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October 5, 2021

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)

Project No. 1599231

Annual Review for 2022 Rates (Application)

Evidentiary Update to the Application, dated October 5, 2021

On August 6, 2021, FBC filed the Application referenced above. In accordance with British Columbia Utilities Commission (BCUC) Order G-226-21, on October 5, 2021, FBC filed its responses to Information Requests (IRs) No. 1. FBC is providing this Evidentiary Update for FBC's wildfire-related exogenous factor treatment request and a change to the calculation of the 2021 cost of removal error as described in response to BCUC IR1 27.1. The combined impacts of these two items do not change FBC's requested 2022 rate increase of 3.46 percent.

Wildfire-Related Exogenous Factor Treatment Request

In the Application (page 102), FBC stated that it was currently evaluating the impact on its O&M and capital costs from ongoing wildfires in its service area and, similar to the exogenous factor treatment approved for the costs of repair associated with wildfires in 2015, if the wildfires resulted in costs exceeding the materiality threshold, FBC would be updating the Application to include these costs.

As discussed in detail in Appendix A of this Evidentiary Update, FBC is applying for exogenous factor treatment for costs related to one wildfire event in 2021 which exceed the materiality threshold. The forecast incremental O&M costs are \$0.155 million and the incremental capital costs are \$2.097 million¹.

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¹ The incremental capital costs result in a 2021 revenue requirement impact of \$0.144 million.



Adjustment to Calculation of 2021 Cost of Removal Error

In Section 12.4.1.2.2 of the Application, FBC explained that it had inadvertently excluded the parentheses from the Cost of Removal amounts for 2020 and 2021 shown on Schedules 7 and 7.1 in the October 28, 2020 Evidentiary Update to the FBC Annual Review for 2020 and 2021 Rates Application. This clerical error resulted in a reduction to FBC's approved rate base amounts and an under-collection of rate revenues in the amount of \$859 thousand in 2021. The calculation of the cost of removal error was provided in Table 12-3 to the Application.

In its response to BCUC IR1 27.1, FBC noted that it identified some minor errors in Table 12-3. FBC had incorrectly used the 2020 income tax deduction for 2021 on Line 51, and inadvertently had the customer share of surplus/(deficit) on Line 66 as after-tax dollars when it should instead be in pre-tax dollars. The correction of the error on Line 51 did not result in any changes to the amount of customers' sharing of revenue/earnings; however, the correction of the error on Line 66 results in the customers' share of the deficit being reduced from \$859 thousand to \$627 thousand. FBC has included a corrected version of Table 12-3 in the response to BCUC IR1 27.1. The change in deficit is \$232 thousand net-of-tax or \$318 thousand pre-tax (\$232 thousand / (1-27 percent)).

Summary of Impacts

The combined impact of the two items identified above do not change the requested 2022 rate increase of 3.46 percent as set out in the Application.

The impact of each of the items is shown in the table below.

Table 1: 2022 Revenue Requirement Impact of Evidentiary Update

	Revenue Deficiency /(Surplus)	Rate Impact
Line Item	\$ million	(%)
August 6, 2021 Filing	13.295	3.46%
Exogenous factor treatment - Capital	0.144	0.04%
Exogenous factor treatment - O&M	0.155	0.04%
2021 Cost of Removal Error	(0.318)	-0.08%
October 5, 2021 Evidentiary Update	13.276	3.46%

Attached in Appendix B for ease of reference is the full Application showing the changes Blacklined², as well as replacement Financial Schedules for Section 11³ that reflect the changes identified.

FBC has also attached an amended Draft Order in Appendix C to this Evidentiary Update, reflecting the request for exogenous factor treatment of the one wildfire event in 2021.

² Revised pages with Blacklined changes include pages 2 to 6, 38, 41, 46 to 48, 50, 51, 62, 64 to 67, 71 to 102, 110, 112 to 114.

³ Revised Financial Schedules are found on pages 71 to 101.

October 5, 2021 British Columbia Utilities Commission FBC Annual Review for 2022 Rates – Evidentiary Update dated October 5, 2021 Page 3



If there are any further changes to FBC's 2022 rates resulting from the BCUC's decision on this Application, or if FBC receives its requested clarification on its Revised and Updated Rate Design and Rates for EV DCFC Fast Charging Service Application, these items will be reflected in the compliance filing following the BCUC's decision on this Application.

If further information is required, please contact the undersigned
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Sincerely,

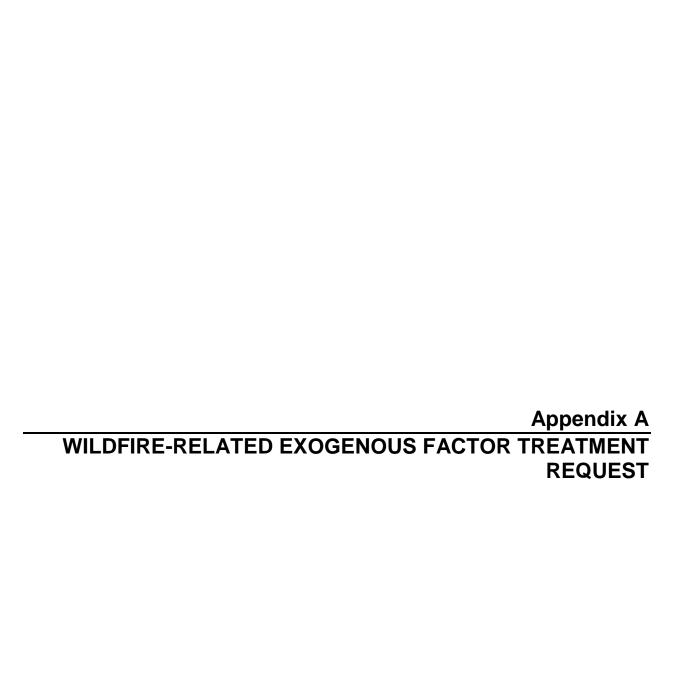
FORTISBC INC.

Original signed:

Diane Roy

Attachments

cc (email only): Registered Interveners



APPENDIX A – WILDFIRE EXOGENOUS FACTOR TREATMENT REQUEST

1. INTRODUCTION

- 2 In this Appendix, FBC sets out its request for exogenous factor treatment for the cost of the Nk'Mip
- 3 Creek wildfire in 2021.

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- 4 There was significant wildfire activity in FBC's service territory during the 2021 wildfire season.
- 5 FBC estimates the total costs associated with preventing and repairing damage to its facilities as
- a result of these wildfires were \$2.381 million. Of the total costs in 2021, only the costs related to
- 7 the Nk'Mip Creek wildfire meet the materiality threshold for exogenous factor treatment. FBC is
- 8 requesting exogenous factor treatment for \$2.252 million in costs related to Nk'Mip Creek wildfire
- 9 (\$2.355 million related to the Nk'Mip Creek wildfire, less the amounts already included in regular
- 10 sustainment capital and formula O&M). Exogenous factor treatment was previously approved for
- 11 FBC for wildfire-related costs incurred in 2015¹.
- 12 In the following sections, FBC:
- 1. Establishes that the Nk'Mip Creek wildfire and the associated costs meet the criteria for exogenous factor treatment under the 2020-2024 MRP;
 - 2. Describes FBC's wildfire response generally, with a focus on FBC's 2021 wildfire experience, and provides a description of the Nk-Mip Creek wildfire specifically;
- 17 3. Provides a summary of historical wildfire activity and costs; and
- 4. Sets out the regulatory treatment of the wildfire-related expenditures.
- 19 The information contained in the following sections responds to the BCUC IR1 25 series, CEC
- 20 IR1 28.1 and the RCIA IR1 17 series.

2. WILDFIRE COSTS MEET THE CRITERIA FOR EXOGENOUS FACTOR TREATMENT

- 23 The BCUC established the following criteria for evaluating whether the impact of an event qualifies
- 24 for exogenous factor treatment:
- The costs/savings must be attributable entirely to events outside the control of a prudently operated utility;
- 27 2. The costs/savings must be directly related to the exogenous event and clearly outside the base upon which the rates were originally derived;
- 3. The impact of the event was unforeseen;
- 30 4. The costs must be prudently incurred; and

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¹ Order G-202-15.

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Annual Review for 2022 Rates – Evidentiary Update dated October 5, 2021 **APPENDIX A – Wildfire Exogenous Factor Treatment Request**



- 5. The costs/savings related to each exogenous event must exceed the BCUC-defined materiality threshold.²
- The materiality threshold (item 5) for FBC has been established at \$0.150 million, as approved in the MRP Decision³.
- The costs to prevent and repair damage caused by the Nk'Mip Creek wildfire meet the exogenous criteria identified above:
 - 1. The costs are attributable entirely to an event outside the control of a prudently operated utility, i.e. the Nk'Mip Creek wildfire. Numerous 2021 wildfire events were precipitated by the unusually warm and dry conditions in FBC's service territory. The Nk'Mip Creek wildfire was person-caused and was exacerbated by the warm and dry conditions. It is clearly outside the control of FBC to prevent forest fires of this nature.
 - 2. The costs are directly and solely attributed to the Nk'Mip Creek wildfire. The magnitude of expenditures required greatly exceeds those of recent years and is, therefore, outside the base used to determine the 2020-2024 capital plan and the formula O&M expense under the MRP. See section 4.1 below for further details.
 - 3. The Nk'Mip Creek wildfire and its impact could not have been foreseen at the time of the MRP Application and Decision.
 - 4. All of the costs to prevent or to repair the damage caused by the wildfire on an emergency basis have been or will be prudently incurred.
 - 5. The cost related to this wildfire event is estimated at \$2.355 million, which exceeds the materiality threshold of \$0.150 million.

Please refer to Section 4 below for the calculation of the forecast incremental O&M and capital costs attributable to the Nk'Mip Creek wildfire and the rate impact.

3. FBC'S WILDFIRE RESPONSE

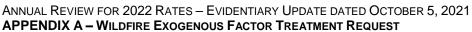
3.1 Increasing Focus on Preventive Measures

- 27 Following British Columbia's record-breaking wildfire years of 2017 and 2018, FBC focused on
- 28 how to evolve with the changing climate and address the increasing wildfire risks.
- 29 In 2019, FBC worked in conjunction with fire professionals to explore what could be done to
- 30 prevent wildfire damage to its assets, focusing on its wooden poles. FBC is developing a Climate
- 31 Adaption Plan in consideration of the Canadian Electricity Association guidelines, in particular
- 32 with respect to wildfires, and will be evaluating further actions to be taken to minimize wildfire risk.
- 33 Since 2019, FBC has acquired equipment for the application of fire retardant gels and liquids on
- 34 wooden poles. Application of fire retardant, in conjunction with the removal of vegetation in the

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² MRP Decision, p. 62.

³ Ibid., p. 65.





- immediate vicinity of the pole base, is a critical element of FBC's proactive response to encroaching wildfires.
- 3 Figure A-1 below shows the pump/spray equipment in the back of a utility vehicle.

4 Figure A-1



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The following four pictures in Figures A-2 to A-5 show examples of the fire retardant being applied ahead of the areas that the Nk'Mip Creek wildfire was encroaching upon, and examples of structures with preventive measures taken (vegetation in the vicinity of the pole removed, and structures sprayed with retardant).



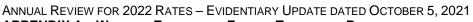
1 Figure A-2 Figure A-3





3 Figure A-4 Figure A-5







APPENDIX A – WILDFIRE EXOGENOUS FACTOR TREATMENT REQUEST

Finally, Figure A-6 is a photograph of treated structures that remained intact in the midst of a burned area.

Figure A-6



The potential savings due to FBC's preventive measures are significant. For example, of the 59 H-frame structures on the 161 kV 48 Line transmission line (48 Line), only eight were impacted by the fire. At an approximate replacement cost of \$40 thousand per structure, the estimated cost to replace the remaining 51 structures would have been \$2.040 million (51 x \$0.040 million), compared to the preventive cost of \$0.181 million for the entirety of the transmission and distribution structures saved in 2021. Further detail on the actual replacement costs and the cost of prevention is provided in the following section.

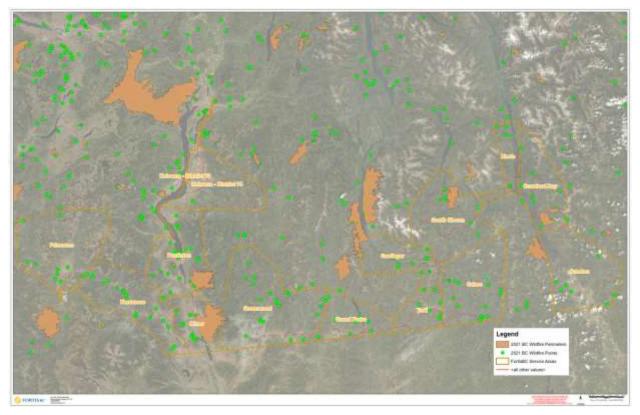
3.2 2021 WILDFIRE EXPERIENCE

There were numerous wildfire events within FBC's service territory in 2021. Figure A-7 below shows the wildfires identified by the BC Wildfire Service (BCWS) within FBC's service territory in 2021 to date. Of the nine wildfires monitored by FBC during the 2021 fire season, only one, the Nk'Mip Creek wildfire, qualifies as an Exogenous Factor under the MRP. Please see Table A-1 in Section 3.4 below which identifies the nine wildfires monitored or addressed by FBC.



APPENDIX A – WILDFIRE EXOGENOUS FACTOR TREATMENT REQUEST

Figure A-7: Map of 2021 Wildfires Within FBC Service Territory



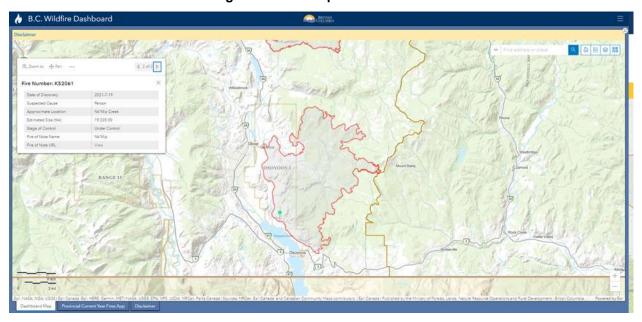
3.3 2021 NK'MIP CREEK WILDFIRE

- 4 The Nk'Mip Creek wildfire started approximately 6 km north of Osoyoos on July 19, 2021. The
- 5 wildfire, which was classified as a Wildfire of Note, resulted in evacuation orders and alerts, and
- 6 burned an estimated area of 19,355 hectares, as seen on the BCWS Dashboard map in Figure
- 7 A-8.

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Figure A-8: Nk'Mip Creek Wildfire



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The Nk'Mip Creek wildfire caused significant damage to FBC's transmission, distribution and fibre optic infrastructure, which resulted in the de-energization of two transmission lines, 48 Line and 66 Line (whose load was transferred to 44 Line), and the loss of communications. FBC and Shaw Communications redundancies ensured no lengthy system operation loss; however, several thousand customers were vulnerable to a lengthy loss of service until the lines were rebuilt.

9 FBC was able to proactively protect many structures ahead of the fire as it expanded, including 10 all of Pine Feeder 2 (PIN2). This was achieved by removing vegetation from around the base of 11 poles and applying a fire retardant gel or spray to the structures.

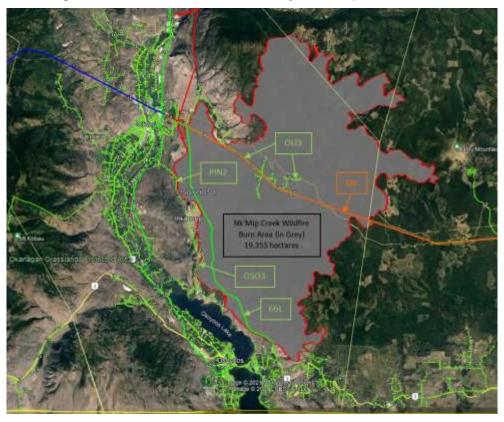
Some damage to Oliver Feeder 3 (OLI3) resulted in the loss of electric service for customers for a lengthy period. These customers were all under an Evacuation Order for the duration of their power outage.

FBC's electric operations staff activated a level 2 emergency in accordance with the corporate emergency response plan and worked at finding a solution to restore power to the affected customers and action repairs to the sections destroyed in the fire. An assessment of the damage found 30 transmission and 13 distribution structures damaged or destroyed. Crews received authorization to enter the fire zone to begin rebuilding structures on July 30. All transmission infrastructure was repaired and re-energized by August 13.

21 Figure A-9 below shows the location of the Nk'Mip Creek wildfire in relation to FBC's facilities.



Figure A-9: FBC Facilities in Proximity to Nk'Mip Creek Wildfire



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The wildfire damaged transmission lines 48 Line and 66 Line, and distribution line OLI3. In addition, on both 48 Line and 66 Line, a fibre optic communication line was damaged. The following subsections provide further details on this damage and associated repair efforts.

66 Line Damage and Repair

- 8 66 Line is a 63kV transmission line that connects the Bentley Terminal Station (BEN) in Oliver to
- 9 the Nk'Mip Substation (NKM) in Osoyoos. The line is 20.2 km in length with the majority of the
- 10 line situated on Osoyoos Indian Band lands. Due to the location of the fire and restricted access,
- 11 there was no opportunity to perform any mitigating actions.
- 12 In total, 22 of 102 structures on 66 Line were burned. 66 Line was de-energized resulting in a loss
- 13 of supply to the Nk'Mip Substation. The Nk'Mip Substation loads were fed from the Osoyoos
- 14 Substation to ensure no customer interruption. This left no redundancy for customers in the
- 15 Osoyoos area.
- 16 Once authorized, FBC personnel entered the 66 Line fire zone to assess the damage and, based
- 17 on the assessment, FBC was able to begin design and material coordination for the rebuild of the
- structures. Line and Telecom contractor crews were utilized for the rebuild of the line and they 18
- 19 mobilized to site with four crews, including tracked line equipment due to the difficult access to
- 20 the structures. Transmission and fibre optic service was restored 15 days after construction
- 21 began.

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Annual Review for 2022 Rates – Evidentiary Update dated October 5, 2021 **APPENDIX A – WILDFIRE EXOGENOUS FACTOR TREATMENT REQUEST**



48 Line Damage and Repair

2 48 Line is a 161kV transmission line that connects the BEN in Oliver to the Kettle Valley

- 3 Substation (KET) north of Rock Creek. The line is 48.1 km in length. In the earlier days of the
- 4 fire, the perimeter was not yet at 48 Line and it was safe to perform preventive measures. Overall,
- 5 of the 59 structures within the wildfire bounds, only 8 were lost. 48 Line was de-energized
- 6 resulting in a separation of the FBC system between the Okanagan and Kootenay/Boundary
- 7 areas. This did not result in a loss of service for any customers.
- 8 Once authorized, FBC personnel entered the 48 Line fire zone to assess the damage and, based
- 9 on this assessment, FBC was able to begin design and material coordination for the rebuild of the
- 10 structures. The same 66 Line contractor crews were also utilized for the rebuild of 48 Line and
- 11 the associated fibre optic repairs. Transmission service was restored 7 days after construction
- began, with fibre optic repairs completed 5 days later.
- 13 The following four pictures show examples of the damage sustained on 66 Line and 48 Line.







APPENDIX A – WILDFIRE EXOGENOUS FACTOR TREATMENT REQUEST





3 OLI3 Circuit Damage and Repair

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- 4 During the fire, a section of the OLI3 distribution circuit that tapped off 66 Line sustained damage
- 5 to 13 distribution poles which required replacement, resulting in outages for up to 76 customers
- 6 from July 20 to August 6. During the repair period and outage, the affected customers were on
- 7 evacuation order. Power was restored a few days before the evacuation order was lifted. FBC
- crews out of Oliver were utilized to rebuild this section of the distribution circuit. 8

9 PIN2 Circuit Undamaged

- 10 A portion of Pine Feeder 2 was within in the fire zone, but was undamaged due to preventive
- measures taken. It is estimated that 16 structures were saved as a result. PIN2 was de-11
- 12 energized July 19, 2021 for approximately 16 hours, resulting in an outage to 690 customers.

3.4 FBC HISTORICAL WILDFIRE ACTIVITY (2015-2021)

- Table A-1 identifies, for the period 20154 to September 2021, wildfires near FBC's assets, 14
- 15 including wildfires monitored by FBC5, those for which preventive measures were taken, and/or
- 16 for which damaged assets were replaced.

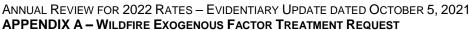
As requested in BCUC IR1 25.4.

⁵ Monitoring of wildfires may encompass patrols and other O&M activity, the small magnitude of which is not reflected in O&M expense in Table A-1.



Table A-1: Historical Wildfire Expenditures 2015 to 2021

Line	Date	Location	BCWS#	Cause	Capital (\$000s)	O&M (\$000s)
1	25 May 2021	Knighthawk	K50645	Person	-	-
2	1 Jul 2021	Merry Creek	N51165	Person	-	-
3	9 Jul 2021	Trozzo Creek	N51705	Lightning	-	-
4	9 Jul 2021	Akokli Creek	N71686	Lightning	-	\$ 23.100
5	11 Jul 2021	Thomas Creek	K51794	Person	-	\$ 2.200
6	19 Jul 2021	Nk'Mip Creek	K52061	Person	\$ 2,199.246	\$ 156.200
7	21 Jul 2021	Barcelo Road	K52095	Person	-	-
8	28 Jul 2021	Boothman Creek	N62234	Person	-	-
9	16 Sep 2021	Mount Nkwala	K52833	Person	-	-
10	Total 2021				\$ 2,199.246	\$ 181.500
11	6 Aug 2020	West Bench	K50962	Person	-	-
12	17 Aug 2020	Talbot Creek	N51250	Lightning	-	-
13	18 Aug 2020	Christie Mountain	K51287	Unknown	-	\$ 15.000
14	9 Sep 2020	Crystal Creek	N71681	Person	-	-
15	14 Sep 2020	Jura FSR	K61757	Person	-	-
16	29 Sep 2020	East of Old Hedley Road	K61823	Person	-	-
17	Total 2020				-	\$ 15.000
18	24 July 2019	Richter Mountain	K51089	Lightning	\$ 6.200	-
19	4 Aug 2019	Eagle Bludd	K51244	Person	\$ 44.800	-
20	13 May 2019	Richter Creek	K50271	Unknown	-	-
21	Total, 2019				\$ 51.000	-
22	17 Jul 2018	Snowy Mountain	K51238	Lightning	\$ 11.321	-
23	23 Jul 2018	Old Hedley Road	K61422	Unknown	\$ 8.544	\$ 1.500
24	Total 2018				\$ 19.865	\$ 1.500
25	4 Jul 2017	Kaleden	K50588	Unknown	\$ 0.765	-
26	7 Jul 2017	Princeton	K60643	Unknown	\$ 48.356	-
27	23 Jul 2017	Ashnola/Cawston	K50434	Unknown	\$ 25.731	-
28	24 Aug 2017	Kelowna – Joe Rich	K51878	Unknown	\$ 42.709	-
29	Total 2017				\$ 117.561	-
30	8 Jun 2016	Gilpin Park, Grand Forks	N60057	Unknown	\$ 36.760	-
31	Total 2016				\$ 36.760	-
32	13 Aug 2015	Rock Creek ¹	N60584	Person	\$ 1,872.243	-
33	14 Aug 2015	Wilson Mountain	K50619	Unknown	\$ 221.551	
34	14 Aug 2015	Testalinden Creek ¹	K50615	Unknown	\$ 313.126	-
35	26 Aug 2015	Stickpin (Washington)	n/a	Unknown	\$ 18.211	-
36	Total 2015				\$ 2,425.131	=





Notes to Table:

¹ The Rock Creek and Testalinden Creek fire events were approved for Z factor treatment.

