2	EV Gross Plant in Service - Ending		4,895	6,455	6,704
3					
4	Accumulated Depreciation - Beginning		(257)	(565)	(1,021)
5	Accumulated Depreciation - Ending		(565)	(1,021)	(1,633)
6					
7	EV CIAC - Beginning		(1,788)	(2,280)	(2,973)
8	EV CIAC - Ending		(2,280)	(2,973)	(3,127)
9					
10	Accumulated Amortization of CIAC - Beginning		105	255	446
11	Accumulated Amortization of CIAC - Ending		255	446	695
12					
13	Net Plant in Service, Mid-Year	(Sum of Lines 1 to Line 11) / 2	1,886	2,606	2,773
14	Cash Working Capital	Line 2 x FBC CWC/Closing GPIS %	14	19	20
15	Total Rate Base	Sum of Line 13 to 14	1,900	2,625	2,792
16					
17	Equity Return	Line 15 x ROE x Equity %	70	96	102
18	Debt Component	Line 15 x (LTD Rate x LTD% + STD Rate x STD %)	55	76	80
19	Total Earned Return	Line 17 + Line 18	124	172	183
20	Return on Rate Base %	Line 19 / Line 15	6.54%	6.54%	6.54%
21	After- Tax Weighted Average Cost of Capital (WACC)	See Note 1	5.76%	5.76%	5.76%

Note 1: ROE Rate x Equity Component + [(STD Rate x STD Portion) + (LTD Rate x LTD Portion)] x (1- Income Tax Rate)]

24.3 With respect to Table 5-2, please explain how the 2022 and 2023 Cost of Energy values are based on FBC's commercial service RS 21.

Response:

As discussed in the response to BCUC IR1 12.1, the cost of energy shown in Table 5-2 of the Application incorrectly included the third-party utilities costs (i.e., City of Penticton, Grand Forks, Nelson Hydro and BC Hydro). These costs should be part of the O&M expenses for the EV DCFC Stations. In the response to BCUC IR1 12.1, FBC has provided a revised Table 5-2 that shows the corrected cost of energy of approximately $215 thousand for 2022 Projected and $265 thousand for 2023 Forecast.

Please refer to Table 1 below for the calculation of the cost of energy (revised) for 2022 Projected and 2023 Forecast, which is based on FBC's RS 21 Commercial Service for both the 50 kW and 100 kW stations. As approved by Order G-341-21, the cost of energy included in the RS 96 EV DCFC Service is to be based on the RS 21 Commercial Service instead of BC Hydro's RS 3808.

Table 1: Calculation for Cost of Energy under RS 21 for FBC's EV DCFC Stations (including Revision per BCUC IR1 12.1)

Line	Particulars	Reference	2022	2023
1	Electricity Rates (RS 21 Commercial Service)			
2	Demand Charge (per kVA > 45 kVA)		11.14	11.58
3	Energy Charge		0.07527	0.07827
4				
5	Basic charge (monthly)		58.90	61.25
7				
8	Maximum Demand per charging station (kVA)		108	108
9	Less: 45 kVA		45	45
10	Billing demand > 45 kVA per station		63	63
11				
12	Maximum Demand per charging station (kVA)		162	162
13	Less: 45 kVA		45	45
14	Billing demand > 45 kVA per station		117	117
15				
16	Maximum Demand per charging station (kVA)		54	54
17	Less: 45 kVA		45	45
18	Billing demand > 45 kVA per station		9.00	9.00
19				
20	Number of Meters Dual 50 kW Site		9	9
21	Number of Meters 100 kW/50 kW Site		6	8
22	Number of Meters Single 50 kW Site		2	2
23				
24	Energy Consumption for all Stations (kWh)		407,408	501,985
25	Annual for all Stations			
26	Demand Charge	See Note 1	172,046	211,440
27	Energy Charge	*Line 3 X Line 24*	30,666	39,292
28	Basic Charge (Annual)	Line 5 X Line 23 X 12	12,016	13,965
29	Total Annual Electricity Revenue ($)	Sum of Line 26 to Line 28	214,727	264,697

Note 1: Demand Charge = ((Line 2 X Line 10 X Line 20) + (Line 2 X Line 14 X Line 21) + (Line 2 X Line 18 X Line 22)) X 12

25.0 Reference: Exhibit B-2, page 45

25.1 Please expand Table 6-3 to include the approved, actuals and variances for 2021.

Response:

FBC interprets this IR as requesting the approved, actuals and variances for 2020 (not 2021), as the 2021 information is already provided in Table 6-3 of the Application.

Please see the updated Table 6-3 below which also includes the breakdown of the actual O&M, formula O&M, and variances between actual and formula O&M for 2020, the first year of the MRP term.

Line No.	Description	2020 Formula Amount	Actual 2020 O&M	2020 Forecast/Actual Variance	2021 Formula O&M[1]	Actual 2021 O&M	2021 Forecast/Actual Variance	Cumulative Forecast/Actual Variance[2]
1	Tree Management	$ 0.077	$ 0.314	$ 0.237	$ 0.080	$ 0.278	$ 0.199	$ 0.436
2	Generation Dam Safety	$ 0.237	$ 0.206	$ (0.031)	$ 0.246	$ 0.415	$ 0.169	$ 0.137
3	Network Operations Apprentice Program	$ 0.202	$ -	$ (0.202)	$ 0.209	$ 0.243	$ 0.034	$ (0.167)
4	Cyber Security	$ 0.082	$ 0.332	$ 0.250	$ 0.085	$ 0.085	$ -	$ 0.250
5	Data Analytics	$ 0.101	$ -	$ (0.101)	$ 0.105	$ -	$ (0.105)	$ (0.206)
6	Other	$ -	$ -	$ -	$ -	$ -	$ -	$ -
7	Total	$ 0.699	$ 0.851	$ 0.153	$ 0.724	$ 1.021	$ 0.297	$ 0.449

26.0 Reference: Exhibit B-2, page 46

26.1 Please expand Table 6-4 to include the approved and actuals for 2021.

Response:

Please refer to Table 1 below for an expanded version of Table 6-4 of the Application which includes 2021 Approved and Actual O&M.

Table 1: 2021 Approved and Actual, 2022 Approved and Projected, and 2023 Forecast O&M

Line No.	Description	2021 Approved	2021 Actual	2022 Approved	2022 Projected	2023 Forecast
1	Pension/OPEB (O&M Portion)	0.775	0.775	(1.716)	(1.716)	(1.297)
2	Insurance Premiums	1.916	1.924	2.223	2.291	2.457
3	BCUC Levies	0.350	0.350	0.373	0.373	0.385
4	Clean Growth Initiative - EV DCFC Stations	-	-	0.187	0.187	0.193
5	Exogenous Factor - MRS	-	0.052	0.765	0.500	0.585
6	Exogenous Factor - Wildfires	-	0.155	-	-	-
7	Total Forecast O&M	$ 3.041	$ 3.256	$ 1.832	$ 1.635	$ 2.323

27.0 Reference: Exhibit B-2, pages 48-49

27.1 Given the effective dates for the MRS AR13 standards is April 2023, does the Projected incremental 2022 O&M related to MRS AR13 include any costs associated with implementing the standard or is the $0.5 M all related to ongoing costs to maintain the standard?

27.1.1 If yes, what portion of the 2022 costs is associated with implementing the standard?

27.1.2 If not, why not?

Response:

All of the costs included in the 2022 Projected O&M for MRS AR13 are associated with implementing the standards. The 2022 Projected O&M is part of the overall cost of $1.435 million ($0.935 million capital, $0.5 million O&M) for the one-time effort to become compliant with the standards.

27.2 Given the effective dates for the MRS AR13 standards is April 2023, does the Forecast incremental 2023 O&M related to MRS AR13 include any costs associated with implementing the standard or is the $0.585 M all related to ongoing costs to maintain the standard?

27.2.1 If yes, what portion of the 2023 costs is associated with implementing the standard?

27.2.2 If not, why not?

Response:

The initial development of the various processes, procedures and tools to become compliant is expected to be completed by the end of 2022. The 2023 activities and the costs comprising the 2023 Forecast are to maintain compliance with the standards.

The first quarter of 2023 allows for any changes or adjustments to the systems (if needed) to be put in place without becoming non-compliant and therefore triggering the requirement to report. Should such adjustments be required (and if those adjustments resulted in increased costs), they would increase the 2023 Forecast since FBC's 2023 Forecast includes only ongoing costs to maintain the standard. If such additional costs were incurred, they would be reflected in the 2023 Projected results in the 2024 Annual Review application.

1 FBC notes that the incremental O&M costs for MRS AR13 are approved to be treated as flow-
2 through; therefore, any variances between forecast/projected and actual O&M amounts will be
3 captured in the Flow-through deferral account.

4

28.0 Reference: Exhibit B-2, page 51

28.1 Please outline FBC's practice with respect to including capital additions in rate base (e.g., are capital projects completed in a given year included in rate base for: i) the entire year, ii) half of the year, or iii) the following year).

Response:

FBC's practice with respect to regular capital additions is to forecast them in rate base in the year the assets are expected to be placed into service. This results in a mid-year impact on rate base in the forecast year, given the assets would not be included in the opening balance of rate base for that year but the full value of the assets would be included in the ending balance of rate base for that year. Rate base is derived on a mid-year basis, with the calculation being ((opening rate base + ending rate base) / 2). However, to provide clarity and elaborate on this example, those same capital additions would have a full-year impact on rate base in the following year, as they would be incorporated in both the opening rate base and ending rate base balances in that year.

CPCN and other Major projects are included in rate base for the full year in the year following completion of either the entire project with all assets placed into service or individual assets of the project completed in phases being placed into service.

28.2 What is the current expectation as to when the Kelowna Bulk Transformer Additions (KBTA) Project is expected to be completed?

Response:

Site construction will be complete in Q2 2023. As builts, project deficiencies, and project close out will continue through Q3 2023.

The aspects of the KBTA project that are expected to be completed by the end of 2022 and therefore added to rate base January 1, 2023, are: (i) all substation work for the 230 KV high side switches and breakers; (ii) the T2 transformer; and (iii) three (58L, 46L and 55L) of the four transmission lines on the 138 KV ring bus. The fourth transmission line (50L) is expected to be completed in 2023 and added to rate base January 1, 2024. There are no further expenditures expected in 2024.

29.0 Reference: Exhibit B-2, page 54 and pages 55-57
Exhibit B-2, Appendix C2, pages 2-4

29.1 With respect to Table 7-4 and 7-5, please provide a schedule that sets out: i) the number of new connects expected annually for 2020-2024 at the time of MRP approval, ii) the actual number of annual new connects for 2020-2021, iii) the projected new connects for 2022 and iv) the now forecasted new connects for 2023 and 2024.

Response:

This response addresses BCOAPO IR1 29.1, 29.2 and 29.3.

FBC is not able to provide the number of forecast new connects for either the forecasts contained in the MRP Application (i.e., the Original 2020-2024 Forecasts) or the Updated 2023 and 2024 Forecasts. FBC forecasts New Connects capital expenditures based on historical expenditures adjusted for anomalous years and inflation, not by forecasting a specific number of new connects and multiplying that number by a forecast cost per connect. However, in order to be responsive, Table 1 below provides the actual and projected number of new connects (i.e., gross customer additions) for 2020 through 2022.

Table 1: Gross New Connects for 2020-2021 Actual, and 2022 Projected

	2020 Actual	2021 Actual	2022 Projected[(1)]
Gross New Connects	3,252	3,553	3,349

Note to Table:

1. Projected based on 2,512 gross new connections as of September 30, 2022, extrapolated for the full year.

Since FBC does not forecast the number of new connects, FBC is not able to determine how much of the variances between forecast and actual/projected New Connects capital expenditures for 2020 through 2022 were the result of an increased annual number of new connects versus increased connection costs. However, FBC started to experience supply chain issues as early as March 2020, which was at the early stage of the COVID-19 pandemic and which led to significant challenges related to international shipping, particularly into and out of Asia Pacific ports. Rising commodity prices and other inflationary pressures arose soon after. These pressures and the resulting cost increases started to become impactful in late 2020 with price increases continuing throughout 2021 and also into 2022. FBC expects that the higher than forecast actual costs for New Connects were in part attributable to the inflationary pressures.

For the Updated 2023 and 2024 Forecasts, FBC based the forecasts for New Connects on the most recent historical actual/projected expenditures with an adjustment to account for the expected increased inflationary pressures, particularly in 2023. The increased 2023 and 2024 forecasts are therefore attributable to both the increased number of actual new connects per year and the increases in material and labour costs impacted by inflationary pressures.

FBC is unable to provide a breakdown of the cost increases in 2023 and 2024 between the two drivers. However, since FBC's forecasts for 2023 and 2024 were based on the average actual expenditures, any increases due to the number of new connects as well as the inflationary pressure on material and labour costs would have been embedded in the historical costs and implicitly reflected in the averages for the forecasts. For example, the 2023 Updated Forecast was based on the average of 2020 Actual, 2021 Actual and 2022 Projected capital expenditures for New Connects shown in Table 7-4 of the Application, plus an adjustment for inflation for 2023. This would include the increases that FBC experienced in 2020 and 2021 as well as 2022 which include the significant inflationary pressures that have been experienced and are expected to continue to be experienced into 2023. The 2024 Updated Forecast was based on the average of 2021 Actual, 2022 Projected, and the 2023 Updated 2023 Forecast as shown in Table 7-4 and 7-5 of the Application, plus an adjustment for inflation for 2024. This would include the actual increases that FBC experienced in 2021 as well as the increase FBC expects to see in 2022 and 2023.

29.2 Are the actual 2020 and 2021 costs for New Connects higher than those in the MRP approval due to an increase in the annual number of new connects, due to higher costs per new connection, or a combination of both?

Response:

Please refer to the response to BCOAPO IR1 29.1.

29.3 Are the projected/forecast costs for New Connects for 2023-2025 simply due to the use of higher 2020 and 2021 costs in the "rolling average calculation" described at page 57?

29.3.1 If not, how much of the increase in each year is due to an increase in the anticipated number of new connections vs. an increase in the cost per connection?

Response:

Please refer to the response to BCOAPO IR1 29.1.

29.4 Please explain the 2020 and 2021 variances in Transmission Growth capital expenditures as between Approved and Actual.

Response:

The following factors contributed to the increased spending in 2020 in Transmission Growth capital of $1.937 million compared to 2020 Approved:

- An increase in the actual cost of the Sexsmith 2nd Transformer Addition project compared to the Original Forecast, as shown in Tables C2-1 and C2-2 in Appendix C2 of the Application; and
- The addition of the 6L Reconductoring and Duck Lake 3 New Distribution Feeders projects, and the Animal Protection Coverup program. These projects and programs were less than $1 million and are not shown in Tables C2-1 and C2-2 in Appendix C2 of the Application.

In 2021, the decrease of $1.319 million was due to the deferral of the Summerland Transformer Replacement project. The decrease was slightly offset by the inclusion in 2021 of some capital costs to begin the detailed design for the Beaver Park Substation Upgrade project.

29.5 Please explain the 2020 and 2021 variances in Distribution Growth capital expenditures as between Approved and Actual.

Response:

The 2020 Actual Distribution Growth capital was $1.790 million lower than 2020 Approved. FBC had originally planned in the 2020-2024 MRP Application to undertake the DG Bell Feeder 4 Addition project in 2020, but this project was deferred to 2022, resulting in a reduction in spending in 2020 of $1.970 million. However, this reduction was partially offset by the addition of the Huth CoP 13 KV Supply project in 2020 (please see Appendix C2 for additional details). The additional driver of the reduced spending in 2020 was due to a lower number of projects than anticipated in the Small Growth and Unplanned Growth program areas.

The 2021 Actual capital expenditures were only slightly higher than approved (i.e., $0.089 million higher). The increase was primarily due to some trailing costs for the Huth CoP 13kV Supply project which was primarily completed in 2020 (as shown in Table C2-4 of Appendix C2 to the Application).

29.6 Please explain how much of the increase in Transmission Growth capital expenditures now forecast for each year from 2022 to 2024 (vs. approved) is due to higher inflationary pressures vs. an increase in customer additions.

Response:

FBC notes that the Updated 2024 Transmission Growth capital is forecast to remain consistent with the Original 2024 Forecast.

The increases in Transmission Growth capital projected in 2022 and forecast in 2023 are all attributable to the increased cost of the Beaver Park Substation Upgrade project, as shown in Tables C2-1 and C2-2 of Appendix C2 to the Application. The total project costs have increased compared to the 2020-2024 MRP Application due to several factors, including archaeological requirements, and increases in engineering, materials and construction costs. Materials costs have been particularly impacted by increased commodity costs. Please also refer to the response to BCOAPO IR1 29.7 which explains that there was an error in the 2022 Projected amount shown for the Beaver Park Substation Upgrade project in Table C2-2 of Appendix C2.

29.7 Appendix C2 shows an increase in major Transmission Growth project (i.e., >$1 M) spending for 2022 of $2.2 M between approved and current projection while Table 7-4 shows an increase of $2.8 M. What accounts for the difference?

Response:

While responding to this information request, FBC discovered an error in the 2022 Projected amount shown for the Beaver Park Substation Upgrade project in Table C2-2 of Appendix C2. The correct amount for 2022 Projected should be $5.524 million (not $4.936 million shown in Table C2-2 of Appendix C2), consistent with the 2022 Projected amount shown in Table 7-4 of the Application. To further clarify, the only project (and capital expenditures) contained within the Transmission Growth capital category for 2022 and 2023, for both the Original Forecasts in the MRP Application and the 2022 Projected and Updated 2023 Forecast provided in this Application, is the Beaver Park Substation Upgrade project. After correcting for the error in the

2022 Projected capital expenditures for the Beaver Park Substation Upgrade project shown in Table C2-2 of Appendix C2, the increase in Transmission Growth capital would be approximately $2.8 million, which agrees with the increase shown in Table 7-4 of the Application.

FBC notes that the error is limited to Appendix C2, and the correct amount is included in the remainder of the Application, including the financial schedules; therefore, there is no impact on the revenue requirement or rates. FBC also notes that the numbers shown for 2021 and 2023 in Table C2-2 of Appendix C2 are correct for the Beaver Park Substation Upgrade; it is only the 2022 Projected amount that was incorrect.

29.8 Please explain how much of the increase in Distribution Growth capital spending now forecast for each year from 2022 to 2024 (vs. approved) is due to higher inflationary pressures vs. an increase in customer additions.

Response:

The changes in the projected/forecast Distribution Growth capital expenditures for 2022 through 2024 are due to project re-prioritization as a result of a combination of changes in the expected system load and cost pressures, including inflation.

FBC is unable to break down the changes in the capital expenditure forecasts into specific drivers. The 2022 Projected, and 2023 and 2024 Updated Forecasts were not developed by applying a blanket escalation factor from the Original Forecasts or from prior years' capital expenditure levels to account for inflationary pressures. The Updated Forecasts, which include individual projects (single-year and multi-year projects) as well as ongoing programs, were developed using the most recent pricing that is available to FBC, such as current contractor pricing or recent bid pricing for similar work. The prices received for projects vary depending on the scope and project category. Additionally, while the prices include consideration of current inflationary pressures, FBC does not have visibility into the extent that inflationary pressures have impacted the overall pricing. For instance, the contractor hourly rates or the recent bid pricings would not normally have a separate line item for inflationary pressures. Inflationary pressure is also not tracked separately for projects that are currently in execution. For example, project managers are required to submit change controls throughout the execution stage of individual projects such that the most recent information is available for the purpose of forecasting future costs; however, these change controls are not categorized for inflation. However, FBC provides further elaboration on the variances between the Original 2022-2024 Forecasts and the 2022 Projected/2023-2024 Updated Forecasts below.

For 2022 Projected, the key driver of the $1.643 million increase in capital expenditures is the addition of the DG Bell Feeder 4 Addition project ($1.870 million projected in 2022), which was originally forecast to be undertaken in 2020. This increase is partially offset by a reduction in the Unplanned Growth program to accommodate other programs and projects.

With regard to the 2023 Updated Forecast, while responding to this information request, FBC discovered that it had incorrectly included project costs for the DG Bell Feeder 4 Addition project. The correct forecast and timing for the DG Bell Feeder 4 Addition project is shown in Appendix C2 (Table C2-4). Therefore, the 2023 Updated Forecast is actually consistent with the 2023 Original Forecast of $1.899 million. FBC will correct this error in the compliance filing to the BCUC's decision on this Application.

The 2024 Updated Forecast is $0.205 million less than the Original Forecast. This variance is attributable to a forecast decrease in the Unplanned Growth program to accommodate other programs and projects within FBC's regular growth and sustainment capital portfolios.

29.9 Appendix C2 shows an increase in major Distribution Growth project (i.e., >$1 M) spending in 2022 of $1.9 M between approved and current projection, while Table 7-4 shows an increase of $1.6 M. What accounts for this difference?

Response:

The variance between the $1.870 million shown in Appendix C2 and the $1.643 million shown in Table 7-4 is a reduction in the Unplanned Growth program to accommodate other programs and projects. Since the Unplanned Growth program is not a project that is greater than $1 million, FBC did not include the program in Appendix C2.

29.10 Appendix C2 shows no increase in major Distribution Growth project spending for 2023 or 2024 between approved and current forecast, while Table 7-5 shows increase of $0.9 M and $0.2 M respectively. What accounts for these differences?

Response:

With regard to the 2023 Updated Forecast, please refer to the response to BCOAPO IR1 29.8. With regard to the variance between the Updated 2024 Forecast in Appendix C2 and Table 7-5, as explained in the response to BCOAPO IR1 29.8, FBC reduced its forecast in the Unplanned Growth program by $0.205 million. Since the Unplanned Growth program is not a project that is greater than $1 million, FBC did not include the program in Appendix C2.

30.0 Reference: Exhibit B-2, pages 55-57

Exhibit B2, Appendix C2, pages 4-6

30.1 Please explain the 2020 and 2021 variances for each category of Sustainment Capital (per Table 7-6) as between Approved and Actual.

Response:

FBC provides the following variance explanations for 2020 and 2021 by category of Sustainment Capital:

Generation Sustainment:

The 2020 Actual Generation Sustainment capital was $0.813 million less than 2020 Approved, while 2021 Actual Generation capital was $0.183 million higher than 2021 Approved. FBC's Generation capital portfolio is grouped into four main categories: Hydraulic Dam Structures, Generating Equipment, Generation Auxiliary Equipment, and Buildings and Structures. However, within each of these four categories are numerous sub-categories which each contain a variety of programs and projects which are undertaken annually.

FBC provides a more detailed breakdown of the 2020 and 2021 Approved and Actual Generation capital into the four main categories, with explanations of the major variances provided below the table.

Table 1: FBC Generation Capital Expenditures 2020 and 2021 Approved and Actual ($000s)

Generation Sustainment Category	2020 Approved	2020 Actual	2021 Approved	2021 Actual
Hydraulic Dam Structures	**4,130**	**4,015**	**3,726**	**4,744**
Generating Equipment	**1,058**	**806**	**1,207**	**1,003**
Generation Auxiliary Equipment	**955**	**690**	**1,033**	**896**
Buildings and Structures	**554**	**375**	**800**	**306**
Generation Sustainment Total	**6,697**	**5,884**	**6,766**	**6,949**

In 2020, the variance in the Hydraulic Dam Structures category was due to deferring the infrastructure upgrades associated with the LBO Spillway Gate Upgrade project from 2020 to 2021 to coordinate work with the replacement of the spillway gate from a project execution perspective. The variances in the other categories are related to finding a less costly alternative for the Generator Thrust Bearing project in Generating Equipment, deferral of the purchase of station service transformers due to supply chain issues in Generating Auxiliary Equipment and the deferral of work related to the floor covers upgrade projects in Buildings and Structures.

In 2021, the main driver of the increased actual spending in the Hydraulic Dam Structures category was an increase in the scope and costs for the LBO Spillway Gate Upgrade project. Please refer to Appendix C2 of the Application for additional details. These increased costs

were partially offset by decreases in other categories. In the Generating Equipment category, the Generator Thrust Bearing Cooling System project cost was reduced, as explained in Appendix C2, and in the Buildings and Structures category, a roof upgrade project was deferred, resulting in lower actual 2021 costs.

Transmission Sustainment:

The 2020 Actual Transmission Sustainment capital was $4.153 million higher than 2020 Approved, and 2021 Actual was $4.280 million higher than 2021 Approved.

In 2020 and 2021, the increases were primarily due to recategorizing the Salmo Substation Upgrade project under transmission sustainment capital. This project was originally categorized under station sustainment capital in the 2020-2024 MRP Application. For comparison purposes in Appendix C2, the Salmo Station Upgrade project was included in stations sustainment, and the cost of the project is provided in Tables C2-9 and C2-10.

Stations Sustainment:

The 2020 Actual Stations Sustainment capital was $8.717 million lower than 2020 Approved, and 2021 Actual was $1.541 million lower than 2021 Approved.

In 2020 and 2021, the reductions were primarily due to recategorizing the Salmo Substation Upgrade project out of Station Sustainment to Transmission Sustainment as discussed above.

Additionally for 2020, FBC deferred the Distribution Transformer Replacement program which resulted in lower actual capital spending.

In 2021, while the recategorization of the Salmo Substation Upgrade project resulted in a reduction to the 2021 Actual results, this reduction was mostly offset by the Distribution Transformer Replacement program which was deferred from 2020 to 2021.

Distribution Sustainment:

The 2020 Actual Distribution Sustainment capital was $1.473 million higher than 2020 Approved, while 2021 Actual was $2.579 million lower than 2021 Approved.

In 2020, the overall increase was primarily due to increased costs for the PCB Environmental Compliance program for early material procurement, higher than anticipated capital expenditures in the Distribution Urgent Line Repairs program due to windstorms, and increased costs for the Porcelain Cutouts Replacement program with work moved forward from 2021 to 2020.

In 2021, the decrease was primarily due to reductions in the Porcelain Cutout Replacement program due to issues with procurement and engineering, finding efficiencies in the Distribution

Line Condition Assessment program, and reductions to the Forced Upgrades and Line Moves programs due to lower than anticipated activity.

Telecommunications Sustainment:

The 2020 Actual Telecommunications Sustainment capital was $0.766 million higher than 2020 Approved, while 2021 Actual was $0.560 million lower than 2021 Approved.

In 2020, the overall increase was primarily due to an increase in the General Telecommunications program. The increase in this program was due to the opportunity to pre-purchase equipment to support substation video and security. This equipment is planned to be deployed over the next two to three years.

In 2021, the reduced spending was primarily due to deferring the SCADA System Replacement project to 2023 and the purchase of equipment to support substation video and security occurring in 2020 instead of 2021 (as described above). The SCADA Replacement project was deferred due to complexities identified in 2020 through the project scope definition process.

30.2 With respect to Table 7-7, for each category of Sustainment Capital, please explain how much of the increase each year 2022 to 2024 (vs. approved) is due to higher inflationary pressures vs. an increase in number of/scope of planned projects.

Response:

FBC is unable to provide the requested breakdown, as these factors impact FBC's specific projects and programs differently and, due to the large number of individual projects which FBC undertakes annually (including the projects and activities within FBC's various sustainment programs), FBC is unable to specifically assign a value to each of the pressures described in the Application. FBC continually manages a portfolio of several hundred active sustainment capital projects at various stages of the project lifecycle (from initial development through to project closing). FBC provides below some discussion around inflation.

The 2023 and 2024 Updated Forecasts were not developed by applying a blanket escalation factor from the Original Forecasts or from prior years' capital expenditure levels to account for inflationary pressures. The 2023 and 2024 Updated Forecasts, which include individual projects (single-year and multi-year projects) as well as ongoing programs, were developed using the most recent pricing that is available to FBC, such as current contractor pricing or recent bid pricing for similar work. The prices received for projects vary depending on the scope and project category. Additionally, while the prices include consideration of current inflationary pressures, FBC does not have visibility into the extent that inflationary pressures have impacted

the overall pricing. For instance, the contractor hourly rates or the recent bid pricings would not normally have a separate line item for inflationary pressures. Inflationary pressure is also not tracked separately for projects that are currently in execution. For example, project managers are required to submit change controls throughout the execution stage of individual projects such that the most recent information is available for the purpose of forecasting future costs; however, these change controls are not categorized for inflation. The 2022 Projected, which is based on what FBC has actually experienced thus far in 2022 plus FBC's expectations for the remainder of the year, are similarly impacted by current contractor and bid pricing and other inflationary pressures, but FBC is not able to separate these factors out from the overall cost increases.

For the Updated 2023 and 2024 Forecasts, FBC provided the changes in projects over $1 million in the 2023 and 2024 Updated Forecasts compared to the Original Forecasts in Appendix C2 of the Application, which provided an explanation of new projects, deferred projects, and projects where costs have changed (increased or decreased). The cost estimates for these projects would have the increases due to inflationary pressures embedded and FBC is unable to provide a further breakdown of these projects for inflation. In contrast, the cost estimates of sustainment capital projects in the Original Forecasts provided in the MRP Application included an annual inflation of two percent. As these forecasts were developed in 2019 (i.e., at the time of the MRP Application), FBC did not have information to develop individual project specific inflationary increases for projects anticipated in the 2020-2024 timeframe; therefore, FBC applied a two percent inflation factor to its overall sustainment capital portfolio for all years. However, for the new and updated sustainment capital projects in this Application, inflationary pressures have been incorporated at a project specific level using the most recent pricing such as current contractor rates as well as recent bid results for similar work, as explained above.

30.3 With respect to Table 7-7, for each category of the Sustainment Capital please indicated how much of the increase in each year 2022-2024 (v. approved) is not accounted for by the change in spending on major projects (i.e., >$ 1 M) as set out in Appendix C2.

30.3.1 For those spending categories/spending categories where the change that is unaccounted for in major projects exceeds $0.5 M, please explain the variance.

Response:

Please refer to Table 1 below for the programs/small projects that would be unaccounted for in Appendix C2.

Table 1: Summary of Sustainment Capital Projects/Programs ($000s) with Variance Greater than $0.5 million (not already included in Appendix C2)

	Program	Forecast	2022	2023	2024
Transmission Sustainment					
Transmission Line Condition Assessment	N/A	MRP	632	502	594
		2023 AR	425	1,058	681
		Variance	(207)	556	87
Transmission Line Rehabilitation	N/A	MRP	3,354	5,819	5,290
		2023 AR	6,031	6,519	10,448
		Variance	2,677	700	5,158
Station Sustainment					
Minimum Oil Circuit Breaker Replacements	Station Equipment	MRP	1,117	1,137	1,152
		2023 AR	1,478	1,956	1,620
		Variance	361	819	468
Generating Station Assets	Station Equipment	MRP	175	109	109
		2023 AR	-	699	268
		Variance	(175)	590	159
Station Oil Recloser Replacement	Station Equipment	MRP	-	-	-
		2023 AR	-	726	432
		Variance	-	726	432
Distribution Sustainment					
Distribution Line Rehabilitation	N/A	MRP	2,872	2,680	3,150
		2023 AR	3,691	3,498	3,268
		Variance	819	818	118
Distribution Line Rebuild	N/A	MRP	1,942	1,938	1,925
		2023 AR	1,668	2,563	1,781
		Variance	(274)	625	(144)
Telecommunications Sustainment					
None					
Generation Sustainment					
Generation Sustainment Small Projects	N/A	MRP	2,332	1,664	1,404
		2023 AR	1,451	2,072	896
		Variance	(881)	408	(508)

For each program/small project with a variance larger than $0.5 million between the MRP Application and the 2023 Annual Review (i.e., 2022 Projected, 2023 Updated Forecast and 2024 Updated Forecast), FBC provides the following explanation.

Transmission Line Rehabilitation Program

At the time of the MRP Application, the Transmission Line Rehabilitation program for 2020 to 2024 was based on the three-year rolling average of actuals between 2017 to 2019. Subsequent to the MRP Decision and as condition assessment results were received, the estimates were refined based off the recommendations from the condition assessment. A greater amount of rehabilitation work was required than anticipated. This has resulted in higher capital expenditures across 2022 to 2024. To manage program costs, rehabilitation work for individual lines has been prioritized and staged over multiple years.

Distribution Line Rehabilitation Program

The Distribution Line Rehabilitation program is based on the three-year average of the total number of action items. More action items than anticipated were identified in 2022, resulting in higher capital expenditures across 2022 to 2024.

Generation Sustainment

For the 2022 Projected Generation sustainment capital, an approximate decrease of $0.881 million is primarily due to the following:

- A decrease in the Other Generating Equipment Projects related mainly to deferring the generator condensation mitigation project; and
- A decrease in the Sustainment of Buildings and Structures category related mainly to deferring portions of the floor cover upgrade, roof upgrade, powerhouse windows and guarding of rotating parts projects.

For the Updated 2023 Forecast, the increase is primarily due to the planned undertaking of some of the small projects that had been planned for 2022. For the Updated 2024 Forecast, FBC deferred some small projects in order to re-prioritize its capital spending for other more urgent projects in the Generation sustainment portfolio.

31.0 Reference: Exhibit B-2, page 59

31.1 With respect to Table 7-8, please explain the increase in Facilities capital spending in 2021 as between the Approved and Actual.

Response:

The variance between the 2021 Approved and Actual Facilities capital was primarily due to the Kelowna Space Project as well as HVAC, water well, and electrical asset replacements at the Kootenay buildings. Please refer to the response to BCOAPO IR1 32.3 for more details on the Kelowna Space Project.

31.2 With respect to Table 7-8, please explain the increase in capital spending in 2022 in each of the three categories as between Approved and Projected.

Response:

For Equipment, the variance between 2022 Approved and Projected is primarily due to a few 2021 orders (i.e., vehicle chassis) that were not delivered until 2022 due to shipment delays by the manufacturer. The cost for these orders was transferred to 2022, resulting in the under-spend in 2021 Actual (as shown in Table 7-8 of the Application) and the over-spend in 2022 Projected.

For Facilities, the variance between 2022 Approved and Projected is primarily due to advancing EV infrastructure at FBC's Operations Centres in support of FBC's fleet conversion to EV which was not included as part of the Original Forecasts provided in the MRP Application. The 2022 Projected expenditures for EV infrastructure are $0.500 million, which is consistent with the amount forecast for 2023 and 2024 (as part of the Updated Forecasts for 2023 and 2024).

For Information Systems, the variance between the 2022 Approved and Projected is due to ensuring robust sustainment of existing applications and infrastructure, which is critical to the running of the business, as well as an increased demand for business technology project implementations in 2022. Examples of business technology project implementations include the areas of Field Operations and Data Analytics.

32.0 Reference: Exhibit B-2, page 59

32.1 With respect to Table 7-9, are the increases in capital spending on Equipment in 2023 and 2024 all due to increases in costs (i.e., inflation) or are there changes in the amount of equipment being purchased?

32.1.1 If there is a change in the amount of equipment being purchased, please explain what and why.

Response:

There are no changes to the amount of equipment FBC is forecasting to purchase for 2023 and 2024.

As explained in Section 7.2.1.2.1 of the Application, the increase in Equipment capital is due to significant changes in the market conditions for supply of vehicles. The Updated 2023 and 2024 Forecasts are based on the higher average unit cost per vehicle that FBC is currently experiencing and expects to experience for the remainder of the MRP term.

32.2 With respect to Table 7-9, please provide a breakdown of the increase in capital spending for Facilities in each of 2023 and 2024 as between that due to: i) the Kelowna Space Project, ii) energy management and GHG emissions reductions activities that FBC is planning to undertake to improve the adaptability and resiliency of FBC's facilities, and iii) the installation of EV infrastructure at FBC's facilities.

Response:

Please refer to Table 1 below for the breakdown of the incremental capital for Facilities in 2023 and 2024 of $1.959 million and $1.750 million, respectively.

Table 1: Breakdown of Incremental Facilities Capital for 2023 and 2024 ($ millions)

Facility Capital (Incremental from Original Forecast)	2023	2024
Kelowna Space Project	1.209	1.000
Energy Management	0.250	0.250
EV Infrastructure	0.500	0.500
Total Incremental ($millions)	**$ 1.959**	**$ 1.750**

32.3 Will FEI or FBC be seeking any additional BCUC approvals for the Kelowna Space Project?

32.3.1 If not, why not?

32.3.2 If not, please provide a copy of the business case justifying the Kelowna Space Project expenditure.

Response:

As explained in the response to BCOAPO IR1 1.1, FBC is seeking approval of the level of forecast growth, sustainment and other capital expenditures to be incorporated in rates for the years 2023 and 2024 in this Application. The Kelowna Space Project is part of the 2023 and 2024 other capital forecasts. As FBC has a deemed CPCN for extensions to its system pursuant to section 45(2) of the *Utilities Commission Act,* FBC is not seeking specific approval of any projects or programs within its updated regular growth, sustainment and other capital for 2023 and 2024, including the Kelowna Space Project.

Please refer to Attachment 32.3 for the Kelowna Space Project business case. FBC notes the business case was originally completed in 2019 with all cost estimates developed at that time. The capital cost estimate shown in Section 7.2.1.2.2 of the Application and included in FBC's updated Other Capital forecast for 2023 and 2024 reflects the current cost estimate.

33.0 Exhibit B-2, page 66

Preamble: The Application states:

> "However, FBC's 2023 Forecast rate base also includes the full-year impact of capital additions related to the Corra Linn Dam Spillway Gate Replacement project, the UBO Old Units Refurbishment project, and the Playmor Substation Upgrade project, all of which are expected to complete in 2022".

With respect to the KBTA Project the Application states:

> "FBC forecasts capital expenditures of $11.384 million and $1.710 million (excluding AFUDC) in 2022 and 2023, respectively, with $21.250 million to be added to rate base on January 1, 2023 and the remainder added to rate base on January 1, 2024".

33.1 Is it still FBC's expectation that the three projects (the Corra Linn Dam Spillway Gate Replacement project, the UBO Old Units Refurbishment project, and the Playmor Substation Upgrade) will all be completed in 2022?

Response:

The UBO Old Units Refurbishment project is complete, and the Playmor Substation Upgrade project will be completed in 2022.

The substantial completion date for the Corra Linn Spillway Gate Replacement project is delayed until Q1 2023; however, given the fixed price nature of the construction contract, the impact to the total project cost is minimal.

33.2 What aspects of the KBTA Project will added to rate base as of January 1, 2023 and why?

Response:

Please refer to the response to BCOAPO IR1 28.2.

34.0 Reference: Exhibit B-2, page 69

34.1 Please explain why the deferral account to capture costs incurred for the 2023 Joint Use Pole Audit is a rate-base deferral account.

Response:

Please refer to the response to BCUC IR1 19.1.

35.0 Reference: Exhibit B-2, page 72

Preamble: The Application states:

> "The bill payment deferral program was offered to residential and small commercial customers affected by the COVID-19 pandemic."

35.1 Please provide a breakdown of the "Transfers" as between those attributable to residential vs. small commercial customers.

Response:

As noted on footnote 50 on page 73 of the Application, the actual 2021 unrecoverable revenue transfers of $0.114 million consist of $0.004 million of small commercial customer balances and $0.110 million of residential customer balances.

The 2022 Projected unrecoverable revenue transfers of $0.005 million consist of $0.001 million of small commercial customer balances and $0.004 million of residential customer balances.

36.0 Reference: Exhibit B-2, page 78

Preamble: The Application states:

"The 2023 debt issuance is reflected in the financial schedules in July 2023 at a rate of 4.90 percent".

"FBC uses interest rate forecasts to estimate future interest expense. Forecasts of Treasury Bills and benchmark Government of Canada Bond interest rates are used in determining the overall interest rates for short-term debt and for rates on new issues of long-term debt, respectively. The forecasts are based on available projections made by Canadian Chartered banks. Credit spreads on new long-term debt are based on current indicative rates, on the assumption that the current credit ratings of FBC are maintained".

36.1 Please provide the sources of the information used and calculations supporting the 4.9%.

Response:

To estimate future interest rates on long-term debt issuances, FBC uses 30-year benchmark Government of Canada bond interest rate forecasts as provided by Canadian Chartered banks with indicative credit spreads applied.

Source	Rate
30-Year Government of Canada bond forecast for 2023 (average of 5 Canadian Chartered banks' forecasts as of July 2022)	3.00%
FBC Indicative Spread (average of 5 Canadian Chartered banks' indicative spreads for FBC on 30-year debt issuances as of July 2022)	1.90%
Total	4.90%

37.0 Reference: Exhibit B-2, page 84

Preamble: The Application states:

"The $0.665 million credit difference between the projected 2021 deferral account after-tax credit addition of zero embedded in 2022 rates, and the actual 2021 deferral account after tax credit addition of $0.665 million as provided in FBC's 2021 Annual Report to the BCUC. This amount is also shown in the opening 2023 balance in the financial schedules in the Application".

37.1 Please provide a copy of FBC's 2021 Annual Report to the BCUC and the page references for the calculation of the $0.665 M 2023 opening after tax balance in the MRP Earnings Sharing deferral account.

Response:

A redacted copy of FBC's 2021 Annual Report to the BCUC is provided in Attachment 37.1.

The actual 2021 deferral account after tax credit additions of $0.665 million are shown on Page 12.2, Line 14, Column 7. The amount on Schedule 12.2 is derived from the earnings sharing calculation on Page 26.2.

38.0 Reference: Exhibit B-2, page 131

38.1 Please update the 2022 results in Table 13-1 to include all months for which the relevant data is currently available (where either the data or the information that would be used to calculate the data are currently available).

Response:

Please refer below for an updated version of Table 13-1 which includes an additional column reflecting year to date results as at August 31, 2022.

Performance Measure	Description	Benchmark	Threshold	2021 Results	June 2022 YTD Results	August 2022 YTD Results
Safety SQIs						
Emergency Response Time	Percent of calls responded to within two hours	>=93%	90.6%	93%	95%	95%
All Injury Frequency Rate (AIFR)	3 year average of lost time injuries plus medical treatment injuries per 200,000 hours worked	<=1.64	2.39	0.67	0.80	0.93
Responsiveness to Customer Needs SQIs						
First Contact Resolution	Percent of customers who achieved call resolution in one call	>=78%	74%	82%	78%	78%
Billing Index	Measure of customer bills produced meeting performance criteria	<=3.0	5.0	0.12	0.14	0.13
Meter Reading Accuracy	Number of scheduled meters that were read	>=98%	96%	99%	99%	99%
Telephone Service Factor (Non-Emergency)	Percent of non-emergency calls answered within 30 seconds or less	>=70%	68%	70%	63%	63%
Customer Satisfaction Index	Informational indicator - measures overall customer satisfaction	-	-	8.4	8.4	8.4
Average Speed of Answer	Informational indicator – the amount of time it takes to answer a call (seconds)	-	-	65	98	103
Reliability SQIs						
System Average Interruption Duration Index (SAIDI) – Normalized	Annual SAIDI (average of cumulative customer outage time)	3.22[6]	4.52	4.27	2.94	2.72

[6] Benchmarks and thresholds for SAIDI and SAIFI were approved in the FBC Annual Review for 2020 and 2021 Rates Decision and Order G-42-21.

Performance Measure	Description	Benchmark	Threshold	2021 Results	June 2022 YTD Results	August 2022 YTD Results
System Average Interruption Frequency Index (SAIFI) - Normalized	Annual SAIFI (average customer outage)	1.57	2.19	2.08	1.58	1.68
Generator Forced Outage Rate	Informational indicator – Percent of time a generating unit is removed from service due to component failure or other events.	-	-	0.23%	0.85%	0.64%
Interconnection Utilization	Informational indicator – percent of time that an interconnection point was available and providing electrical service to wholesale customers.	-	-	99.90%	99.91%	99.93%

1

39.0 Reference: Exhibit B-2, pages 137 and 139

39.1 Please provide the 2022 year to date results for the TSF (non-emergency) on a quarterly basis (i.e., January-March, April-June and July-September (if available)).

Response:

Please refer to the table below showing the 2022 results by quarter. Third quarter results are not available at this time.

2022 results by quarter	Q1 (Jan-Mar)	Q2 (Apr-June)
TSF (%)	**64%**	**62%**

August year-to-date results (first eight months of 2022) are at 63 percent.

39.2 Please provide the 2022 year to date results for the ASA on a quarterly basis.

Response:

Please refer to the table below showing the 2022 results by quarter. Third quarter results are not available at this time.

2022 results by quarter	Q1 (Jan-Mar)	Q2 (Apr-June)
ASA (seconds)	**89**	**106**

August year-to-date results (first eight months of 2022) are at 103 seconds.

Attachment 32.3

Kelowna Space Project Business Case

FORTIS BC™

Table of Contents

FORTIS BC™

Introduction

This document provides a summary of FortisBC's current facilities in Kelowna and the Kelowna Space Project. It provides justification for the solution chosen for several space and operational challenges faced by both the Electric (FBC) and Gas (FEI). To fully understand the solution, it is first necessary to explain the problem and the history of attempted prior solutions.

With this information providing context, the subsequent discussion of challenges, constraints, and solution options may be more easily understood.

Finally, the proposed solution is discussed, along with cost estimates and timelines for implementation.

Current Facilities

FBC owns the **Benvoulin Office** which is located at 2850 Benvoulin Road. The property size is approximately three acres in size and located within the Agricultural Land Reserve (ALR) and has been designated for non-farm use. There are three structures on-site:

1) A two-Storey Office and Warehouse/Shop space of approximately 25,000 ft^2
2) A covered parking area for the rubber trucks, and
3) An enclosed Bay used for rubber truck parking

In addition, there are two ancillary buildings for covered parking of FBC rubber trucks.

The Benvoulin sites currently supports the Electric Operations Network Services, Engineering & System Assets, PMO, Property Services, IS, OH&S, Warehouse and Fleet.