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Of the nine fires that posed potential risk to FBC's assets in 2021, all are currently under control and FBC is not forecasting any additional activity. The 2021 estimates above are based on the best available information at the time of filing, and include estimates of third-party costs for which invoices have not yet been received.

- 8 With regard to the Nk'Mip Creek wildfire exogenous factor costs, if approved for flow-through
- 9 treatment, any variation in 2021 Actual costs from the estimate will be recorded in the Flow-
- through deferral account and will be reported on in FBC's 2023 Annual Review.
- 11 The following section describes the regulatory treatment proposed for the exogenous factor
- wildfire costs, including how the incremental capital and O&M costs were calculated.

4. REGULATORY TREATMENT OF WILDFIRE-RELATED EXPENDITURES

15 FBC is requesting exogenous-factor treatment for the costs of the Nk'Mip Creek wildfire over and above amounts embedded in the MRP capital plan and formula O&M expense for 2021. The 16 17 materiality threshold is the sum of capital plus O&M expense for each event, recognizing that the 18 costs/savings must also be "outside the base upon which the rates were originally derived". 19 Therefore, to establish the amount that was included in the base for setting 2021 rates, FBC 20 shows in Section 4.1 below the amount that is already embedded in its 2021 Approved capital as 21 well as in its 2021 Formula O&M. In Section 4.2 below, FBC describes the regulatory treatment 22 of the wildfire-related exogenous factor costs in 2021.

4.1 WILDFIRE-RELATED EXPENDITURES EMBEDDED IN 2021 APPROVED CAPITAL AND O&M

For capital, the forecast costs of wildfire repairs were included under FBC's transmission and distribution urgent repairs (sustainment capital) categories. The approved 2021 capital funding for this category was forecast based on a three-year rolling average lagged by one year; as such, the 2021 amount was based on 2017 and 2018 Actual wildfire expenditures and 2019 Projected wildfire expenditures⁶. These amounts were escalated by an inflation factor of 2 percent to bring them to 2021 dollars.

Table A-2 below shows the calculation of the 2021 approved wildfire-related capital costs included

32 under the MRP capital plan, which were \$102,286.

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⁶ FBC's MRP Application was filed in March 2019. Therefore, the 2021 amount as included in the forecast sustainment capital for the MRP was based on a 2019 projected number at that time, which in turn was based on a three-year average of 2015 to 2017 actuals.



Table A-2: Calculation of 2021 Approved Wildfire Related Capital Costs

Line	Year	Actual (2021 \$)	Reference
1	2017 Actual	127,252	Line 29 of Table A-1 x (1 + 2%)^4 Yrs
2	2018 Actual	21,081	Line 24 of Table A-1 x (1+ 2%)^3 Yrs
3	2019 Projected	158,525	Average of 2015 to 2017 actual expenditures in 2021 dollars: 2015 = \$273,261 (Line 36 of Table A-1 less \$2,151,870 recovered through Z-factor for 2015) x (1 + 2%)^6 Yrs 2016 = \$36,760 (Line 31 of Table A-1) x (1 + 2%)^5 Yrs 2017 = \$127,252 (Line 1 of Table A-2)
4	Total	306,857	Sum of Line 1 to 3
5	2021 Approved	102,286	Line 4 / 3 (Average of 2017-2019 expenditures)

For O&M, the wildfire costs embedded in FBC's O&M formula under MRP were based on 2018 actuals as the starting point for Base O&M. The 2018 actual O&M expenditure related to wildfire prevention was \$1,500. Table A-3 below shows the wildfire-related O&M that was included in FBC's 2021 Base O&M to be \$1,614, calculated based on the approved inflation factor for the O&M formula under FBC's PBR Plan in 2019 and under FBC's MRP for 2020 and 2021, as well as the actual O&M expenditures in 2018.

Table A-3: Calculation of 2021 Approved Wildfire Related Formula O&M

	2018 Actual	2019	2020	2021
Inflation Factor		1.481%	2.309%	3.668%
Base O&M	1,500	1,522	1,557	1,614

Based on Tables A-2 and A-3 above, the total amount embedded in the MRP funding for 2021 is \$103,900, comprised of \$102,286 for capital and \$1,614 for O&M.

4.2 WILDFIRE-RELATED EXOGENOUS Z-FACTOR TREATMENT EXPENDITURES FOR 2021

Table A-4 below summarizes FBC's request for exogenous (Z-factor) treatment for the 2021 wildfire-related expenditures for the Nk'Mip Creek wildfire.

Table A-4: Calculation of 2021 Exogenous Factor

		Capital	O&M	Total	
Line	Particular	(\$000s)	(\$000s)	(\$000s)	Reference
1	Total 2021 Expenditures	2,199.246	181.500	2,380.746	Table A-1, Line 10
2	Less: Events not meeting Materiality Threshold	-	(25.300)	(25.300)	Table A-1, Sum of Line 4 and 5
3	Costs Meeting Materiality Threshold	2,199.246	156.200	2,355.446	Line 1 + Line 2
4					
5	Less: Total Embedded 2021 Costs under MRP	(102.286)	(1.614)	(103.900)	Table A-2 and A-3
6					
7	Z-Factor Request	2,096.960	154.586	2,251.546	Line 3 + Line 7



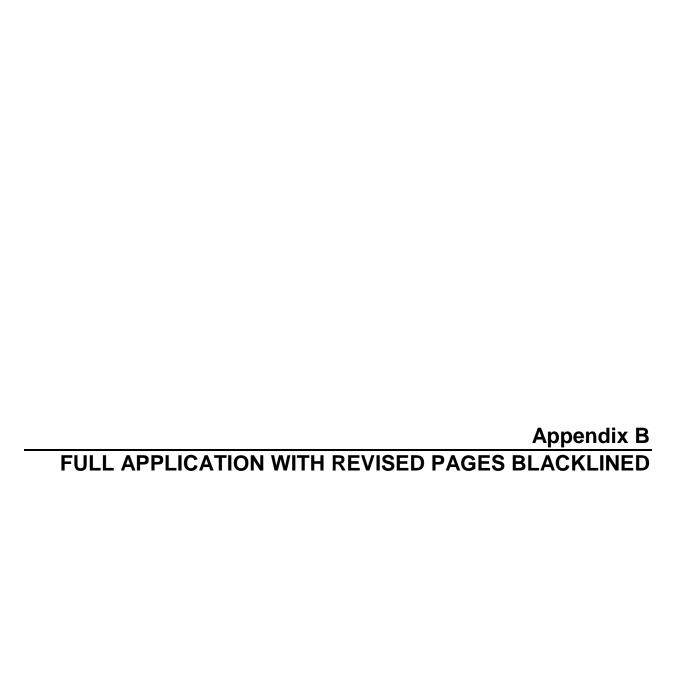


1 As detailed above, the total exogenous factor amount for 2021 is \$2.252 million, which includes

- 2 \$2.097 million of capital and \$0.155 million of O&M. This is equivalent to an incremental
- deficiency of \$0.144 million⁷ related to capital and \$0.155 million related to O&M. The rate impact
- 4 in 2022 due to these expenditures is approximately 0.08 percent⁸ (0.04 percent for capital and
- 5 0.04 percent for O&M). Since the incremental costs related to the Nk'Mip Creek wildfire satisfy
- 6 the exogenous factor criteria, FBC has forecast these costs as flow-through capital expenditures
- 7 and O&M outside of the formula. Any variations from the forecast amounts included in this
- 8 Appendix will be trued up in FBC's 2023 Annual Review.

⁷ The incremental deficiency related to the \$2.097 million capital includes incremental depreciation expenses, earned return, and income tax.

⁸ Rounded to two decimal places.





Multi-Year Rate Plan for 2020 through 2024

Annual Review for 2022 Rates

August 6, 2021 as amended by the October 5, 2021 Evidentiary Update



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1. APPROVALS SOUGHT, OVERVIEW OF THE APPLICATION AND PROPOSED PROCESS

1.1 INTRODUCTION

- 4 FortisBC Inc. (FBC or the Company) files this Application in compliance with British Columbia
- 5 Utilities Commission (BCUC) Order G-166-20, which approved a Multi-Year Rate Plan (MRP or
- 6 the Plan) for FBC for the years 2020 to 2024. In accordance with the MRP, an annual review
- 7 process is required to set rates for each year of the MRP.
- 8 The MRP provides stable levels of O&M funding and includes service quality indicators (SQIs)
- 9 to monitor the maintenance of service quality. The approved Earnings Sharing Mechanism
- 10 (ESM), set out in Section 10, aligns the incentive properties of the Plan between customers and
- 11 the Company.

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- 12 As explained in Section 10 of the Application, FBC proposes to distribute \$1.195 million pre-tax
- 13 (\$0.872 million after-tax) in earnings sharing to customers in 2022. For 2020, FBC achieved
- 14 formula O&M savings in addition to meeting the embedded productivity improvement factor in
- 15 the O&M formula. Total formula O&M savings before earnings sharing were approximately
- 16 \$1.5 million. Approximately \$0.9 million of the total O&M savings were primarily due to labour
- 17 savings, reflecting the impact of variances in customer contact needs as well as vacancies due
- 18 to employee movement. Approximately \$0.7 million of the savings were due to the timing of
- 19 expenditures, such as unfilled vacancies and consulting expenditures, and lower general and
- 20 miscellaneous expenditures. Additionally, approximately \$0.1 million in formula O&M savings
- 21 were realized due to the net incremental impact of the COVID-19 pandemic. Please refer to
- 22 Section 12.2.2 for further details. Partially offsetting the O&M savings were \$0.2 million of
- 23 higher spending compared to the formula amount for incremental expenditures related to
- 24 System Operations, Integrity and Security. Please refer to Section 6.2.1 for further details.
- 25 FBC will continue to pursue productivity improvements to achieve savings beyond the
- 26 embedded productivity improvement factor as it seeks to manage its business needs and cost
- 27 pressures resulting from its evolving and challenging operating environment. In 2021, FBC and
- 28 FortisBC Energy Inc. (together FortisBC) initiated a working group consisting of senior
- 29 managers and directors from different parts of the organization that is responsible for reviewing
- 30 and identifying areas for productivity initiatives. An area of focus for potential productivity
- 31 opportunities is initiatives that offer financial and customer service benefits and leverage
- technology and innovation as enablers. Additionally, the group is focused on fostering a sustained awareness amongst managers and employees of the importance of productivity
- during the MRP to help address cost pressure challenges. In next year's annual review, FBC
- will be in a position to report back to the BCUC on the success of some of its initiatives.
- 36 The proposed rates for 2022 flowing from the approved formulas and forecasts set out in the
- 37 Application, including returning the actual 2020 earnings sharing to customers, result in a
- 38 3.46 percent rate increase from 2021 rates. The increase is primarily due to a decrease in load,

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ANNUAL REVIEW FOR 2022 RATES



- 1 rate base growth, and the elimination of the accumulated revenue surplus of \$5.420 million, 2 which was fully utilized in 2021, as described in Section 1.4 below.
- In the subsections below, FBC sets out the approvals it is seeking and provides an overview of the requirements for the annual review process. This is followed by a summary of FBC's
- 5 proposed revenue requirements and rate changes for 2022 and an overview of the SQI results.
- 6 These matters are addressed in more detail in subsequent sections of the Application.

7 1.2 APPROVALS SOUGHT

- With this Application, FBC requests BCUC approval for the following pursuant to sections 59 to 61 of the *Utilities Commission Act* (UCA):
 - Approval to recover the 2022 revenue requirement and resultant rate changes on a
 permanent basis, effective January 1, 2022, as filed in the Application and subject to any
 adjustments identified by FBC during the regulatory process and from any directives or
 determinations made by the BCUC in its decision on the Application.
 - 2. The following deferral account approvals, as described in Sections 7.6 and 12.4:
 - Creation of a rate base deferral account for the 2021 Generic Cost of Capital Proceeding, with the amortization period to be determined in a future proceeding;
 - Amortization periods for the following previously approved deferral accounts:
 - A one-year amortization period for the 2020 Cost of Service Analysis (COSA) deferral account commencing January 1, 2022;
 - A three-year amortization period for the Mandatory Reliability Standards (MRS) 2021 Audit deferral account commencing January 1, 2022;
 - A three-year amortization period for the 2021 Long-Term Electric Resource Plan (LTERP) deferral account commencing January 1, 2022; and
 - A three-year amortization period for the Rate Design and Rates for Electric Vehicle (EV) Direct Current Fast Charging (DCFC) Service Application deferral account commencing January 1, 2022.
 - 3. Approval to change the frequency of reporting on the COVID-19 Customer Recovery Fund Deferral Account from monthly to quarterly, as described in Section 7.6.2.1.
 - 4. Z-factor treatment for the incremental O&M and capital expenditures related to MRS Assessment Report. No. 13, as described in Section 12.2.1 of the Application.
 - 5. Z-factor treatment for incremental O&M and capital expenditures related to the prevention and repair of damages resulting from the Nk'Mip Creek wildfire, as described in the Evidentiary Update to the Application, filed on October 5, 2021.

An <u>amended</u> draft order is included <u>as Appendix C to the Evidentiary Update filed on October 5, 2021.</u>

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1 1.3 REQUIREMENTS FOR THE ANNUAL REVIEW

On page 167 of the MRP Decision, the BCUC set out its expectations for the Annual Review component of the MRP. For reference, the table below sets out each requirement and FBC's response or where it is addressed in the Application.

Table 1-1: Annual Review Requirements

Item	Description	Response or Reference		
1	Review of the current year projections and the upcoming year's forecast. For further clarity, these items are listed below:	See items 1(a) to 1(f) below		
1(a)	Customer growth, volumes and revenues;	Section 3		
1(b)	Year-end and average customers, and other cost driver information including inflation;	Section 2		
1(c)	Expenses, determined by the indexing formula plus items forecast annually;	Section 6		
1(d)	Capital expenditures (as provided for by the capital forecast), plus other items forecast annually;	Section 7		
1(e)	Plant balances, deferral account balances and other rate base information and depreciation and amortization to be included in rates; and	Sections 7 and 12		
1(f)	Projected earnings sharing for the current year and true-up to actual earnings sharing for the prior year.	Section 10		
2	Identification of any efficiency initiatives that the Utilities have undertaken, or intend to undertake, that require a payback period extending beyond the MRP period with recommendations to the BCUC with respect to the treatment of such initiatives.	FBC has not identified any efficiency initiatives with a payback beyond the end of the MRP period		
3	Review of any exogenous events that the Company or stakeholders have identified that should be put forward to the BCUC for review.	Section 12.2		
4	Review of the Utilities' performance with respect to SQIs. Bring forward recommendations to the BCUC where there have been a "sustained serious degradation" of service.	Section 13		
5	Assess and make recommendations with respect to any SQIs that should be reviewed in future Annual Reviews.	FBC does not have any recommendations at this time		
6	Reporting on the Innovation Fund status.	Not Applicable for FBC		
7	Assess and make recommendations to the BCUC on potential issues or topics for future Annual Reviews.	FBC does not have any recommendations at this time		

1.4 REVENUE REQUIREMENT AND RATE CHANGES FOR 2022

The rates for 2022 flowing from the revenue requirement components set out in the Application result in a 3.46 percent increase from 2021 rates. The rate increase results from a revenue deficiency of \$13.276 million.

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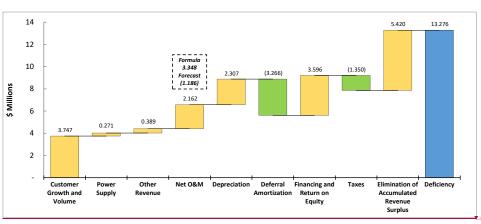
ANNUAL REVIEW FOR 2022 RATES



The following chart summarizes the items that contribute to the 2022 revenue deficiency. The chart shows each item that increases the deficiency in yellow and each item that decreases the deficiency in green. The 2022 deficiency of \$13.276 million is then the sum of all of the previous

bars and is shown at the end of the chart in blue.

Figure 1-1: 2022 Revenue Deficiency (\$ millions)



7 Each of the categories is discussed briefly below.

1.4.1 Customer Growth and Volume Forecast (Section 3)

For 2022, FBC has forecast a sales load decrease of 68 GWh compared to 2021 Approved, primarily due to decreased loads in the industrial, wholesale and commercial classes, partially offset by an increase in residential load.

12 FBC's 2022 Forecast revenue at 2021 approved rates is \$383.895 million.

1.4.2 Power Supply (Section 4)

14 FBC has forecast Power Supply to increase by \$0.271 million in 2022 compared to 2021

15 Approved. This increase is primarily due to forecast increases in wheeling expense and water

16 fees of \$1.469 million, which are partially offset by savings in power purchases of \$1.198 million.

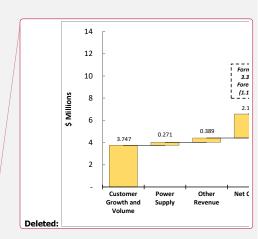
1.4.3 Other Revenue (Section 5)

Other Revenue is forecast to decrease by \$0.389 million in 2022. The main driver of this decrease is lower forecast Contract Revenue resulting from the timing of work expected to be

20 performed on an asset refurbishment project for a third party, partially offset by higher

21 Transmission Access Revenue.





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ANNUAL REVIEW FOR 2022 RATES



Operations and Maintenance (O&M) Expense (Section 6)

2 FBC establishes the majority of its O&M expense by formula during the MRP term. For 2022, 3 the O&M formula incorporates a net inflation factor of 4.089 percent, which is inclusive of a

- productivity improvement factor (X-Factor) of 0.5 percent, and uses a forecast of the change in
- 5 average customers1, for a total increase in formula O&M net of capitalized overhead of
- 6 \$3.348 million², compared to 2021 formula O&M. Net O&M forecast outside of the formula is
- 7 decreasing by \$1.186 million³ over 2021 Approved, primarily due to a decrease in pension and 8
 - OPEB expense. The 2022 increase in total O&M expense net of capitalized overhead is
- 9 \$2.162 million (3.9 percent).

Depreciation (Section 7) 1.4.5

- FBC's 2022 depreciation expense is forecast to increase by \$2.536 million, which is partially 11
- 12 offset by an increase in CIAC amortization of \$0.229 million from net additions compared to
- 2021 Approved, resulting in a net increase of \$2.307 million. The increase in depreciation 13
- 14 expense is primarily a result of CPCN additions to plant for the Corra Linn Dam Spillway Gate
- Replacement Project, the Grand Forks Terminal (GFT) Station Reliability Project, and the Upper 15
- 16 Bonnington (UBO) Old Units Refurbishment Project, as well as the addition of the 2021
- 17 approved amounts for regular distribution plant related to growth and sustainment capital, as
- discussed in Section 7. 18

1.4.6 Amortization of Deferral Accounts (Section 7 and Section 12)

- 20 Amortization of deferral accounts in 2022 decreased by \$3.266 million, primarily due to the
- credit amortization related to the 2020-2024 Flow-through non-rate base deferral account. As 21
- 22 discussed in Section 12.4.1.2, the credit amortization of \$3.407, million in this account is
- 23 primarily due to favourable revenue variances, savings in power purchase expenses, and lower
- 24 property taxes and interest expense. These savings are partially offset by unfavourable
- 25 variances in wheeling expenses, income taxes, flow-through O&M expenses, and a one-time
- 26 adjustment to the flow-through deferral account related to the unrecovered revenue from the
- 27 2021 net salvage forecast.

Financing and Return on Equity (Section 8) 1.4.7

- 29 Financing and Return on Equity (ROE) increased FBC's 2022 deficiency by \$3.596 million
- 30 through changes in financing rates, the ratio of long-term debt versus short-term debt, and
- 31 changes in rate base.
- 32 For 2022, FBC is forecasting a short-term debt rate of 1.51 percent, which is a decrease from
- 33 the 2.22 percent short-term debt rate embedded in the 2021 Approved revenue requirement.
- 34 Overall, FBC's deficiency is reduced by \$1.867 million from financing rate changes and further
 - Modified by 75 percent.
 - Increase in gross formula O&M of \$3.886 million (6.2 percent) compared to 2021 Approved.
 - Decrease in gross forecast O&M of \$1.396 million (45.9 percent) compared to 2021 Approved.

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ANNUAL REVIEW FOR 2022 RATES



1 decreased by \$1.155 million from the ratio change between long-term and short-term debt. The

- 2 savings in financing rate changes and financing ratio changes are offset by the increase in 2022
- 3 rate base, which contributed \$6.618 million to FBC's deficiency when compared to 2021
- 4 Approved. The increase in rate base is primarily due to a combination of CPCN additions and
- 5 regular capital additions entering rate base, as discussed in Section 7.
- 6 FBC has utilized the currently approved capital structure and ROE of 40 percent and 9.15
- 7 percent, respectively.

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1.4.8 Taxes (Section 9)

- 9 FBC's 2022 property taxes are forecast to decrease by 1.9 percent or \$0.355 million from 2021
- 10 Approved. As part of the 2021 Approved amount, FBC had included rate increases for
- 11 distribution and transmission lines; however, these rate increases are now not expected to be
- 12 implemented until 2023.
- 13 There has been no change in the income tax rate of 27 percent from 2021. Taxes are forecast
- 14 to decrease in 2022 by \$0.995 million due to lower taxable temporary differences associated
- 15 with pension and OPEB and amortization of deferred charges.

1.4.9 Elimination of Prior Years' Accumulated Revenue Surplus

- 17 The largest driver of FBC's 2022 revenue deficiency is the elimination of the prior years'
- 18 accumulated revenue surplus of \$5.420 million before tax, which equates to approximately
- 19 40.8 percent of the total forecast rate increase of 3.46 percent. Pursuant to Order G-42-21,
- 20 FBC was approved to draw down the 2018-2019 Revenue Surplus deferral account to help
- 21 mitigate the 2021 rate increase. The draw-down of the revenue surplus approved for 2021
- brought the deferral account balance to zero at the end of December 31, 2021, thus resulting in the 2022 deficiency increasing by \$5.420 million compared to 2021 rates. FBC notes this is a
- 24 one-time impact isolated to 2022.

1.5 Service Quality Indicators (Section 13)

- 26 FBC's 2020 and June 2021 year-to-date SQI results indicate that the Company's overall
- 27 performance is representative of a high level of service quality. In 2020, for the eight SQIs with
- 28 benchmarks, six met or were better than the benchmark, with two better than the threshold. For
- 29 the four SQIs that are informational only, performance generally remains at a level consistent
- 30 with prior years. In 2021 to date, performance for the metrics with benchmarks is trending
- 31 towards meeting the benchmark or the threshold.

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1 2. FORMULA DRIVERS

2 2.1 Introduction and Overview

- 3 This section provides the calculation of the Inflation Factor (or I-Factor) and Growth Factor used
- 4 for calculating the 2022 O&M amounts according to the MRP formula.
- 5 In the MRP Decision and Order G-166-20, the BCUC approved an I-Factor using the actual
- 6 CPI-BC and BC-AWE indices from the previous year and a labour weighting based on the most
- 7 recent completed year of actuals.⁴
- 8 The MRP Decision approved the use of a forecast of growth⁵ to determine Formula O&M and
- 9 determined that a growth factor multiplier of 75 percent for Formula O&M was appropriate.
- 10 The Inflation Factor and Growth Factor calculations utilize the above-described inputs and
- 11 determinations. For 2022, FBC has used July 2019 through June 2021 inflation data for the
- 12 2022 revenue requirement calculations, using the Statistics Canada tables included in Appendix
- 13 A1 of the Application.

14 2.2 Inflation Factor Calculation Summary

- 15 In the MRP Decision, the BCUC approved an Inflation Factor (I-Factor) using the actual CPI-BC
- and BC-AWE indices from the previous year and the actual labour weighting based on the most
- 17 recent completed year of actuals. FBC uses inflation data from July through June and Statistics
- 18 Canada Table 18-10-0004-01 for CPI-BC and Table 14-10-0223-01 to determine AWE-BC. The
- 19 supporting Statistics Canada tables are provided in Appendix A1. The latest available month of
- 20 May 2021 has been used as a placeholder for June 2021 for AWE-BC, as results for this period
- 21 have not been released by Statistics Canada. Once results for this period are available, this
- 22 placeholder will be replaced with actuals and included in an Evidentiary Update or Compliance
- 23 Filing.
- 24 As shown in Table 2-1 below, the I-Factor has been calculated utilizing actual CPI-BC and
- 25 AWE-BC data. Applying the actual 2020 labour weighting of 63 percent, the calculation of the
- 26 2022 I-Factor is (1.281 percent x 37 percent) + (6.532 percent x 63 percent) = 4.589 percent.

Section 2: Formula Drivers Page 7

FBC's most recent year of completed actuals is 2020 so that ratio has been used for the 2022 I-Factor calculation. The 2023 I-Factor calculation will be based on the 2021 actual non-labour / labour split.

⁵ Forecast of average customers for Formula O&M, including a true-up to actual customers in the following years.



Table 2-1: I-Factor Calculation

	1	1				1					1
		Table: 18-	Table: 14-10-		_				mpleted		
		10-0004-01	0223-01	<u>12 Mth</u>	<u>Average</u>			<u>Ye</u>	<u>ear</u>		
								Non			
Line		BC CPI	BC AWE	CPI	AWE	CPI	AWE	labour	Labour	I-Factor	MRP Year
No.	Date	index	\$	index	\$	%	%	%	%	%	
1	Jul-2019	132.4	995.70								
2	Aug-2019	132.2	1,003.20								
3	Sep-2019	132.0	1,007.69								
4	Oct-2019	132.2	1,015.61								
5	Nov-2019	131.8	1,012.26								
6	Dec-2019	131.7	1,014.87								
7	Jan-2020	132.1	1,025.98								
8	Feb-2020	132.9	1,024.80								
9	Mar-2020	132.3	1,029.14								
10	Apr-2020	131.2	1,105.84								
11	May-2020	131.5	1,127.73								
12	Jun-2020	132.6	1,097.00	132.1	1,038.32						
13	Jul-2020	132.6	1,095.17								
14	Aug-2020	132.4	1,089.30								
15	Sep-2020	132.5	1,092.97								
16	Oct-2020	132.9	1,093.25								
17	Nov-2020	133.3	1,098.85								
18	Dec-2020	132.8	1,109.54								
19	Jan-2021	133.6	1,115.13								
20	Feb-2021	134.1	1,114.34								
21	Mar-2021	134.9	1,104.90								
22	Apr-2021	135.2	1,111.16								
23	May-2021	135.1	1,124.55								
24	Jun-2021	135.8	1,124.55	133.8	1,106.14	1.281%	6.532%	37%	63%	4.589%	2022

3 2.3 GROWTH FACTOR CALCULATION SUMMARY

- As noted above, the BCUC approved the use of a forecast of average customers with a 75 percent modifier to determine Formula O&M.
- 6 The calculation of average customers used to determine 2022 Formula O&M is summarized in
- 7 the table below. The growth factor is applied to the unit cost O&M (UCOM) which was
- 8 calculated based on 2019 average customers of 139,916 (shown on Line 28 in Table 2-2
- 9 below). Starting with this 2019 average customers, the calculation adds 75 percent of
- 10 cumulative average customer growth during the MRP term (shown on Line 26 in Table 2-2
- 11 below) to determine the average customers for rate setting (shown on Line 29 of Table 2-2
- 12 below).

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

Line		Actual	Projected	Forecast	Total for 2022	
No.	Date	2020	2021	2022	Rate Setting	Reference
1	Prior Year Ending Customer Count	141,027	143,714	145,695		Appendix A2 - Section 3.1 Customers
2						
3	Additions:					
4	January	292	257	231		
5	February	174	89	238		
6	March	8	123	229		
7	April	110	113	231		
8	May	173	319	222		
9	June	172	86	227		
10	July	522	165	230		
11	August	129	166	232		
12	September	83	167	293		
13	October	545	164	169		
14	November	234	165	231		
15	December	245	167	232		
16	Total Additions	2,687	1,981	2,766		Appendix A2 - Section 3.2 Customer Additions
17	12-month Weighted Average Additions	1,294	1,079	1,504		
18						
19	Current Year Ending Customer Count	143,714	145,695	148,461		Line 1 + Line 16; Appendix A2 - Section 3.1 Customers
20						
21	Actual/Projected Prior Year Average Customers	139,916	142,321	144,793		2020: G-42-21; Sch 3, Line 13; 2021 and 2022: Prior Year Ending, Line 22
22	Average Customers for the Year	142,321	144,793	147,199		Line 1 + Line 17
23	Change in Average Customers	2,405	2,471	2,406	7,283	Sum of Annual Change in Average Customers on Line 23
24						
25	25 Growth Factor Multiplier					G-166-20
26	Change in Average Customers for Rate Setting Purposes					Line 25 x Line 23
27						
28						1
						Line 28 + Line 26
30						
31						2020: G-42-21; Sch 3, Line 22
	ÿ ,					Line 21 + (Line 23 x 0.75)
33	2020 True Up	126				Line 32 - Line 31

2.4 Inflation and Growth Calculation Summary

- 4 A summary of the factors used to determine Formula O&M for 2022 is provided in Table 2-3,
 - including the I-Factor calculated in Section 2.2, the approved X-Factor of 0.5 percent, and the
- 6 forecast of customers incorporating the growth factor multiplier determined in Section 2.3.

Table 2-3: Summary of Formula Drivers

Line	Line									
No.	Description	2022	Reference							
1	CPI	1.281%	Table 2-1, Line 24							
2	AWE	6.532%	Table 2-1, Line 24							
3										
4	Non Labour	37%	Table 2-1, Line 24							
5	Labour	63%	Table 2-1, Line 24							
6										
7	CPI/AWE Inflation	4.589%	(Line 1 x Line 4) + (Line 2 x Line 5)							
8										
9	Productivity Factor	-0.500%	Order G-166-20							
10										
11	Net Inflation Factor	4.089%	Line 7 + Line 9							
12										
13	Average Customer Forecast for Formula O&M purposes	145,378	Table 2-2, Line 29							

FORTISBC INC. ANNUAL REVIEW FOR 2022 RATES

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- 1 In summary, the Net Inflation Factor for 2022 is 4.089 percent and Formula O&M for 2022 is
- 2 determined using average customers of 145,378.



1 3. LOAD FORECAST AND REVENUE AT EXISTING RATES

2 3.1 Introduction and Overview

- 3 This section describes FBC's forecast of gross system load. The gross system load is a
- 4 combination of residential, commercial, wholesale, industrial, street lighting and irrigation loads,
- 5 system losses and company use. The forecast of gross system load includes the impacts of
- 6 forecast load savings which include Demand Side Management (DSM) savings. These savings
- 7 are further explained in Section 3.3 Demand Side Management Savings.
- 8 FBC is forecasting a decrease in consumption in the 2022 Forecast (2022F) compared to the
- 9 2021 Approved. The 2022F gross load is forecast to be approximately 3,591 GWh, which is a
- 10 73 GWh decrease compared to the 2021 Approved gross load. The decrease in 2022F is due to
- 11 decreased loads in the industrial, wholesale and commercial classes, partially offset by an
- increase in residential load. Based on the 2021 Approved rates for each customer class, FBC's
- 13 2022 revenue forecast is \$383.895 million.
- 14 FBC has provided further information supporting its load forecast in Appendix A of the
- 15 Application.

16 3.2 Overview of Forecast Methods

- 17 Consistent with the forecasting method followed by FBC in previous years, the load forecast
- 18 relies on the following components:
- the residential and commercial customer count forecast:
- the residential use per customer (UPC) forecast;
- the commercial, lighting and irrigation load forecast; and
- the industrial and wholesale survey forecast.

The load forecast for residential customers is based on forecasts for the number of customers

- and UPC rates. Specifically, the average UPC is estimated and is then multiplied by the corresponding forecast of the number of customers to derive the residential load forecast. The
- 27 commercial load forecast is based on a regression against the Conference Board of Canada
- 28 (CBOC) Gross Domestic Product (GDP) forecast, while the lighting and irrigation forecasts use
- 29 the prior year's actual loads. Wholesale and industrial forecasts are primarily based on
- 30 customer-specific survey results.
- 31 More detail on FBC's forecasting methods can be found in Appendix A of this filing.
- 32 The following sections set out the results of the load forecast. In the figures provided in the load
- forecast sections, the following three time periods are shown:

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- Actual Years: Actual years are those for which actual data exists for the full calendar year. For this Annual Review the latest calendar year for which full actual data exists is the 2020 calendar year.
 - Seed Year: The Seed Year is the year prior to the first forecast year. The Seed Year is forecast based on the latest years of actual data available, and will be different than the original forecast for that year in the previous filing. For example, for this Application the Seed Year is 2021 (2021S) and the Seed Year forecast is based on the latest actual years, including 2020. As such, the 2021 Seed Year forecast in this Application will differ from the 2021 Forecast presented in the Annual Review for 2020 and 2021 Rates. for which 2020 actual data was not available.
 - Forecast Year: This is the year or years for which the forecast is being developed. This can be one year (in the case of the Annual Review) or a range of two or more years depending on the filing. In this Application, the forecast year is 2022 (2022F).
 - Also included in the figures in this section is the prior year's forecast (shown as the green Approved lines in the figures below), as presented in the Annual Review for 2020 and 2021 Rates.

18 FBC acquired the utility assets and customers of the City of Kelowna's electric utility effective 19 March 31, 2013, resulting in an increase in direct customers and changes in the composition of 20 customers and sales load by class, which are reflected in the data and figures in this section.

3.3 DEMAND SIDE MANAGEMENT SAVINGS 21

- 22 FBC forecasts the DSM savings that are incremental to the DSM savings that are already embedded in historical loads up to and including 2020. 23
- 24 The DSM savings forecast is deducted from the before-savings forecast for all customer 25 classes. All forecast values in the sections below are shown after being reduced by DSM
- 26 savings unless explicitly stated otherwise.
- 27 The forecast incremental DSM savings for 2022 are summarized in Table 3-1 below, and are
- 28 the forecast savings incremental to the savings embedded in the historical loads. Historical
- 29 DSM savings can be found in Appendix A2.

FBC's load forecast is developed using only complete years of historical data. FBC requires the complete year of load data in order to validate it, including the review of and potential adjustments to unbilled energy. For this reason, partial year data is not used in forecasting.

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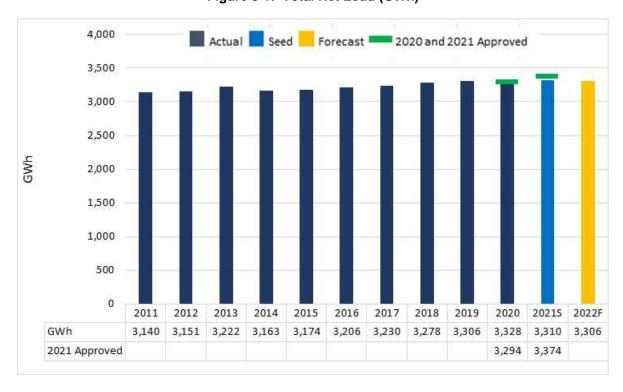
Table 3-1: Forecast Incremental 2022 DSM Savings (GWh)

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

3 3.4 LOAD FORECAST

FBC's total load consists of the weather normalized residential, commercial and wholesale load and the industrial, lighting and irrigation load. In aggregate, the absolute load forecast variance in 2020 was 1.0 percent. As shown in Figure 3-1 below, the total load, net of losses, is forecast to be 3,306 GWh in 2022F, which is 4 GWh less than 2021S and a decrease of 68 GWh from 2021 Approved.

Figure 3-1: Total Net Load (GWh)



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- 1 Table 3-2 below shows the normalized after-savings gross load by customer class as well as
- 2 the system peak. For 2022F, the residential customer class is forecast to account for 36 percent
- 3 of the normalized after-savings gross load.

Table 3-2: Normalized After-Savings Gross Load and System Peak

Line													
No.	Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021S	2022F
	Energy (GWh)												
1	Residential	1,249	1,229	1,353	1,296	1,298	1,296	1,320	1,313	1,266	1,347	1,295	1,283
2	Commercial	657	681	788	863	853	905	915	926	932	922	933	946
3	Wholesale	910	899	675	567	580	574	574	585	566	569	561	560
4	Industrial	271	291	352	381	380	373	363	403	495	441	473	470
5	Lighting	13	13	13	16	16	16	16	13	11	11	11	10
6	Irrigation	40	38	40	40	46	42	42	39	36	37	37	37
7	Net Load	3,140	3,151	3,222	3,163	3,174	3,206	3,230	3,278	3,306	3,328	3,310	3,306
8	Losses & Company Use	307	271	278	270	272	274	282	285	287	288	285	285
9	Gross Load	3,447	3,422	3,500	3,433	3,446	3,480	3,512	3,564	3,592	3,616	3,595	3,591
10	_												
11	System Peak (MW)												
12	Winter Peak	702	723	698	693	685	755	714	682	732	731	715	717
13	Summer Peak	537	589	600	620	611	593	605	631	639	666	606	609

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The residential, commercial, wholesale, industrial, lighting and irrigation load forecasts are provided separately in the following subsections.

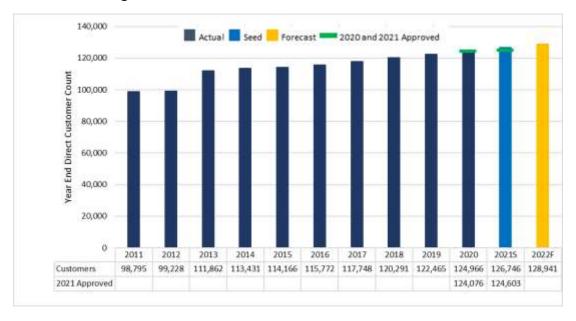
3.4.1 Residential

10 3.4.1.1 Residential Customers

- 11 Forecast residential customer counts are determined by a regression of the year-end customer
- 12 accounts against population in the FBC direct service area. The population forecast for the FBC
- service area is provided by a BC Statistics report produced for FBC.
- 14 Figure 3-2 shows the year-end residential customer count for FBC.



Figure 3-2: Year-End Direct Residential Customer Count

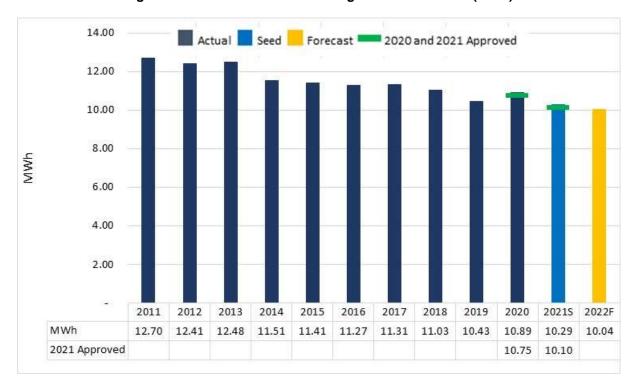


3.4.1.2 Residential UPC

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 ten-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. DSM savings, which are incremental to the savings embedded in the historical data to 2020, are then deducted from the before-savings load forecast to determine the after-savings load forecast. The after-savings UPC forecast is then calculated by dividing the after-savings load forecast by the average customer count. As shown in Figure 3-3 below, the residential after-savings UPC is forecast to decrease by 0.25 MWh in 2022F from 2021S and decrease by 0.06 MWh from 2021 Approved.



Figure 3-3: Normalized After-Savings Residential UPC (MWh)



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3.4.1.3 Residential Load

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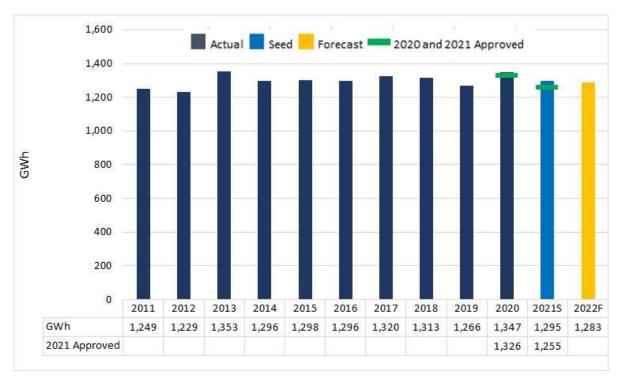
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Consistent with past practice, the total before-savings load for the residential class is the product of the average annual residential customer count multiplied by the residential UPC. The after-savings load is produced by taking the before-savings load and then subtracting DSM savings. As shown in Figure 3-4 below, residential after-DSM savings load is forecast to decrease by 12 GWh in 2022F from 2021S and increase by 28 GWh from 2021 Approved levels.





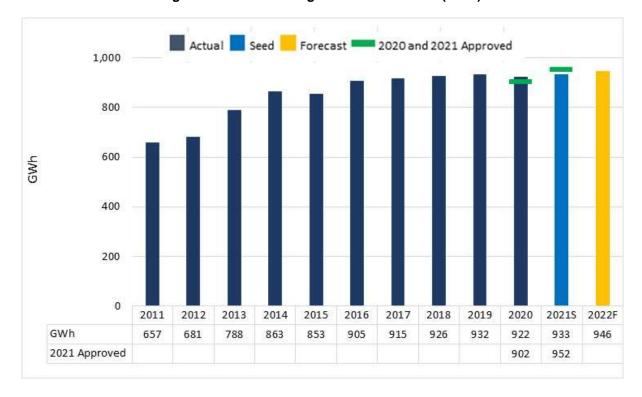
3.4.2 Commercial

3.4.2.1 Commercial Load

- The commercial class is forecast based on a regression of load on the provincial GDP forecast
- 13 obtained from the CBOC. As shown in Figure 3-5 below, Commercial after-savings load is
- 14 forecast to increase by 13 GWh in 2022F from 2021S and decrease by 6 GWh in 2022F from
- 15 2021 Approved.



Figure 3-5: After-Savings Commercial Load (GWh)



3.4.3 Wholesale

FBC sells wholesale power to municipalities for service to certain customers within its service territory that own and operate their own electrical distribution systems, and to BC Hydro. The wholesale customers' load composition is a combination of residential, commercial, industrial and street lighting.

Consistent with past practice, the wholesale class is forecast using survey information from each of the individual wholesale customers, as the individual wholesale customers are best able to forecast their future load growth. For 2022, all of the wholesale customers responded with their load forecast projections. As shown in Figure 3-6 below, after-savings wholesale load is forecast to decrease by 1 GWh in 2022F from 2021S and decrease by 24 GWh in 2022F from 2021 Approved.

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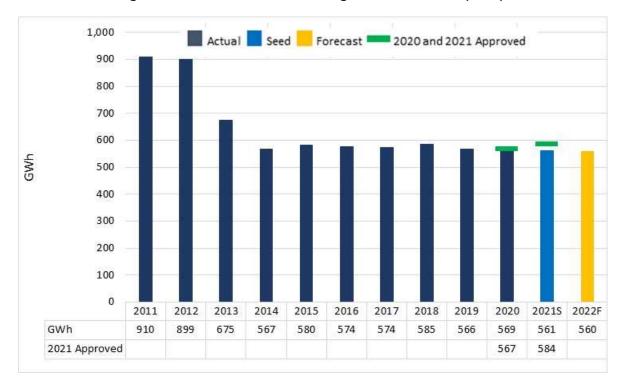
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Figure 3-6: Normalized After-Savings Wholesale Load (GWh)



3.4.4 Industrial

Consistent with past practice, the industrial forecast is determined through a combination of customer load surveys and, when not available, escalation of the most recent annual loads by the corresponding provincial GDP growth rates for individual industries.

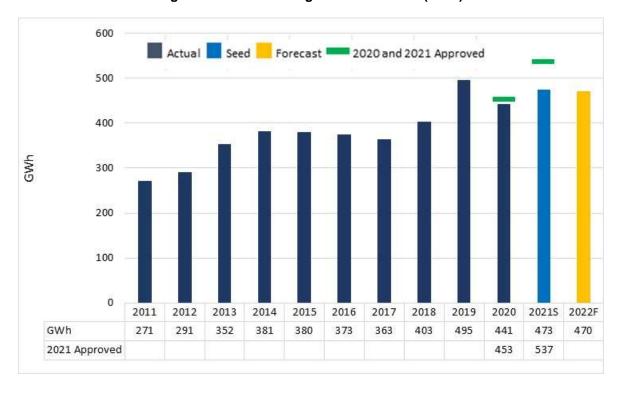
FBC sends all existing industrial customers a load survey that requests the customer's anticipated use for the next five years. A survey is used because individual industrial customers have the best understanding of what their future load will be. This year FBC received a response from 81 percent (35 of 43) of the surveys sent out. The responding customers represent approximately 91 percent of the total industrial load.

FBC's forecasts of industrial loads from new customers in 2022F are based on information from key account managers.

As shown in Figure 3-7 below, after-savings industrial load is forecast to decrease by 3 GWh in 2022F when compared to 2021S and by 67 GWh in 2022F compared to 2021 Approved. The lower forecast in 2021S and 2022F compared to 2021 Approved is primarily due to cannabis loads not materializing in 2021 as planned. FBC's 2021 Approved included 68 GWh of additional cannabis load; however, at this time, none of those customers have taken service in the industrial class. As a result, those loads have been removed from the current forecast.



Figure 3-7: After-Savings Industrial Load (GWh)



3.4.5 Lighting

- 4 Due to the implementation of LED street lights, the lighting load has seen declines for the past
- three years. FBC used the 2020 Actuals as the forecast for this load and then reduced it by
- 6 DSM savings. As shown in Figure 3-8 below, after-savings lighting load is forecast to decrease
- 7 by 1 GWh in 2022F from 2021S and remain stable at 10 GWh in 2022F when compared to 2021
- 8 Approved.