FEI owns the **Springfield Office** which is located at 1975 Springfield Road. The property is approximately three acres in size and is zoned Utility. There are three structures on-site:

1) Three-Storey Office and Shop space of approximately 35,000 ft^2
2) Covered storage bays and
3) Covered parking.

FBC leases space from FEI at the Springfield location.

The Springfield location currently supports FEI Gas Operations, FEI/FBC Shared Services (Audit, Business Innovation, Communication & External Relations, Conservation & Energy Management, Customer Service Billing, Energy Solutions Facilities, Finance, Governance & Legal, HR, IS, Regulatory, Sustainability & Environment) and Executive.

At the **Enterprise** location, FBC leases office, shop and yard space at a multi-tenant building located at 2076 Enterprise Way with a leased size of 10,500 ft^2. There is a 1.5 acre fenced yard compound. This site supports the Electric Operations Substation Department and Shared Services. The pole yard is situated at the Enterprise location.

Below is the summary of the sites:

	Benvoulin	Springfield	Enterprise
Own vs. Lease	Owned	Owned	Leased
Lot size	3.4 acres	3.2 acres	1.5 acres
Zoning	ALR, non-farm use	Utility	Industrial 1
Office Size	16,731 ft^2	30,943 ft^2	5,652 ft^2
Warehouse Size	8,538 ft^2	4,246 ft^2	5,000 ft^2
On-site parking stalls	75	108	20
Off-site parking stalls	5	65	n/a

Currently, Electric Operations are spread over the three locations while Gas Operations is co-located with Electrical Operations at Springfield.

Project History

To address the issues identified above, two plans were put forward.

The first, in 2006, involved the purchase of additional land adjacent to the Benvoulin location and subsequent expansion of office and yard space. This plan failed because the Agricultural Land Commission declined to allow rezoning of the desired land parcel.

A subsequent plan in 2013 proposed the purchase of the same land parcel and, in addition, the offer to move other farmed agricultural land outside the ALR into the ALR. This plan also failed.

FBC also continued to examine options applicable to the Benvoulin property such as the addition of a third floor to the building and underground parking. However, these were extremely challenging and costly improvements due to the configuration of the property and existing building. The cost of underground parking alone would have been approximately $3.5 million.

FBC continued to investigate the real estate market for opportunities to purchase land within the service territory and consolidate its employees and function into a single facility. In 2016, FBC negotiated use of the neighbouring property to Benvoulin for a small amount of parking to relieve growing pressure brought about by headcount growth.

Concurrent with these efforts, notable developments occurred which have prompted a reevaluation of the original strategy to address space constraints in the Okanagan region, particularly regarding Electric Operations.

Real estate costs for industrial land in the Kelowna area have escalated substantially. Moreover, the location of what land is available would entail inefficiencies for FBC crews and pose challenges for the development of a prudent and cost effective project.

In addition, in 2019, FEI began experiencing office growth challenges in Gas Operations at the Springfield site.

As a result, FortisBC has decided to significantly alter its plan to address space constraints in the Okanagan region. Where the previous plan had encompassed only Electrical Operations, the new plan would include Electrical Operations, Gas Operations, and Shared Services Departments with their attendant required space programs.

Current Challenges

Space constraints and a number of other factors have resulted in a several challenges facing not just Electric Operations, but also Gas Operations:

- All three locations are either at or over workstation capacity with attendant over-subscription of meeting rooms
- Meeting rooms have been removed to accommodate headcount growth. This provides challenges as the majority of our office space is an open plan and requires meeting space to conduct collaborative and private sessions.
- The Benvoulin District Stores is on the 2nd floor. This provides an ergonomic challenge to employees when they attempt to ensure their safety while moving parts. There is no available space to move the District Stores to the main floor.
- The Benvoulin site has one access point which feeds into a busy road with no controlled light. This poses safety challenges for the aerial rubber boom bucket trucks (RBD trucks) which are large fleet vehicles that are over 26 feet in length with tandem axel. Currently we have directed RBD truck drivers to only turn right onto the street to reduce the safety risk. This does increase windshield time.
- The Benvoulin and Springfield yard employee parking are both at capacity
- Employees at the Enterprise location feel isolated and forgotten as there are few opportunities to collaborate with their fellow employees from other departments. These feelings are exacerbated by the "tired" nature of the Enterprise space.
- FBC is growing concerned with the Enterprise owner's ability to operate as a commercial landlord. Moreover, there is a mix of businesses within the building which is not conducive to the type of work environment required by FBC.
- Headcount is unpredictable due to expansions. Furniture alterations and relocations are costly and repetitive due to densification, which itself is a short term, inefficient method of addressing space issues in a cost-effective manner. In effect, densification is a "band-aid" measure which has been exhausted as a solution to the space shortage.

Because FortisBC is pursuing a holistic approach to these issues, any solution which addresses the concerns of Electric Operations will also address Gas Operations and other departments such as Shared Services.

Constraints

Any solution to the foregoing problems must address a number of constraints. These include:

- Address the headcount increase and allow for 5% growth in workstation space,
- Over densification is no longer a viable option. Simply put, there is no space.

- There is no ability to expand property size. For example, both Benvoulin and Springfield locations are surrounded by the Agricultural Land Reserve with no opportunities to increase their footprint size.
- The Benvoulin location is experiencing parking overflow. While a parking agreement has been reached with the neighbouring facility it is restricted to a small number of spaces and cannot be increased further. The location of Benvoulin is on a busy road with no street parking. Any proposed solutions would need to address this issue.
- There is limited market availability of land in the preferred area for the Electric Operations service territory.
- There is minimal financial benefit to be realized from consolidation of multiple offices into a single location; FortisBC has no buildings in the Kelowna area nearing their end-of-life, nor would consolidation result in significant operational efficiencies.
- Sale of the Benvoulin Office would result in a loss due to the ALR use restrictions.
- Springfield Office zoning restrictions would limit the resale value of the property.

Solution Options Identified

FortisBC considered multiple options to address the space constraints faced by both FEI and FBC in the Kelowna region. The options developed considered the needs of each utility separately as well as the two utilities combined.

In determining the options for the Project, FortisBC considered the ability of each option to meet the following criteria:

- Address the immediate space and functional limitations of facilities which play an integral part of FortisBC's Company's operational requirements.
- Address the separation of the Electric Operations teams by having them located together on the same site
- Provide permanent storage for the pole, construction project materials and pole trailers in close proximity to the Network Operations
- Provide an opportunity to address condition and any pre-existing buildings building code accessibility requirements
- Efficiencies and cost savings opportunities;
- Prudent capital spend

Four options were considered:

- **Option 1:** Acquire a new Combined Operations Centre to house all Kelowna employees (Electric Operations, Gas Operations and Shared Service Departments). The estimated cost of this option was over $70 million.
    - Given its unique nature, such an Operations Centre facility (office, warehouse, truck bays and secured yard compound for storage of material and fleet) is generally not available on the real estate market and thus would require land purchase and construction or a design/build/lease arrangement.
        - Purchase of ten-acre parcel of land
        - Construction of 61,000 sq. ft^2 office building
        - Construction of 22,000 sq. ft^2 warehouse/fleet/shop building
        - Secured yard compound with covered parking and storage

  - Finding a location that meets both utilities' operational requirements without increasing inefficiencies within operations became very challenging in the Kelowna market and was considered likely not possible.
  - The challenging market for available industrial land, the industrial land costs, the escalating construction costs, and delivery timelines outweighed the operational benefits of bringing the departments together

- **Option 2:** Acquire a New Electric Operations Centre which would include the Shared Service Department. Gas Operations would remain at Springfield, which would be renovated to meet space programming requirements. The Benvoulin site would be sold. The cost of this option was estimated at over $48 million.
  - The unique nature of an Operations Centre facility (office, warehouse, truck bays and secured yard compound for storage of material and fleet) is generally not available on the real estate market and would require land purchase and construction or a design/build/lease arrangement.
    - Purchase of a six-acre parcel of land
    - Construction of 47,000 sq. ft^2 of office building
    - Construction of 14,000 sq. ft^2 of warehouse/fleet/shop building
    - Construction of secured yard compound with covered parking and storage
  - Bringing the Shared Service Department and Electric Operations Department together provides some efficiencies but minimal monetary value.
  - The Benvoulin disposal has minimal financial benefit due to the Agriculture Land Reserve requirement that the property be returned to the ALR.
  - Due to the challenging real estate market for available industrial land, the industrial land costs, the escalating construction costs and delivery timelines and the revenue loss on the Benvoulin property this option was eliminated.

- **Option 3:** Acquire a new Electric Operations Centre which would include the Support Services Department. Gas Operations would relocate to Benvoulin. The Springfield site would be sold. The cost of this option was estimated at over $45 million.
  - The unique nature of an Operation Centre (office, warehouse, truck bays and secured yard compound for storage of material and fleet) is such that a suitable facility is generally not available on the real estate market and would require land purchase and construction or a design/build/lease arrangement
    - Purchase of a six-acre parcel of land
    - Construction of 47,000 sq. ft^2 of office building
    - Construction of 14,000 sq. ft^2 of warehouse/fleet/shop building
    - Construction of secured yard compound with covered parking and storage
  - Bringing the Shared Service Department and Electric Operations together provides some efficiencies but minimal monetary value.
  - The Springfield disposal has better market value as there is potential to rezone the property from utility to other uses.

  - Due to the challenging release estate market for available industrial land, the industrial land costs, the escalating construction costs, and delivery timelines, this option was eliminated.

- **Option 4:** New Lease for Shared Services Departments. Gas Operations relocates to Benvoulin. Electric Operations relocates to Springfield. The Pole Yard will remain a separate lease space. Improvements are completed at all locations at an estimated cost of $11.8 Million.
  - Relocating the Shared Services Departments away from the Operations Centre creates enough room to accommodate the Operations Departments but drives little inefficiency.
  - The FBC Electrical Operations assessed space requirements are more aligned to the Springfield site. Having all of the Electric Operations at one site would promote greater efficiency.
  - The FEI's Gas Operations assessed space requirements are more aligned to the Benvoulin site
  - There is no disposal of existing owned assets that would trigger zoning issues and financial loss
  - Of all the options, this one results in significantly reduced capital investment
  - Changes in location have minimal impact on employees and their commutes

Proposed Solution

Option 4 (New Shared Service Lease, Electric Operations relocate to Springfield, Gas Operations relocate to Benvoulin and new lease pole yard) addresses the criteria set out for the Kelowna Space Project. In addition, it ensures prudent capital deployment towards project goal. It should be noted that while Option 1 also meets the project goal, it does not represent a cost-effective solution for the benefits gained.

Relocating the Shared Service Departments to a new leased facility allows reconfiguration of the Springfield and Benvoulin Operations Centre to meet the requirements of the Electric and Gas Operations.

The new leased facility for Shared Service will be an office building with a targeted 27,000 ft^2 footprint, supporting the Shared Services Departments. The targeted location will be in the Kelowna City area. The estimated annual rent cost for this lease is $875,000 to $945,000 annually. The estimated cost of tenant improvements is $150 per ft^2 which could total $4.05 Million. The allocation of capital and O&M costs for the Shared Services Departments will be based on a cost driver approach using the number of employees. This allocation is expected to be 77% FEI and 23% FBC.

Some of the lease costs will be offset by the exiting of the Enterprise and Springfield leases.

For the Operations Centre, the chart below shows the space requirement alignment of FBC Operations to the Springfield facility and FEI Operations to the Benvoulin facility. Swapping buildings will address the space requirements, bring all Electric Operations into one facility, keep the operating teams in a central location to support their day-to-day functions, and allow reconfiguration of the facilities. Leases will be implemented to address the use of the space. It is expected that FEI will see a greater revenue for the facilities given the space differences.

FortisBC Space Building Requirements are provided in the two following tables:

	Gas Operations	Benvoulin Current Space
Office Space Requirements	14,000 ft^2	16,731 ft^2
Warehouse/Shop Space Requirements	8,000 ft^2	8,538 ft^2
Total Building	**22,000 ft^2**	**25,269 ft^2**

	Electric Operations	Springfield Current Space
Office Space Requirements	22,000 ft^2	30,943 ft^2
Warehouse/Shop Space Requirements	14,000 ft^2	4,246 ft^2
Total Building	36,000 ft^2	35,189 ft^2

The Benvoulin renovation will consist of Tenant Improvements to meet the FEI's space requirements. This will include full renovation of the 1st and 2nd office floors to create private offices, an open office workspace, meeting rooms, and lunchroom. The cost is estimated at $2.6 Million.

The Springfield renovation will consist of a structure change to the building to accommodate the shop space. This cost will be borne by the owner, FEI, and recovered in lease rates. This cost is estimated at $3.7 Million. Tenant improvements will be completed by the tenant – FBC – for the office space and are estimated to cost $1.25 Million.

Solution Cost Estimates

	Responsibility	Capital	
		FBC	FEI
New Shared Services Lease	Both cost driver approach	$931,500	$3,118,500
Springfield Structural Improvements	Owner – FEI	0	$3,700,000
Springfield Tenant Improvements	Tenant – FBC	$1,250,000	0
Benvoulin Tenant Improvements	Tenant – FEI	0	$2,600,000
Pole Yard	Tenant – FBC	$300,000	0
TOTALS		**$2,481,500**	**$9,318,500**

Note: FBC will be terminating leases (Springfield and Enterprise) which will result in $738,624 in lease savings.

Solution Timeline

Kelowna Space Project Major Milestones:

Description	Estimated Duration
Lease Market Survey & Assessments	3 months
Lease Short List, Fit Tests & Site Reviews	3 months
Lease negotiations and award	6 months
Lease Design Development (DD) & Construction Drawings (CD)	6 months
*Lease Tenant Improvements (TI) Construction	7 months
Shared Service Relocation to new lease space	1 week
Springfield and Benvoulin Improvements DD & CD	6 months
**Springfield and Benvoulin TI Construction	12 months
Operations building swap	1 week

*Start date determined by determined Lease Fixturing Period

**Start date determined by Shared Service relocation timeline

Conclusion

The space and efficiency issues affecting the Electric and Gas Operations in the Kelowna area have been evident for some time, and several previous attempts to address them have failed for various reasons. However, the solution set forth is well positioned to succeed. The combination of carefully considered capital and ongoing expenditures, employee relocation, facility re-purposing, and lease terminations represent a tailored approach to addressing the space constraints and optimizing efficiency regarding employees at the Benvoulin, Enterprise, and Springfield locations.

Attachment 37.1

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
Email: diane.roy@fortisbc.com
www.fortisbc.com

April 29, 2022

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

Attention: Mr. Patrick Wruck, Commission Secretary

Dear Mr. Wruck:

Re: FortisBC Inc. (FBC)
2021 Annual Report to the British Columbia Utilities Commission (BCUC)

Please find attached, for BCUC review, the FBC 2021 Annual Report of actual results (the Annual Report). This Annual Report is being filed electronically only and hardcopies will be provided upon request.

FBC has also attached a redacted public version of the 2021 FBC Annual Report. Pursuant to Section 18 of the BCUC's Rules of Practice and Procedure regarding confidential documents as set out in Order G-15-19, FBC has redacted certain information which is confidential and should not be publicly disclosed. The basis for requesting confidentiality of the redacted information is to protect two categories of information.

The first category of redactions relates to commercially sensitive information that is not otherwise publicly available and, if disclosed, could significantly harm the financial, competitive or negotiating position of the company. This category includes detailed information related to finances and financial position, information about tax and tax liabilities, or details about compensation or labour relations matters.

The second category of redactions relates to employee information which discloses employee names and positions which is subject to FortisBC's privacy policy and applicable privacy legislation, and the public disclosure of which is unnecessary in cases when an employee is not an officer of the company.

The following table identifies the specific redactions in the 2021 FBC Annual Report and the reason for redacting the information based on the two categories of confidential information identified above.

Section/Pages	Reasons for Redaction
Tab 3, pages 28.1 to 28.8	Commercially sensitive financial information
Tab 4, page 31.1	Commercially sensitive compensation and labour relations information
Tab 8	Commercially sensitive tax information
Tabs 10 and 13	Employee information
Tab 16	Commercially sensitive financial information related to non-regulated business operations

FBC hereby provides the redacted version of the 2021 Annual Report. FBC requests that the BCUC keep the redacted information confidential for the reasons discussed above.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC INC.

Original signed:

Diane Roy

Attachment

ELECTRIC UTILITIES

ANNUAL REPORT

OF

FORTISBC INC.

FortisBC Inc.

(Exact Legal Name of Utility)

Suite 100, 1975 Springfield Road, Kelowna, B.C., V1Y 7V7

(Address of Principal Business Office)

TO THE

BRITISH COLUMBIA UTILITIES COMMISSION

For the Period January 1, 2021 To December 31, 2021

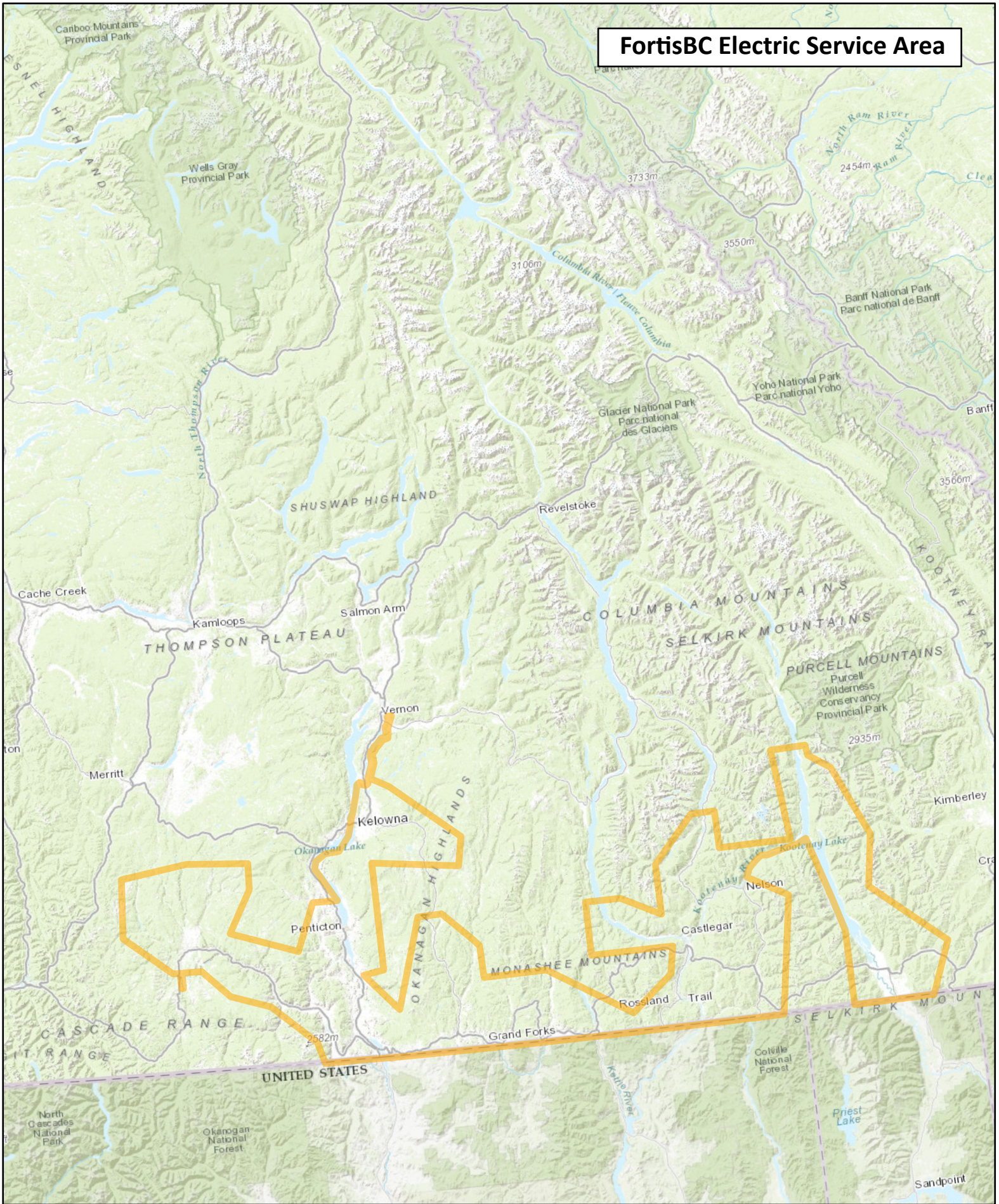
Annual Report Summary Information Page- L-8-22 Attachment

Public Utility Reporting Template Instructions: Please complete this document and submit with your annual report (in electronic format). Where possible, please include a copy of a high level map of the province with approximate locations marked where you provide regulated service. Please contact Commission Secretary if you have questions or require assistance.

Complete the following information for the Utility:

Entity Name:	FortisBC Inc.
Reporting/Fiscal Period End Date	December 31, 2021
Entity Website	www.fortisbc.com
Type of Energy Provided (Electricity, Natural Gas, Propane, etc)	Electricity
Sales Revenue ($)	$404,247,000
Fixed Assets/Rate Base ($) (Total Utility Assets-public)	$1,505,738,000
Total Capital Additions	$126,980,000
Total Expenses	$52,340,000
Repairs and Maintenance Expenses	$5,417,000
Net Utility Income (loss)	$55,774,000
Net Utility Equity (Deficit)	$602,295,000
Return on Equity	9.26%
Cost of Capital	5.69%
System Average Interruption Frequency Index (SAIFI)	2.08
System Average Interruption Duration Index (SAIDI)	4.27
Number of Pipeline Outages caused by Third Party	N/A
Mileage in km - Pipeline distribution	N/A
Mileage in km - Pipeline transmission	N/A
Mileage in km- Electrical system distribution	6,060
Energy Delivered (GJ/MWh)	3,459,000 MWh
Number of Customers	144,877
Number of New Customer Connections	3,553
Major Customer Types (Residential, Commercial, Industrial)	Residential, Commercial, Wholesale, Industrial

FortisBC Electric Service Area



FORTIS BC™

Locations of electric features shown on this map are approximate only. Accuracy, completeness, correctness, and currency are not guaranteed. Persons utilizing the map agree and accept that their use of any information contained therein is entirely at their own risk. FortisBC will not accept responsibility for any errors or omissions. You are required to call BC OneCall at 1-800 474-6886 prior to commencing any excavation.