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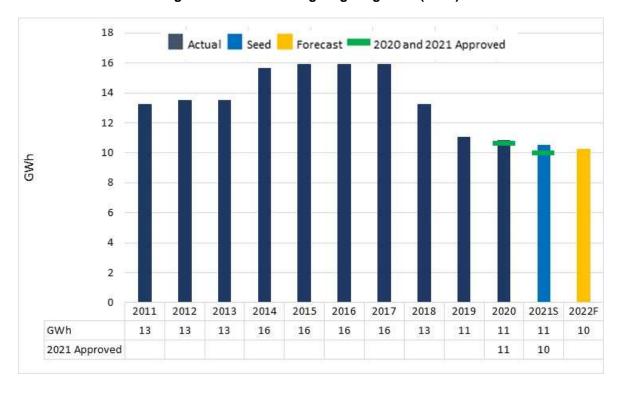
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Figure 3-8: After-Savings Lighting Load (GWh)



3.4.6 Irrigation

- Due to the variability in the load in the recent historical data, FBC has used the 2020 Actuals as the forecast for the irrigation load. As shown in Figure 3-9 below, after-savings irrigation load is
- 6 forecast to remain stable at 37 GWh from 2021S to 2022F and increase by 1 GWh in 2022F
- 7 when compared to 2021 Approved.

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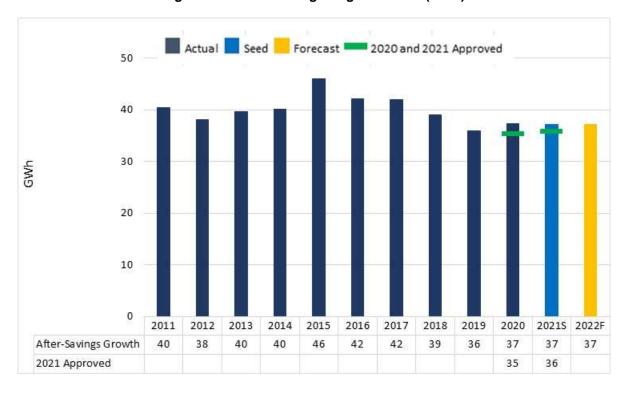
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Figure 3-9: After-Savings Irrigation Load (GWh)



3.4.7 Losses and Company Use

FBC conducted a Losses Study in 2019⁷ and, consistent with that study, has assumed a loss rate of 7.6 percent of gross load (excluding company use). System losses consist of:

- Losses in the transmission and distribution system;
- Losses due to wheeling through the BC Hydro system; and
- Unaccounted-for load (meter inaccuracies and theft).

As shown in Figure 3-10 below, after-savings load losses are forecast to remain constant in 2022F because the gross load is forecast to be relatively stable in 2021S and 2022F. FBC has separated company use in the graph below, which is forecast at 13 GWh per year in 2022F, consistent with 2021S.

⁷ MRP Application, Exhibit B-1-1, Appendix B3.

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Figure 3-10: Normalized After-Savings Load Losses (GWh)



3.4.8 Peak Demand

- 4 The peak demand forecast is produced using the ten-year average of historical peaks. The
- 5 historical peak data is escalated by the gross load growth rate before it is averaged to account
- 6 for the growth of demand on the FBC system.
- 7 Normalized after-savings historical winter and summer peaks are shown below along with
- 8 2021S and 2022F. The peaks shown below are seasonal, where the winter peak can fall in
- 9 either November or December of the current year or January and February of the following year,
- while the summer peak falls in June, July or August of the current year.



1 Figure 3-11: After-Savings Winter Peaks (MW)

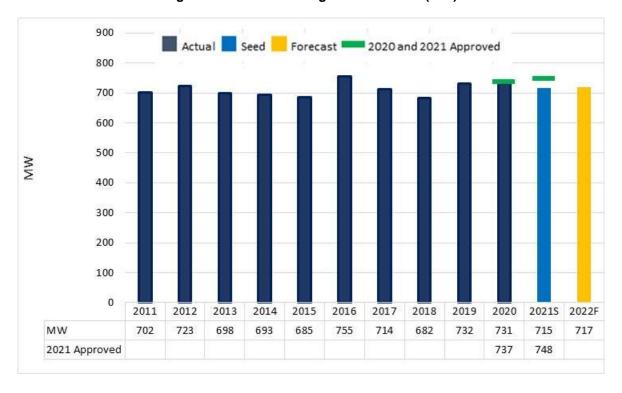
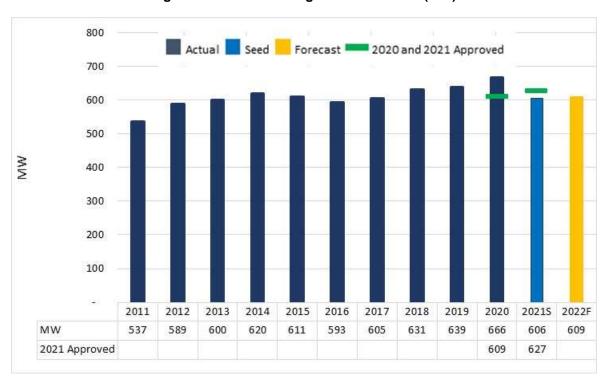


Figure 3-12: After-Savings Summer Peaks (MW)





3.5 Customer Forecast

- 2 Table 3-3 shows the actual and forecast year-end customer count by rate class. The residential,
- 3 commercial, and lighting customer counts are forecast using the methods described in Sections
- 4 3.4.1, 3.4.2 and 3.4.5, respectively. Industrial customers are forecast based on information on
- 5 expected new loads provided by key account managers. Wholesale and irrigation customer
- 6 counts are assumed to remain at 2020 levels.

7 Overall, for 2022F FBC is forecasting customer growth of 1.9 percent compared to 2021S and

8 growth of 3.3 percent compared to 2021 Approved.

Table 3-3: Year-End Direct Customer Count

Line	•												
No.	Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021S	2022F
1	Residential	98,795	99,228	111,862	113,431	114,166	115,772	117,748	120,291	122,465	124,966	126,746	128,941
2	Commercial	11,525	11,811	13,662	14,363	14,976	15,073	15,398	15,678	15,956	16,165	16,384	16,975
3	Wholesale	7	7	6	6	6	6	6	6	6	6	6	6
4	Industrial	36	39	47	49	50	50	50	52	51	43	43	43
5	Lighting	1,803	1,739	1,644	1,620	1,590	1,559	1,511	1,482	1,467	1,443	1,425	1,406
6	Irrigation	1,092	1,091	1,097	1,103	1,095	1,090	1,080	1,078	1,082	1,091	1,091	1,091
7	Total	112,249	113,915	128,318	130,572	131,883	133,550	135,793	138,587	141,027	143,714	145,695	148,461

3.6 REVENUE FORECAST

- 12 The forecast of revenues has been developed by applying approved 2021 rates to the forecast
- 13 billing determinants for each customer class.

14 Table 3-4 below summarizes the 2021 Approved, 2021 Projected and 2022 Forecast sales

15 revenue.

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Table 3-4: Forecast Sales Revenue at Approved Rates (\$ millions)

Line		Ap	Approved Projected		ojected	Fo	recast
No.	Description		2021		2021	2022	
1	Residential	\$	184.235	\$	192.364	\$	188.510
2	Commercial		101.451		100.971		100.815
3	Wholesale		51.623		50.552		49.534
4	Industrial		44.776		39.780		39.434
5	Lighting		2.261		2.281		2.330
6	Irrigation	<u></u>	3.298		3.152		3.272
7	Total	\$	387.642	\$	389.100	\$	383.895

17 18 19

20 21 When comparing the 2021 Approved forecast to 2021 Projected there is an increase in revenue of \$1.458 million, the majority of which is due to increased residential load, partially offset by decreased industrial, commercial and wholesale loads.

The 2022 Forecast revenue is \$3.747 million lower than 2021 Approved due to decreased industrial, commercial and wholesale loads.

FORTISBC INC.

ANNUAL REVIEW FOR 2022 RATES



- 1 Variances between the revenue forecast in this section and the actual revenues realized are
- 2 captured in the Flow-through deferral account.

3.7 SUMMARY

- 4 The normalized after-savings gross load forecast for 2022 is 3,591 GWh. Based on net load of
- 5 3,306 GWh at the approved 2021 rates, FBC's 2022 revenue forecast is \$383.895 million.
- 6 When comparing 2022F to 2021 Approved, there is a decrease in net load of 68 GWh. The
- 7 decrease in 2022F is due to decreased loads in the industrial, wholesale and commercial
- 8 classes, which is partially offset by increases in the residential class.

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4. POWER SUPPLY

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4.1 Introduction and Overview

- 3 This section includes a review of the 2021 Projected and 2022 Forecast power purchase
- 4 expense (PPE), wheeling expense and water fees. Collectively, the PPE, wheeling expense
- 5 and water fees are referred to as the Power Supply cost.
- 6 As shown in Table 4-1 below, the 2022 Forecast Power Supply cost of \$161.830 million
- 7 represents an increase of 0.2 percent or \$0.271 million compared to the 2021 Approved cost of
- 8 \$161.559 million. The increase in the 2022 Forecast Power Supply cost is due to increases in
- 9 wheeling expense and water fees. The 2022 Forecast wheeling expense and water fees have
- 10 both increased as a result of rates and usage.
- 11 Any variances between forecast and actual Power Supply costs are recorded in the Flow-
- 12 through deferral account and returned to or recovered from customers in the subsequent year.

13 Table 4-1: Power Supply Cost (\$ millions)

Line No.		proved 2021	ojected 2021	recast 2022	Reference
1	Power Purchase Expense	\$ 144.977	\$ 141.747	\$ 143.779	Schedule 19, Line 12, Column 3
2	Wheeling Expense	5.714	5.836	6.093	Schedule 19, Line 23, Column 3
3	Water Fees	10.868	10.878	11.958	Schedule 19, Line 28, Column 3
4	Total Power Supply Cost	\$ 161.559	\$ 158.462	\$ 161.830	Schedule 19, Line 30, Column 3
5					=
6	Gross Load (GWh)	3,664	3,640	3,591	Schedule 19, Line 2, Column 3

4.2 Summary of Power Supply Resources

- FBC uses a combination of Company-owned generation entitlements, firm contracted supply and market purchases to meet its load requirements. The Company's firm resources consist of:
 - Canal Plant Agreement (CPA) Entitlements associated with the generation facilities owned by FBC. The costs associated with FBC-owned generation are not included in the power purchase estimates, except for the Balancing Pool adjustments, which account for year-to-year timing differences in the entitlement energy storage under the CPA;
 - 2. The Brilliant Power Purchase Agreement (BPPA), a 125 MW contract (Order E-7-96), and an amendment to the BPPA which reflects the purchase of 20 MW of Brilliant Upgrade power (Letter L-57-00), and the 5 MW Brilliant Tailrace Capacity agreement (Order E-17-01);
 - 3. A power purchase agreement (PPA) with BC Hydro (a 200 MW contract) under BC Hydro Rate Schedule 3808 (Order G-60-14);

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- 4. The Waneta Expansion Capacity Purchase Agreement (WAX CAPA), which is a 40year purchase agreement with the Waneta Expansion Limited Partnership for capacity entitlements under the CPA (Orders E-29-10 and E-15-12);
 - 5. A number of small Independent Power Producer (IPP) contracts; and
 - 6. A number of market purchase arrangements.

4.3 PORTFOLIO OPTIMIZATION

- 7 The primary objectives of FBC's power supply portfolio planning are to ensure that the
- 8 Company has sufficient firm resources to meet expected load requirements, to ensure the
- 9 availability of cost-effective reliable power for FBC's customers, to prudently manage exposure
- 10 to the cost and availability of market power supplies, and to optimize the value of any surplus
- 11 resources that are not needed to meet load requirements.
- 12 The Company currently has long-term, firm resources from which it can supply all of its 2022
- 13 forecast annual energy and capacity requirements. The nature of FBC's contracted resources,
- 14 in particular the BC Hydro PPA, provides the Company some flexibility to participate in the
- market when conditions are favourable to mitigate the cost of holding those firm resources.
- 16 Furthermore, although FBC's load requirements are forecast to grow over time, the amount of
- 17 capacity provided under the WAX CAPA is currently greater than FBC's capacity requirements
- in most months, and FBC sells the surplus capacity to mitigate power purchase expense. FBC
- 19 has contracted to release a 50 MW block of capacity purchased under the WAX CAPA to BC
- 20 Hydro under the Residual Capacity Agreement (RCA), which was approved by the BCUC in
- 21 Order G-161-14. The remaining surplus WAX CAPA will be sold to Powerex Corp. (Powerex)
- 22 on a day-ahead basis, if and when it is not required to meet FBC load requirements. These
- 23 sales are made under the Capacity and Energy Purchase and Sale Agreement (CEPSA) with
- Powerex dated February 17, 2015, and accepted by the BCUC in Order E-10-15.

4.4 FBC 2021/22 Annual Electric Contracting Plan

- 26 On March 31, 2021, FBC filed its 2021/22 Annual Electric Contracting Plan (AECP) with the
- 27 BCUC. The purpose of the AECP is to outline FBC's plan to meet its peak demand
- 28 requirements and annual energy requirements for the operating year commencing October 1,
- 29 2021 and ending September 30, 2022, and to facilitate FBC's annual energy nomination under
- 30 the PPA. FBC is required to take or pay for 75 percent of the PPA Nomination, regardless of
- 31 whether it schedules the energy. The difference between the PPA Nomination and the 75
- 32 percent minimum take provides flexibility to manage annual loads that are below forecast or to
- 33 displace PPA purchases with lower cost market purchases. Therefore, real-time opportunities
- 34 to displace PPA purchases are restricted to a maximum of 25 percent of the PPA nominated

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- 1 energy, but could be more or less, depending on system conditions.8 The AECP also outlines
- 2 FBC's load and resource balance over the following four years, and FBC's plan for optimizing its
- 3 portfolio over that period. FBC's forecasts of PPE for the remainder of 2021 and for 2022 are
- 4 based on the plan detailed in the 2021/22 AECP, which was accepted by the BCUC on April 29,
- 5 2021, by way of Letter L-10-21.9
- 6 The AECP identified FBC's intention to make its annual energy nomination under the PPA for
- 7 the 2021/22 contract year equal to 673 GWh, less any firm market contracts that FBC could
- 8 enter into, as described in section 5 of the 2021/22 AECP.
- 9 Before June 30, 2021, FBC entered into one energy supply contract (ESC) with Powerex under
- 10 the terms of the CEPSA, which provides FBC with an additional 8 GWh of incremental market
- energy during March 2022 at a lower cost than if supplied under the PPA. The ESC is less than
- 12 62 days in duration and will therefore be reported to the BCUC in FBC's Q1 2022 Report on
- 13 Energy Supply Contracts pursuant to Section 71 of the UCA. The ESC and associated savings
- 14 are included in the 2022 Forecast PPE. As a result of this contract, and changes to the forecast
- 15 gross load, the Company submitted a PPA nomination for the 2021/22 contract year of 645
- 16 GWh, as confirmed in a letter to the BCUC on July 26, 2021.

4.5 2021 Projected Power Purchase Expense

- 18 As shown in Table 4-2 below, FBC's 2021 Projected gross load (after taking into account
- demand side management and other customer savings) is expected to be 24 GWh below the
- 20 2021 Approved value, and PPE is projected to be below the 2021 Approved value by \$3.230
- 21 million. The decrease in 2021 Projected PPE is primarily due to additional market purchases
- 22 used to displace BC Hydro PPA energy and capacity purchases at a lower total cost, as well as
- 23 the reduction in gross load.

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For example, if loads were 50 GWh lower in a year than forecast, that must be adjusted for as part of the 25 percent PPA flexibility such that the amount of PPA energy that can be displaced by market purchases is also reduced by 50 GWh.

The AECP was filed confidentially. The non-confidential Executive Summary is attached to Letter L-10-21.

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Table 4-2: 2021 Power Purchase Expense (\$ millions)

Line		Ap	proved	Pro	ojected		
No.	Description	2	2021	2	2021	Diff	erence
1	Brilliant	\$	41.009	\$	41.015	\$	0.006
2	BC Hydro PPA		47.440		35.989		(11.451)
3	Waneta Expansion		41.640		41.570		(0.071)
4	Market and Contracted Purchases		14.751		19.646		4.895
5	Independent Power Producers		0.076		0.064		(0.013)
6	Self-Generators		0.061		-		(0.061)
7	CPA Balancing Pool		(0.000)		3.834		3.834
8	Transmission Service Loss Recoveries		-		-		-
9	Special and Accounting Adjustments		-		(0.371)		(0.371)
10	Total	\$	144.977	\$	141.747	\$	(3.230)
11	-						
12	Gross Load (GWh)		3,664		3,640		(24)

4.6 2022 Forecast Power Purchase Expense

- 4 As shown in Table 4-3 below, the 2022 Forecast PPE is \$2.032 million greater than the 2021
- 5 Projected. The forecast increase from \$141.747 million in 2021 to \$143.779 million in 2022 is a
- 6 result of a reduction in market and contracted purchases and correspondingly, a greater
- 7 reliance on relatively higher cost energy supplied by BC Hydro. Also contributing to the
- 8 increase are reduced surplus sales along with escalations to the Waneta Expansion and Brilliant
- 9 contract rates.
- Table 4-3 below shows a comparison of the 2021 Projected and 2022 Forecast PPE. Reasons for significant variances from the 2021 Projected PPE are discussed below.

Table 4-3: 2022 Forecast Power Purchase Expense (\$ millions)

Line		Pro	ojected	Fo	recast		
No.	Description	2	2021		2022	Diffe	erence
			-				
1	Brilliant	\$	41.015	\$	41.841	\$	0.825
2	BC Hydro PPA		35.989		44.062		8.072
3	Waneta Expansion		41.570		42.701		1.131
4	Market and Contracted Purchases		19.646		15.102		(4.544)
5	Independent Power Producers		0.064		0.073		0.009
6	Self-Generators		-		-		-
7	CPA Balancing Pool		3.834		0.000		(3.834)
8	Transmission Service Loss Recoveries		-		-		-
9	Special and Accounting Adjustments		(0.371)		-		0.371
10	Total	\$	141.747	\$	143.779	\$	2.032
11		-					
12	Gross Load (GWh)		3,640		3,591		(49)

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1 **Brilliant**

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- 2 Brilliant expense is forecast to increase in 2022 by \$0.825 million compared to 2021 Projected
- 3 due to increased rates, which are based on a forecast of the operating and maintenance cost of
- 4 the plant, as well as a true-up to the prior year's actual costs compared to forecast.

BC Hydro PPA

- 6 BC Hydro PPA expense is forecast to increase in 2022 by \$8.072 million compared to the 2021
- 7 Projected expense. The drivers of the increase are a higher purchased volume (132 GWh).
- 8 which increases the expense by \$8.505 million, and an increase in BC Hydro rates, which
- 9 accounts for an increase of \$0.068¹⁰ million, for a total of \$8.573 million. FBC has reduced its
- 10 2022 Forecast of PPA expense by \$4.000 million in savings to account for potential real-time
- 11 opportunities to displace PPA purchases with lower cost market purchases. The 2021
- 12 Projected BC Hydro expense has also been reduced by \$3.500 million to account for potential
- real-time opportunities during the remainder of 2021. This results in a variance between 2021
- 14 Projected and 2022 Forecast of \$8.072 million, as shown in Table 4-3. Actual market savings
- 15 for the remainder of 2021 and 2022 may be higher or lower and will depend on system and
- 16 market conditions at the time. Any variance, including these savings, is recorded in the Flow-
- through deferral account and returned to or recovered from customers in a subsequent year.

18 Waneta Expansion

19 The \$1.131 million increase in Waneta Expansion expense is due to the 2.1 percent annual

20 fixed escalation of WAX CAPA rates, as well as a \$0.035 million decrease in forecast surplus

21 sales revenue under the RCA and CEPSA. Revenue under the CEPSA is linked to the amount

of capacity FBC releases to Powerex and the day-ahead market prices at the Mid-Columbia

23 River (Mid-C) trading hub. The Mid-C is the largest electricity trading hub in the Pacific

Northwest and is located on the US portion of the Columbia River. FBC's forecast of Mid-C

forward market prices is based on contracts that have been traded and/or bids and offers from forward contracts on the Intercontinental Exchange Inc. (ICE), which is a global exchange,

27 clearing, financial data, and technology company. The method used to forecast market prices

and surplus sales is the same as in the Annual Review for 2020 and 2021 Rates. Overall, the

29 forecast of market prices has a relatively small effect on the PPE. The forecast of surplus

30 capacity sales revenue in 2022, which is included in line 3 of Table 4-3, is approximately \$9.209

31 million.

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Market and Contracted Purchases

33 The \$4.544 million decrease in Market and Contracted Purchases forecast for 2022 is due to a

34 lesser volume purchased at reduced rates when compared to 2021 Projected. Market and

35 Contracted Purchases for 2021 Projected include both fixed price contracted purchases and

36 real-time market purchases made using the 25 percent flexibility of the PPA. All of the market

37 purchases included in the 2022 Forecast are based on fixed price contracts executed by the

Although BC Hydro rates are forecast to decrease on April 1, 2022 per BC Hydro's Evidentiary Update in the Fiscal 2020-2021 Revenue Requirements Application dated August 22, 2019 (Exhibit B-11, Figure 1, Section 1), the calendar year weighted average price paid by FBC works out to be slightly higher in 2022 than 2021.



- 1 Company. As discussed above in the BC Hydro PPA variance explanation, there may be
- 2 opportunities for additional real-time market purchases using the flexibility of the PPA
- 3 purchases.

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4 CPA Balancing Pool

- 5 The CPA Balancing Pool represents timing differences in entitlement energy storage under the
- 6 CPA, and is used to manage fluctuations in load and resource availability, or to take advantage
- 7 of market opportunities. In the 2021 Projected PPE, FBC has stored a net total of 76 GWh of
- 8 entitlement energy, valued at \$3.834 million. For the 2022 Forecast, and consistent with past
- 9 practice, FBC does not forecast any net use or storage of entitlement energy.

4.7 Transmission Service Loss Recoveries

- 11 Transmission service customers taking service under FBC's Rate Schedules 100 and 101
- 12 currently physically deliver energy to FBC to compensate for the losses that are incurred on
- 13 FBC's system as a result of wheeled energy. FBC includes transmission wheeling losses in its
- 14 load forecast (included in Tables 4-2 and 4-3, Line 8), and also includes loss recovery as a firm
- 15 resource. Because the recoveries are delivered physically, there is no associated cost or
- revenue. Table 4-4 shows the 2021 and 2022 loss recoveries.

Table 4-4: Transmission Service Loss Recoveries (GWh)

Line		Approved	Projected	Forecast
No.	Description	2021	2021	2022
1	Loss Recoveries	14	12	12

4.8 Wheeling Expense

- 20 Wheeling expense includes wheeling service provided by BC Hydro under the Amended and
- 21 Restated Wheeling Agreement (ARWA) and Open Access Transmission Tariff (OATT) as
- 22 needed to supply the Company's loads in the Okanagan, Creston and Princeton. Also included
- 23 are charges paid to Teck Metals Ltd. (Teck) for the use of its 71 Line. Rates under the ARWA
- 24 are specified in BC Hydro's Rate Schedule 21.
- 25 Wheeling expense is forecast using the same method as in the Annual Review for 2020 and
- 26 2021 Rates. Table 4-5 below shows FBC's Wheeling Expense for 2021 and 2022.



Table 4-5: Wheeling Expense (\$ millions)

Line No.	Description	 roved 21	Proje 202		 recast 2022
1	Wheeling Nomination (MW Months)				
2	Okanagan Point of Interconnection	2,400		2,400	2,475
3	Creston	420		420	420
4					
5	Wheeling Expense				
6	Okanagan Point of Interconnection	\$ 4.694	\$	4.654	\$ 4.903
7	Creston	0.535		0.531	0.542
8	Other	0.485		0.651	0.648
9	Total Wheeling Expense	\$ 5.714	\$	5.836	\$ 6.093

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Total 2021 Projected wheeling expense is \$0.122 million greater than 2021 Approved. The

- 5 2021 Projected ARWA costs are \$5.185 million, a \$0.044 million decrease when compared to
- 6 2021 Approved, which is a result of lower than expected BC-CPI and therefore ARWA rates.
- 7 2021 Projected Teck and OATT wheeling costs are \$0.651 million, which is \$0.166 greater than
- 8 2021 Approved. This is mainly due to increased use of OATT wheeling.
- 9 2022 wheeling expense is forecast to increase by \$0.257 million over 2021 Projected. This is a
- 10 result of both increased use and rates. FBC increased the Okanagan wheeling nomination to
- 11 2,475 MW months in 2022 from 2,400 MW months in 2021. ARWA rates are forecast to
- 12 increase on October 1 of both 2021 and 2022, based on forecast BC-CPI, as is the Teck
- 13 wheeling rate as a result of a letter agreement made between Teck and FBC.

4.9 WATER FEES

- 15 Water fees are based on FBC's entitlement usage in the previous year and the rate increases
- 16 are indexed to BC-CPI.
- 17 As shown in Table 4-6 below, the 2022 Forecast water fees are increasing by \$1.080 million
- over 2021 Projected due to increased entitlement use and rates. Water fees are forecast using
- the same method as in the Annual Review for 2020 and 2021 Rates.

20 Table 4-6: Water Fees (\$ millions)

Line No.	Description	 proved 2021	jected 1021	recast 2022
1	Plant Entitlement in Previous Year (GWh)	1,559	1,558	1,679
2 3	Water Fees	\$ 10.868	\$ 10.878	\$ 11.958

SECTION 4: POWER SUPPLY



4.10 SUMMARY

- 2 FBC's forecast of power purchase expense is based on FBC's firm resources in place at the
- 3 time of filing and is consistent with the 2021/22 AECP. Any variances in the Power Supply cost,
- 4 including any decreases in power purchase expense due to further portfolio optimization, are
- 5 recorded in the Flow-through deferral account and returned to or recovered from customers in a
- 6 subsequent year.

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5. OTHER REVENUE

5.1 Introduction and Overview

- 3 This section discusses FBC's forecasts of Other Revenue. In the MRP Decision (page 74), FBC
- 4 was approved for variances between forecast and actual Other Revenue to be subject to
- 5 earnings sharing.

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- 6 FBC is forecasting Other Revenue for 2022 to be \$0.389 million lower than 2021 Approved,
- 7 primarily due to lower Contract Revenue resulting from the timing of work expected to be
- 8 performed on an asset refurbishment project for a third party, partially offset by higher
- 9 Transmission Access Revenue.

10 2021 Projected Other Revenue is \$0.327 million higher than 2021 Approved. The main drivers

- 11 of this increase are higher Transmission Access Revenue due to a wheeling customer
- 12 exceeding their nomination at the beginning of 2021, as well as higher Late Payment Charges
- and Connection Charges based on amounts charged to date. The resumption of Late Payment
- 14 Charges occurred as of March 1, 2021 after being waived for most of 2020 as a result of
- 15 customer relief measures implemented by FBC during the COVID-19 pandemic.

Table 5-1: Other Revenue (\$ millions)

Line		Α	pproved	Pi	rojected	Fo	orecast
No.	Description	2021			2021		2022
1	Apparatus and Facilities Rental	\$	5.930	\$	5.930	\$	6.018
2	Contract Revenue		3.088		3.088		2.277
3	Transmission Access Revenue		1.501		1.639		1.771
4	Interest Income		0.020		0.025		0.020
5	Late Payment Charges		0.829		0.927		0.875
6	Connection Charges		0.476		0.562		0.505
7	Other Recoveries		0.377		0.377		0.366
8	Total Other Revenue		\$ 12.221	ç	12.548	\$	11.832

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In the following sections, FBC summarizes its projections and forecasts for each of the line items included in the table above.

5.2 APPARATUS AND FACILITIES RENTAL

Apparatus and Facilities Rental is comprised primarily of pole contact revenue from other utilities and businesses that attach their facilities to FBC infrastructure in order to deliver services to their customers, such as telephone and cable television providers. Rent is charged at a unit rate per pole contact multiplied by the number of poles that are contacted. There are no variances projected in 2021 compared to 2021 Approved, as final amounts have yet to be calculated since the majority of invoices are issued during the third quarter of the year. The

SECTION 5: ANNUAL REVENUE



- 1 2022 Forecast is higher than 2021 Approved due to expected escalations in unit rental rates for
- 2 continuing contracts.

5.3 CONTRACT REVENUE

- 4 FBC performs work under contract to third parties at the Waneta and Brilliant hydroelectric
- 5 generating facilities. This third party work, and the associated management fees earned,
- 6 fluctuates from year to year based on customer requirements, which include routine and non-
- 7 routine work planned at the start of the customer's fiscal year.
- 8 The Company also operates and maintains a number of other facilities for third party entities
- 9 through its non-regulated affiliate FortisBC Pacific Holdings Inc. (FPHI). Transactions between
- 10 FBC and FPHI are conducted in accordance with FBC's Code of Conduct and Transfer Pricing
- 11 Policy¹¹ and earn a transfer price profit revenue. Revenues may fluctuate from year to year
- 12 depending on customer requirements.
- 13 There are no variances projected in 2021 compared to 2021 Approved based on progress
- 14 billings to date. The 2022 Forecast is lower than 2021 Approved due to the expiry of revenues
- received from a three-year asset refurbishment project for a third party that began in 2020,
- 16 based on customer requirements.

17 5.4 Transmission Access Revenue

- 18 Transmission Access Revenue represents charges to customers for transmitting power over the
- 19 FBC system. The 2021 Projected revenue is higher than 2021 Approved due to a transmission
- 20 customer exceeding their nomination at the beginning of 2021. The 2022 Forecast is higher
- 21 than 2021 Approved due to the phased increase in rates over three years beginning January 1,
- 22 2020, as approved by Order G-40-19.

23 **5.5** INTEREST INCOME

- 24 Interest Income is primarily comprised of DSM loan interest income, as well as other banking
- 25 interest income. The Company is not forecasting significant changes in the amount of DSM
- 26 loans outstanding. As a result, no significant changes in interest income are expected in 2021
- 27 Projected or the 2022 Forecast.

5.6 LATE PAYMENT CHARGES

- 29 FBC implemented a number of customer relief measures in 2020 due to the COVID-19
- 30 pandemic, including the suspension of Late Payment Charges. As of March 1, 2021, FBC
- 31 resumed Late Payment Charges.

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¹¹ As approved by Order G-5-10A.

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- 1 The 2021 Projected Late Payment Charges are higher than 2021 Approved due to a higher than
- 2 forecast balance of accounts attracting late fees, based on amounts charged so far in 2021. The
- 3 2022 Forecast is based on the 2017 to 2019 average of Late Payment Charges earned, as it is
- 4 expected that the amount of late fees will return to a more normal level after the COVID-19
- 5 pandemic.

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5.7 CONNECTION CHARGES

- 7 Connection Charges are calculated based on the fees specified in FBC's rate schedules
- 8 applicable to new customer connections or current customer reconnections. The 2021 Projected
- 9 is higher than 2021 Approved based on amounts charged so far in 2021. The 2022 Forecast is
- 10 expected to be higher than 2021 Approved but lower than 2021 Projected based on customer
- 11 growth and forecast customer reconnections.

12 **5.8 OTHER RECOVERIES**

- 13 Other Recoveries are primarily comprised of fees earned on the recovery of costs for
- 14 miscellaneous services, such as street light maintenance charged to municipalities and,
- beginning in 2020, AMI radio-off meter read fees. 12 There are no variances expected in 2021
- 16 Projected compared to 2021 Approved based on amounts recognized to date. The 2022
- 17 Forecast is expected to be slightly lower than 2021 Approved due to an expected reduction in
- 18 AMI radio-off meter read fees from a lower volume of customers choosing the radio-off option.

19 **5.9 SUMMARY**

- 20 FBC has forecast the Other Revenue components for 2022 reflecting all applicable contracts
- and fixed revenues, and based on the Company's best knowledge of the factors that drive the
- 22 variable components. Variances in Other Revenue are shared with customers through the
- 23 earnings sharing mechanism.

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SECTION 5: ANNUAL REVENUE

¹² As approved by Order G-40-19.



1 6. O&M EXPENSE

6.1 Introduction and Overview

- Under the MRP, FBC's O&M expense is primarily determined by formula, with the addition of a
 number of items that are forecast outside the formula on an annual basis.
- 5 In 2022, the Formula O&M is \$66.147 million, representing a 6.2 percent increase from the 2021
- 6 Formula O&M, primarily due to the formula drivers. O&M expenses forecast outside the formula
- 7 for 2022 are \$1.645 million, representing a 45.9 percent decrease from the amount approved for
- 8 2021. Overall, the increase in Gross O&M Expense from 2021 Approved to 2022 Forecast is
- 9 3.9 percent.
- 10 The components of 2022 O&M expense are shown in Table 6-1 below.

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Table 6-1: 2022 O&M Expense (\$ millions)

Line No.	Description	 proved 2021	ojected 2021	orecast 2022	Reference
1 2 3	Formula O&M Forecast O&M 2020 O&M True-up	\$ 62.261 3.041	\$ 62.261 3.402	\$ 66.147 1.645 0.053	Section 11, Schedule 20, Line 8 Section 11, Schedule 20, Line 19 Table 6-2, line 16
4	Total Gross O&M	65.302	65.663	67.845	Line 1 through 3
5	Capitalized Overhead (15%)	(9.795)	(9.795)	(10.177)	Section 11, Schedule 20, Line 22
6	Net O&M	\$ 55.506	\$ 55.867	\$ 57.668	Line 4 + Line 5

In the sections below, FBC provides further details on its formula and forecast O&M expenses for 2022. Additionally, in compliance with the BCUC's directive in the MRP Decision, ¹³ FBC provides information related to its System Operations, Integrity and Security expenditures in

16 Subsection 6.2.1.

6.2 FORMULA O&M EXPENSE

The formula-driven portion of O&M starts from the prior year's Approved Base O&M per Customer (UCOM), escalated by the prior year's inflation less a productivity improvement factor

- 20 of 0.5 percent, and then multiplied by 75 percent of the forecast growth in average customers,
- 21 resulting in the current year inflation-indexed O&M before true-up. A true-up of formula O&M
- 27 Issued as a state of the control of the control
- 22 based on actual average customers from two years prior is then added to the current year
- 23 inflation-indexed O&M.

24 As calculated in Section 2, the 2022 inflation based on prior year's BC-CPI and BC-AWE, less

- 25 the productivity improvement factor, is 4.089 percent.
- 26 For 2022, the annual operating and maintenance expense under the formula is calculated as:

2021 Approved formula UCOM x [1 + (I Factor – X Factor)] x [Prior Year Average Customers + (0.75 x growth in average customers)] + 2020 Formula O&M True-up

Line

¹³ MRP Decision, p. 118.

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Table 6-2 below shows the calculation of the 2022 Formula O&M, including the calculation of the 2020 Formula O&M true-up. FBC notes the true-up of formula O&M is a two-year lag based on actual average customer counts from 2020.

Table 6-2: Calculation of 2022 Formula O&M (\$ millions)

Line		F	orecast	
No.	Description		2022	Reference
1	Prior Year Base Unit Cost O&M (\$/ customer)	\$	437	G-166-20 FBC MRP Decision
2	I-Factor		4.089%	Section 2, Table 2-3, Line 11
3	Current Year Unit Cost O&M (\$/customer)	\$	455	
4	Average Customer Forecast		145,378	Section 2, Table 2-3, Line 13
5	2022 Inflation-Indexed O&M before 2020 True-up	\$	66.147	Line 3 x Line 4 / 1,000,000
6	2020 True-up O&M		0.053	Line 16
7	Inflation-Indexed O&M	\$	66.200	Line 5 + Line 6
8				
9	2020 O&M True-up			
10	2020 Actual 12 month Average Customers		142,321	FBC 2020 Annual Report
11	2020 Forecast 12 month Average Customers		142,153	G-42-21 FBC 2020 Rates Decision
12	Difference		169	Line 10 + Line 11
13	Growth Factor		75%	G-166-20 FBC MRP Decision
14	Change in Customers - True-up		126	Line 12 x Line 13
15	2020 Unit Costs	\$	422.0	G-42-21 FBC 2020 Rates Decision
16	O&M True-up for 2022	\$	0.053	Line 14 x Line 15 / 1,000,000

6.2.1 New/Incremental System Operations, Integrity and Security Funding

- 7 In the MRP Decision (page 118), the BCUC directed FBC to provide in each Annual Review a
- 8 breakdown and explanation of both annual and cumulative variances between forecast/actual
- 9 and formula O&M related to the approved new/incremental System Operations, Integrity and
- 10 Security funding, and quantify the variances attributable to the following areas: tree
- 11 management; generation dam safety; network operations apprentice program; cyber security;
- data analytics; and any other significant factors or miscellaneous items.
- 13 The table below shows the requested information, including the new/incremental funding in
- 14 each category in 2019 dollars (the Approved Base O&M), escalated by the annual formula
- 15 factors to arrive at the formula O&M amounts (the 2020 Formula O&M). The table also shows
- the 2020 Actual O&M and the resulting variances to the 2020 Forecast (or Formula) O&M.

Section 6: O&M Expense Page 39



Table 6-3: System Operations, Integrity and Security New/Incremental Spending (\$ millions)

Line No.	Description	Appr	oved Base O&M	2	020 Formula O&M ¹	Actual 2020 O&M		2020 Forecast/Actual Variance			Cumulative precast/Actual Variance ²
1	Tree Management	\$	0.075	\$	0.077	\$	0.049	\$	(0.028)	\$	(0.028)
2	Generation Dam Safety	•	0.232	•	0.237	*	0.162	*	(0.076)	•	(0.076)
3	Network Operations Apprentice Program		0.197		0.202		-		(0.202)		(0.202)
4	Cyber Security		0.080		0.082		0.332		0.250		0.250
5	Data Analytics		0.099		0.101		-		(0.101)		(0.101)
6	Other		-		-		0.309		0.309		0.309
7	Total	\$	0.683	\$	0.699	\$	0.851	\$	0.153	\$	0.153

Notes to table:

- 4 (1) 2020 Formula O&M is the incremental funding with Net Inflation factor applied (2.309%).
- 5 (2) Cumulative Forecast/Actual variance is the same as the 2020 (first year of MRP) Forecast/Actual variance.

Overall, total actual spending in 2020 was approximately \$0.851 million, which is approximately \$0.153 million higher than the 2020 Formula O&M amount. Areas with notable variances include Cybersecurity, Network Operations Apprentice Program, Data Analytics, and Other.

With regard to Cybersecurity, the additional \$0.250 million in spending was for activities to enhance FBC's cybersecurity and business continuity programs. The funding was used to build out the governance and controls for operational technology in response to increasing cyber threats on operational systems, and to update the Company's business continuity plans for each business area in response to opportunities for improvement identified during the COVID-19 pandemic, as well as to improve overall resiliency.

Offsetting the increase in Cybersecurity were lower expenditures of approximately \$0.303 million for the Network Operations Apprentice Program and Data Analytics, primarily due to labour savings from the timing of new hires.

Incremental activities and costs of approximately \$0.309 million in the "Other" Operations Integrity and Security category were incurred for tree management and dam rock trap clearing activities. In 2020, increased vegetation management activities were taken to better define the right of ways and protect the system from danger trees and other vegetation issues. Vegetation management directly impacts compliance with the System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI) and the safety of workers responding to incidents and maintaining the system. Rock traps are located on the intake side of the dam and can become blocked with rocks and other debris. Regular cleaning of the traps contributes to the overall safe and reliable operation of the dam.

As discussed in the FBC Annual Review for 2020 and 2021 Rates (pages 40 and 41), the funding for the different categories of new/incremental O&M approved for System Operations, Integrity and Security was developed based on the anticipated requirements over the term of the MRP, recognizing that priorities may change and that the expenditures may vary from year to year depending upon factors such as the availability of resources (i.e., labour vacancies) and the timing of activities. The 2020 Actual spending related to the approved new/incremental

Section 6: O&M Expense Page 40

FORTISBC INC

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- System Operations, Integrity and Security funding is indicative of the prioritization of spending 1 2 that occurs from year to year, not only in this grouping of formula O&M costs, but also more
- 3 broadly in how FBC manages its overall formula O&M spending.
- 4 Over the term of the MRP, FBC anticipates that the total new/incremental spending in the 5 combined categories of System Operations, Integrity and Security required will be relatively
- close to the cumulative approved formula amounts, and there will continue to be variations from 6
- 7 year to year.

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6.3 O&M Expense Forecast Outside the Formula

In addition to FBC's Formula O&M, FBC forecasts a number of O&M items outside of the formula annually, including pension and OPEB expense, insurance premiums, BCUC levies, and the cost of service associated with Clean Growth Initiatives, such as Electric Vehicle (EV) charging stations, as well as the O&M impacts of any exogenous factor items. Please refer to Appendix A of FBC's Evidentiary Update, filed on October 5, 2021 for details of the wildfirerelated exogenous factor request for 2021. For 2022, FBC has included incremental operating expenses for mandatory reliability standards (MRS) as an exogenous factor. The 2022 amounts are shown in Table 6-4 below along with a comparison to 2021.

Table 6-4: 2022 Forecast O&M (\$ millions)

Line Annroyed

Lille		App	noveu	PIU	jecteu	FUI	ecasi
No.	Description	2021		2021		2	2022
1	Pension/OPEB (O&M Portion)	\$	0.775	\$	0.775	\$	(1.716)
2	Insurance Premiums		1.916		2.022		2.223
3	BCUC Levies		0.350		0.350		0.373
4	Clean Growth Initiative - EV Charging Stations		-		-		-
5	Exogenous Factor - MRS		-		0.100		0.765
6	Exogenous Factor - Wildfire		-		0.155		-
7	Forecast O&M	\$	3.041	\$	3.402	\$	1.645

Each of the items that is forecast outside of the formula is discussed below. Variances in pension and OPEB expenses are captured in the Pension and OPEB Variance deferral account and variances in BCUC levies are captured in the BCUC Levies Variance deferral account. Variances in insurance premiums, the cost of service associated with EV charging stations, and exogenous factors are captured in the Flow-through deferral account.

6.3.1 **Pension and OPEB Expense**

Pension and OPEB expense for 2022 is based upon actuarial estimates using a range of assumptions as of December 31, 2020 with an update of discount rate estimates as of May 31, 2021 provided by the Company's external third party actuary, Willis Towers Watson. The discount rate determined as of May 31, 2021 reflects the market yields of high quality Canadian corporate bonds which have increased since 2020. Pension and OPEB expense is segregated into O&M and capital categories, as shown in Table 6-5.

SECTION 6: O&M EXPENSE PAGE 41 Deleted: Projected

1		Line	
		No.	Description
		1	Pension/OPEB (O&M Portion)
		2	Insurance Premiums
		3	BCUC Levies
		4	Clean Growth Initiative - EV Charg
		5	Exogenous Factor - MRS
	Deleted:	6	Forecast O&M



Table 6-5: Pension and OPEB Expense (\$ millions)

Line No.			oroved 021	,	ected 021	Forecast 2022	
110.	Description		021		021		.022
1	O&M	\$	0.775	\$	0.775	\$	(1.716)
2	Capital (Approved)		3.575		3.575		3.807
3	Capital (to Pension & OPEB Variance Deferral) ¹		1.454		1.454		(0.400)
4	Total	\$	5.804	\$	5.804	\$	1.691

Notes to table:

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The variance between the 2021 Approved and actual pension and OPEB expense, including the known capital variance on Line 3 of Table 6-5 above, and any variance between the 2022 Forecast and actual amounts, is flowed through to the Pension and OPEB Variance deferral account and amortized into rates over a three-year period, as approved by Order G-139-14.

- The 2022 Forecast pension and OPEB expense has decreased by \$4.113 million compared to the 2021 Approved expense primarily due to the following factors:
 - An approximate \$5.8 million decrease in amortization of actuarial losses and increases in current service costs due to an increase in the discount rate. The discount rate, which is determined with reference to the market rate of interest on high quality debt instruments at a point in time, increased from 2.5 percent, which was used to determine the 2021 Approved expense, to 3.5 percent, which is used to determine the 2022 Forecast expense; and
 - An approximate \$0.8 million decrease due to an increase in investment returns as a result of a higher balance of pension plan assets;
- 22 offset in part by:
 - An approximate \$2.5 million increase in interest costs due to an increase in the discount rate.

6.3.2 Insurance Premiums

The component of insurance expense tracked outside of Formula O&M relates to the insurance premium expense allocated to FBC by Fortis Inc. as set out in Table 6-6 below.

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This line item represents the pension and OPEB expense difference between the estimates embedded in the Capital forecasts on Line 2 in this table, which were based on the pension and OPEB actuarial estimates provided in 2019 as part of the 2020 to 2024 MRP Application, and the actuarial estimates updated for 2022 rate setting purposes.



Table 6-6: Insurance Premiums (\$ millions)

Line No.	Description	 roved 021	jected 021	Forecast 2022		Reference
1	Insurance Premiums	\$ 1.916	\$ 2.022	\$	2.223	Section 11, Schedule 20, Line 16
2	Total	\$ 1.916	\$ 2.022	\$	2.223	

The 2021 Projected insurance premium expense of \$2.022 million is \$0.106 million higher than 2021 Approved, as it incorporates FBC's actual July 2021 to June 2022 insurance renewals of \$2.033 million. The higher premiums experienced in 2021 are expected to continue into 2022. The forecast for 2022 insurance is \$2.223 million, an increase of \$0.201 million from 2021 Projected. The 2022 Forecast is calculated as the amount of the first six months of actual annual insurance premiums for January 2022 to June 2022 of \$1.017 million, applying a 5 percent increase for the remaining six months, plus the fire fighting premium of \$138.5 thousand.¹⁴

- FBC has experienced significant increases in insurance expense in the last two renewals as a result of the following factors:
 - Insurers reducing their insurance capacity, which means reducing the limit that an
 insurance company agrees to assume from underwriting a risk. This results in the need
 for other insurers of the existing policies to increase their capacity or the need to seek
 new insurers who are willing to participate in the existing insurance program, which can
 lead to changes in pricing philosophies and higher premiums being charged;
 - Insurers limiting their risks by adding new exclusions to exclude or restrict coverages for a particular event; and
 - Increases in policy deductibles or self-insured retentions, which raises the threshold of an insured event for indemnification under a policy.