N

30 15 0 30 60 Km

Projection: BC Standard Albers - Datum: NAD83(CSRS98)

Scale: 1:2,000,000

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TABLE OF CONTENTS

FORTISBC INC.
UTILITY RATE BASE
($000)

Line No.	Description	Reference	Approved 2021	Year Ended 12/31/2021 Actual	Normalization	Normal	Difference	Reasons for Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Gross Plant in service, Beginning [1]	#6.1	$ 2,162,849	$ 2,161,114	$ -	$ 2,161,114	$ (1,736)	- See Page 2.1.1
2	Opening Balance Adjustment	#6.1	-	-	-	-	-	- See Page 2.1.1
3	CPCN's	#6.1	40,407	28,116	-	28,116	(12,291)	- See Page 2.1.1
4								
5	Additions	#6.1	103,626	98,864	-	98,864	(4,763)	- See Page 2.1.1
6	Disposals/Retirements	#6.1	(17,208)	(29,320)	-	(29,320)	(12,112)	- See Page 2.1.1
7	Gross Plant in service, Ending	#6.1	2,289,676	2,258,774	-	2,258,774	(30,902)	
8								
9	Accumulated Depreciation Beginning - Plant	#7.1	(641,268)	(624,899)	-	(624,899)	16,369	
10	Opening Balance Adjustment	#7.1	-	-	-	-	-	
11	Accumulated Depreciation Ending - Plant	#7.1	(700,033)	(647,572)	-	(647,572)	52,461	- See Page 2.1.2
12								
13	Contributions in aid of construction, Beginning	#9	(220,826)	(215,893)	-	(215,893)	4,933	
14	Opening Balance Adjustment	#9	-	-	-	-	-	
15	Contributions in aid of construction, Ending	#9	(232,291)	(223,260)	-	(223,260)	9,031	- See Page 2.1.2
16								
17	Accumulated Amortization Beginning - CIAC	#9	79,867	79,349	-	79,349	(518)	
18	Opening Balance Adjustment	#9	-	-	-	-	-	
19	Accumulated Amortization Ending - CIAC	#9	84,283	82,745	-	82,745	(1,538)	- See Page 2.1.2
20								
21	Net plant in service, Mid-year		$ 1,411,129	$ 1,435,178	-	$ 1,435,178	$ 24,050	
22	Adjustment for timing of Capital additions	#6.2	20,204	(99)	-	(99)	(20,303)	- See Page 2.1.2
23	Capital Work in Progress, No AFUDC	#6.3	11,228	34,306	-	34,306	23,078	- See Page 2.1.2
24								
25	Sub-total		1,442,561	1,469,385	-	1,469,385	26,825	
26								
27	Unamortized Deferred Charges	#11	25,696	25,132	-	25,132	(564)	- See Page 11 / 2.1.2
28	Working Capital	#13	6,044	6,286	(128)	6,158	114	- See Page 2.1.3
29	Utility Plant Acquisition Adjustment		4,935	4,935	-	4,935	-	
30	**Mid-Year Utility Rate Base**		$ 1,479,236	$ 1,505,738	$ (128)	$ 1,505,610	$ 26,375	
31								
32	# Indicates Annual Report Reference Page No.							
33								
34	Notes:							
35	[1] Pursuant to Order G-9-18, the costs of FBC's Electric Vehicle DCFC stations were excluded from rate base until the Commission directed otherwise.							
36	FBC has subsequently received Order G-341-21 allowing FBC to include these amounts in rate base effective January 1, 2022. As such, no amounts							
37	related to Electric Vehicle DCFC stations are included in the 2021 actual rate base amounts in this report.							

FORTISBC INC.

2021 RATE BASE
- EXPLANATION OF VARIANCES FROM 2021 APPROVED

FORTISBC INC.
UTILITY RATE BASE
COMPARISON OF 2021 APPROVED TO 2021 NORMALIZED RESULTS

($ MILLIONS)

Particulars	2021 Approved	2021 Normal	Variance	Reasons for Difference
PLANT IN SERVICE, BEGINNING	$ 2,162.8	$ 2,161.1	$ (1.7)	
ADDITIONS TO ELECTRIC PLANT IN SERVICE				
Additions/Transfers/Adjustments	$ 144.0	$ 127.0	$ (17.0)	Variance mainly due to differences in the timing of when CPCN amounts are placed into service, with the majority of the 2021 variance related to the Grand Forks terminal station.
Disposals/Retirements	$ (17.2)	$ (29.3)	$ (12.1)	Variance mainly due to retirement of services on customer premises no longer in-use.

FORTISBC INC.
UTILITY RATE BASE
COMPARISON OF 2021 APPROVED TO 2021 NORMALIZED RESULTS
($ MILLIONS)

Particulars	2021 Approved	2021 Normal	Variance	Reasons for Difference
CONTRIBUTIONS IN AID OF CONSTRUCTION	$ (232.3)	$ (223.3)	$ 9.0	
ACCUMULATED DEPRECIATION/CIAC AMORTIZATION	$ (615.8)	$ (564.8)	$ 51.0	Variance primarily relates to the difference between actual and approved removal costs, as well as the variance in retirements discussed on Page 2.1.1.
ADJUSTMENT TO 13-MONTH AVERAGE	$ 20.2	$ (0.1)	$ (20.3)	Variance due to timing differences.
WORK IN PROGRESS, NO AFUDC	$ 11.2	$ 34.3	$ 23.1	Variance due to timing differences.
UNAMORTIZED DEFERRED CHARGES	$ 25.7	$ 25.1	$ (0.6)	See Page 11 for details.

FORTISBC INC.
UTILITY RATE BASE
COMPARISON OF 2021 APPROVED TO 2021 NORMALIZED RESULTS

($ MILLIONS)

Particulars	2021 Approved	2021 Normal	Variance	Reasons for Difference
CASH WORKING CAPITAL				
Cash Required for Operating Expenses	$ 6.8	$ 6.9	$ 0.1	
Less – Funds Available:				
Customer Loans	0.5	0.4	(0.1)	
Employee Loans	0.3	0.5	0.2	
Withholdings From Employees	(2.2)	(2.3)	(0.1)	
Average	$ 5.4	$ 5.5	$ 0.1	
OTHER WORKING CAPITAL				
Inventories	$ 0.6	$ 0.6	$ -	

SCHEDULE NOT APPLICABLE

FORTISBC INC.
CAPITAL EXPENDITURES
($000)

Line No.	Particulars	2021 Approved Total CapEx	2021 Actual Total CapEx	Difference	Cross Reference
	(1)	(2)	(3)	(4)	(5)
1	**Forecast Capital Expenditures**				
2	Growth Capital	$ 23,042	$ 21,865	$ (1,177)	
3	Sustainment Capital	49,818	49,601	(218)	
4	Other Capital	14,712	15,349	637	
5	Total Forecast Capex	$ 87,573	$ 86,815	$ (758)	
6					
7	**Flowthrough Capital Expenditures**				
8	Wildfire	-	1,921	1,921	
9					
10	**Total Capital Expenditures Before CIAC**	$ 87,573	$ 88,736	$ 1,163	
11	Add: AFUDC	542	338	(204)	
12	**Total Capital Expenditures Before CIAC and including AFUDC**	$ 88,115	$ 89,074	$ 959	
13			Page 5, Line 16		

FORTISBC INC.
CAPITAL EXPENDITURES TO PLANT RECONCILIATION
($000)

Line No.	Particulars	Approved 2021	Actual 2021	Difference Increase (Decrease)
	(1)	(2)	(3)	(4)
1	CPCNs and Special Projects			
2				
3	Opening Work in Progress	$ 52,289	$ 48,074	$ (4,215)
4				
5	Add - Capital Expenditures (including AFUDC)	23,795	30,621	6,826
6				
7	Less - Closing Work in Progress	(35,677)	(50,579)	(14,902)
8				
9	Total Plant Additions - CPCNs and Special Projects	$ 40,407	$ 28,116	$ (12,291)
10				
11				
12	Non-CPCNs			
13				
14	Opening Work in Progress	$ 6,179	$ 13,348	$ 7,169
15				
16	Add - Capital Expenditures (including AFUDC)	88,115	89,074	959
17				
18	Less - Closing Work in Progress	(462)	(13,352)	(12,891)
19				
20	Non-CPCN Additions to Plant in Service	93,832	89,069	(4,763)
21				
22	Add: Capitalized Overheads	9,795	9,795	-
23				
24	Total Plant Additions - Non-CPCNs	$ 103,626	$ 98,864	$ (4,763)

FORTISBC INC.
ADDITIONS TO PLANT IN SERVICE - CPCNs AND SPECIAL PROJECTS
SUMMARY OF SIGNIFICANT PROJECTS
($000)

Line No.	Particulars	Actual 2020	Actual 2021	Difference Increase (Decrease)
	(1)	(2)	(3)	(4)
1	Significant Projects - CPCNs and Special Projects			
2				
3	Opening WIP			
4	Corra Linn Spillway Gate Replacement	$ 32,794	$ 35,725	$ 2,931
5	Grand Forks Terminal Station	1,112	4,803	3,691
6	Upper Bonnington Old Units Refurbishment	9,510	6,890	(2,620)
7	Playmor Substation Rebuild Project	-	656	656
8	Kelowna Bulk Transformer Capacity Addition	-	-	-
9				
10	Sub-Total	43,415	48,074	4,659
11				
12	Add: Capital Expenditures (excluding AFUDC)			
13	Corra Linn Spillway Gate Replacement	13,122	9,504	(3,618)
14	Grand Forks Terminal Station	3,545	1,909	(1,636)
15	Upper Bonnington Old Units Refurbishment	5,732	1,652	(4,080)
16	Playmor Substation Rebuild Project	650	6,309	5,659
17	Kelowna Bulk Transformer Capacity Addition	-	9,242	9,242
18				
19	Sub-Total	23,049	28,618	5,569
20				
21	Add: AFUDC			
22	Corra Linn Spillway Gate Replacement	1,649	1,239	(410)
23	Grand Forks Terminal Station	146	340	194
24	Upper Bonnington Old Units Refurbishment	230	39	(191)
25	Playmor Substation Rebuild Project	7	204	197
26	Kelowna Bulk Transformer Capacity Addition	-	181	181
27				
28	Sub-Total	2,032	2,003	(28)
29				
30	Less: Closing WIP			
31	Corra Linn Spillway Gate Replacement	35,725	25,221	(10,504)
32	Grand Forks Terminal Station	4,803	7,053	2,249
33	Upper Bonnington Old Units Refurbishment	6,890	1,713	(5,177)
34	Playmor Substation Rebuild Project	656	7,169	6,513
35	Kelowna Bulk Transformer Capacity Addition	-	9,424	9,424
36				
37	Sub-Total	48,074	50,579	2,505
38				
39	Additions to Electric Plant in Service			
40	Corra Linn Spillway Gate Replacement	11,840	21,248	9,408
41	Grand Forks Terminal Station	-	-	-
42	Upper Bonnington Old Units Refurbishment	8,582	6,868	(1,713)
43	Playmor Substation Rebuild Project	-	-	-
44	Kelowna Bulk Transformer Capacity Addition	-	-	-
45				
46	Total CPCN and Special Projects Additions	$ 20,421	$ 28,116	$ 7,695

FORTISBC INC.
PLANT IN SERVICE
($000)

Line No.	B.C.U.C. Account	Approved Ending 2021	Balance 12/31/2020	2021 CPCN's	2021 Capitalized Overhead	2021 Additions	2021 Retirements	2021 Other Adjustments	Balance 12/31/2021
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	**HYDRAULIC PRODUCTION PLANT**								
2	330 Land Rights	$ 962	$ 962	$ -	$ -	$ -	$ -	$ -	$ 962
3	331 Structures and Improvements	20,608	19,979	-	96	59	-	-	20,134
4	332 Reservoirs, Dams & Waterways	46,188	52,995	21,588	733	6,373	(304)	-	81,385
5	333 Water Wheels, Turbines and Gen.	148,044	115,641	4,770	66	581	(9)	-	121,049
6	334 Accessory Equipment	57,734	48,764	1,733	13	108	(32)	-	50,585
7	335 Other Power Plant Equipment	47,664	45,990	-	0	4	-	-	45,994
8	336 Roads, Railways and Bridges	1,287	1,287	-	-	-	-	-	1,287
9	**TOTAL HYDRAULIC PRODUCTION PLANT**	322,488	285,616	28,090	909	7,126	(344)	-	321,397
10									
11	**TRANSMISSION PLANT**								
12	350 Land Rights - R/W	$ 10,223	$ 9,080	$ -	$ 11	$ 100	$ -	$ -	$ 9,191
13	350.1 Land Rights - Clearing	9,448	8,306	-	11	100	-	-	8,417
14	353 Station Equipment	256,343	242,956	25	267	2,967	(343)	-	245,873
15	355 Poles, Towers & Fixtures	122,810	119,618	-	578	5,475	(1,084)	-	124,586
16	356 Conductors and Devices	119,901	116,703	-	578	5,475	(364)	-	122,392
17	359 Roads and Trails	1,283	1,121	-	-	-	-	-	1,121
18	**TOTAL TRANSMISSION PLANT**	520,008	497,785	25	1,445	14,117	(1,791)	-	511,581
19									
20	**DISTRIBUTION PLANT**								
21	360 Land Rights - R/W	$ 7,185	$ 7,681	$ -	$ 78	$ 688	$ -	$ -	$ 8,448
22	360.1 Land Rights - Clearing	11,630	11,743	-	36	315	-	-	12,094
23	362 Station Equipment	288,076	265,660	-	1,167	11,055	(2,275)	-	275,607
24	364 Poles, Towers & Fixtures	248,039	237,000	-	1,240	11,106	(197)	-	249,149
25	365 Conductors and Devices	416,018	382,693	-	1,937	17,324	(621)	-	401,333
26	368 Line Transformers	187,007	186,854	-	1,306	11,984	(2,387)	-	197,758
27	369 Services	9,521	9,521	-	-	-	(6,090)	-	3,431
28	370 Meters	49	49	-	-	-	(3)	-	45
29	370.1 AMI Meters	41,281	42,336	-	48	452	(1,450)	-	41,386
30	371 Installation on Customers' Premises	938	938	-	-	-	(938)	-	1
31	373 Street Lighting and Signal System	14,123	13,869	-	15	144	(25)	-	14,003
32	**TOTAL DISTRIBUTION PLANT**	1,223,868	1,158,344	-	5,827	53,068	(13,985)	-	1,203,254

FORTISBC INC.
PLANT IN SERVICE
($000)

Line No.	B.C.U.C. Account	Approved Ending 2021	Balance 12/31/2020	2021 CPCN's	2021 Capitalized Overhead	2021 Additions	2021 Retirements	2021 Other Adjustments	Balance 12/31/2021
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	**GENERAL PLANT**								
2	389 Land	$ 11,105	$ 11,105	$ -	$ -	$ -	$ -	$ -	$ 11,105
3	390 Structures - Frame & Iron	-	-	-	-	-	-	-	-
4	390.1 Structures - Masonry	47,717	46,633	-	267	2,347	-	-	49,247
5	390.2 Operation Building	18,416	16,762	-	58	514	(18)	-	17,316
6	390.1 Leasehold Improvements	2,872	2,914	-	-	-	-	-	2,914
7	391 Office Furniture & Equipment	5,354	5,386	-	21	182	(243)	-	5,345
8	391.1 Computer Equipment	13,195	15,052	-	317	2,808	(4,825)	-	13,352
9	391.2 Computer Software	41,345	44,755	-	618	5,982	(4,188)	-	47,168
10	391.2 AMI Software	12,266	9,586	-	-	(3)	-	-	9,583
11	392.1 Light Duty Vehicles	5,876	5,148	-	53	462	(517)	-	5,146
12	392.1 Heavy Duty Vehicles	27,211	26,902	-	128	1,301	(838)	-	27,493
13	394 Tools and Work Equipment	8,869	9,049	-	87	592	(860)	-	8,869
14	397 Communication Structures & Equipment	13,799	10,787	-	65	574	(1,708)	-	9,718
15	397.1 Fibre	10,316	10,319	-	-	-	(3)	-	10,316
16	397.2 AMI Communication Structures & Equipment	4,970	4,970	-	-	-	-	-	4,970
17	**TOTAL GENERAL PLANT**	223,312	219,369	-	1,613	14,759	(13,199)	-	222,542
18									
19									
20	**TOTAL PLANT IN SERVICE**	$ 2,289,676	$ 2,161,114	$ 28,116	$ 9,795	$ 89,069	$ (29,320)	$ -	$ 2,258,774
21									
22	Cross References	#2	#2	#2	#2	#2	#2	#2	#2

FORTISBC INC.
13 MONTH ADJUSTMENT FOR TIMING OF CAPITAL ADDITIONS
($000)

Line No.	Particulars	Opening	January	February	March	April	May	June	July	August	September	October	November	December	Total 2021
1	Capital Additions net of CIAC	$ -	$ 3,626	$ 3,669	$ 4,394	$ 4,171	$ 4,427	$ 7,038	$ 3,817	$ 5,560	$ 10,115	$ 5,145	$ 9,442	$ 29,171	$ 90,575
2	CPCN / Opening Adjustments	28,116													28,116
3															
4															
5	Cumulative Additions	$ 28,116	$ 31,742	$ 35,411	$ 39,805	$ 43,977	$ 48,403	$ 55,441	$ 59,258	$ 64,818	$ 74,933	$ 80,078	$ 89,520	$ 118,690	$ 118,690
6															
7															
8															
9											Mid-Year Average Plant in Service				$ 59,345
10											13 Month Average Plant in Service				$ 59,246
11															
12											Adjustment to 13- Month Average				$ (99)
13															
14	Cross Reference														#2

FORTISBC INC.
CAPITAL WORK IN PROGRESS
($000)

Line No.	Particulars	Approved 2021	Actual 2021 Total C.W.I.P. (115/116)	Actual 2021 C.W.I.P. Not Earning AFUDC	Difference
	(1)	(2)	(3)	(4)	(5)
1	Balance December 31, 2020		$ 71,763	$ 19,853	
2					
3	Adjustment for January 1, 2021 CPCN Additions		(28,116)	-	
4					
5	Balance January 1, 2021		43,647	19,853	
6	January 31		46,488	27,364	
7	February 28		50,460	28,960	
8	March 31		54,626	31,199	
9	April 30		59,375	33,579	
10	May 31		63,851	36,351	
11	June 30		68,006	37,591	
12	July 31		73,866	40,726	
13	August 31		80,579	43,834	
14	September 30		80,215	40,387	
15	October 31		84,701	42,657	
16	November 30		90,916	45,655	
17	December 31		75,363	17,820	
18					
19	Total		$ 872,094	$ 445,976	
20					
21	Average	$ 11,228		$ 34,306	$ 23,078
22					
23	Cross References	#2		#2	#2

FORTISBC INC.
ACCUMULATED DEPRECIATION CONTINUITY SCHEDULE
($000)

Line No.	Account	Gross Plant for Depreciation	Annual Depreciation Rate %	2021 Depreciation (incl. Salvage)	2021 Other Adjustments	2021 Retirements	2021 Cost of Removal	Accumulated Balance 12/31/2020	Accumulated Balance 12/31/2021
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	HYDRAULIC PRODUCTION PLANT								
1	330 Land Rights	$ 962	1.07%	$ 10	$ -	$ -	$ -	$ (403)	$ (392)
2	331 Structures and Improvements	19,979	1.68%	336	-	-	-	5,278	5,613
3	332 Reservoirs, Dams & Waterways	74,583	1.90%	1,417	-	(304)	(4,364)	446	(2,805)
4	333 Water Wheels, Turbines and Gen.	120,410	1.79%	2,155	-	(9)	(8)	21,692	23,830
5	334 Accessory Equipment	50,496	3.13%	1,136	-	(32)	(306)	13,152	13,950
6	335 Other Power Plant Equipment	45,990	2.12%	1,419	-	-	-	19,029	20,448
7	336 Roads, Railways and Bridges	1,287	1.44%	19	-	-	-	439	457
8	**TOTAL HYDRAULIC PRODUCTION PLANT**	313,707		6,492	-	(344)	(4,678)	59,631	61,101
9									
10	**TRANSMISSION PLANT**								
11	350 Land Rights - R/W	$ 9,080	0.00%	$ -	$ -	$ -	$ -	$ (0)	$ (0)
12	350.1 Land Rights - Clearing	8,306	1.27%	105	-	-	-	2,256	2,361
13	353 Station Equipment	242,982	2.33%	5,662	-	(343)	(374)	92,421	97,366
14	355 Poles, Towers & Fixtures	119,618	2.52%	3,014	-	(1,084)	(1,103)	33,828	34,655
15	356 Conductors and Devices	116,703	2.52%	2,941	-	(364)	(1,103)	27,489	28,963
16	359 Roads and Trails	1,121	1.96%	22	-	-	-	391	413
17	**TOTAL TRANSMISSION PLANT**	497,810		11,744	-	(1,791)	(2,580)	156,386	163,758
18									
19	**DISTRIBUTION PLANT**								
20	360 Land Rights - R/W	$ 7,681	0.00%	$ -	$ -	$ -	$ -	$ 16	$ 16
21	360.1 Land Rights - Clearing	11,743	1.25%	147	-	-	-	2,665	2,811
22	362 Station Equipment	265,660	2.61%	6,934	-	(2,275)	(366)	81,261	85,555
23	364 Poles, Towers & Fixtures	237,000	2.73%	6,470	-	(197)	(1,332)	69,601	74,543
24	365 Conductors and Devices	382,693	2.38%	9,108	-	(621)	(2,149)	114,516	120,855
25	368 Line Transformers	186,854	3.13%	5,825	-	(2,387)	(816)	40,469	43,090
26	369 Services	9,521	0.51%	18	-	(6,090)	-	6,688	615
27	370 Meters	49	6.68%	3	-	(3)	-	1,233	1,233
28	370.1 AMI Meters	42,336	6.25%	2,646	-	(1,450)	-	6,513	7,709
29	371 Installation on Customers' Premises	938	0.00%	-	-	(938)	-	938	(0)
30	373 Street Lighting and Signal System	13,869	4.95%	687	-	(25)	-	5,095	5,757
31	**TOTAL DISTRIBUTION PLANT**	1,158,344		31,837	-	(13,985)	(4,663)	328,995	342,183

FORTISBC INC.
ACCUMULATED DEPRECIATION CONTINUITY SCHEDULE (CONT'D)
($000)

Line No.	Account	Gross Plant for Depreciation	Annual Depreciation Rate %	2021 Depreciation (incl. Salvage)	2021 Other Adjustments	2021 Retirements	2021 Cost of Removal	Accumulated Balance 12/31/2020	Accumulated Balance 12/31/2021
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	**GENERAL PLANT**								
2	389 Land	$ 11,105	0.00%	$ -	$ -	$ -	$ -	$ 34	$ 34
3	390 Structures - Frame & Iron	-	0.56%	-	-	-	-	-	-
4	390.1 Structures - Masonry	46,633	2.53%	1,180	-	-	-	10,330	11,510
5	390.2 Operation Building	16,762	1.63%	273	-	(18)	-	6,438	6,693
6	390.1 Leasehold Improvements	2,914	1.63%	16	-	-	-	2,578	2,594
7	391 Office Furniture & Equipment	5,386	4.42%	238	-	(243)	-	1,528	1,524
8	391.1 Computer Equipment	15,052	21.60%	3,251	-	(4,825)	-	6,458	4,885
9	391.2 Computer Software	44,755	8.96%	4,010	-	(4,188)	-	17,891	17,713
10	391.2 AMI Software	9,586	10.00%	959	-	-	-	5,311	6,270
11	392.1 Light Duty Vehicles	5,148	3.81%	261	-	(517)	182	3,213	3,139
12	392.1 Heavy Duty Vehicles	26,902	6.50%	1,760	-	(838)	-	7,215	8,137
13	394 Tools and Work Equipment	9,049	4.11%	365	-	(860)	-	4,572	4,077
14	397 Communication Structures & Equipment	10,787	3.44%	306	-	(1,708)	(11)	6,939	5,527
15	397.1 Fibre	10,319	6.97%	719	-	(3)	-	5,649	6,365
16	397.2 AMI Communication Structures & Equipment	4,970	6.67%	331	-	-	-	1,731	2,062
17	**TOTAL GENERAL PLANT**	219,369		13,670	-	(13,199)	171	79,887	80,529
18									
19		$ 2,189,230		$ 63,743	$ -	$ (29,320)	$ (11,750)	$ 624,899	$ 647,572
20									
21	Cross References			#21				#2	#2