6.3.3 BCUC Levies

- 24 FBC's 2022 Forecast for BCUC levies is based on two components: (i) the BCUC levy; and (ii)
- 25 FBC's portion of funding for the BCUC hearing room facilities. 15
- 26 The 2022 Forecast BCUC levies for FBC is \$0.373 million and includes the following:
 - The forecast BCUC levy of \$0.324 million based on Order G-180-21 for the BCUC's Fiscal 2021/22 year, which represents the best information available at this time. The BCUC levy calculation for Fiscal 2022/23 will not be available until early in 2022; and
 - An estimate of \$0.049 million for FBC's portion of the funding for the BCUC hearing room facilities.

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 $^{^{14}}$ \$2.033 million/2 = \$1.017 million. \$1.017 million x 1.05 = \$1.068 million. \$1.068 million + \$1.017 million + \$0.138 million annual firefighting premium = \$2.223 million.

¹⁵ Located at 12th floor, 1125 Howe Street, Vancouver, BC and managed/operated by Allwest Reporting Ltd.



- 1 BCUC levies receive flow-through treatment, with annual variances between actual and forecast
- 2 amounts in O&M expense being recorded in the BCUC Levies Forecast Variance deferral
- 3 account and amortized over one year.

6.3.4 Clean Growth Initiative – Electric Vehicle (EV) Charging Stations

- 5 The cost of service associated with EV charging stations is subject to flow-through treatment,
- 6 contingent upon approval by the BCUC for inclusion of EV charging stations in rate base. 16
- 7 FBC's application for rates for EV charging stations was adjourned in 2018; however, on July
- 8 10, 2020 the BCUC issued Order G-183-20 re-starting the review process and on July 14, 2021,
- 9 the BCUC issued Order G-215-21 finding that FBC's EV direct current fast charging (DCFC)
- 10 stations are prescribed undertakings under section 5 of the GGRR and approving FBC to
- include the assets in FBC's rate base. However, the BCUC did not provide determinations on
- 12 certain related approvals sought by FBC, including approval of a straight-line 10 percent
- depreciation rate for FBC's EV DCFC stations and approval to include related revenues and
- 14 expenses associated with the EV DCFC stations in FBC's regulated accounts; as such, the
- 15 revenue requirement impacts of the decision are not clear at this time. FBC will provide an
- 16 Evidentiary Update if required once FBC has clarity on these matters.

17 6.3.5 MRS Incremental Operating Expenses

- 18 FBC forecasts that it will incur \$0.100 million in 2021 and \$0.765 million in 2022 in incremental
- 19 O&M costs related to MRS Assessment Report No. 13 (AR13). As explained in Section 12.2.1,
- 20 the incremental costs in 2021 and 2022 for MRS compliance qualify for exogenous factor
- 21 treatment.

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- 22 BC Hydro issued AR13 on May 1, 2020 recommending adoption of 8 of the 9 standards and the
- 23 NERC Glossary that were assessed. The BCUC issued Order R-19-20 on September 8, 2020
- 24 which adopted and determined the effective dates for the recommended 8 of 9 standards. Of
- 25 the 9 standards and respective NERC Glossary terms assessed by FBC, 5 standards have
- 26 associated costs, of which one was held in abeyance. The effective date for the 4 adopted
- 27 standards (which include 1 new and 3 revised Critical Infrastructure and Protection Standards)
- 28 is April 1, 2023. The adoption of these standards will require ongoing effort and cost resulting
- 29 from additional staffing requirements. FBC notes that it was unable to provide information on
- the 2021 Projected incremental costs for AR13 in the Annual Review for 2020 and 2021 Rates
- 31 as Order R-19-20 was issued subsequent to the annual review application being filed.
- 32 As stated above, FBC expects to incur one-time incremental O&M costs to achieve compliance
- associated with AR13 in 2021 and 2022 of \$0.100 million and \$0.765 million, respectively, with
- 34 ongoing incremental O&M costs expected to be incurred to sustain compliance in 2023 and
- 35 beyond. The expenditures are primarily required for both assessing and determining the
- 36 strategy and detailed scope required to comply with the new and revised standards as well as

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¹⁶ Costs related to EV charging stations are held outside of rate base pending BCUC approval, pursuant to Order G-9-18.

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- 1 implementing the strategy and scope. During Q4 of 2021 and in 2022, FBC will be evaluating,
- 2 scoping and implementing additions/changes to procedures, processes and installation of
- 3 hardware and software to achieve compliance with those standards that come into effect in April
- 4 1, 2023. FBC is required to monitor and disconnect vendor remote access, evaluate and report
- 5 attempts to compromise, ensure software downloads and installations are unaltered and secure,
- 6 and assess risk for any product or service procured for Bulk Electrical System assets under the
- 7 Critical Infrastructure and Protection (CIP) standards. FBC will need to address
- 8 changes/additions under CIP-005-6 (Electronic Security Perimeter(s)), CIP-008-6 (Incident
- 9 Reporting and Response Planning), CIP-010-3 (Configuration Change Management and
- 10 Vulnerability Assessments) and the new CIP-013-1 (Supply Chain Risk Management).
- 11 FBC will continue to evaluate and determine how to best achieve compliance with AR13. Future
- 12 expenditures associated with AR13 in 2023 and beyond are preliminarily forecast to be
- 13 approximately \$0.650 million of incremental O&M annually. This effort and estimate will be
- 14 revisited over 2021/22 and will be addressed in future annual reviews. Any variances from the
- 15 2021 Projected and 2022 Forecast amounts for AR13 will be trued up by way of the Flow-
- through deferral account and returned to, or recovered from, customers in future years.

17 **6.4 NET O&M EXPENSE**

- 18 Net O&M expense is Gross O&M less capitalized overhead. As approved by the BCUC in
- 19 Order G-166-20, the capitalized overhead rate is set at 15 percent for FBC, unchanged from
- 20 2021. After capitalized overhead, the net O&M expense is \$57.668 million in 2022.

21 **6.5 SUMMARY**

- 22 Overall, the increase in Gross O&M Expense from 2021 Approved to 2022 Forecast is 3.9
- 23 percent. Formula-driven O&M is increasing at a rate of 6.2 percent, and O&M forecast outside
- the formula is 45.9 percent lower than 2021 Approved.
- 25 The capitalized overhead rate for 2022 remains unchanged from 2021.

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7. RATE BASE

7.1 Introduction and Overview

Rate Base for FBC is forecast to be \$1.582 billion for 2022. Rate Base is comprised of mid-year net plant in service, work in progress not attracting AFUDC, unamortized deferred charges,

- 5 working capital, and the generation plant acquisition adjustment.¹⁷
- FBC's 2022 Rate Base includes the full-year impacts of the 2021 closing projected plant balances as well as the impact of the following amounts:
- Mid-year impact of plant additions, net of CIAC additions, resulting from regular capital
 expenditures of \$81.819 million;
 - Mid-year impact of plant depreciation, net of CIAC amortization, of \$49.499 million; and
 - Full-year impact of \$32.362 million for the portions of the Corra Linn Dam Spillway Gate Replacement Project, the UBO Old Units Refurbishment Project, and the Grand Forks Terminal Station Reliability Project added to plant in 2022, as discussed in Section 7.3 below.

In addition, various changes in deferred charges, working capital and other items increase rate
 base by a net amount of \$8.796 million in 2022.

18 Details of the 2022 Forecast plant balances can be found in Section 11, Schedules 5 through 9.

19 7.2 REGULAR CAPITAL EXPENDITURES

- As part of the MRP Decision and Order G-166-20, FBC received the following approvals for capital expenditures:
 - Approval of FBC's forecasts submitted for regular capital expenditures for the years 2020 through 2022; and
 - Approval of a number of items to be forecast on an annual basis.

The components of 2022 regular capital expenditures are shown in Table 7-1 below.

17 The utility plant acquisition adjustment relates to the 1982 purchase of Plants 2, 3, and 4 and is being amortized over a period of 64 years.

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Table 7-1: Regular Capital Expenditures (\$ millions)

Line		Apı	proved	Pro	jected	Fo	recast	
No.	Description	2	2021	2	2021	2	2022	Reference
1	Approved Capex	\$	87.573	\$	87.573	\$	82.205	Table 7-2, Line 4
2	Flow-Through Capex		-		2.097		0.935	Table 7-3, Line 3
3	Total Gross Regular Capex	\$	87.573	\$	89.670	\$	83.140	Sum of Lines 1 & 2
4	Less CIAC		(11.465)		(11.465)		(11.712)	Section 11, Schedule 9, Line 2
5	Net Regular Capex	\$	76.108	\$	78.205	\$	71.428	Sum of Lines 3 & 4

In the subsections below, FBC provides further details on its regular capital expenditures for 2022.

7.2.1 Approved Capital Expenditures

The level of forecast capital expenditures approved for 2022 by the MRP Decision is shown in Table 7-2 below.

Table 7-2: Approved Capital Expenditures (\$ millions)

Line		App	oroved	Pro	jected	Fo	recast	
No.	Description	2	2021	2	2021	2	2022	Reference
1	Growth Capital	\$	23.042	\$	23.042	\$	24.339	Section 11, Schedule 4, Line 2
2	Sustainment Capital		49.818		49.818		43.110	Section 11, Schedule 4, Line 3
3	Other Capital		14.712		14.712		14.756	Section 11, Schedule 4, Line 4
4	Total	\$	87.573	\$	87.573	\$	82.205	Section 11, Schedule 4, Line 5

7.2.2 Flow-Through Capital Expenditures

FBC is afforded flow-through treatment for certain capital items due to a variety of factors, including their uncontrollable nature, because they drive incremental revenues, because they are related to clean growth initiatives, or because of the uncertainty in scope, costs and timing. The amounts for 2022 are shown in Table 7-3 below along with a comparison to 2021.

Table 7-3: Flow-Through Regular Capital Expenditures (\$ millions)

Line No.	Description	Appr 20		 jected 021	 ecast 022	Reference
1	Clean Growth Initiative - EV Charging Stations	\$	-	\$ -	\$ -	
2	Exogenous Factor - MRS		-	-	0.935	
3	Exogenous Factor - Wildfire		-	2.097	-	
4	Forecast Capital Expenditures		-	\$ 2.097	\$ 0.935	Section 11, Schedule 4, Line 9

EV Charging Stations

As discussed in Section 6.3.4, on July 14, 2021, the BCUC issued Order G-215-21 finding that FBC's EV DCFC stations are prescribed undertakings under section 5 of the GGRR and approving the inclusion of EV DCFC station prescribed undertaking assets in FBC's rate base. However, the BCUC did not provide determinations on certain related approvals sought by FBC, including approval of a straight-line 10 percent depreciation rate for FBC's EV DCFC stations and approval to include related revenues and expenses associated with the EV DCFC stations

Line Approved No. Description 2021 Approved Capex Ś 87.5 Flow-Through Capex 87.5 **Total Gross Regular Capex** Ś 3 Less CIAC (11.4 Net Regular Capex 76.1 Deleted:

Line
No. Description

1 Clean Growth Initiative - EV Charging Stations
2 Exogenous Factor - MRS

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- in FBC's regulated accounts; as such, the revenue requirement impacts of the decision are not 2 clear at this time. FBC will provide an Evidentiary Update if required once FBC has clarity on
- 3 this matter

Mandatory Reliability Standards Incremental Capital 4

- FBC forecasts that it will incur \$0.935 million in incremental capital related to the adoption of 5 new revised MRS standards for Assessment Report No. 13 (AR13), as explained in Section 6
- 7 6.3.5. The treatment of this amount as an exogenous factor is discussed in Section 12.2.1.
- During Q4 of 2021 and in 2022, FBC will be evaluating, scoping and implementing 8
- 9 changes/additions, including the development and implementation of methods to monitor
- network traffic and software tools to support the changes/additions to the standards. It will 10
- 11 require the purchase and installation of hardware and software to assess and evaluate network
- traffic and the development of software tools to track risk assessments of any product or service 12
- procured for Bulk Electrical System assets. 13

14 Wildfire-Related Incremental Capital

- For wildfire-related incremental capital as an exogenous factor, please refer to Appendix A of 15
- FBC's Evidentiary Update to its Application, filed on October 5, 2021. 16

7.3 MAJOR PROJECTS CAPITAL EXPENDITURES 17

- Major Projects are capital expenditures that do not form part of regular capital spending as they 18
- are approved through a separate CPCN or other method. As part of the MRP Decision, 18 the 19
- 20 BCUC approved the continuation of the current process of reviewing Major Projects outside of
- the proposed MRP and approved the continuation of the existing financial threshold for CPCNs 21
- 22 of \$20 million for FBC for the MRP term.
- 23 For 2022, FBC is forecasting capital expenditures related to the following approved projects:
- 24 Corra Linn Dam Spillway Gate Replacement Project, the Grand Forks Terminal (GFT) Station
- Reliability Project, the UBO Refurbishment Project, the Kelowna Bulk Transformer Addition 25
- 26 (KBTA) Project, and the Playmor Substation Upgrade Project.
- 27 Each of these approved projects is described further below.
 - The Corra Linn Dam Spillway Gate Replacement Project was approved by Order C-1-17 and involves the replacement of 14 spillway gates and upgrades to the associated infrastructure. The project is expected to be substantially complete in 2022 at a cost of \$77.656 million, inclusive of AFUDC and cost of removal. FBC forecasts capital expenditures of \$13.147 million and \$6.019 million (excluding AFUDC) in 2021 and 2022, respectively. Expenditures are added to plant in service as the gate replacements are completed. The forecast additions to rate base in 2022 are \$23.197 million.
 - The UBO Project was approved by Order G-8-17 and involves the refurbishment of the more than 100-year-old generating Units 1 - 4 (the Old Units). The refurbishments will be completed in 2021 at an estimated total project cost of \$34.180 million, inclusive of AFUDC and cost of removal. FBC forecasts capital expenditures of \$1.814 million

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¹⁸ MRP Decision, pp. 132-133.



- (including AFUDC) in 2021 which will be additions to rate base in 2022.¹⁹ As directed by the BCUC in the Annual Review for 2017 Rates, the UBO Project Status Report is included as Appendix B2.
 - The GFT Station Reliability Project was approved by Order C-2-19. 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. The project is expected to be completed in 2021 at an estimated cost of \$9.253 million,²⁰ inclusive of AFUDC and cost of removal. FBC projects capital expenditures of \$2.171 million (excluding AFUDC) in 2021, and the forecast plant additions in 2022 to be \$7.351 million.
 - The KBTA Project was approved by Order C-4-20 and involves the installation of a third terminal transformer at the F.A. Lee Terminal Station, including the reconfiguration of the 138 kV bus into an industry standard ring bus configuration. The new transformer is scheduled to be in service by the end of 2022 or early 2023, with project completion and close-out during 2023, at an estimated cost of \$23.288 million, inclusive of AFUDC and cost of removal. FBC forecasts capital expenditures of \$9.759 million and \$12.085 million (excluding AFUDC) in 2021 and 2022, respectively, and forecasts that the expenditures will be added to rate base January 1, 2023.
 - 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. The project is expected to be completed in 2022 at an estimated cost of \$10.922 million, inclusive of AFUDC and cost of removal. FBC forecasts capital expenditures of \$8.730 million and \$1.297 million (excluding AFUDC) in 2021 and 2022, respectively, and forecasts that the expenditures will be added to rate base January 1, 2023.

7.4 2022 PLANT ADDITIONS

The 2022 Plant Additions are comprised of: (i) FBC's 2022 regular capital expenditures from Section 7.2; (ii) the Major Projects from Section 7.3 to the extent that portions of those projects are placed into service; (iii) the change in work in progress which adjusts for capital expenditures for projects that are in progress at year-end; (iv) AFUDC; and (v) overhead capitalized for the year. A reconciliation of capital expenditures to plant additions is shown below and is also provided in Section 11, Schedule 5.

Actual spending up to June 30, 2021 is \$32.252 million (excluding AFUDC). Forecast construction and removal costs to complete at the end of 2021 is \$0.710 million and \$0.035 million, respectively, as discussed in Appendix B2, Table B2-3. Total AFUDC forecast for the project is \$1.183 million, for a total project cost estimate of \$34.180 million.

²⁰ The installation of the second transformer at GFT was completed in February 2021 at an actual cost of \$5.066 million. FBC forecasts the total costs for the portion of the transmission line removal between Christina Lake and Rossland to be \$4.187 million, resulting in a forecast total project cost at completion of \$9.253 million.

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Table 7-4: Reconciliation of 2022 Capital Expenditures to Plant Additions (\$ millions)

Line		Forecast	
No.	Description	2022	Reference
1	Forecast Capital Expenditures	\$ 82.205	Section 11, Schedule 5, Line 2
2	Flow-Through Capital Expenditures	0.935	Section 11, Schedule 5, Line 3
3	Total Gross Regular Capital Expenditures	83.140	Sum of Lines 1 and 2
4			
5	Capitalized Overhead	10.177	Section 11, Schedule 5, Line 18
6	AFUDC	0.214	Section 11, Schedule 5, Line 19
7	Change in Work in Progress	-	Section 11, Schedule 5, Line 21
8	Total Regular Additions to Plant	93.531	Sum of Lines 3 through 7
9			
10	Special Projects and CPCN Capital Expenditures		
11	Corra Linn Spillway Gate Replacement	6.019	Section 11, Schedule 5, Line 7
12	Playmor Substation Rebuild Project	1.297	Section 11, Schedule 5, Line 8
13	Kelowna Bulk Transformer Capacity Addition	12.085	Section 11, Schedule 5, Line 9
14	AFUDC	2.158	Section 11, Schedule 5, Line 25
15	Change in Work in Progress	 10.803	Section 11, Schedule 5, Line 27
16	Total Special Projects and CPCN Additions to Plant	32.362	Sum of Lines 11 through 15
17			
18	Total Plant Additions	\$ 125.893	Line 8 + Line 16

7.5 ACCUMULATED DEPRECIATION

The rate base of FBC includes both the accumulated depreciation on plant in service and accumulated amortization of CIAC. Both are increased through depreciation expense, and decreased through retirements.

The depreciation rates used for 2022, which were approved by Order G-166-20 and are based on FBC's most recent depreciation study, include the recovery of the estimated future costs of removal over the average service life of the assets (net salvage) in accumulated depreciation.

9 removal over the average service life of the assets (net salvage) in accumulated depreciation.
10 Depreciation is calculated beginning January 1 of the year after the assets are placed in service,

which is the treatment approved in Order G-139-14.

Based on calculating depreciation expense at these approved depreciation rates on the opening plant-in-service balance, the 2022 depreciation expense is calculated as \$61.681, million.²¹

7.6 RATE BASE DEFERRED CHARGES

15 On May 3, 2017, the BCUC issued its Regulatory Account Filing Checklist.²² The stated

16 purpose of the checklist is to assist regulated entities when filing regulatory account requests

17 and to facilitate an efficient review by the BCUC.

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^{21 \$66,327} million depreciation expense as shown in Section 11, Schedule 21, Line 2 less \$4.646 million amortization of CIAC as shown in Section 11, Schedule 21, Line 8.

²² BCUC Letter, Log No. 53608, Appendix B.

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The checklist classifies deferral accounts as one of: (a) forecast variance account; (b) rate 1 2 smoothing account; (c) benefit matching (capital-like) account; (d) retroactive expense account; 3 or (e) other. In Section 11, Schedule 11, FBC has classified its rate base deferral accounts in

accordance with this classification.

5 The forecast mid-year balance of unamortized deferred charges in rate base for FBC is a debit of \$30.388 million in 2022. The 2022 debit balance is driven largely by the balances in the 6

7 Demand Side Management (DSM) and Deferred Debt Issue Costs deferral accounts, partially

8 offset by the Pension and OPEB Liability deferral account.

9 Figure 7-1 provides the mid-year deferral account balances summarized by deferral account 10 category.

Figure 7-1: FBC Forecast Mid-Year Balances of Rate Base Deferral Accounts by Category



Based on amortizing the opening deferral account balances using the approved and proposed amortization periods, the 2022 amortization expense is calculated as \$1.844 million.²³ The subsections below include a discussion on new rate base deferral accounts and changes or updates to existing rate base deferral accounts. For a discussion on non-rate base deferral accounts, please refer to Section 12.

7.6.1 **New Deferral Accounts**

19 FBC is seeking approval to create the following new deferral account discussed below.

2021 Generic Cost of Capital Proceeding

21 On January 18, 2021, the BCUC issued a Notice of Initiating a Generic Cost of Capital (GCOC) 22 proceeding to all regulated entities. In subsequent orders, the BCUC has determined the 23 GCOC will proceed in two stages, and will determine, at a later date, the effective date to

24 implement a new cost of capital, whether interim rates will be necessary or not, or whether a Deleted: 1.962

SECTION 7: RATE BASE

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²³ Total of Section 11, Schedule 11, Line 26, Column 6 and Schedule 12.2, Line 23, Column 6.



- 1 transition period will be required. The scope for Stages 1 and 2 has been determined, including
- 2 the BCUC addressing deferral account financing costs after the completion of both Stages 1
- 3 and 2. Additionally, the BCUC advised parties that it has engaged an independent expert
- 4 consultant for the GCOC proceeding, as well as an initial report on the pros and cons of using a
- 5 Benchmark Utility in the determination of cost of capital, alternatives to using a Benchmark
- 6 Utility, the practices in other jurisdictions, and the applicability of practices in other jurisdictions
- 7 to BC. Participants have filed submissions on the initial report as well as submissions on
- 8 questions regarding the use of a Benchmark Utility.
- 9 FBC is seeking a deferral account to capture costs associated with its participation in the GCOC
- 10 proceeding. These costs include BCUC costs, intervener and participant funding costs, external
- 11 legal fees, expert/consulting costs, and miscellaneous facilities, stationery and supplies costs.
- 12 While the regulatory timetable for the GCOC proceeding is not yet established, which will inform
- 13 the level of participation FBC will have in each stage of the proceeding, FBC has included an
- 14 estimate of \$150 thousand in 2022. This estimate is based on an allocation of costs for joint
- submissions with FortisBC Energy Inc. (i.e., FBC's share of costs for Stage 1) and includes
- 16 FBC's forecast for costs incurred for Stage 2, which FBC has assumed will commence later in
- 17 2022. Actual costs will vary depending on how the proceeding progresses and will be confirmed
- 18 after the regulatory process is completed.

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- 19 FBC will apply for disposition of the account in a future application, following completion of the
- 20 regulatory process for the GCOC proceeding.
- 21 Table 7-5 below addresses the considerations identified in the Regulatory Account Filing
- 22 Checklist as they pertain to the above-described deferral account request.

Table 7-5: Deferral Account Filing Considerations

Item	Consideration	Determination
I.	Indicate if the request is: (a) for a modification or a change in scope to an existing Commission approved regulatory account; or (b) to establish a new regulatory account.	The 2021 Generic Cost of Capital Proceeding deferral account is a new deferral account, consistent with previously approved regulatory proceeding deferral accounts.
a)	If the request is for a modification or change in scope to an existing regulatory account, explain why the existing regulatory account is an appropriate account to use (specifically addressing the existing account's intended and approved purpose, mechanism for recovery, timeline for recovery and carrying costs).	N/A
b)	If the request is for approval of a new regulatory account, state the purpose of the regulatory account and explain its intended use.	The requested account is a regulatory proceeding cost account, which is routinely sought by utilities to capture external costs related to the preparation, filing, and regulatory review of applications.



Item	Consideration	Determination
II.	Propose a term (i.e. length of time) that the regulatory account should be approved for and explain why that term is appropriate.	The term of the account encompasses the preparation and filing of the relevant regulatory application and its review by the BCUC.
III.	Identify any alternate treatments that were considered, including an overview of what the accounting treatment would be in the absence of approval of the request to establish a regulatory account, and explain why these alternate treatments may not be appropriate.	In the absence of deferral accounts for regulatory proceedings, the costs of regulatory proceedings would have to be forecast as an O&M expense (outside of the MRP formula O&M since regulatory proceeding costs are not included in Base O&M Expense) and trued up annually by way of the Flow-through deferral account. FBC considers this to be a more cumbersome and less efficient means of accounting for regulatory proceeding costs.
		It is accepted regulatory practice to defer the costs of regulatory applications for review and recovery following the regulatory review of the application itself. Review and recovery after the completion of the regulatory process allows for more transparency as the history of the costs is simpler to track and report on.
IV a)	Address: whether, or to what extent, the item is outside of management's control;	Regulatory proceeding cost accounts are necessary because the number and type of regulatory proceedings can vary significantly by year. Further, once a regulatory proceeding is identified, the costs of that proceeding cannot be accurately forecast by the utility given that they can vary substantially, are not known at the time of making the regulatory account request, are unique to the circumstances for each application, may change as the regulatory review process unfolds, and are dependent on factors not within the utility's control. Factors not within the control of the utility include the regulatory process determined by the BCUC and the degree of involvement of interveners.
b)	the degree of forecast uncertainty associated with the item;	Refer to IV. a). FBC forecasts additions to the deferral accounts based on the expected type of review process and degree of intervener involvement. Actual costs are recorded in the account so that actual, not forecast, costs are recovered in rates.
c)	the materiality of the costs	The number and size of regulatory proceedings vary from year to year, and represent costs not included in Base O&M for the purpose of determining formula O&M expense under the MRP. See section 7.6.1.1.
d)	any impact on intergenerational equity	Generally, FBC recovers the costs of regulatory proceedings over the period of time related to the application, which serves to match the costs and benefits. See section 7.6.1.1. There are no intergenerational inequities inherent in this practice.



Item	Consideration	Determination
V.	Classify the regulatory account as either: (a) forecast variance account; (b) rate smoothing account; (c) benefit matching account; (d) retroactive expense account; or (e) other.	FBC generally classifies regulatory proceeding accounts as benefit matching accounts since the costs are recovered over the period of time related to the applications, which serves to match the costs and benefits of the application.
VI.	Identify if the regulatory account is a cash or non-cash account.	Regulatory proceeding cost accounts are cash accounts.
VII.	Specify what additions to the regulatory account are being requested (i.e. type and amount of additions), including whether the account is intended to capture additions for a specific period of time or on an ongoing basis.	Eligible costs include the BCUC's direct costs, notice publication costs, fees for consultants or experts, external legal counsel fees, courier and miscellaneous administrative costs, and participant assistance cost awards incurred in the preparation, filing and regulatory review of the applications.
		Regular labour and staff expenses related to regulatory applications are included in formula O&M Expense.
VIII.	Propose a mechanism for recovery (e.g. how the balance in the regulatory account will be recovered or refunded to ratepayers) and explain why it is appropriate.	Costs are recovered in revenue requirements by way of amortization expense.
IX.	Propose a timeline for recovery (e.g. the period over which the regulatory account balance is either collected or refunded; also referred to as the amortization period) and explain why it is appropriate.	Generally, FBC amortizes the costs of regulatory proceedings over the period of time related to the application, which serves to match the timing of costs and benefits. See section 7.6.1.1.
X.	Propose a carrying cost for the balance in the regulatory account and explain why it is appropriate.	Rate base deferral accounts are included in rate base and are therefore implicitly financed using the weighted average cost of capital (WACC).
XI.	Outline a recommended regulatory process for the Commission's review of the application.	The proposed deferral account can be reviewed as part of the present proceeding. Deferral account approvals and disposition are generally determined in revenue requirements proceedings.

2 7.6.2 Existing Deferral Accounts

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- 3 In the discussion below, FBC provides information on five existing deferral accounts and
- 4 requests an amortization period for three of them.

5 7.6.2.1 COVID-19 Customer Recovery Fund Deferral Account

- 6 7.6.2.1.1 <u>DESCRIPTION AND FINANCIAL ESTIMATES</u>
- 7 In June 2020, FBC received approval through Order G-133-20 to establish the COVID-19
- 8 Customer Recovery Fund Deferral Account in rate base to record three items:



- (a) any bill payment deferrals provided to customers due the COVID-19 pandemic and subsequent payments of those deferred amounts;
- (b) any bill credits provided to customers due to the COVID-19 pandemic; and
- (c) any unrecovered revenue resulting from customers being unable to pay their bills due to the COVID-19 pandemic, which will be tracked separately by rate schedule.

The following section provides 2021 and 2022 financial estimates and descriptions for each of the three items for inclusion in the COVID-19 Customer Recovery Fund Deferral Account.

(a) Bill payment deferrals provided to residential and small commercial customers

The bill payment deferral program was offered to residential and small commercial customers affected by COVID-19. Overall, the bill payment deferral program has been successful, providing easy to access bill payment support to those customers that need it most during the pandemic with minimal administrative burden. FBC has experienced high collection rates in regards to this program and is therefore expecting to recover approximately 87 percent of the outstanding balances through the regular monthly instalments. FBC will no longer be accepting new applications effective June 1, 2021.

Table 7-6: Bill Payment Deferral Forecast Amounts (\$ millions)

	2020 Actual	2021 Projected	2022 Forecast
Opening Balance	-	0.563	0.108
Additions	0.803	-	-
Repayments	(0.240)	(0.455)	-
Transfers	-	-	(0.108)
Ending Balance	0.563	0.108	-

Although the program has been successful, FBC does not expect to recover the full amount of the deferred balances, as a small percentage of customers have not made their required instalment payments. Any of the customer balances that are ultimately deemed unrecoverable will be designated as unrecoverable revenue and as such, added to the Customer Recovery Fund Deferral Account. These additions to the deferral account are forecast in section (c), Table 7-8 Unrecoverable Revenue Amounts.

Based on the results of a small pilot customer contact approach (which is described further below) and current repayment trends, FBC expects approximately 87 percent of the required repayments under the deferral arrangement to be collected, resulting in approximately 13 percent of the amounts being considered unrecoverable. This results in \$0.108 million of customer accounts being deemed unrecoverable and therefore reclassed within the COVID-19 Customer Recovery Fund Deferral Account to unrecoverable revenue additions in section (c).



1 (b) Bill credits provided to small commercial customers

The bill credit program offered to small commercial customers has been calculated using the existing balance of \$0.132 million as of May 2021. The credits provided through this program

were well received by small commercial customers and supported them in the initial phase of

5 the COVID-19 pandemic.

Table 7-7: Bill Credit Amounts (\$ millions)

	2020 Actual	2021 Projected	2022 Forecast
Opening Balance	-	0.130	0.132
Additions	0.178	0.003	-
Tax	(0.048)	(0.001)	-
Ending Balance	0.130	0.132	0.132

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Given the duration and period these credits were available for, as well as the June 1, 2021 closure of the program for new applications, FBC does not expect additional credits to be offered to customers throughout the remainder of 2021 or in 2022.

(c) <u>Unrecovered revenue resulting from customers being unable to pay their bills due to the COVID-19 pandemic.</u>

This portion of the deferral account forecast represents the amount of customer balances owing (i.e., account receivables) that are recognized as unrecoverable due to COVID-19. As such, these amounts are in excess of the normal course forecast bad debt expense that is recognized in indexed-based O&M.

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

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

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The unrecovered revenue recorded in the deferral account includes:

 any remaining balances associated with the bill payment deferral program, described in section (a), that resulted from customers' inability to pay; and

 any unrecovered revenue from all customer classes due to COVID-19, including industrial and large commercial customers and those residential and small commercial customers that did not participate in the bill payment deferral or bill credit relief offerings.

²⁴ The 2020 unrecoverable revenue additions of \$0.015 million consist of \$0.014 million of small commercial customer balances and \$0.001 million of residential customer balances.

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- 1 To date, there has been a minimal amount of unrecoverable revenue related to COVID-19
- 2 added to the Customer Recovery Fund Deferral Account. This is primarily due to FBC's
- 3 temporary suspension of the debt collections program and related collections activities
- 4 throughout 2020 and early 2021²⁵ as well as the timing of the Customer Recovery Fund
- 5 repayment schedule.
- 6 To support the development of a consistent and appropriate approach for identifying amounts
- 7 deemed unrecoverable due to COVID-19, FBC has created an internal set of guidelines to be
- 8 used by members of the customer service team with an objective to identify and support
- 9 customers that have been financially impacted by COVID-19. The underlying goal and intent of
- 10 this approach is for customers to be able to maintain their electric services while maximizing
- 11 recoveries associated with any balances due. These internal guidelines include questions that
- 12 help identify the extent to which the customer has been impacted by COVID-19 as well as
- 13 payment arrangement guidelines that include partial or full recognition of receivable balances as
- 14 unrecoverable due to COVID-19.
- 15 FBC has recently conducted a pilot where a select amount of customers were contacted with
- 16 the intent of measuring the success of the outreach plan and internal guidelines. The results
- 17 from this pilot stage have been used to develop the unrecoverable revenue forecast additions to
- 18 the Customer Recovery Fund Deferral Account provided in Table 7-8 above. During the pilot,
- 19 150 customers with past due balances were contacted to determine impacts of the pandemic.
- 20 15 percent of the customers with an average balance of \$800 confirmed that they were
- 21 financially impacted by COVID-19 and will require support to bring their accounts in good
- 22 standing. This result was applied to the estimated 690 customers with outstanding balances as
- 23 at June 1, 2021 to derive the forecast COVID-19 related unrecoverable revenue deferral
- 24 account additions.

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- 25 While the forecasts of the unrecovered revenue additions rely on estimates and broader
- 26 macroeconomic factors, the actual amounts that accumulate in the deferral account are
- 27 expected to be representative of balances that are attributable to specific customers that cannot
- 28 make payment due to COVID-19. Further, due to the time between identifying these accounts
- 29 as unrecoverable due to COVID-19 and the review process, which may include a payment
- 30 commitment from the customer on a partial outstanding balance, FBC expects that additions to
- 31 the account will extend to at least 2022.

7.6.2.1.2 DISPOSITION OF DEFERRAL ACCOUNT

- 33 As discussed above, additions to the COVID-19 Customer Recovery Fund Deferral Account for
- 34 unrecovered revenues resulting from customers being unable to pay their bills due to the
- 35 COVID-19 pandemic are expected to continue into 2022. As a result, the deferral account will
- 36 be required to capture unrecovered revenues until at least the end of 2022.

²⁵ In response to the pandemic, FBC ceased late payment charges, disconnections for non-payment and collection agency referrals for the majority of 2020 and restarted these activities in March 2021.



- 1 After 2022, the need for the continuation of the COVID-19 Customer Recovery Fund Deferral
- 2 Account is dependent on the continued impact of the COVID-19 pandemic on FBC's customers'
- 3 ability to make payment on their utility bills. While the current outlook regarding the COVID-19
- 4 pandemic in BC is positive, with resumption of normal operating conditions expected later this
- 5 year, coinciding with the Province achieving Step 4 of the Province of BC Four Step Restart
- 6 Plan, the financial effects of the COVID-19 pandemic on customers' ability to make payments
- 7 may remain for some time afterwards. During the pandemic, individuals and businesses alike
- 8 have suffered, with some struggling to meet their financial obligations. Federal and provincial
- 9 government support programs such as the Canada Recovery Benefit (CRB) for individuals, the
- 10 Canada Emergency Wage Subsidy (CEWS) for businesses and other various financial
- 11 assistance programs have helped individuals and businesses in BC. However, with the
- 12 elimination of these financial assistance programs eventually expected, even though the
- 13 pandemic may be declared over from a medical perspective, financially some consumers and
- businesses may not have recovered and may be unable to make bill payments.
- 15 Similarly, the general state of the economy may not have fully recovered from the impact of the
- 16 pandemic by 2022. As FBC's unrecovered revenue additions are influenced by broader
- 17 macroeconomic factors, and given the state of the economy at this time and the uncertainty as
- 18 to the timing of recovery, FBC is not able to forecast by the end of 2022 that its unrecovered
- 19 revenues will have normalized to that prior to the COVID-19 pandemic.
- 20 With the uncertainties described and recognizing the uncertainty around the duration and
- 21 significance of the pandemic on customers' ability to pay their bills, with the potential for
- 22 unrecoverable revenue to shift between periods or vary from the forecast, FBC will be in a better
- 23 position to provide an update regarding the continued financial effects from the COVID-19
- 24 pandemic on its customers (homes and businesses) at the time of the Annual Review for 2023
- 25 Rates and will be able to provide a recommendation on whether the deferral account will be
- 26 required past 2022. By this time next year, based on the current outlook, the general state of
- 27 the economy post pandemic and the status of the collectability of FBC's billed revenues will
- 28 likely be clearer.
- 29 In consideration of the ongoing uncertainties and continued need for the COVID-19 Customer
- 30 Recovery Fund Deferral Account discussed above, FBC is not proposing to commence recovery
- 31 of the deferral account as part of this Application. Instead, FBC will request approval of an
- amortization period for this deferral account in the Annual Review for 2023 Rates application.

33 7.6.2.1.3 REQUEST TO CHANGE REPORTING FREQUENCY

- 34 FBC seeks approval to change the reporting requirements for the COVID-19 Customer
- 35 Recovery Fund Deferral Account from filing monthly reports with the BCUC to filing quarterly
- 36 reports.
- 37 As part of the approval in Order G-133-20 for the establishment of the deferral account, FBC
- 38 was directed to file monthly reports with the BCUC detailing the status of the relief program as

39 follows:



- a) An assessment on the need for an extension or any other formal change to the customer relief measures beyond the July 1, 2020 date.
- b) A report on the COVID-19 Customer Recovery Fund Deferral Account and customer relief measures. This report must include the number of customers that have been approved for each program, as well as the number of customers that have applied but have been rejected from participating in the program, in addition to reporting on the current balance in the deferral account.

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- FBC has filed monthly reports with the BCUC since May 15, 2020 and effective June 1, 2021, FBC closed the deferral and credit program components to new applicants.
- 11 With more than one full year of monthly reporting complete, the closure of the deferral and credit 12 program to new applicants and the administrative efforts associated with monthly reporting, a 13 change to the frequency of filing these reports with the BCUC from monthly to quarterly is 14 appropriate at this time. In addition, quarterly data may better highlight material changes in the 15 deferral account balance as repayments continue and unrecovered revenue amounts 16 materialize. FBC will continue to provide the same level of deferral account detail in the 17 quarterly reports as currently provided in the monthly reports and proposes to file the quarterly 18 reports with the BCUC as follows each year as applicable: October 15, January 15, April 15 and 19 July 15.

7.6.2.2 Indigenous Relations Agreement (Huth Substation)

- As part of the Annual Review for 2020 and 2021 Rates Decision and Order G-42-21, FBC received approval to establish the Indigenous Relations Agreement (Huth Substation) deferral account to capture costs to address the Penticton Indian Band's (PIB) concerns regarding the Huth Substation in Penticton and the impacts the substation has had on Syilx²⁶ history and culture, such as the discovery of ancestral remains found at the Huth substation while performing construction works.
 - The Huth substation is a vital component of the South Okanagan area power system, providing direct service to both FBC customers and the municipal utility of the City of Penticton. This hub is connected to five major transmission lines (42L, 49L, 47L, 52L and 53L) and to two City of Penticton distribution substations. Given the importance of the substation to the supply of power in the South Okanagan and the historical value of the land to the PIB and the Syilx people, FBC has engaged in reconciliation efforts with the PIB, consistent with the recent legislation passed by the Provincial government.
- In the Annual Review for 2020 and 2021 Rates application, FBC stated that it would update its progress with respect to this matter in the Annual Review for 2022 Rates filing and would request approval for recovery of costs captured in this deferral account in a future revenue

²⁶ The PIB is a community of the Syilx people.



- 1 requirements proceeding once an agreement with the PIB had been reached and the impacts
- 2 could be communicated.
- 3 FBC was unable to continue preliminary discussions with the PIB on reconciliation efforts on the
- 4 Huth substation. Due to impacts on the community from the COVID-19 pandemic, followed by
- 5 the unique circumstances that arose in 2021 with the Kamloops Residential School findings, out
- 6 of respect to the community, FBC chose not to pursue the efforts until both parties agreed to
- 7 proceed. FBC will continue to provide updates on this matter and on the deferral account in
- 8 future annual review filings.

9 7.6.2.3 2020 Cost of Service Analysis (COSA)

- 10 As part of the Annual Review for 2020 and 2021 Rates, FBC received approval through Order
- 11 G-42-21 to establish the 2020 Cost of Service Analysis deferral account to capture the costs
- related to filing the 2020 COSA and the related regulatory proceeding. While no regulatory
- process was established to review the 2020 COSA, FBC incurred costs of \$0.043 million
- 14 (\$0.032 million after tax) to date for consultant fees related to updating the COSA model and
- providing input to the information filed with the BCUC.
- 16 In this Application, FBC is seeking approval to amortize these costs over one year commencing
- 17 January 1, 2022.

18 7.6.2.4 Mandatory Reliability Standards (MRS) 2021 Audit

- 19 As part of the Annual Review for 2020 and 2021 Rates Decision and Order G-42-21, FBC
- 20 received approval to establish a rate base deferral account to capture the costs of the 2021
- 21 triennial MRS audit, with the amortization period to be determined in a future proceeding.
- 22 FBC's triennial MRS audit will conclude in August 2021. Notification of the audit was received
- on April 19, 2021 and the scope of the audit includes both Critical Infrastructure Protection (CIP)
- 24 and Operations and Planning (O&P) standards. The formal audit with the Western Electricity
- 25 Coordinating Council (WECC) auditors is over a three-week period from July 19 to August 6.
- 26 The audit will be conducted remotely and consists of off-site data reviews and interviews
- 27 clarifying outstanding questions. Preparation and submission of evidence was required several
- 28 months in advance of the three-week formal audit period. A total of 19 standards will be
- 29 assessed and evidence submitted to WECC. FBC anticipates receiving a draft report of the
- audit assessment and findings in September 2021.
- 31 The Company continues to work towards maintaining MRS compliance. The projected additions
- 32 to the deferral account in 2021 are \$0.350 million. FBC requests approval to amortize the
- 33 actual costs over three years beginning January 1, 2022. This amortization period is appropriate
- 34 as it reflects the period until the next MRS triennial audit.



1 7.6.2.5 2021 Long-Term Electric Resource Plan (LTERP)

- 2 As part of the Annual Review for 2020 and 2021 Rates, FBC received approval through Order
- 3 G-42-21 to establish the 2021 Long-Term Electric Resource Plan deferral account to capture
- 4 the costs related to external resources required for the 2021 LTERP that are incremental to the
- 5 costs in FBC's Base O&M, including expert and consulting fees, external legal fees, public
- 6 consultation, BCUC costs and intervener funding. FBC filed the 2021 LTERP on August 4,
- 7 2021 and estimates that the total costs of the LTERP application proceeding, which will
- 8 conclude in 2022, will be \$0.660 million (\$0.482 million after tax).
- 9 In this Application, FBC seeks approval of a three-year amortization period for the 2021 Long-
- 10 Term Electric Resource Plan deferral account, commencing January 1, 2022. A three-year
- amortization period is appropriate because it is consistent with previous amortization periods for
- 12 LTERP deferral accounts and results in the costs being fully amortized prior to the next LTERP
- 13 filing.

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7.7 WORKING CAPITAL

- 15 The working capital component of rate base is comprised of cash working capital and other
- 16 working capital.
- 17 Cash working capital is defined as the average amount of capital provided by investors in the
- 18 Company to bridge the gap between the time expenditures are required to provide service
- 19 (expense lag) and the time collections are received for that service (revenue lag). The cash
- 20 working capital requirements that have been included reflect the most recent Lead Lag Study
- 21 results, as approved through Order G-166-20.
- 22 Other working capital includes customer (DSM) loans, employee loans and withholdings, and
- 23 inventory of materials and supplies. 2022 amounts are projected based on 2020 and 2021
- 24 levels.

7.8 SUMMARY

- 26 FBC's rate base includes the impact of Regular and Major Projects capital expenditures.
- 27 adjusted for work-in-progress, AFUDC and overheads capitalized. FBC has provided forecasts
- for all of its rate base deferral accounts in the financial schedules included in Section 11. In
- 29 Section 7.6.1, FBC requested approval of one new deferral account and in Section 7.6.2, FBC
- 30 discussed five existing accounts, including requesting amortization of three of these existing
- 31 accounts. Finally, the rate base includes cash and other working capital.

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1 8. FINANCING AND RETURN ON EQUITY

8.1 Introduction and Overview

FBC has prepared this Application using a capital structure of 60 percent debt and 40 percent equity and a Return on Equity (ROE) of 9.15 percent as approved by Orders G-129-16 and G-

- 5 47-14. FBC's ROE is set at a premium of 40 basis points over the benchmark ROE, which is
- 6 the ROE approved for FortisBC Energy Inc. (FEI). The 2022 Forecast for financing costs,
- 7 including the interest expense on issued long- and short-term debt and on new issuances that
- 8 are forecast, has been updated as described in Section 8.3 below. Based on the updated
- 9 financing costs, FBC's AFUDC rate for 2022 (which is equal to its after-tax weighted average
- 10 cost of capital) is 5.62 percent. Any variances from interest rates used to set rates, and any
- 11 variances in interest resulting from items subject to flow-through in the Flow-through deferral
- 12 account, will be flowed through to customers. All other differences in interest expense will affect
- 13 the achieved ROE and be subject to earnings sharing.

8.2 Capital Structure and Return on Equity

15 The Company finances its investment in rate base assets with a mix of debt and equity, as

- approved by the BCUC from time to time. Order G-47-14 approved a capital structure for FBC of
- 17 60.0 percent debt and 40.0 percent equity with an equity risk premium of 40 basis points over
- the benchmark ROE, which was set at 8.75 percent by Order G-129-16; these approved capital
- 19 structure and ROE values have been used to calculate rates in the Application. FBC notes that
- 20 the BCUC has initiated a Generic Cost of Capital (GCOC) proceeding and, in Order G-156-21
- 21 and accompanying Reasons for Decision, the BCUC found that the effective date to implement
- a new cost of capital will depend on the timing and progress of the GCOC proceeding. If the BCUC determines later in 2021 that the effective date to implement a new cost of capital is
- January 1, 2022, FBC will file for interim rates and will update the 2022 revenue requirement
- 25 once the GCOC decision is issued.