SCHEDULE NOT APPLICABLE

FORTISBC INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION
($000)

Line No.	Particulars	Approved Ending 2021	Balance 12/31/2020	Adjustment	2021 Additions	Retirements	Balance 12/31/2021	Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	**CIAC**	$ 232,291	$ 215,893		$ 8,289	$ (922)	$ 223,260	$ 9,031
2								
3	**Amortization**	(84,283)	(79,349)		(4,318)	922	(82,745)	(1,538)
4								
5	**NET CIAC**	$ 148,008	$ 136,545	$ -	$ 3,971	$ -	$ 140,516	$ 7,492
6								
7								
8	Cross References	#2	#2	#2	#21		#2	

SCHEDULE NOT APPLICABLE

FORTISBC INC.
UNAMORTIZED DEFERRED CHARGES AND AMORTIZATION - RATE BASE
($000)

Line No.	Particulars	Fcst Mid-Year 2021	Balance 12/31/2020	Opening Bal. Transfer / Adjustment	Gross Additions	Less-Taxes	Net Additions	Amortization Expense	Balance 12/31/2021	Mid-Year Average 2021	Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Forecasting Variance Accounts										
2	BCUC Levies Variance Account	$ -	$ (9)	$ -	$ 18	$ (5)	$ 13	$ -	$ 4	$ (3)	$ (3)
3											
4	Rate Smoothing Accounts										
5											
6	Benefits Matching Accounts										
7	Demand-Side Management	32,107	30,282	-	12,679	(3,423)	9,256	(5,040)	34,498	32,390	283
8	Deferred Debt Issue Costs	3,929	3,805	-	-	(69)	(69)	(178)	3,558	3,682	(247)
9	Preliminary and Investigative Charges [1]	1,658	790	-	316	-	316	-	1,106	948	(710)
10	Annual Reviews for 2020-2024 Rates	91	122	-	165	(45)	120	(102)	140	131	40
11	2020 Cost of Service Analysis	66	27	-	6	(2)	4	-	32	29	(37)
12	2021 Long-Term Electric Resource Plan	243	100	-	187	(50)	137	-	237	169	(74)
13	BCUC Initiated-Inquiry Costs	88	142	-	49	(13)	36	(172)	6	74	(14)
14	MRS 2021 Audit	128	-	-	323	(87)	236	-	236	118	(10)
15	2021 Generic Cost of Capital Proceeding	-	-	-	74	(20)	54	-	54	27	27
16											
17	Retroactive Expense Accounts										
18											
19	Other Accounts										
20	Pension & OPEB Liability	(14,166)	(13,063)	-	284	-	284	-	(12,779)	(12,921)	1,245
21	Indigenous Relations Agreement (Huth Substation)	-	-	-	-	-	-	-	-	-	-
22	COVID-19 Customer Recovery Fund	1,552	704	-	(387)	(46)	(433)	-	271	488	(1,064)
23											
24	**Total Rate Base Deferral Accounts**	$ 25,696	$ 22,900	$ -	$ 13,714	$ (3,760)	$ 9,954	$ (5,493)	$ 27,362	$ 25,132	$ (564)
25	Cross Reference							#21			
26											
27	Notes:										
28	[1] Additions are net of transfers to Construction Work in Progress										

FORTISBC INC.
UNAMORTIZED DEFERRED CHARGES AND AMORTIZATION - NON-RATE BASE
($000)

Line No.	Particulars	Fcst Mid-Year 2021	Balance 12/31/2020	Opening Bal. Transfer / Adjustment	Gross Additions	Less-Taxes	Net Additions	Amortization Expense	Balance 12/31/2021	Mid-Year Average 2021	Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	**Deferral Accounts Financed at the Short Term Interest Rate**										
2											
3	Forecasting Variance Accounts										
4	Pension & Other Post Employment Benefits (OPEB) Variance	$ (795)	$ (905)	$ -	$ 645	$ -	$ 645	$ 706	$ 446	$ (230)	$ 565
5											
6	Rate Smoothing Accounts										
7											
8	Benefits Matching Accounts										
9	Tariff Applications	-	-	-	13	(4)	9	-	9	5	5
10											
11	Retroactive Expense Accounts										
12											
13	Other Accounts										
14											
15	**Total Non Rate Base Deferral Accounts Financed at Short Term Interest**	$ (795)	$ (905)	$ -	$ 658	$ (4)	$ 654	$ 706	$ 455	$ (225)	$ 570
16											
17	Financing Costs at STI	$ (57)	$ (94)	$ -	$ (6)	$ -	$ (6)	$ 96	$ (4)	$ (49)	$ 8

FORTISBC INC.
UNAMORTIZED DEFERRED CHARGES AND AMORTIZATION - NON-RATE BASE
($000)

Line No.	Particulars	Fcst Mid-Year 2021	Balance 12/31/2020	Opening Bal. Transfer / Adjustment	Gross Additions	Less-Taxes	Net Additions	Amortization Expense	Balance 12/31/2021	Mid-Year Average 2021	Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	**Deferral Accounts Financed at Weighted Average Cost of Debt**										
2											
3	Forecasting Variance Accounts										
4											
5	Rate Smoothing Accounts										
6	2018-2019 Revenue Surplus	$ (1,978)	$ (3,956)	$ -	$ 5,420	$ (1,464)	$ 3,956	$ -	$ -	$ (1,978)	$ -
7											
8	Benefits Matching Accounts										
9	CPCN Projects Preliminary Engineering [1]	215	430	-	(430)	-	(430)	-	-	215	-
10	2016 Long Term Electric Resource Plan	155	207	-	-	-	-	(103)	104	156	1
11	2017 Rate Design Application	413	472	-	-	-	-	(118)	354	413	-
12	2020-2024 Multi-Year Rate Plan Application	471	570	-	-	-	-	(135)	435	503	32
13	2019-2022 Multi-Year DSM Expenditure Schedule	54	72	-	-	-	-	(36)	36	54	-
14	2018 Joint Pole Use Audit	40	53	-	-	-	-	(26)	27	40	-
15	EV Charging Stations Rate Design and Tariff Application	127	68	-	89	(24)	65	-	133	101	(26)
16											
17	Retroactive Expense Accounts										
18											
19	Other Accounts										
20	US GAAP Pension and OPEB Transitional Obligation	868	1,042	-	(347)	-	(347)	-	695	869	1
21	Advanced Metering Infrastructure Radio-Off Shortfall	60	73	-	-	-		(24)	49	61	1
22											
23	**Total Non Rate Base Deferral Accounts Financed at Weighted Average Cost of Debt**	$ 425	$ (969)	$ -	$ 4,732	$ (1,488)	$ 3,244	$ (442)	$ 1,833	$ 434	$ 9
24											
25	Financing Costs at WACD	$ (2)	$ (18)	$ -	$ 21	$ -	$ 21	$ 24	$ 27	$ 5	$ 7
26											
27	Notes:										
28	[1] Gross additions for CPCN Projects Preliminary Engineering after transfers to Construction Work in Progress										

FORTISBC INC.
UNAMORTIZED DEFERRED CHARGES AND AMORTIZATION - NON-RATE BASE
($000)

Line No.	Particulars	Fcst Mid-Year 2021	Balance 12/31/2020	Opening Bal. Transfer / Adjustment	Gross Additions	Less-Taxes	Net Additions	Amortization Expense	Balance 12/31/2021	Mid-Year Average 2021	Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	**Deferral Accounts Financed at Weighted Average Cost of Capital**										
2											
3	Forecasting Variance Accounts										
4	Flow-Through Account (2020-2024)	$ -	$ 213	$ -	$ (8,758)	$ -	$ (8,758)	$ -	$ (8,545)	$ (4,166)	$ (4,166)
5											
6	Rate Smoothing Accounts										
7											
8	Benefits Matching Accounts										
9	On Bill Financing (OBF) Participant Loans	4	2	-	-	-	-	-	2	2	(2)
10											
11	Retroactive Expense Accounts										
12											
13	Other Accounts										
14	MRP Earnings Sharing Account	-	(872)	-	(911)	246	(665)	-	(1,537)	(1,205)	(1,205)
15	2021 Forecast Cost of Removal Revenue Deficiency	-	-	-	254	-	254	-	254	127	127
16											
17	**Total Non Rate Base Deferral Accounts Financed at Weighted Average Cost of Capital**	$ 4	$ (657)	$ -	$ (9,415)	$ 246	$ (9,169)	$ -	$ (9,826)	$ (5,242)	$ (5,246)
18											
19	Financing Costs at WACC	$ -	$ (28)	$ -	$ (333)	$ -	$ (333)	$ -	$ (361)	$ (195)	$ (195)
20											
21											
22	**Deferral Accounts Non-Interest Bearing**										
23											
24	Kettle Valley Future Development	$ 50	$ 50	$ -	$ -	$ -	$ -	$ -	$ 50	$ 50	$ -
25											
26	**Total Non-Interest Bearing Non Rate Base Deferral Accounts**	$ 50	$ 50	$ -	$ -	$ -	$ -	$ -	$ 50	$ 50	$ -
27											
28											
29	**Total Non Rate Base Deferral Accounts (including financing)**	**$ (375)**	**$ (2,621)**	**$ -**	**$ (4,343)**	**$ (1,246)**	**$ (5,589)**	**$ 383**	**$ (7,826)**	**$ (5,222)**	**$ (4,847)**
30	Cross Reference							#21			

FORTISBC INC.
FLOW-THROUGH CALCULATION
FOR THE YEAR ENDING DECEMBER 31, 2021
($000s)

Line No.	Particulars	Reference	2021 Approved	2021 Actual	After-Tax Flow-Through Variance	Variance Subject to Sharing
	(1)	(2)	(3)	(4)	(5)	(6)
1	**Total Revenue**	Page 16, -Line 5	(387,642)	(404,247)	(16,605)	-
2						
3	**Total Power Purchase Expense**	Page 18, Line 13	144,977	152,473	7,496	-
4						
5	**Total Wheeling**	Page 18, Line 24	5,714	6,000	286	-
6						
7	**Total Water Fees**	Page 18, Line 29	10,868	10,741	(127)	-
8						
9	**Net O&M Expense**					
10	Index Based O&M	Page 20, Line 1	62,261	58,880	-	(3,381)
11	Pension & OPEB	Page 20, Line 4	775	775	-	-
12	Insurance	Page 20, Line 5	1,916	1,924	8	-
13	BCUC Fees	Page 20, Line 6	350	350	-	-
14	MRS	Page 20, Line 7	-	52	52	-
15	Wildfires	Page 20, Line 8	-	155	155	-
16	Capitalized Overhead	Page 20, Line 11	(9,795)	(9,795)	-	-
17	**Total Net O&M Expense**	Page 16, Line 9	55,506	52,340		
18						
19	**Depreciation and Amortization**					
20	Amortization of Deferrals	Page 21, Lines 5 - 6	5,110	5,110	-	-
21	Depreciation variance on Clean Growth Projects/CPCNs		-	(301)	(301)	-
22	CIAC Amortization variance on Clean Growth Projects/CPCNs		-	-	-	-
23	All Other Depreciation/CIAC Amortization variances	Page 21, Line 11 - (Lines 20 - 22 above)	59,560	59,912	-	352
24	**Total Depreciation and Amortization**	Page 16, Line 10	64,670	64,721		
25						
26	**Total Property Taxes**	Page 16, Line 11	18,242	17,262	(980)	-
27						
28	**Other Revenues**					
29	Apparatus and Facilities Rental	Page 23, - Line 1	(5,930)	(5,751)	-	179
30	Contract Revenue	Page 23, - Line 2	(3,088)	(3,283)	-	(195)
31	Transmission Access Revenue	Page 23, - Line 3	(1,501)	(1,533)	-	(32)
32	Interest Income	Page 23, - Line 4	(20)	(29)	-	(9)
33	Late Payment Charges	Page 23, - Line 5	(829)	(892)	-	(63)
34	Connection Charges	Page 23, - Line 6	(476)	(601)	-	(125)
35	Other Recoveries	Page 23, - Line 7	(377)	(313)	-	64
36	**Total Other Revenues**	Page 16, Line 12	(12,221)	(12,404)		
37						
38	**Interest Expense**					
39	Long-term debt interest expense variance	Page 26, Line 11	41,714	40,251	(1,463)	-
40	Interest variance on Clean Growth Projects/CPCNs		-	(59)	(59)	-
41	Short-term debt rate variance		-	(593)	(593)	-
42	Short-term debt volume variance from long-term debt issue variance		-	303	303	-
43	Short-term debt timing variance from long-term debt issue timing		-	-	-	-
44	Remaining short-term debt (Volume variance from actual rate base)	Page 26, Line 5 - (Lines 40 - 43 above)	933	1,121	-	188
45	**Total Interest Expense**	Page 24.1, Line 15	42,647	41,023		
46						
47	**Income Tax Expense**					
48	Income tax variance on Clean Growth Projects/CPCNs		-	48	48	-
49	Income tax/CCA rate changes		-	-	-	-
50	Income tax on taxable flowthrough variances above (excl. Clean Growth Projects/CPCNs)		-	3,097	3,097	-
51	Remaining income tax variance	Page 24, Line 15 - (Lines 48 - 50 above)	8,519	9,243	-	724
52	**Total Income Tax Expense**	Page 16, Line 17	8,519	12,388		
53						
54	**Total amounts subject to Flowthrough or Sharing**	Sum of Lines 1 through 51			**(8,684)**	**(2,299)**
55					Page 16, Line 16	Page 26.2, Line 20
56						
57	**EV DCFC Service Application 2018-2021 adjustment**	G-341-21	-	(74)	(74)	-
58						
59	**Total amount recorded in Flowthrough Deferral**	Sum of Lines 54 through 57			**(8,758)**	

FORTISBC INC.
WORKING CAPITAL ALLOWANCE
($000)

Line No.	Particulars	Approved 2021	Year Ended 12/31/2021 Actual	Normalization	Normal	Difference
	(1)	(2)	(3)	(4)	(5)	(6)
1	Revenue Lag Days	49.2	49.7	(0.1)	49.6	0.4
2						
3	Expense Lead Days	(39.4)	(39.5)	0.2	(39.3)	0.1
4						
5	Net Lag (Lead) Days	9.8	10.2	0.1	10.3	0.5
6						
7						
8	Cash Working Capital					
9	Cash Required for Operating Expenses [1]	$ 6,767	$ 7,037	$ (128)	$ 6,909	$ 142
10						
11	Add/Less - Funds Unavailable/(Funds Available):					
12	Customer Loans	470	353	-	353	(117)
13	Employee Loans	340	570	-	570	230
14	Employee Withholdings	(2,163)	(2,322)	-	(2,322)	(159)
15						
16	Average	5,414	5,637	(128)	5,509	95
17						
18	Other Working Capital Items					
19	Inventories	630	649	-	649	19
20						
21	Average - See Page 13.1	630	649	-	649	19
22						
23	Total	$ 6,044	$ 6,286	$ (128)	$ 6,158	$ 114
24						
25	Cross Reference	#2	#2	#2	#2	#2
26						
27	Notes:					
28	[1] Cash Required for Operating Expenses is calculated as Total Expenses from Page 14.1 Column 2 multiplied by Net lag					
29	(lead) days from row 5 above, divided by 365.					

FORTISBC INC.
OTHER WORKING CAPITAL ITEMS
FOR THE YEAR ENDED DECEMBER 31, 2021
($000)

Line No.	Particulars	Inventories	Total
	(1)	(2)	(3)
1	Approved 2021	$ 630	$ 630
2			
3	Actual (Average)	$ 649	$ 649
4			
5	Cross Reference	(150/151/154)	
6			
7	Balances- January 1	$ 593	$ 593
8	- January 31	625	625
9	- February 28	648	648
10	- March 31	645	645
11	- April 30	689	689
12	- May 31	658	658
13	- June 30	642	642
14	- July 31	655	655
15	- August 31	665	665
16	- September 30	665	665
17	- October 31	659	659
18	- November 30	652	652
19	- December 31	638	638
20			
21	Total	$ 8,435	$ 8,435
22			
23	Average	$ 649	$ 649
24			
25	Difference	$ 19	$ 19
26			
27			
28	Cross Reference	#13	#13

FORTISBC INC.
CASH WORKING CAPITAL
LAG TIME FROM DATE OF PAYMENT TO RECEIPT OF CASH
FOR THE YEAR ENDED DECEMBER 31, 2021
($000)

Line No.	Particulars	Revenue	Lag Days Service to Collection	Dollar Days	Reference
	(1)	(2)	(3)	(4)	(5)
1	REVENUE, RECORDED				
2					
3	Sales Revenue				
4	Residential Tariff Revenue	$ 204,573	56.0	$ 11,456,085	
5	Commercial Tariff Revenue	103,585	45.1	4,671,689	
6	Wholesale Tariff Revenue	52,104	37.5	1,953,918	
7	Industrial Tariff Revenue	37,841	38.0	1,437,959	
8	Lighting Tariff Revenue	2,177	34.6	75,329	
9	Irrigation Tariff Revenue	3,967	47.0	186,434	
10	Total Sales Revenue	404,247	48.9	19,781,414	#17
11					
12	Other Revenues				
13	Apparatus and Facilities Rental	5,751	90.0	517,583	#23
14	Contract Revenue	3,283	62.2	204,229	#23
15	Transmission Revenue	1,533	65.2	99,967	#23
16	Late Payment Charges	892	54.0	48,186	#23
17	Connection Charges	601	30.5	18,339	#23
18	Other Recoveries	343	63.4	21,738	#23
19					
20	Total Revenue	$ 416,651	49.7	$ 20,691,456	
21					
22					
23	REVENUE, NORMALIZED				
24					
25	Sales Revenue				
26	Residential Tariff Revenue	$ 198,165	56.0	$ 11,097,240	
27	Commercial Tariff Revenue	102,334	45.1	4,615,263	
28	Wholesale Tariff Revenue	50,187	37.5	1,882,013	
29	Industrial Tariff Revenue	37,841	38.0	1,437,958	
30	Lighting Tariff Revenue	2,177	34.6	75,324	
31	Irrigation Tariff Revenue	3,967	47.0	186,449	
32	Total Sales Revenue	394,671	48.9	19,294,247	#17
33					
34	Other Revenues				
35	Apparatus and Facilities Rental	5,751	90.0	517,583	#23
36	Contract Revenue	3,283	62.2	204,229	#23
37	Transmission Revenue	1,533	65.2	99,967	#23
38	Late Payment Charges	892	54.0	48,186	#23
39	Connection Charges	601	30.5	18,339	#23
40	Other Recoveries	343	63.4	21,738	#23
41					
42	Total Revenue	$ 407,075	49.6	$ 20,204,289	

FORTISBC INC.
CASH WORKING CAPITAL
LEAD TIME IN PAYMENT OF EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2021
($000)

Line No.	Particulars	Amount	Lead Days Expense to Payment	Dollar Days	Reference
	(1)	(2)	(3)	(4)	(5)
1	EXPENSES, RECORDED				
2					
3					
4	Power Purchases	$ 152,473	51.5	$ 7,852,362	#18
5	Wheeling	6,000	46.9	281,393	#18
6	Water Fees	10,741	1.4	15,037	#18
7	Operating and Maintenance	52,340	28.6	1,496,928	#20
8					
9	Taxes				
10	Property Taxes	17,262	4.9	84,584	#22
11	Goods and Service Tax	593	45.4	26,900	
12	Income Tax	12,388	15.2	188,298	#24
13					
14	Total	$ 251,797	39.5	$ 9,945,502	
15					
16					
17	EXPENSES, NORMALIZED				
18					
19					
20	Power Purchases	$ 146,489	51.5	$ 7,544,186	#18
21	Wheeling	6,000	46.9	281,393	#18
22	Water Fees	10,741	1.4	15,037	#18
23	Operating and Maintenance	52,340	28.6	1,496,928	#20
24					
25	Taxes				
26	Property Taxes	17,262	4.9	84,584	#22
27	Goods and Service Tax	593	45.4	26,900	
28	Income Tax	11,418	15.2	173,554	#24
29					
30	Total	$ 244,843	39.3	$ 9,622,582	

SCHEDULE NOT APPLICABLE

FORTISBC INC.
UTILITY INCOME AND EARNED RETURN
($000)

Line No.	Description	Reference	2021 Approved	Year Ended 12/31/2021 Actual	Normalization	Normal	Difference	Reasons for Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	**ENERGY VOLUMES**							
2	Sales Volume (GWh)	#17	3,374	3,459	(76)	3,383	9	
3								
4	**REVENUE**							
5	Sales	#17	$ 387,642	$ 404,247	$ (9,576)	$ 394,671	$ 7,029	
6								
7	**EXPENSES**							
8	Cost of Energy	#18	161,559	169,214	(5,984)	163,230	1,671	
9	Operation & Maintenance	#20	55,506	52,340	-	52,340	(3,166)	- See Page 16.1
10	Depreciation and Amortization	#21	64,670	64,721	-	64,721	51	- See Page 16.1
11	Property and Sundry Taxes	#22	18,242	17,262	-	17,262	(980)	- See Page 16.1
12	Other Operating Revenue	#23	(12,221)	(12,404)	-	(12,404)	(183)	- See Page 16.1
13	Deferred 2020/2021 Revenue Deficiency		(5,420)	(5,420)	-	(5,420)	-	
14			282,336	285,713	(5,984)	279,729	(2,607)	
15	Utility Income before Income Taxes		105,306	118,534	(3,592)	114,942	9,636	
16	Flow-Through (after-tax)	#12.3	-	8,684	(2,622)	6,062	6,062	- See Page 16.1
17	Income Taxes	#24	8,519	12,388	(970)	11,418	2,899	- See Page 16.1
18	**EARNED RETURN (before-sharing)**		$ 96,787	$ 97,462	$ (0)	$ 97,462	$ 675	
19	**UTILITY RATE BASE**	#2	$ 1,479,236	$ 1,505,738	$ (128)	$ 1,505,610	$ 26,375	
20								
21	**RETURN ON RATE BASE**	#26	6.54%	6.47%	0.00%	6.47%	-0.07%	

FORTISBC INC.

DIFFERENCE ANALYSIS

1. Operating and Maintenance Expenses

Operation and Maintenance Expense was $3.2 million lower than 2021 Approved with the differences summarized on Page 20. The 2021 Approved was derived by applying an inflation factor to an approved 2020 Base O&M unit cost and then multiplying that amount by the forecasted average number of customers to determine an inflation indexed O&M amount. O&M forecast outside the inflation indexed O&M amount is then added to derive the total 2021 Approved Gross O&M.

2. Depreciation and Amortization

The variance between forecast and actual depreciation and amortization is immaterial, with variances either recorded in the flow-through deferral account or subject to sharing.

3. Property Tax

The variance between forecast and actual property tax is recorded in the flow-through deferral account.

4. Other Revenue

The variance between forecast and actual other revenues is immaterial. Variances in other revenue are subject to sharing.

5. Flow-Through

The actual flow-through amount was a debit of $8.7 million in 2021 that will be returned to customers in future rates. See Page 12.3 for details.

6. Income Taxes

Differences on Page 24 also arise from various variances throughout the Annual Report, primarily in revenues, O&M expenses, and rate base as well as timing differences in calculating taxable income, which result in income tax being $2.9 million higher than Approved on a normalized basis. The variance between forecast and actual income taxes is either recorded in the flow-through deferral account or subject to sharing.

FORTISBC INC.
VOLUMES, REVENUE AND CUSTOMERS

Line No.	Description	Reference	2021 Approved	Year Ended 12/31/2021 Actual	Normalization	Normal	Difference	Reasons for Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	**ENERGY VOLUME (GWh)**							
2	Residential		1,255	1,394	(44)	1,350	95	
3	Commercial		952	972	(12)	960	8	
4	Wholesale		584	588	(22)	566	(18)	
5	Industrial		537	454	-	454	(83)	
6	Lighting		10	10	-	10	(0)	
7	Irrigation		36	43	-	43	7	
8	Total Sales Load Volume	#16	3,374	3,459	(76)	3,383	9	
9	Losses		290	305	(6)	299	9	
10	Total Gross Load Volume		3,664	3,764	(82)	3,682	18	
11								
12	**REVENUE ($000s)** [1]							
13	Residential		$ 184,235	$ 204,573	$ (6,408)	$ 198,165	$ 13,931	
14	Commercial		101,451	103,585	(1,251)	102,334	884	
15	Wholesale		51,623	52,104	(1,917)	50,187	(1,436)	
16	Industrial		44,776	37,841	(0)	37,841	(6,935)	
17	Lighting		2,261	2,177	(0)	2,177	(84)	
18	Irrigation		3,298	3,967	0	3,967	669	
19	Total Revenue	#16	$ 387,642	$ 404,247	$ (9,576)	$ 394,671	$ 7,029	
20								
21	**AVERAGE CUSTOMERS (000s)**							
22	Residential		124,361	125,911	-	125,911	1,550	
23	Commercial		16,413	16,390	-	16,390	(23)	
24	Wholesale		6	6	-	6	-	
25	Industrial		59	43	-	43	(16)	
26	Lighting		1,405	1,421	-	1,421	16	
27	Irrigation		1,082	1,106	-	1,106	24	
28	Total Average Customers		143,325	144,877	-	144,877	1,552	
29								
30	Notes:							
31	[1] Revenue is net of $53 thousand provided in 2021 for Evacuation Relief credits ($11 thousand provided in 2020 for comparison purposes).							

FORTISBC INC.
COST OF ENERGY
($000)

Line No.	Description	Reference	Year Ended 12/31/2021 Approved	Actual	Normalization	Normal	Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	**POWER PURCHASES**						
2	Gross Load (GWh)		3,664	3,764	(82)	3,682	18
3							
4	**Power Purchase Expense**						
5	Brilliant		$ 41,009	$ 41,014	$ -	$ 41,014	$ 5
6	BC Hydro PPA		47,440	43,333	(5,983)	37,350	(10,090)
7	Waneta Expansion		41,640	37,560	-	37,560	(4,080)
8	Market and Contracted Producers		14,751	26,453	-	26,453	11,702
9	Independent Power Producers		76	69	-	69	(7)
10	Self-Generators		61	1	-	1	(60)
11	CPA Balancing Pool		-	3,772	-	3,772	3,772
12	Special and Accounting Adjustments		-	270	-	270	270
13	**Total Power Purchase Expense**		$ 144,977	$ 152,473	$ (5,983)	$ 146,489	$ 1,512
14							
15	**WHEELING**						
16	**Wheeling Nomination (MW months)**						
17	Okanagan Point of Interconnection		2,400	2,400	-	2,400	-
18	Creston		420	420	-	420	-
19							
20	**Wheeling Expense**						
21	Okanagan Point of Interconnection		$ 4,694	$ 4,666	$ -	$ 4,666	$ (28)
22	Creston		535	532	-	532	(3)
23	Other		485	802	-	802	317
24	**Total Wheeling Expense**		$ 5,714	$ 6,000	$ -	$ 6,000	$ 286
25							
26	**WATER FEES**						
27	Plant Entitlement Use in previous year (GWh)		1,559	1,558	-	1,558	(1)
28							
29	**Total Water Fees**		$ 10,868	$ 10,741	$ -	$ 10,741	$ (127)
30							
31	**TOTAL COST OF ENERGY**		$ 161,559	$ 169,214	$ (5,983)	$ 163,230	$ 1,671

SCHEDULE NOT APPLICABLE

FORTISBC INC
OPERATION & MAINTENANCE EXPENSES
($000)

Line No.	Particulars	Year Ended 12/31/2021 Approved	Actual	Difference
	(1)	(2)	(3)	(4)
1	**Inflation Indexed O&M**	$ 62,261	$ 58,880	$ (3,381)
2				
3	**Flowthrough O&M**			
4	Pension/OPEB (O&M Portion)	775	775	-
5	Insurance	1,916	1,924	8
6	BCUC Fees	350	350	-
7	MRS	-	52	52
8	Wildfires	-	155	155
9				
10	**Total Gross O&M**	65,302	62,135	(3,166)
11	Less: Capitalized Overhead	(9,795)	(9,795)	-
12	**Net O&M Expense**	**$ 55,506**	**$ 52,340**	**$ (3,166)**

FORTISBC INC
OPERATION & MAINTENANCE EXPENSES - ACTIVITY VIEW
($000)

Line No.	Particulars	Reference	2021	2020	Increase (Decrease)
	(1)	(2)	(3)	(4)	(5)
1	Supervision & Administration	535R	$ 775	$ 910	$ (136)
2	Water Fees	536	10,741	10,968	(227)
3	Structures	542	1,236	1,172	64
4	Dams & Waterways	543	221	270	(48)
5	Electric Plant	544	1,146	1,038	107
6	Other Plant	545	410	328	81
7	**Generation Total**		**14,528**	**14,687**	**(159)**
8					
9	Purchased Power	555	152,473	139,354	13,119
10	System Control	556	2,479	2,583	(104)
11	**Other Power Supply Total**		**154,951**	**141,937**	**13,015**
12					
13	Supervision & Administration	560R-1	3,514	3,352	162
14	System Planning	560R-2	4,471	4,189	282
15	Load Dispatching	561	1,493	1,631	(138)
16	Transmission Station Expense	562	1,027	929	98
17	Transmission Line Maintenance	563R-1	537	505	32
18	Transmission Right of Way Maintenance	563R-2	1,065	955	111
19	Wheeling	565	6,000	5,846	155
20	Rents	567	3,444	3,275	170
21	Distribution Line Maintenance	583R-1	4,162	4,307	(145)
22	Distribution Right of Way Maintenance	583R-2	4,269	4,437	(168)
23	Meter Expenses	586	557	584	(26)
24	Distribution Station Expense	592	1,612	1,711	(99)
25	Street Lighting	596	72	84	(11)
26	Other Plant	598	720	633	87
27	**Transmission and Distribution Total**		**32,944**	**32,436**	**508**

FORTISBC INC
OPERATION & MAINTENANCE EXPENSES - ACTIVITY VIEW (CONT'D)
($000)

Line No.	Particulars	Reference	2021	2020	Increase (Decrease)
	(1)	(2)	(3)	(4)	(5)
1	Supervision & Administration	901	$ 1,585	$ 1,354	$ 230
2	Meter Reading	902	74	71	4
3	Customer Billing	903	1,421	1,325	96
4	Credit & Collections	904	1,019	995	24
5	Customer Assistance	910	1,966	1,889	76
6	**Customer Service Total**		**6,065**	**5,634**	**431**
7					
8	Executive and Senior Management	920.1	437	442	(6)
9	Legal and Regulatory	920.2	484	534	(50)
10	Human Resources	920.3	1,145	1,252	(107)
11	Finance and Accounting	920.4	1,169	1,175	(6)
12	Information Services	920.6	1,971	1,813	158
13	Materials Management	920.7	-	-	-
14	Other		(1,310)	(1,528)	218
15	Salaries Total	920	3,896	3,688	208
16					
17	Executive and Senior Management	921.1	6	7	(1)
18	Legal and Regulatory	921.2	483	480	3
19	Human Resources	921.3	95	78	18
20	Finance and Accounting	921.4	482	827	(345)
21	Information Services	921.6	1,738	1,860	(122)
22	Materials Management	921.7	336	305	32
23	Other		234	336	(102)
24	Expenses Total	921	3,374	3,893	(519)
25					
26	**Administrative and General Total**		**7,269**	**7,580**	**(311)**

FORTISBC INC
OPERATION & MAINTENANCE EXPENSES - ACTIVITY VIEW (CONT'D)
($000)

Line No.	Particulars	Reference	2021	2020	Increase (Decrease)
	(1)	(2)	(3)	(4)	(5)
1	Special Services	567	$ 2,686	$ 2,397	$ 289
2	Insurance	283R-1	1,224	1,080	144
3	Maintenance to General Plant	283R-2	1,635	1,555	80
4	Transportation Equipment Expenses	586	251	212	39
5	**Other Total**		**5,796**	**5,244**	**552**
6					
7	**Sub-Total**		**221,554**	**207,519**	**14,035**
8					
9	Less: Water Fees		(10,741)	(10,968)	227
10	Less: Power Purchases		(152,473)	(139,354)	(13,119)
11	Less: Wheeling		(6,000)	(5,846)	(155)
12					
13	**Net O&M Expense**		**$ 52,340**	**$ 51,352**	**$ 989**

FORTISBC INC.
DEPRECIATION AND AMORTIZATION EXPENSES
($000)

Line No.	Particulars	Reference	Year Ended 12/31/2021 Approved	Actual	Difference
	(1)	(2)	(3)	(4)	(5)
1	**Depreciation**				
2	Depreciation Expense	#7.1	$ 63,791	$ 63,743	$ (48)
3					
4	**Amortization**				
5	Rate Base Deferrals	#11	$ 5,493	$ 5,493	$ -
6	Non-Rate Base Deferrals	#12.2	(383)	(383)	-
7	Utility Plant Acquisition Adjustment		186	186	-
8	CIAC	#9	(4,417)	(4,318)	99
9			879	978	99
10					
11	Total Depreciation and Amortization Expense		$ 64,670	$ 64,721	$ 51

FORTISBC INC.
PROPERTY AND SUNDRY TAXES
($000)

Line No.	Particulars	Reference	2021 Approved	Year Ended 12/31/2021 Actual	Normalization	Normal	Difference	Reasons for Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Generating Plant		$ 3,087	$ 3,131	$ -	$ 3,131	$ 44	
2	Transmission and Distribution		8,075	7,001	-	7,001	(1,074)	
3	Substation Equipment		3,843	3,861	-	3,861	18	
4	Land and Buildings		1,112	1,130	-	1,130	18	
5	1% In-Lieu of Municipal Taxes		2,125	2,139	-	2,139	14	
6								
7	**Total Property Tax Expense**	#16	$ 18,242	$ 17,262	$ -	$ 17,262	$ (980)	

FORTISBC INC.
OTHER REVENUE
($000)

Line No.	Particulars	Reference	2021 Approved	Year Ended 12/31/2021 Actual	Normalization	Normal	Difference	Reasons for Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Apparatus and Facilities Rental		$ 5,930	$ 5,751	$ -	$ 5,751	$ (179)	
2	Contract Revenue		3,088	3,283	-	3,283	195	
3	Transmission Access Revenue		1,501	1,533	-	1,533	32	
4	Interest Income		20	29	-	29	9	
5	Late Payment Charges	(560)	829	892	-	892	63	
6	Connection Charges	(561)	476	601	-	601	125	
7	Other Recoveries	(579)	377	313	-	313	(64)	
8								
9	Total Other Revenue	#16	$ 12,221	$ 12,404	$ -	$ 12,404	$ 183	

FORTISBC INC.
INCOME TAXES
($000)

Line No.	Particulars	Reference	Approved 2021	Year Ended 12/31/2021 Actual	Normalization	Normal	Difference	Reasons for Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	CALCULATION OF INCOME TAXES							
2	Utility Income before Taxes	#16	$ 105,306	$ 118,534	$ (3,592)	$ 114,942	$ 9,636	
3	Deduct - Interest on Debt	#24.1	(42,647)	(41,023)	-	(41,023)	1,624	
4	Net Additions (Deductions)	#24.2	(31,107)	(31,629)	-	(31,629)	(522)	
5								
6	Taxable Income before Tax		$ 31,551	$ 45,882	$ (3,592)	$ 42,289	$ 10,738	
7								
8	Income Tax Rate (Current Tax)		27.000%	27.000%		27.000%	0.000%	
9	1 - Current Income Tax Rate		73.000%	73.000%		73.000%	0.000%	
10								
11								
12	Income Tax							
13	Current		$ 8,519	$ 12,388	$ (970)	$ 11,418	$ 2,899	
14	Prior Year Adjustments		-	-	-	-	-	
15	Total Income Tax	#16	$ 8,519	$ 12,388	$ (970)	$ 11,418	$ 2,899	

FORTISBC INC.
INTEREST EXPENSE FOR UTILITY PURPOSES
($000)

Line No.	Particulars	Reference	Approved 2021	Year Ended 12/31/2021 Actual	Normalization	Normal	Difference	Reasons for Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Utility Rate Base	#2	$ 1,479,236	$ 1,505,738	$ (128)	$ 1,505,610	$ 26,375	
2								
3	Weighted average embedded cost of debt							
4	in the capital structure							
5	Long-term debt	#26	2.82%	2.67%	0.00%	2.67%	-0.15%	
6	Unfunded debt	#26	0.06%	0.05%	0.00%	0.05%	-0.01%	
7								
8								
9			2.88%	2.72%	0.00%	2.72%	-0.16%	
10								
11								
12	Interest expense for income taxes							
13	related to utility operations							
14	(rate base x weighted average							
15	embedded cost of debt)		$ 42,647	$ 41,023	$ -	$ 41,023	$ (1,624)	

FORTISBC INC.
NON-TAX DEDUCTIBLE EXPENSES (NET) AND TIMING DIFFERENCE ADJUSTMENTS
($000)

Line No.	Particulars	Reference	Approved 2021	Year Ended 12/31/2021 Actual	Normalization	Normal	Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	**ADDBACKS:**						
2	Depreciation		$ 63,791	$ 63,743	$ -	$ 63,743	$ (48)
3	Amortization of Deferred Charges		5,110	5,110	-	5,110	-
4	Amortization of Utility Plant Acquisition Adjustment		186	186	-	186	-
5	Pension & OPEB Expense		5,804	5,804	-	5,804	-
6							
7	**DEDUCTIONS:**						
8	Capital Cost Allowance		(85,236)	(84,569)	-	(84,569)	667
9	CIAC Amortization		(4,417)	(4,318)	-	(4,318)	99
10	Pension & OPEB Contributions		(5,239)	(5,167)	-	(5,167)	72
11	Overheads Capitalized Expensed for Tax Purposes		(9,795)	(9,795)	-	(9,795)	-
12	Removal Costs		(1,200)	(2,019)	-	(2,019)	(819)
13	All Other		(111)	(604)	-	(604)	(493)
14							
15	TOTAL	#24	$ (31,107)	$ (31,629)	$ -	$ (31,629)	$ (522)

FORTISBC INC.
CAPITAL COST ALLOWANCE
($000)

Line No.	Class	CCA Rate %	UCC Balance 1/1/2021	Adjustments [1]	Net Additions (AIIP) [2]	Net Additions (Disposals) (Not AIIP)	UCC Adjustment for AIIP	UCC Amount for CCA	2021 CCA	UCC Balance 12/31/2021
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) (3)+(4)+(5)+(6)+(7)	(9)	(10) (3)+(4)+(5)+(6)-(9)
1	1(a)	4%	$ 167,192	$ 1	$ -	$ -	$ -	$ 167,193	$ 6,688	$ 160,505
2	1(b)	6%	33,580	-	2,861	-	1,430	37,871	2,272	34,169
3	2	6%	12,905	-	-	-	-	12,905	774	12,131
4	3	5%	718	-	-	-	-	718	36	682
5	6	10%	4	(1)	-	-	-	3	0	3
6	8	20%	4,209	2	947	-	473	5,631	1,126	4,032
7	10	30%	4,615	-	1,313	(191)	561	6,297	1,889	3,847
8	12	100%	-	-	2,150	-	-	2,150	2,150	-
9	13	(Manual)	34	-	-	-	-	34	14	19
10	14.1 (pre 2017)	7%	7,840	-	-	-	-	7,840	549	7,291
11	14.1 (post 2016)	5%	1,959	(1)	1,203	-	602	3,763	188	2,973
12	17	8%	137,019	173	30,644	-	15,322	183,158	14,653	153,183
13	42	12%	5,961	-	574	-	287	6,822	819	5,717
14	45	45%	2	-	-	-	-	2	1	1
15	46	30%	6,826	-	1,755	-	878	9,459	2,838	5,744
16	47	8%	460,683	12	68,611	(49)	34,281	563,538	45,085	484,172
17	50	55%	2,566	-	4,882	-	2,441	9,889	5,439	2,009
18	54	30%	77	(77)	48	-	113	161	48	-
19										
20		Total	$ 846,189	$ 109	$ 114,987	$ (241)	$ 56,387	$ 1,017,434	$ 84,569	$ 876,478
21										
22	Reference								#24.2	
23										

24 Notes:

25 [1] Adjustments required to bring prior year annual report ending balance (Column 3) to actual amounts filed in prior year T2

26 [2] For eligible capital property acquired after November 20, 2018 and available for use before 2028 (Accelerated Investment Incentive Property or “AIIP”), the capital property will qualify for enhanced CCA in the first year. For most CCA classes, the Accelerated Investment Incentive rules (the “AIIR”) will allow taxpayers to claim 3 times the normal amount of CCA in the first year of addition only (for additions prior to 2024). This is achieved by suspending the application of the half year rule and by adding an amount equal to 1/2 of AIIP additions in the year only for the purposes of calculating CCA. Property acquired before November 21, 2018 (“Not AIIP”), are not eligible for enhanced CCA under the AIIR regime and, therefore, will still be subject to the half year rule. No multiplier will apply for the purposes of calculating CCA. Certain classes, such as class 12, 13, and 43.2 contain class specific rules which modify how CCA is calculated for that class. FBC has claimed the maximum CCA available to the utility for all classes.

FORTISBC INC.
RETURN ON CAPITAL
($000)

Line No.	Particulars	Reference	Approved 2021	Year Ended 12/31/2021 Actual	Normalization	Normal	Difference	Reasons for Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Short Term Debt		$ 42,042	$ 95,443	$ (77)	$ 95,366	$ 53,325	
2	Ratio		2.84%	6.34%	0.00%	6.33%	3.49%	
3	Average Embedded Cost		2.22%	0.81%	0.00%	0.81%	-1.41%	
4	Cost Component		0.06%	0.05%	0.00%	0.05%	-0.01%	
5	Earned Return		$ 933	$ 772	$ -	$ 772	$ (161)	
6								
7	Long Term Debt	#27	$ 845,500	$ 808,000	$ -	$ 808,000	$ (37,500)	
8	Ratio		57.16%	53.66%	0.00%	53.67%	-3.49%	
9	Average Embedded Cost	#27	4.93%	4.98%	0.00%	4.98%	0.05%	
10	Cost Component		2.82%	2.67%	0.00%	2.67%	-0.15%	
11	Earned Return	#27	$ 41,714	$ 40,251	$ -	$ 40,251	$ (1,463)	
12								
13	Common Equity		$ 591,694	$ 602,295	$ (51)	$ 602,244	$ 10,550	-See Page 26.1
14	Ratio		40.00%	40.00%	0.00%	40.00%	0.00%	
15	Average Embedded Cost (Before Sharing)		9.15%	9.37%	0.00%	9.37%	0.22%	
16	Cost Component		3.66%	3.75%	0.00%	3.75%	0.09%	
17	Earned Return (Before Sharing)		$ 54,140	$ 56,439	$ -	$ 56,439	$ 2,299	
18								
19								
20	Utility Rate Base	#2	$ 1,479,236	$ 1,505,738	$ (128)	$ 1,505,610	$ 26,375	
21								
22								
23	Return on Rate Base	#16	6.54%	6.47%	0.00%	6.47%	-0.07%	

FORTISBC INC.

DIFFERENCE ANALYSIS

Recorded common equity is higher due to a higher rate base. See also Page 26 – Return on Capital.

FORTISBC INC.
EARNINGS SHARING CALCULATION
FOR THE YEAR ENDING DECEMBER 31, 2021
($000s)

Line No.	Description	Reference	Amounts
1	Actual Equity Return	Page 26, Line 13 x Line 15	$ 56,439
2			
3	Actual Rate Base	Page 26, Line 20	1,505,738
4	Approved Equity Thickness	G-139-14	40.00%
5	Actual Equity Component of Rate Base	Line 3 x Line 4	602,295
6			
7	Actual ROE on Common Equity	Line 1 / Line 5	9.37%
8	Approved ROE on Common Equity	G-75-13/G-47-14	9.15%
9	ROE Surplus / (Deficit)	Line 7 - Line 8	0.22%
10			
11	After-Tax Surplus / (Deficit) Earnings available for Sharing	Line 5 x Line 9	1,329
12	Sharing %	G-165-20	50%
13	Customers share of Surplus / (Deficit) Earnings (net of tax)	Line 11 x Line 12	665
14			
15	**Customers share of Surplus / (Deficit) Earnings (pre-tax)**	Line 13 / (1 - 27% tax rate)	**911**
16			
17			
18	Proof:		
19			
20	Pre-Equity Sharing Amounts	Page 12.3, -Line 54	$ 2,299
21			
22	Equity Sharing:		
23	Rate Base Variance (Approved less Actual)	Page 26, Line 20, Col 3 - Col 4	(26,503)
24	Approved Equity Thickness	G-139-14	40.00%
25	Approved ROE on Common Equity	G-75-13/G-47-14	9.15%
26	Equity Sharing on Rate Base Variance	Line 23 x Line 24 x Line 25	(970)
27			
28	After-Tax Surplus / (Deficit) Earnings available for Sharing	Line 20 + Line 26	1,329
29	Sharing %	G-165-20	50%
30	Customers share of Surplus / (Deficit) Earnings (net of tax)	Line 28 x Line 29	665
31			
32	**Customers share of Surplus / (Deficit) Earnings (pre-tax)**	Line 30 / (1 - 27% tax rate)	**911**

FORTISBC INC.
CALCULATION OF AFTER-SHARING ROE
FOR THE YEAR ENDING DECEMBER 31, 2021
($000s)

Line No.	Description	Amount	Reference
1	Proof of Before-Sharing Actual ROE		
2			
3	Utility Income Before Taxes	118,534	Page 24, Line 2
4	Less: Interest Expense	(41,023)	Page 24, Line 3
5	Less: Income Taxes	(12,388)	Page 24, -Line 15
6	Add: Flow-Through (After-tax)	(8,684)	Page 16, -Line 16
7	Utility Income	56,439	Sum of Lines 3 through 6
8			
9	Equity Portion of Rate Base	602,295	Page 26, Line 13
10			
11	Achieved Before-Sharing ROE	9.371%	Line 7 / Line 9
12			
13	After-Sharing Actual ROE		
14			
15	Utility Income Before Taxes	118,534	Page 24, Line 2
16	Less: Earnings Sharing	(665)	Page 26.2, -Line 13
17	Less: Interest Expense	(41,023)	Page 24, Line 3
18	Less: Income Taxes	(12,388)	Page 24, -Line 15
19	Add: Flow-Through (After-tax)	(8,684)	Page 16, -Line 16
20	Utility Income	55,774	Sum of Lines 15 through 19
21			
22	Equity Portion of Rate Base	602,295	Page 26, Line 13
23			
24	**Achieved After-Sharing ROE**	**9.260%**	Line 20 / Line 22

FORTISBC INC
EMBEDDED COST OF LONG-TERM DEBT
FOR THE YEAR ENDED DECEMBER 31, 2021
($000)

Line No.	Particulars	Issue Date	Maturity Date	Coupon Rate	Principal Amount of Issue	Average Principal Outstanding	Annual Cost	Average Embedded Cost
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Series G	28-Aug-1993	28-Aug-2023	8.800%	$ 25,000	$ 25,000	$ 2,200	
2	Series I	1-Dec-1997	1-Dec-2021	7.810%	25,000	23,000	1,796	
3	Series 1 - 05	9-Nov-2005	9-Nov-2035	5.600%	100,000	100,000	5,600	
4	Series 1 - 07	4-Jul-2007	4-Jul-2047	5.900%	105,000	105,000	6,195	
5	MTN - 09	2-Jun-2009	2-Jun-2039	6.100%	105,000	105,000	6,405	
6	MTN - 10	24-Nov-2010	24-Nov-2050	5.000%	100,000	100,000	5,000	
7	MTN - 14	28-Oct-2014	28-Oct-2044	4.000%	200,000	200,000	8,000	
8	MTN - 17	4-Dec-2017	6-Dec-2049	3.620%	75,000	75,000	2,715	
9	MTN - 20	11-May-2020	11-May-2050	3.120%	75,000	75,000	2,340	
10	**MID-YEAR LONG-TERM DEBT**					$ 808,000	$ 40,251	4.982%

FORTISBC INC.

RECONCILIATION WITH FINANCIAL STATEMENTS
- NET EARNINGS/RATE BASE
FOR THE YEAR ENDED DECEMBER 31, 2021

Page

2021 FortisBC Inc Annual Audited Financial Statements - SEDAR

FORTISBC INC.
RECONCILIATION OF CONSOLIDATED STATEMENT OF EARNINGS
TO UTILITY INCOME BEFORE INTEREST AND INCOME TAXES
FOR THE YEAR ENDED DECEMBER 31, 2021
($000)

Line No.	Particulars	Account	Amount ($000)	Reference
1	CONSOLIDATED STATEMENT OF EARNINGS (CFS)			
2	Net Earnings		$ 56,533	- Consolidated Statements of Earnings
3				
4	ADD BACK:			
5	Financing Costs - Interest		72,862	- Consolidated Statements of Earnings
6	Income Taxes		11,197	- Consolidated Statements of Earnings
7	Earnings Before Interest and Taxes		140,592	
8				
9	LESS:			
10	[redacted]		[redacted]	[redacted]
	Items reclassed for F/S purposes		(32,313)	- Page 28.2, Lines 11, 12, 29, 30, 31; Page 28.3, Lines 7, 8, 9, 10; Page 28.4, Lines 8, 9, 10, 11
11				
12	Subtotal (Lines 10 to 11 above)		(33,858)	
13				
14	ADD:			
15	[redacted]		[redacted]	[redacted]
16				
17	2021 Earnings Sharing & Flowthrough in F/S		9,995	- Page 28.2, Lines 13 & 14
18	2021 Forecast Cost of Removal Deficiency Adjustment		(255)	- Page 28.2, Line 16
19	Subtotal (Lines 15 to 18 above)		11,800	
20				
21	Total FortisBC Utility Income Before Income Taxes		118,534	- FBC Annual Report, Page 16, Line 15

FORTISBC INC.
RECONCILIATION OF CONSOLIDATED STATEMENT OF EARNINGS
TO UTILITY INCOME BEFORE INTEREST AND INCOME TAXES
FOR THE YEAR ENDED DECEMBER 31, 2021
($000)

Line No.	Particulars	Account	Amount ($000)	Reference
1	**ITEM 1 - Reconciliation of Other Revenue**			
2				
3	Consolidated Financial Statements Revenues & Other Income		$ 459,815	- Consolidated Statements of Earnings
4	Less: Electricity Revenues in Financial Statements		(404,247)	- FBC Annual Report, Page 16, Line 5
5	Other Revenues in Financial Statements (Line 3 to Line 4)		55,568	
6				
7	[redacted]		[redacted]	[redacted]
8				
9			-	
10				
11	Power Purchases classified as Other Revenue for F/S purposes		(13,464)	- Page 28.1, Line 11, Page 28.4, Line 9
12	O&M classified as Other Revenue for F/S purposes		(32,475)	- Page 28.1, Line 11, Page 28.3, Line 8
13	2021 Earnings Sharing in F/S		1,172	- Page 28.1, Line 17
14	2021 Flow-Through in F/S		8,823	- Page 28.1, Line 17
15	FBC 2021 Revenue Deficiency classified as Other Revenue for F/S purposes		(5,420)	- FBC Annual Report, Page 16, Line 13
16	2021 Forecast Cost of Removal Deficiency Adjustment		(255)	- Page 28.1, Line 18
17	Other Revenue items - Subtotal of Above (Line 11 to Line 16)		(41,619)	
18				
19				
20	Total Other Revenues (Line 5 + Line 9 + Line 17)		$ 12,404	- FBC Annual Report, Page 16, Line 12
21				
22				
23				
24	**ITEM 2: Reconciliation of Depreciation and Amortization Expense**			
25				
26	Consolidated Financial Statements Depreciation & Amortization Expense		$ 65,107	
27				
28	[redacted]		[redacted]	[redacted]
29	O&M classified as Amortization for F/S purposes		(918)	- Page 28.1, Line 11, Page 28.3, Line 9
30	Power Purchases classified as Amortization for F/S purposes		425	- Page 28.1, Line 11, Page 28.4, Line 10
31	Amortization classified as Financing Charges for F/S purposes		238	- Page 28.1, Line 11
32			(385)	
33				
34	Total Depreciation & Amortization Expense (Line 26 + Line 32)		$ 64,721	- FBC Annual Report, Page 16, Line 10

FORTISBC INC.
RECONCILIATION OF CONSOLIDATED STATEMENT OF EARNINGS
TO UTILITY INCOME BEFORE INTEREST AND INCOME TAXES
FOR THE YEAR ENDED DECEMBER 31, 2021
($000)

Line No.	Particulars	Account	Amount ($000)	Reference
1	**ITEM 3 - Reconciliation of O&M Expenses**			
2				
3	Consolidated Financial Statements O&M Expense		$ 100,823	- Consolidated Statements of Earnings
4				
5	[redacted]		[redacted]	
6				
7	O&M classified as Power Purchases for F/S purposes		(16,741)	- Page 28.1, Line 11, Page 28.4, Line 8
8	O&M classified as Other Revenue for F/S purposes		(32,475)	- Page 28.1, Line 11, Page 28.2, Line 12
9	O&M classified as Amortization for F/S purposes		918	- Page 28.1, Line 11, Page 28.2, Line 29
10	O&M classified as Financing Charges for F/S purposes		1,744	- Page 28.1, Line 11
11	Other O&M items - Subtotal of Above		(46,554)	
12				
13	Total O & M Expense (Line 3 + Line 5 + Line 11)		$ 52,340	- FBC Annual Report, Page 16, Line 9
14				
15				
16	**ITEM 4 - Reconciliation of Municipal and Other Taxes**			
17				
18	Consolidated Financial Statements -			
19	Municipal and Other Taxes		$ 17,262	FBC Annual Report, Page 16, Line 11

FORTISBC INC.
RECONCILIATION OF CONSOLIDATED STATEMENT OF EARNINGS
TO UTILITY INCOME BEFORE INTEREST AND INCOME TAXES
FOR THE YEAR ENDED DECEMBER 31, 2021
($000)

Line No.	Particulars	Account	Amount ($000)	Reference
1	**ITEM 5 - Reconciliation of Gross Margin**			
2				
3	Consolidated Financial Statements Revenues & Other Income		$ 459,815	- Consolidated Statements of Earnings
4	Less: Other revenues in Financial Statements		(55,568)	- Page 28.2, Line 5
5	Electricity Revenues per Annual Report		404,247	- FBC Annual Report, Page 16, Line 5
6				
7	Power Purchase Costs in Financial Statements		136,032	- Consolidated Statements of Earnings
8	O&M classified as Power Purchases for F/S purposes		16,741	- Page 28.1, Line 11, Page 28.3, Line 7
9	Power Purchases classified as Other Revenue for F/S purposes		(13,464)	- Page 28.1, Line 11, Page 28.2, Line 11
10	Power Purchases classified as Amortization for F/S purposes		(425)	- Page 28.1, Line 11, Page 28.2, Line 30
11	Power Purchases classified as Financing Charges for F/S purposes		30,330	- Page 28.1, Line 11
12	Cost of Energy per Annual Report		169,214	- FBC Annual Report, Page 18, Line 31
13				
14	Total FBC Gross Margin (Line 5 & Line 12)		$ 235,033	- FBC Annual Report, Page 16, Line 5 - Line 8

FORTISBC INC.
RECONCILIATION OF CONSOLIDATED BALANCE SHEET
TO UTILITY NET PLANT IN SERVICE, ENDING
FOR THE YEAR ENDED DECEMBER 31, 2021
($000)

Line No.	Particulars	Account	Amount ($000)	Reference
1	**CONSOLIDATED BALANCE SHEET**			
2				
3	Property Plant and Equipment		$ 2,431,779	- Notes 6 & 7 of the Financial Statements
4	Less: Accumulated Depreciation		(646,812)	- Notes 6 & 7 of the Financial Statements
5				
6	Net Property Plant and Equipment & Intangible Assets per Consolidated Financial Statements		1,784,967	- Notes 6 & 7 of the Financial Statements
7				
8	LESS:			
9	[redacted]		[redacted]	
10				
11	Work-in-Progress (including CPCN adjustments)		(75,366)	- Page 28.6, Line 13
12	[redacted]		[redacted]	
13	Subtotal (Lines 9 to 12 above)		(314,281)	
14				
15	FBC - Net Plant in Service, Ending (Line 6 + Line 13)		$ 1,470,686	- FBC Annual Report, Page 2, Lines 7, 11, 15, 19

FORTISBC INC.
RECONCILIATION OF CONSOLIDATED BALANCE SHEET
TO UTILITY NET PLANT IN SERVICE, ENDING
FOR THE YEAR ENDED DECEMBER 31, 2021
($000)

Line No.	Particulars	Account	Amount ($000)	Reference
1	**ITEM 1 - Reconciliation of Property Plant & Equipment**			
2	**to Plant in Service**			
3	Property, Plant & Equipment - including Intangibles and CIAC		$ 2,431,779	- Page 28.5, Line 3
4				
5	[redacted]			
6				
7				
8				
9				
10				
11	Subtotal (Line 3 + Line 9)		2,110,879	
12				
13	Work-in-progress (including CPCN adjustments)		(75,366)	- Page 28.5, Line 11
14				
15	Total FBC Plant in Service and CIAC (Line 11 + Line 13)		$ 2,035,513	- FBC Annual Report, Page 2, Lines 7 & 15

FORTISBC INC.
RECONCILIATION OF CONSOLIDATED BALANCE SHEET
TO UTILITY NET PLANT IN SERVICE, ENDING
FOR THE YEAR ENDED DECEMBER 31, 2021
($000)

Line No.	Particulars	Account	Amount ($000)	Reference
1	**ITEM 2 - Reconciliation of Accumulated Depreciation and CIAC Amortization**			
2				
3	Consolidated Accumulated Depreciation and CIAC Amortization		$ (646,812)	- Page 28.5, Line 4
4				
5	[redacted]			
6				
7				
8				
9				
10				
11	Total Utility Accumulated Depreciation and CIAC Amortization (Line 3 + Line 9)		$ (564,827)	- FBC Annual Report, Page 2, Lines 11 & 19

FORTISBC INC.
RECONCILIATION OF UTILITY DEFERRED CHARGES
TO CONSOLIDATED DEFERRALS IN THE BALANCE SHEET
FOR THE YEAR ENDED DECEMBER 31, 2021
($000)

Line No.	Particulars	Account	Amount ($000)	Reference
1	Ending Deferred Charges Balance per Consolidated Balance Sheet		$ 203,162	- Note 8 (431-228) of the Financial Statements
2				
3	Add: Other Deferrals in Financial Statements			
4	Deferred Credits		(38,869)	- Notes 8 (-39) of the Financial Statements
5	Deferred Net Pension Costs		(51,457)	- Note 5 (15), Note 10 (-1) & Note 13 (-65) of the Financial Statements
6	Deferred Debt Issue Costs		6,194	- Note 11 (6) of the Financial Statements
7	Subtotal		(84,132)	
8				
9	Total Deferrals (Line 1 + Line 7)		119,030	
10				
11	Non-Rate Base Deferrals			
12	Amount per Page 12.0		(451)	- Page 12.0, Line 15, Column 9 + Page 12.0, Line 17, Column 9
13	Amount per Page 12.1		(1,860)	- Page 12.1, Line 23, Column 9 + Page 12.1, Line 25, Column 9
14	Amount per Page 12.2		10,137	- Page 12.2, Line 17, Column 9 + Page 12.2, Line 19, Column 9 + Page 12.2, Line 26, Column 9
15	[redacted]		[redacted]	
16	Subtotal		(118,259)	
17				
18	Adjustments to BCUC Report			
19	Adjustments booked in financial statements in 2022		626	
20	Items reclassed for F/S purposes		25,966	
21	Subtotal		26,592	
22				
23	FBC Ending Deferral Balance (Line 9 + Line 16 + Line 21)		$ 27,362	- FBC Annual Report, Page 11, Line 24, Column 9

EXECUTIVE SUMMARY

FORTISBC INC.

DIRECTORS, OFFICERS AND SHAREHOLDERS

Report below the name, title and business address of each director and general officer.

AS AT DECEMBER 31, 2021

NAME	BUSINESS ADDRESS	OFFICE HELD
DIRECTORS		
Tracey C. Ball	#1 - 1033 Pakington Street Victoria, BC V8V 3A2	Director
Peter Blake	910-925 W. Georgia Street Vancouver, BC V6C 3L2	Director
Michelle Corfield	1021 Halliburton Street, Nanaimo, BC V9R 6NR	Director
Roger A. Dall'Antonia	10th Floor, 1111 W. Georgia Street Vancouver, BC V6E 4M3	Director and President and CEO
Nora M. Duke	Suite 1201 Fortis Building 139 Water Street St. John's, NL A1B 3T2	Director
David G. Hutchens	538 E. Rudasill Road Tucson, AZ 85704	Director
K.M. Tracy Medve	5655 Airport Way Kelowna, BC V1V 1S1	Director, Chair of the Board
Douglas G. Pearce	2135 Abbott Street Kelowna, BC V1Y 1C8	Director
Jocelyn H. Perry	Suite 1201 Fortis Building 139 Water Street St. John's, NL A1B 3T2	Director
Janine Sullivan	320 17 Avenue SW Calgary, AB T2S 2V1	Director
Susan L. Yurkovich	1220-595 Howe Street Vancouver, BC V6C 2T5	Director

FORTISBC INC.

DIRECTORS, OFFICERS AND SHAREHOLDER

Report below the name, title and business address of each director and general officer.

AS OF DECEMBER 31, 2021

NAME	BUSINESS ADDRESS	OFFICE HELD
OFFICERS		
Roger A. Dall'Antonia	10th Floor - 1111 West Georgia St., Vancouver, BC, V6E 4M3	President & CEO
Doyle Sam	10th Floor - 1111 West Georgia St., Vancouver, BC, V6E 4M3	Executive Vice-President, Operations & Engineering
Jody D. Drope[1]	10th Floor - 1111 West Georgia St., Vancouver, BC, V6E 4M3	Vice-President, Human Resources and Environment, Health & Safety
Michael Leclair	10th Floor - 1111 West Georgia St., Vancouver, BC, V6E 4M3	Vice-President, Major Projects and LNG
Ian G. Lorimer	10th Floor - 1111 West Georgia St., Vancouver, BC, V6E 4M3	Vice President, Finance & CFO
Joseph C. Mazza	10th Floor - 1111 West Georgia St., Vancouver, BC, V6E 4M3	Vice-President, Energy Supply & Resource Development
Dawn M. Mehrer	10th Floor - 1111 West Georgia St., Vancouver, BC, V6E 4M3	Vice-President, Customer and Corporate Services
Monic D. Pratch	10th Floor - 1111 West Georgia St., Vancouver, BC, V6E 4M3	Vice-President, General Counsel, Corporate Secretary and Sustainability
Diane E. Roy	10th Floor - 1111 West Georgia St., Vancouver, BC, V6E 4M3	Vice-President, Regulatory Affairs
Douglas M. Slater	10th Floor - 1111 West Georgia St., Vancouver, BC, V6E 4M3	Vice President, External and Indigenous Relations
Debra G. Nelson	10th Floor - 1111 West Georgia St., Vancouver, BC, V6E 4M3	Assistant Corporate Secretary

[1] Jody D. Drope ceased as an Officer on September 24, 2021

NAME	BUSINESS ADDRESS	OFFICE HELD
SHAREHOLDER		
FortisBC Pacific Holdings Inc.	Suite 100 1975 Springfield Rd. Kelowna, BC, V1Y 7V7	Shareholder – 100% Common Stock

OPERATING AREA AND UTILITY PLANT DETAIL

AS AT DECEMBER 31, 2021

OPERATING AREA

Trail, Warfield, Rossland, Fruitvale, Montrose, Christina Lake, Grand Forks, Greenwood, Midway, Rock Creek, Westbridge, Beaverdell, Osoyoos, Oliver, Cawston, Keremeos, Hedley, Coalmont, Tulameen, Princeton, Penticton, Naramata, Summerland, Okanagan Falls, Kelowna, Castlegar, South Slocan, Slocan, Crawford Bay, Creston, Kaslo, Salmo, Nelson, all within the Province of British Columbia.

PRODUCTION PLANT – HYDRAULIC

Site	Voltage	Cycles	Nameplate Rating (kVA)
Lower Bonnington	7,200	60	60,000
Upper Bonnington	2,300/7,200	60	79,400
South Slocan	7,200	60	72,000
Corra Linn	7,200	60	60,000

TRANSMISSION PLANT
Line Length (kilometers)

Area	63 kV	132/138 kV	161 kV	230 kV	Total
Boundary	48.6	0.0	103.3	0.0	151.9
Creston	85.0	0.0	0.0	0.0	85.0
Kelowna	0.4	119.7	0.0	114.0	234.1
Kootenay	359.4	0.0	22.6	50.3	432.4
Similkameen	0.0	91.4	0.0	0.0	91.4
South Okanagan	123.2	11.5	16.5	98.5	249.7
Total	**616.6**	**222.6**	**142.4**	**262.8**	**1,244.4**

Terminal Transformers

Rating (MVA)	Quantity
22.4/30	3
45/60	1
60/80	2
56/75	1
60/80/100	2
90/120/150	1
90/120/150/168	1
100/134/168	3
120/160/200	4
150/200/250	2
Total Base Capacity	**1,609 MVA**

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OPERATING AREA AND UTILITY PLANT DETAIL

AS AT DECEMBER 31, 2021

DISTRIBUTION PLANT
Line Length (kilometres)

	1 Phase		2 Phase		3 Phase		Total
	OH	UG	OH	UG	OH	UG	
Boundary	464.6	10.7	25.0	0.0	341.1	2.6	843.9
Creston	355.0	17.5	8.4	0.0	278.5	3.8	663.1
Kelowna	432.5	383.1	15.8	2.3	354.2	416.6	1,604.3
Kootenay	687.8	41.6	15.8	0.1	431.2	24.7	1,201.1
Similkameen	296.8	18.8	22.3	0.0	393.3	7.5	738.6
South Okanagan	465.4	95.3	42.0	0.1	368.8	37.3	1,008.9
Total	**2,701.8**	**566.9**	**129.2**	**2.5**	**2,167.0**	**492.5**	**6,059.9**

OH = Overhead UG = Underground

Distribution Transformers (HV < 60 kV)

	Overhead		Underground		Total	
Rating (kVA)	Quantity	Capacity (kVA)	Quantity	Capacity (kVA)	Quantity	Capacity (kVA)
0-100	31,389	929,784	5,782	431,256	37,171	1,361,040
101-500	88	15,699	1,759	539,559	1,847	555,258
>500	13	27,000	307	345,750	320	372,750
Total	**31,490**	**972,483**	**7,848**	**1,316,565**	**39,338**	**2,289,048**

Distribution Substation (HV > 60 kV)

Rating (kVA)	Quantity	Rating (kVA)	Quantity
500	3	11,200	1
1,500	3	11,250	9
2,000	1	12,000	10
2,800	3	13,400	1
3,750	1	13,500	1
4,500	1	16,000	2
5,000	1	24,000	23
6,000	4	28,500	1
7,500	5	30,000	2
10,000	4	31,500	1
		1,094,500	**77**

IMPORTANT CHANGES DURING THE YEAR

MAJOR CAPITAL PROJECTS

Upper Bonnington Old Units Refurbishment Project

The Upper Bonnington Old Units Refurbishment Project (the UBO Project) was approved by Order G-8-17 on January 20, 2017. The UBO Project involves the replacement or refurbishment of various components of four of the generation plant's six units, which are at end of life and can no longer be operated in a safe, reliable, and environmentally responsible manner. The UBO Project, which will be executed over the period 2017-2021, will extend the productive life of the Old Units for the next twenty years or more.

In 2021, the balance of plant work was completed. Defects identified throughout the Project were addressed and the Project was successfully closed out. All of the refurbished generating units are performing well and are expected to provide a safe, reliable source of energy for the next 20 years or more.

Corra Linn Dam Spillway Gate Replacement

The Corra Linn Dam Spillway Gate Replacement Project (the Corra Linn Project) was approved by Order C-1-17 on February 7, 2017. Project components include the replacement of the 14 existing spillway gates at the Corra Linn Dam, the reinforcement of the existing towers and bridges, the refurbishment of the existing gate hoists, and the replacement of the existing embedded parts.

Spillway gates 5 through 14 are replaced and in service. In 2021, spillway gates 5, 12, 13, and 14 were completed, including the replacement of embedded components. The required replacement of the embedded components added scope to the Project and extended the schedule. In Q3 2021, cofferdams were positioned in front of the final set of spillway gates to be replaced (gates 1 through 4) and work has commenced to replace these embedded components and spillway gates. Spillway gates 1 through 4 are scheduled to be complete in Q1 and Q2 2022. Additionally in 2021, the majority of the superstructure has been painted and both gantry hoists have been refurbished. In 2022, the final set of spillway gates will be returned to service, the superstructure painting will finish, the final electrical works will be installed and defect correction work will be completed. The on-site component of the Project is currently scheduled to end in Q3 2022 with Project close out continuing into Q1 2023.

Grand Forks Terminal (GFT) Station Reliability Project

The GFT Station Reliability Project was approved by Order C-2-19 on July 25, 2019. It involves the installation of a second transformer at GFT and the removal of 44.6 km of transmission line between Christina Lake and Rossland.

In 2021, the final commissioning and energization of GFT T2 was completed in Q1. In Q2, construction began on the reconfiguration and salvage of the 60kV transmission lines that span between Rossland, BC and Christina Lake, BC. The transmission work was completed in early Q4 and the Project was successfully closed out.

Kelowna Bulk Transformer Capacity Addition Project (KBTCA)

The KBTCA Project was approved by Order C-4-20 on November 30, 2020. It involves the installation of a third terminal transformer and upgrading the low side 138kV bus to a true ring bus at the LEE terminal in Kelowna, BC.

In 2021, all the site preparation for the station and the majority of the transmission line relocations were completed. All civil and physical designs were completed for the 230kV ring bus expansion and the main construction award for the station component was awarded in early Q4 with work beginning shortly thereafter. All major equipment and materials have been ordered and forecast to arrive in time for construction. All distribution switchgear has been removed. Work will continue all of 2022 with the energization of the third transformer forecast for end of year with Project completion forecast for the end of Q2 in 2023.

Playmor Station Upgrade

The Playmor Substation Upgrade Project was approved by Order G-42-21 and involves rebuilding the Playmor substation in South Slocan, BC on an expanded station footprint in order to increase station capacity. It involves the construction of a new greenfield dual 20MVA transformer substation feeding four feeders in South Slocan, BC. The old Playmor substation, which resides right next to the new site, will then be salvaged once the new station is built.

Some engineering and specifications for major equipment began in 2020 along with a purchase order released for the 2 power transformers. The remainder of the engineering and material procurement was completed and received in 2021. Site preparation and civil construction of the substation began in April of 2021 and was completed in August. The physical and electrical construction of the substation began in June 2021 and was nearly 75 percent complete at the end of 2021. The final stages of the transmission and distribution line work and all equipment commissioning are scheduled for Q1 and Q2 of 2022. Project completion including the salvage of the old Playmor station is forecast for completion at the end of Q2 2022.

HUMAN RESOURCES

FORTISBC INC.
COMMON EQUITY RETURNS AND OTHER COMPARISONS
FOR THE YEARS ENDED

Line No.	Years	ROE				Common Equity	Bond Yield [1]	Actual Rate Base $000's	Energy Sales (GW.h)	Temperature (% warm, HDD)	Average Direct Customers [2]
		Allowed	Achieved Pre-Earnings Sharing	Achieved Post-Earnings Sharing	Normal						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	12/31/2012	9.90%	10.52%	-	10.83%	41.38%	2.43%	$ 1,088,470	3,144	0.0%	113,484
2	12/31/2013	9.15%	10.21%	-	10.13%	40.92%	2.84%	$ 1,142,132	3,211	-2.4%	128,557
3	12/31/2014	9.15%	9.29%	9.22%	9.18%	40.00%	2.73%	$ 1,205,246	3,180	1.4%	129,525
4	12/31/2015	9.15%	9.35%	9.26%	9.35%	40.00%	2.17%	$ 1,251,128	3,116	11.1%	131,016
5	12/31/2016	9.15%	9.52%	9.38%	9.52%	40.00%	1.92%	$ 1,281,694	3,120	-7.9%	132,480
6	12/31/2017	9.15%	9.41%	9.31%	9.41%	40.00%	2.28%	$ 1,291,048	3,305	8.0%	134,246
7	12/31/2018	9.15%	9.32%	9.29%	9.32%	40.00%	2.33%	$ 1,321,729	3,250	-1.0%	137,300
8	12/31/2019	9.15%	9.15%	9.18%	9.15%	40.00%	1.77%	$ 1,355,193	3,326	6.9%	139,808
9	12/31/2020	9.15%	9.46%	9.30%	9.46%	40.00%	1.19%	$ 1,418,909	3,291	-0.7%	142,321
10	12/31/2021	9.15%	9.37%	9.26%	9.37%	40.00%	1.88%	$ 1,505,738	3,459	0.1%	144,877

Notes:

[1] Canada long-term benchmark bonds monthly average.

[2] 2013 Direct Customer count increased by approximately 15,000 direct customers due to FBC's purchase of the utility assets of the City of Kelowna effective March 31, 2013. The former direct customers of City of Kelowna are now direct customers of FBC.

FORTISBC INC.

DECLARATION

I, Ian G. Lorimer, do hereby certify:

1. That I am Vice President, Finance & CFO of FortisBC Inc. with its Head Office at Suite 100, 1975 Springfield Road, Kelowna, British Columbia.

2. That I have examined the content of this report and the information set out herein is complete and accurate, to the best of my knowledge, information and belief. I have read and understand Sections 106 and 109.1 to 109.8 of the *Utilities Commission Act.*

3. That I confirm the Utility's compliance with the BCUC's financial directions contained in Decisions and Orders.

Original signed:

Ian G. Lorimer,
Vice President, Finance & CFO

Name, title and address of officer or other person to whom any questions concerning this report should be addressed:

Diane Roy,
Vice President, Regulatory Affairs

FortisBC Inc.
16705 Fraser Highway
Surrey, BC
V4N 0E8

FORTISBC INC.
BRITISH COLUMBIA UTILITIES COMMISSION
LETTER NO. L-36-94 / L-45-15, DIRECTION NO. 1

Direction No. 1

In the years when a Long Term Resource Plan is not filed, the section 45(6) filings of capital budget statements and system plans should be made in the Annual Report to the Commission.

Response

FBC provides forward-looking information, including information on capital budgets and system plans, in its Annual Review filings with the BCUC.

FORTISBC INC.
BRITISH COLUMBIA UTILITIES COMMISSION
LETTER NO. L-36-94 / L-45-15, DIRECTION NO. 2

Direction No. 2

A detailed comparison between forecast and actual results for all completed or in progress capital projects above the utility's materiality limit. For capital projects with ongoing reporting, the explanation may refer to those reports. For capital projects below the utility's materiality limit, a summary report showing forecast and actual is required.

Response

An analysis of significant projects completed during 2021 and of significant projects in work in progress as at December 31, 2021 is included under Tab 1, Pages 4, 5 and 5.1 of this report.

FORTISBC INC.
BRITISH COLUMBIA UTILITIES COMMISSION
LETTER NO. L-36-94 / L-45-15, DIRECTION NO. 3

Direction No. 3

Copies of income tax assessment and reassessment notices pertaining to utility business.

Response

Please see attached pages.

Summerside PE C1N 6A2

0007622

FORTISBC INC.
SUITE 100
1975 SPRINGFIELD ROAD
KELOWNA BC V1Y 7V7

Notice details

Business number	10564 5642 RC0001
Date issued	Aug 25, 2021

Corporation income tax assessment

[redacted]

Canada

Summerside PE C1N 6A2

FORTISBC INC.
SUITE 100
1975 SPRINGFIELD ROAD
KELOWNA BC V1Y 7V7

Notice details

Business number	10564 5642 RC0001
Tax year-end	Dec 31, 2020
Date issued	Aug 25, 2021

Corporation notice of assessment

Results

[redacted]

Canada

0007623

FORTISBC INC.

Notice details

Business number	10564 5642 RC0001
Tax year-end	Dec 31, 2020
Date issued	Aug 25, 2021

Summary

Description	$ Reported	CR	$ Assessed	CR

More information

If you need more information, go to **canada.ca/en/services/taxes**.

To see your latest account information, including payment transactions, go to **canada.ca/my-cra-business-account**.

If you have new or additional information and want to change your return, go to **canada.ca/t2-return** and select the topic "After you file your corporation income tax return." For faster service, submit your request electronically.

If you disagree with this assessment, go to **canada.ca/t2-return** and select the topic "After you file your corporation income tax return," and then "Resolving disputes." You have 90 days from the date of this notice to register your dispute.

To protect the security of your information if your mail is returned to us undelivered, we may stop sending mail to you until we receive a new address. However, you can view your mail at **canada.ca/my-cra-business-account**.

Did you know you can go paperless and get your mail from us online? If you register for this service, we will email you when you have mail in your secure online account. We would no longer print and send mail to you. For more information about our online services, go to **My Business Account**.

Definitions

CR (credit) is the amount we owe you.

Help for persons with visual impairments

You can get this notice in braille, large print, or audio format. For more information about other formats, go to **canada.ca/cra-multiple-formats**.

My Business Account

Use **My Business Account** to see and manage your tax information online. Check your return balances, manage direct deposit and addresses, submit an enquiry, set up online mail, and more. To register for **My Business Account**, go to **canada.ca/my-cra-business-account**.

FORTISBC INC.
BRITISH COLUMBIA UTILITIES COMMISSION
LETTER NO. L-36-94 / L-45-15, DIRECTION NO. 4

Direction No. 4

A list of topics covered in the management letters.

Response

No management letter was issued regarding the 2021 year.

FORTISBC INC.
BRITISH COLUMBIA UTILITIES COMMISSION
LETTER NO. L-36-94 / L-45-15, DIRECTION NO. 5

Direction No. 5

A list of topics covered in the internal audit reports together with a brief description of each topic.

Response

See the attached letter dated February 8, 2022 by [redacted]

FORTIS BC™

[redacted]

Attn: Mr. Patrick Wruck, Commission Secretary
British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, B.C. V6Z 2N3

February 8, 2022

RE: FortisBC Inc. 2021 Internal Audit Reports

Dear Mr. Wruck:

As requested by the British Columbia Utilities Commission in letter No. L-45-15, we are pleased to provide a list of topics covered in the internal audit reports together with a brief description of each topic for FortisBC Inc. (See Appendix A).

Internal Audit prepares an annual Audit Plan that is risk-based, reviewed with management and approved by the Audit Committee. The Audit Plan consists of a variety of projects that evaluate the design and effective operation of internal controls, compliance with corporate policies and practices, and fairness of management representations.

Should the BCUC require additional information related to the contents of this report, please do not hesitate to contact me at the address or contact numbers provided above.

Regards,

[redacted]

1. **Financial Directions and Orders**
   Review compliance with the financial directions contained in Decisions, Orders and Letters issued by the BCUC.

2. **Anti-Fraud Program**
   Assess the effectiveness of controls designed to mitigate the risk of potentially fraudulent actions that could materially affect the financial statements.

3. **SOX 404 Compliance**
   Test key internal controls over financial reporting for all in-scope business processes, IT general controls and entity level controls for annual SOX 404 Compliance.

4. **Executive Expenses**
   Review expenses incurred by the executive management team for the current calendar year for reasonableness and compliance with Company policy.

5. **Directors' Liabilities**
   Review to ensure all payroll tax withholdings, sales taxes, corporate tax installments, WCB payments and Directors' and Officers' liability insurance premiums have been remitted in a timely manner.

6. **Code of Conduct and Transfer Pricing Policy Review**
   Assess effectiveness of key controls established to facilitate and ensure compliance with the Code of Conduct & Transfer Pricing Policy as approved by the BCUC, including awareness of the policy by all employees.

7. **Information System Security (Patch Management Program)**
   Assess the design and operating effectiveness of the global patch management program controls for corporate systems as outlined in FortisBC's Patch Management Program to manage corporate system security and vulnerability risks.

8. **Scorecard Metrics Audit**
   Review 2020 Scorecard calculations for accuracy, as they relate to short term incentive payment amounts for Executives and employees.

9. **Conservation & Energy Management (C&EM)**
   Assess the effectiveness of controls in the C&EM Program, including those over customer rebate payments. The 2021 C&EM audit also verified that IT general controls over the rebate program management system, which is being upgraded to a new combined gas/electric software program, are operating effectively and in compliance with corporate information system policies.

10. **In-house Training/eLearning Program Review**
    Review to ensure that FortisBC's in-house training program and eLearning system accurately reports and provides an effective method to ensure accurate assignments of courses, timely completion of courses, and accurately documented training records for worker safety compliance purposes.

11. **Corporate Credit Card/ Employee Expenses**
    Review expenses incurred by all employees for reasonableness and compliance with Company policy. The audit included review of the IT controls over the new employee expense reporting software application, SAP Concur, which was implemented in 2020.

FORTISBC INC.
BRITISH COLUMBIA UTILITIES COMMISSION
LETTER NO. L-36-94 / L-45-15, DIRECTION NO. 6

Direction No. 6

A reconciliation, prepared by the utility and attested to by a Company officer, of the utility's year-end financial statements to the shareholders compared to the Annual Report to the Commission.

Response

The financial statement reconciliation is included at Tab 3. The Officer's Declaration is found at Page 33.

FORTISBC INC.
BRITISH COLUMBIA UTILITIES COMMISSION
LETTER NO. L-36-94 / L-45-15, DIRECTION NO. 7

Direction No. 7

A report, prepared by the internal auditor or equivalent and attested to by a Company officer, which examines the utility's classification of certain expenditures, as specified by the Commission, according to a Uniform System of Accounting.

Response

The requested examination will be undertaken upon receipt of the BCUC's specifications of the accounts to be reviewed.

FORTISBC INC.
BRITISH COLUMBIA UTILITIES COMMISSION
LETTER NO. L-36-94 / L-45-15, DIRECTION NO. 8

Direction No. 8

A report, prepared by the internal auditor or equivalent and attested to by a Company officer, which confirms the utility's compliance with the Commission's financial directions contained in Decisions and Orders.

Response

See the attached letter dated March 28, 2022 by [redacted]. The Officer's Declaration is found at Page 33.

FORTIS BC™

[redacted]

March 28, 2022

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

Attention: Mr. Patrick Wruck, Commission Secretary

Re: FortisBC Inc. (FBC) Compliance with the BCUC's Financial Directions Contained in Decisions, Orders and Letters

Dear Mr. Wruck:

As requested by the BCUC in letter No. L-45-15, Internal Audit has performed procedures in connection with FBC's compliance with the financial directions contained in Decisions, Orders and Letters issued by the BCUC.

We have independently identified the financial directions for examination using Decisions, Orders and Letters issued during 2021 as well as certain Decisions, Orders and Letters issued in previous years that relate to the 2021 year. For the purposes of this letter, "financial directions" include specific directions, instructions and orders issued by the BCUC relating to accounting practices and methodologies, and the filing of specific reports, studies and agreements.

Based on our review, nothing has come to our attention that indicates that FBC is not, in all material respects, in compliance with the financial directions contained within Decisions, Orders and Letters issued by the BCUC.

If further information is required, please contact the undersigned.

Sincerely,

FortisBC Inc.

[redacted]

[redacted]

FORTISBC INC.
BRITISH COLUMBIA UTILITIES COMMISSION
LETTER NO. L-14-95

Direction

The Commission requires the filing of executive compensation information as part of the Utility Annual Report to the Commission. For certain British Columbia utilities the information filed should be consistent with the annual filing requirements of the Ontario Securities Commission ("OSC").

Response

The following table sets forth information concerning the compensation earned for services rendered in respect of each of the individuals who served as the President & CEO, the Vice President, Finance & CFO and the Corporation's other most highly compensated executive officer during the most recently completed financial year.

Name and Position	Year	Salary (1)	Bonus (2)	Value of all other compensation (3)
Roger A. Dall'Antonia President & CEO, Director (4)(5)	2021	$640,000	$587,500	$204,763
Ian G. Lorimer Vice President, Finance & CFO (5)	2021	$379,000	$181,500	$106,803
Doyle Sam Executive Vice President, Operations & Engineering (6)	2021	$399,000	$286,000	$82,947

Notes:

(1) Represents the annual salary for the Named Executive Officers.
(2) Represents performance bonus and amounts awarded under the Corporation's short-term non-equity incentive program in recognition of FEI and FBC's respective corporate performances and the individual's performance for the reported year and paid in the following year.
(3) Includes, where applicable the aggregate of amounts paid by FEI or FBC for (i) payment in lieu of vacation, (ii) the dollar value of insurance premiums paid by the Corporation with respect to term life insurance, (iii) 10 per cent match by the Corporation on contributions made to purchase Fortis Common Shares through the Employee Share Purchase Plan (ESPP), (iv) interest benefit from ESPP loans, and (v) all compensation paid or accrued to Named Executive Officers relating to defined contribution pension plans, including contributions to the Named Executive Officer's self-directed RRSP and SERP. Perquisites are not disclosed as they did not exceed the minimum disclosure threshold of the lesser of 10 per cent of the total annual salary of the Named Executive Officer.
(4) In addition to his role of President and CEO, Mr. Dall'Antonia also held the position of Director for which no additional compensation was earned or received.
(5) Amounts reported represent amounts paid by FEI for Mr. Dall'Antonia's and Mr. Lorimer's service to FBC and other FortisBC companies. FBC proportionately reimburses FEI for their services.
(6) Amounts reported represent amounts paid by FBC for Mr. Sam's service to FEI and FHI. FEI proportionately reimburses FBC for Mr. Sam's service.

FORTISBC INC.
BRITISH COLUMBIA UTILITIES COMMISSION
LETTER NO. L-65-20

Direction

The BCUC instructs the regulated public utilities under its jurisdiction to provide the following Capital Expenditures table in their Annual Reports, pursuant to sections 24 and 45 of the UCA.

Response

The requested table is provided below.

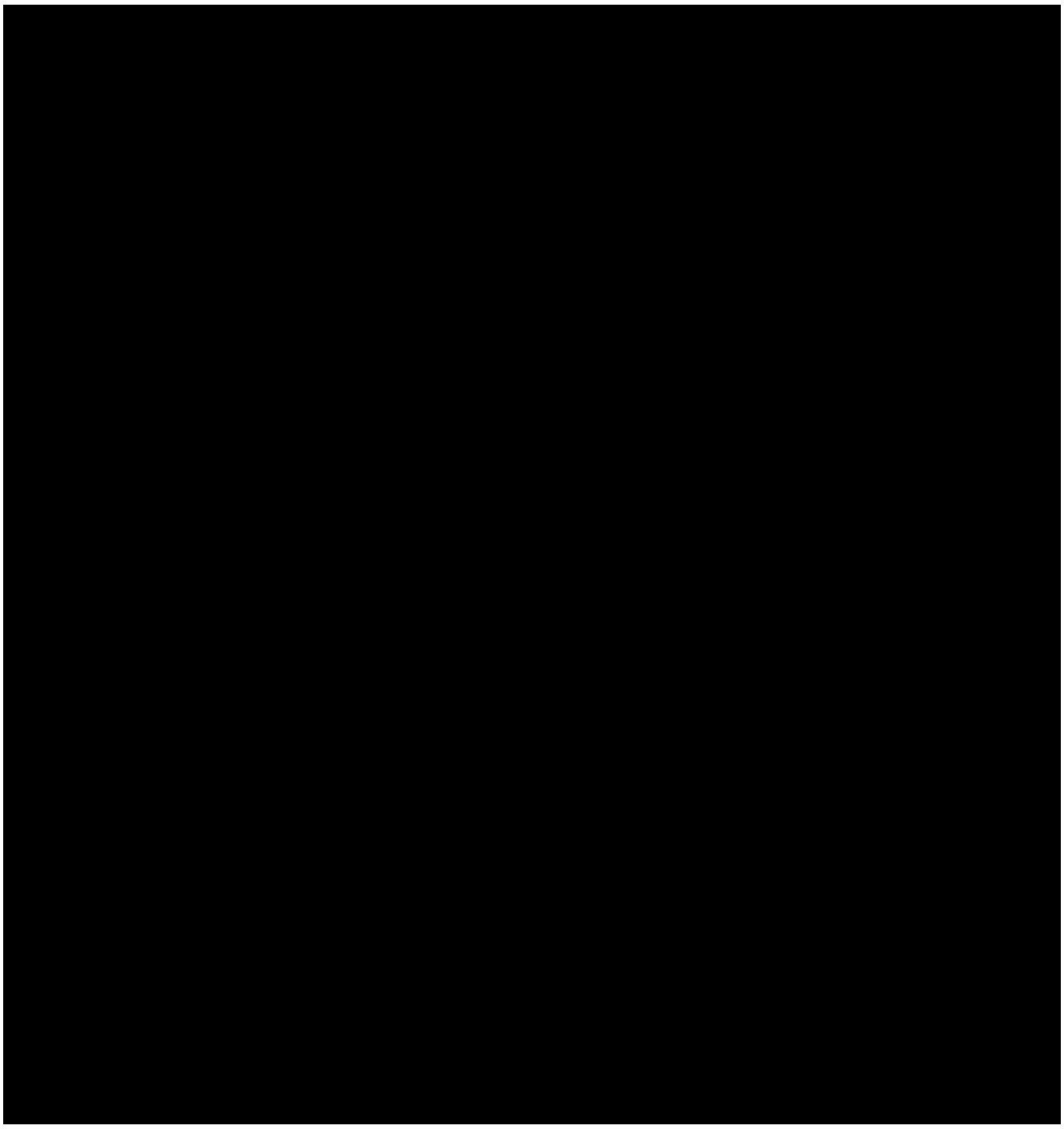
	Capital Expenditures ($000)				
	Forecast 2021	**Actual 2021**	**2021 Variance**	**Forecast 2022**	**Forecast 2023**
	(a)	(b)	(a)-(b)=(c)	(d)	(e)
CPCN	21,938	28,618	(6,680)	19,401	N/A
System Extensions	23,042	21,865	1,177	24,339	N/A
Other Capital	64,530	66,871	(2,340)	58,801	N/A
Total	**$109,511**	**$ 117,353**	**$ (7,842)**	**$102,541**	**N/A**

Note: The above amounts exclude AFUDC. Forecast 2023 amounts will be provided in the FBC Annual Review for 2023 Rates.

FORTISBC INC.

Affiliated Transactions Report

For the Period January 1, 2021 to December 31, 2021



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