8.3 FINANCING COSTS

- 27 Debt financing costs include the borrowing costs on issued debt as well as on new issuances
- 28 that are forecast. Debt consists of both long- and short-term (unfunded) debt.

8.3.1 Long-term Debt

30 FBC is both a private and public issuer of long-term debt. FBC plans to issue additional long-

- 31 term debt of approximately \$75 million in 2021, the proceeds of which will be used to repay
- 32 existing indebtedness and finance the Company's capital expenditure program. The 2021 debt
- 33 issuance is reflected in the financial schedules in November 2021 at a rate of 3.60 percent.²⁷

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²⁷ Section 11, Schedule 27, Line 9.

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- 1 The exact timing, amount and rate of the 2021 issuance will depend on future market conditions
- 2 and capital expenditure requirements. Variances in interest expense related to the timing and
- 3 amount of the issuances of the debt or the rates at which they are issued will be captured in the
- 4 Flow-through deferral account.

8.3.2 Short-term Debt

- 6 FBC obtains short-term funding primarily through the issuance of commercial paper to Canadian
- 7 institutional investors. FBC backstops the commercial paper issuances by maintaining a \$150
- 8 million committed credit facility that matures in April 2026.²⁸ The credit facility, along with a \$10
- 9 million overdraft facility, provides FBC with short-term liquidity to fund FBC's capital program
- 10 and working capital requirements. The Company also issues letters of credit as part of this
- 11 facility. The short-term debt rate reflects FBC's commercial paper and letter of credit issuances.

12 8.3.3 Forecast of Interest Rates

- 13 FBC uses interest rate forecasts to estimate future interest expense. Forecasts of Treasury Bills
- 14 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.
- 16 The forecasts are based on available projections made by Canadian Chartered banks.
- 17 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.
- 19 FBC's short-term borrowing rate is based on the rate at which it issues commercial paper and
- 20 letters of credit. Since commercial paper issuance rates are not forecast by economists, a
- 21 forecast needs to be derived by FBC. The forecast is based on the historical differential
- 22 between the Canadian Deposit Overnight Rate (CDOR) and the rate obtained by FBC under its
- 23 commercial paper program. CDOR is used because FBC's short-term borrowings under its
- 24 credit facility are priced based on CDOR and therefore CDOR is tracked relative to FBC's
- commercial paper borrowings. As CDOR is not forecast by economists, FBC must first obtain
- the 3-Month T-Bill rate forecast and then convert it to a CDOR forecast. FBC does this by taking
- 27 the 3-year historical spread between CDOR and the 3-month T-Bill rate. Then, to derive the
- 28 short-term borrowing rate forecast, FBC adjusts the CDOR forecast with the historical spread
- between CDOR and rates of issuances under its commercial paper program.
- 30 The 3-Month T-Bill forecast for 2022 is 0.47 percent, which is a slight increase from the 0.45
- 31 percent approved in 2021. FBC's 2022 Forecast for other financing fees is similar to 2021,
- 32 which includes the fees that it incurs for its letters of credit under the \$150 million credit facility,
- 33 as well as interest paid on customer deposits. The short-term borrowing rate forecast is shown
- 34 in Table 8-1 below.

 $^{^{28}\,}$ On July 14, 2021, the credit facility was extended to April 27, 2026.

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ANNUAL REVIEW FOR 2022 RATES



Table 8-1: Short Term Interest Rate Forecast

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

Notes to table:

- ¹ 3-Month T-Bill Rate for 2022 is a weighted average rate based on forecasts provided by Canadian Chartered banks in June 2021.
- Fixed financing fees represent the costs of maintaining the \$150 million credit facility and letter of credit facility, which are fixed fees regardless if FBC draws from the credit facility. The fees have been converted into a short-term rate for forecast purposes.
- 3 A standby fee of 20 bps is charged on undrawn credit facility amounts, which would change if credit facility amounts are drawn through banker acceptances or prime loans. However, the forecast assumes FBC will borrow through commercial paper and will not change the undrawn credit facility fee percentage.

8.3.4 Interest Expense Forecast

- The interest expense forecast reflects FBC's existing and forecast borrowing costs on long- andshort-term debt.
- Short-term interest expense is determined by applying the forecast short-term debt rate to the estimated short-term debt balance. Long-term debt interest expense is determined using the
- 17 straight-line method by multiplying the average balance of the specific debenture by the debt
- and grit line included by indusprying the create of the special described by the described
- 18 coupon rate, or forecast coupon rate, if it is a new issue. The 2022 long-term debt schedule for
- 19 FBC can be found in Section 11, Schedule 27.

8.3.5 Allowance for Funds Used During Construction (AFUDC)

- 21 FBC applies AFUDC to projects that are greater than 3 months in duration and greater than
- 22 \$100 thousand. Based on the above information, FBC's AFUDC rate for 2022 (which is equal to
- 23 its after-tax weighted average cost of capital) is 5.62 percent. The calculation of the rate is
- 24 shown in the following table.

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ANNUAL REVIEW FOR 2022 RATES



Table 8-2: Calculation of AFUDC Rate for 2022

		Pre-Tax	After-Tax	Earned
	Weight	Rate	Rate	Return
-				
Short Term Debt	5.62%	1.51%	1.10%	1.51%
Long Term Debt	54.38%	4.79%	3.50%	4.79%
Common Equity	40.00%	12.53%	9.15%	9.15%
Weighted Average	100.00%	7.70%	5.62%	6.35%

	Pr Weight F
Short Term Debt Long Term Debt Common Equity	5.55% 54.45% 40.00% 1
Deleted: Weighted Average	100.00%

8.4 SUMMARY

FBC's equity financing and ROE have been forecast for 2022 at the same percentages as approved for 2021. FBC's debt financing costs on rate base are primarily determined by embedded rates on long-term debt, and to a lesser degree by short-term debt rates; the embedded rate on long-term debt is forecast to decrease in 2022 as compared to 2021 Approved.

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ANNUAL REVIEW FOR 2022 RATES



9. **TAXES**

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9.1 INTRODUCTION AND OVERVIEW

3 This section discusses FBC's forecasts of property taxes and income tax which have been forecast on a basis consistent with prior years. In 2022, property taxes are forecast to decrease 4

- 5 by 1.9 percent from 2021 Approved, while income tax is forecast to decrease by 11.7 percent
- 6 compared to 2021 Approved.

9.2 **PROPERTY TAXES**

Property taxes for 2022 of \$17.887 million incorporate Company forecasts of assessed values of taxable assets, mill rates and taxes from revenues earned from electricity consumed within

10 municipalities. A breakdown of property taxes by asset type is provided in Table 9-1 below.

11 Table 9-1: Property Taxes (\$ millions)

Line No.	Description	 oroved 2021	jected 2021	recast 2022
1	Generating Plant	\$ 3.087	\$ 3.131	\$ 3.210
2	Transmission and Distribution	8.075	6.991	7.426
3	Substation Equipment	3.843	3.834	3.948
4	Land and Buildings	1.112	1.131	1.165
5	In-Lieu	2.125	2.138	2.138
6	Total Property Taxes	\$ 18.242	\$ 17.225	\$ 17.887
7				
8	Forecast Change from 2021 Approved			-1.9%
9	Forecast Change from 2021 Projected			3.8%

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As shown in the above table, in 2022 property taxes are forecast to decrease by 1.9 percent from 2021 Approved and increase by 3.8 percent compared to 2021 Projected. In general, the 2022 increase from 2021 Projected is due to construction activities, market value changes, and changes in tax policies of local taxing authorities. The most significant forecast drivers of the changes are as follows:

- 19 1. Changes in Tax Rates. Tax Rates are expected to change for 2022 as follows:
 - a) Municipal rates are expected to increase by 0.50 percent;
 - b) School rates are expected to decrease by 1.0 percent;
 - c) Rural rates are expected to decrease by 2.0 percent;
 - d) Tax rates on First Nations are expected to increase by 0.25 percent; and

SECTION 9: TAXES PAGE 66 Deleted: 1

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ANNUAL REVIEW FOR 2022 RATES



- e) Other rates are expected to stay the same.
 - Changes in Revenues to Calculate Grants In Lieu of Taxes. Revenues reported to
 municipalities are expected to decrease by 0.2 percent. Grants in-lieu of taxes are based
 on a fixed percentage of revenues; the overall decrease in revenues reported to
 municipalities decreases the grants in-lieu of taxes due.
 - Changes in Assessed Values. Forecast changes in the assessed values of FBC's property are based on expected inflationary increases. These include:
 - a) A 5.0 percent increase in assessed values of distribution and transmission lines;
 - b) A 2.5 percent increase in assessed values for generating facilities calculated using legislated cost manuals for valuing generating facilities;
 - A 3.0 percent increase in assessed values for substations calculated using legislated cost manuals for valuing substations; and
 - d) Land values are expected to increase on average 3.0 percent for right of ways and 2.0 to 4.0 percent for properties owned in fee simple.

Any variances from the forecast of property taxes included in rates are recorded in the Flow-through deferral account and returned to or collected from customers in the following year.

9.3 INCOME TAX

FBC is subject to corporate income taxes imposed by the Federal and BC governments. Current income taxes have been calculated using the flow-through (taxes payable) method, consistent with BCUC-approved past practice, at the corporate tax rate of 27 percent for 2022, which is unchanged from 2021. The corporate tax rates used in this Application are based on the Canada Income Tax Act and the BC Income Tax Act enacted legislation and are updated each year as part of the annual rate setting process.

25 Income tax for 2022 is forecast to decrease by \$0.995 million or 11.7 percent compared to 2021

26 Approved. The 2022 decrease is primarily due to lower taxable temporary differences

27 associated with pension and OPEB and amortization of deferred charges, partially offset by

lower deductible temporary differences associated with property, plant and equipment and

29 higher rate base.

30 Any tax rate variances and variances in income taxes on items that are flowed through in rates

31 are subject to flow-through treatment.

32 All other differences in income tax expense are subject to earnings sharing.

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Section 9: Taxes Page 67



1 **9.4 SUMMARY**

- 2 FBC has forecast its property and income taxes on a basis consistent with prior years, utilizing
- 3 enacted legislation for income taxes and forecast changes for property tax rates and
- 4 assessments.

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Section 9: Taxes Page 68



10. EARNINGS SHARING

- 2 In the MRP Decision (at page 82), the BCUC approved an earnings sharing mechanism from
- 3 2020 to 2024 whereby 50 percent of the achieved ROE above or below the allowed ROE will be
- 4 shared with customers. Since FBC is unable to determine final earnings sharing until all items
- 5 required for the ROE calculation are known, including the final rate base, there is a lag in when
- 6 FBC distributes earnings sharing amounts. This is consistent with the calculations of formula
- 7 O&M, where the true-up of the formula inputs happens only once actuals are known. Thus, for
- 8 2022 rates, it is the 2020 formula O&M and 2020 earnings sharing amounts that are calculated
- 9 and impact rates in 2022.
- For 2022, FBC proposes to distribute a \$1.195 million pre-tax credit (\$0.872 million after-tax) to
- 11 customers, comprised of:
 - The \$0.872 million credit difference between the projected ending 2020 deferral account balance of zero²⁹ embedded in 2021 rates, and the actual ending 2020 deferral account credit balance of \$0.872 million as provided in FBC's 2020 Annual Report to the BCUC.

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- After truing-up the 2020 earnings sharing balance to actual as described above, FBC proposes
- 17 to distribute \$1.195 million to customers in 2022 as a reduction in 2022 revenue requirements
- 18 through amortization of the projected 2022 opening after-tax balance of \$0.872 million in the
- 19 MRP Earnings Sharing deferral account.
- 20 As part of future rate filings, the earnings sharing for 2021 will be subject to similar true-ups as
- 21 described above, which will account for the actual 2021 ROE variance from approved.

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²⁹ Annual Review for 2020 and 2021 Rates Evidentiary Update dated October 28, 2020, 2021 financial schedules, Schedule 12.2, Line 12, Column 2.



1 11. FINANCIAL SCHEDULES

	Schedule
Description	Reference
Summary Of Rate Change	1
Rate Base	
Utility Rate Base	2
Formula Inflation Factors	3
Capital Expenditures	4
Capital Expenditures To Plant Reconciliation	5
Plant In Service Continuity Schedule	6
Accumulated Depreciation Continuity Schedule	7
Schedule Not Applicable	8
Contributions In Aid Of Construction Continuity Schedule	9
Schedule Not Applicable	10
Unamortized Deferred Charges And Amortization - Rate Base	11
Unamortized Deferred Charges And Amortization - Non-Rate Base	12
Working Capital Allowance	13
Cash Working Capital	14
Schedule Not Applicable	15
Revenue Requirement	
Utility Income And Earned Return	16
Volume And Revenue	17
Revenue At Existing And Revised Rates	18
Cost Of Energy	19
Operating And Maintenance Expense	20
Depreciation And Amortization Expense	21
Property And Sundry Taxes	22
Other Revenue	23
Income Taxes	24
Capital Cost Allowance	25
Return On Capital	26
Embedded Cost Of Long Term Debt	27

FORTISBC INC. Evidentiary Update - October 5, 2021

Section 11
Schedule 1

SUMMARY OF RATE CHANGE FOR THE YEAR ENDING DECEMBER 31, 2022 (\$millions)

Line		2022			
No.	Particulars	Forecast			Cross Reference
	(1)	(2)	(3)		(4)
1	VOLUME/REVENUE RELATED				
2	Customer Growth and Volume	\$ 3.747			
3	Change in Other Revenue	0.389		4.136	
4	·		-		
5	POWER SUPPLY				
6	Power Purchases	(1.198)			
7	Wheeling	0.379			
8	Water Fees	1.090		0.271	
9			-		
10	O&M CHANGES				
11	Gross O&M Change	2.544			
12	Capitalized Overhead Change	(0.382)		2.162	
13	·		-		
14	DEPRECIATION EXPENSE				
15	Depreciation from Net Additions			2.536	
16					
17	AMORTIZATION EXPENSE				
18	CIAC from Net Additions	(0.229)			
19	Deferrals	(3.266)		(3.495)	
20			_		
21	FINANCING AND RETURN ON EQUITY				
22	Financing Rate Changes	(1.867)			
23	Financing Ratio Changes	(1.155)			
24	Rate Base Growth	6.618		3.596	
25			_		
26	TAX EXPENSE				
27	Property and Other Taxes	(0.355)			
28	Other Income Taxes Changes	(0.995)		(1.350)	
29			_		
30	2021 Revenue Deficiency			5.420	
31	,				
32	REVENUE DEFICIENCY (SURPLUS)		\$	13.276	Schedule 16, Line 6, Column 4
33	TETEROL DELIGITION (OUTLEON)		Ψ	13.210	Concadic 10, Line 0, Column 4
34	Revenue at Existing Rates		2	883.895	Schedule 18, Line 7, Column 3
35	Rate Change			3.46%	Concadio 10, Ento 1, Column o
33	Nate Change			3.40 /0	

Evidentiary Update - October 5, 2021

Section 11

Schedule 2

UTILITY RATE BASE FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Line No.	Particulars		2021 Approved	at F	2022 Revised Rates	Change	Cross Reference
	(1)		(2)		(3)	(4)	(5)
1 2 3	Plant in Service, Beginning Opening Balance Adjustment Net Additions	\$	2,162,849 - 126,826	\$	2,279,834 - 105,009	\$ 116,985 - (21,817)	Schedule 6.1, Line 31, Column 3 Schedule 6.1, Line 31, Column 4 Schedule 6.1, Line 31, Column 5+6+7
4 5	Plant in Service, Ending		2,289,676		2,384,843	95,167	
6 7 8	Accumulated Depreciation Beginning Opening Balance Adjustment Net Additions	\$	(641,268) - (58,765)	\$	(659,517) - (33,261)	\$ (18,249) - 25,504	Schedule 7.1, Line 31, Column 5 Schedule 7.1, Line 31, Column 6 Schedule 7.1, Line 31, Column 7+8+9
9 10	Accumulated Depreciation Ending		(700,033)		(692,778)	7,255	
11 12 13	CIAC, Beginning Opening Balance Adjustment Net Additions	\$	(220,826) - (11,465)	\$	(232,291) - (11,712)	\$ (11,465) - (247)	Schedule 9, Line 3, Column 2 Schedule 9, Line 3, Column 5+6
14 15	CIAC, Ending		(232,291)		(244,003)	(11,712)	
16 17 18	Accumulated Amortization Beginning - CIAC Opening Balance Adjustment Net Additions	\$	79,867 - 4,417	\$	84,284 - 4,646	\$ 4,417 - 229	Schedule 9, Line 7, Column 2 Schedule 9, Line 7, Column 5+6
19 20	Accumulated Amortization Ending - CIAC		84,283		88,930	4,647	
21 22	Net Plant in Service, Mid-Year	\$	1,411,129	\$	1,504,651	\$ 93,522	
23 24 25 26 27 28	Adjustment for timing of Capital additions Capital Work in Progress, No AFUDC Unamortized Deferred Charges Working Capital Utility Plant Acquisition Adjustment	\$	20,204 11,228 25,696 6,044 4,935	\$	16,181 19,332 30,388 6,253 4,749	\$ (4,023) 8,104 4,692 209 (186)	Schedule 11, Line 26, Column 8 Schedule 13, Line 9, Column 3
29	Mid-Year Utility Rate Base	\$	1,479,236	\$	1,581,554	\$ 102,318	

FORTISBC INC. Evidentiary Update - October 5, 2021 Section 11

FORMULA INFLATION FACTORS FOR THE YEARS ENDING DECEMBER 31, 2020 to 2022 (\$000s)

Schedule 3

Line No.	Particulars	Reference	2020	2021	2022	Total for 2022 Rate Setting	Cross Ref
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Formula Cost Drivers						
2	CPI		2.692%	1.596%	1.281%		
3	AWE		2.881%	5.745%	6.532%		
4	Labour Split						
5	Non Labour		38.000%	38.000%	37.000%		
6	Labour		62.000%	62.000%	63.000%		
7	CPI/AWE	(Line 2 x Line 5) + (Line 3 x Line 6)	2.809%	4.168%	4.589%		
8	Productivity Factor	G-166-20	-0.500%	-0.500%	-0.500%		
9	Net Inflation Factor	Line 7 + Line 8	2.309%	3.668%	4.089%		
10							
11							
12	Growth in Average Customer Calculation						
13	Actual/Projected Prior Year Average Customers		139,916	142,321	144,793		
14	Average Customers for the Year	Schedule 18, Line 7, Column 6	142,321	144,793	147,199		
15	Change in Average Customers	Line 14 - Line 13	2,405	2,471	2,406	7,283	
16							
17	Customer Growth Factor Multiplier	G-166-20				75%	
18	Change in Average Customers for Rate Setting Purposes	Line 15 x Line 17			•	5,462	•
19						·	
20	Average Customers Used to Determine Starting UCOM	Line 13 Year 2020				139,916	
21							_
22	Average Customer Forecast - 2022 Rate Setting Purposes	Line 18 + Line 20			•	145,378	-
					I		

Evidentiary Update - October 5, 2021

Section 11

Schedule 4

CAPITAL EXPENDITURES FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Line		Т	otal						
No.	Particulars	C	арЕх	Cross Reference					
	(1)		(2)						
1	Forecast Capital Expenditures								
2	Growth Capital	\$	24,339						
3	Sustainment Capital		43,110						
4	Other Capital		14,756						
5	Total Forecast Capital	\$	82,205						
6									
7	Flow-Through Capital Expenditures								
8	MRS Capital	\$	935						
9	Total Flow-Through Capital	\$	935						
10									
11	Total Regular Capital Expenditures	\$	83,140						

Evidentiary Update - October 5, 2021

Section 11

Schedule 5

CAPITAL EXPENDITURES TO PLANT RECONCILIATION FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Line				
No.	Particulars	Fo	ormula	Cross Reference
	(1)		(2)	(3)
1	CAPEX			
2	Forecast Capital Expenditures	\$	82,205	
3	Flow-Through Capital	Ψ	935	
4	Total Regular Capital Expenditures	\$	83,140	Schedule 4, Column 2, Line 11
5	Total Nogular Capital Exportances		30,110	Contradic 1, Column 2, 2me 11
6	Special Projects and CPCN's			
7	Corra Linn Spillway Gate Replacement	\$	6,019	
8	Playmor Substation Rebuild Project		1,297	
9	Kelowna Bulk Transformer Capacity Addition		12,085	
10	Total Special Projects and CPCN's	\$	19,401	
11				
12	Total Capital Expenditures	\$	102,541	
13				
14				
15	RECONCILIATION OF CAPITAL EXPENDITURES TO PLANT			
16				
17	Regular Capital Expenditures	\$	83,140	Line 4
18	Add - Capitalized Overheads		10,177	Schedule 20, Column 4, Line 22
19	Add - AFUDC		214	
20	Gross Capital Expenditures		93,531	
21	Change in Work in Progress		-	
22	Total Regular Additions to Plant		93,531	
23				
24	Special Projects and CPCN's Capital Expenditures	\$	19,401	Line 10
25	Add - AFUDC		2,158	
26	Gross Capital Expenditures		21,559	
27	Change in Work in Progress		10,803	
28	Total Special Projects and CPCN Additions to Plant	\$	32,362	
29				
30	Grand Total Additions to Plant	\$	125,893	Schedule 6.1, Columns 5 + 6, Line 31

FORTISBC INC. Evidentiary Update - October 5, 2021 Section 11

PLANT IN SERVICE CONTINUITY SCHEDULE FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Schedule 6

Line					0	pening Bal						
No.	Account	Particulars	12	2/31/2021	А	djustment	CPCN's	Additions	Retirements	1	2/31/2022	Cross Reference
	(1)	(2)		(3)		(4)	(5)	(6)	(7)		(8)	(9)
1		Hydraulic Production Plant										
2	330	Land Rights	\$	962	\$	-	\$ -	\$ -	\$ -	\$	962	
3	331	Structures and Improvements		20,611		-	-	715	(51)		21,275	
4	332	Reservoirs, Dams & Waterways		77,240		-	23,197	3,693	(373)		103,757	
5	333	Water Wheels, Turbines and Gen.		121,931		-	1,451	1,173	(238)		124,317	
6	334	Accessory Equipment		52,946		-	363	1,582	(471)		54,420	
7	335	Other Power Plant Equipment		47,667		-	-	1,149	(221)		48,595	
8	336	Roads, Railroads and Bridges		1,287		-	-	-	-		1,287	
9			\$	322,644	\$	-	\$ 25,011	\$ 8,312	\$ (1,354)	\$	354,613	
10												
11		Transmission Plant										
12	350	Land Rights-R/W	\$	10,224	\$	-	\$ -	\$ 549	\$ -	\$	10,773	
13	350.1	Land Rights-Clearing		9,449		-	-	549	-		9,998	
14	353	Station Equipment		245,539		-	7,351	2,510	(222)		255,178	
15	355	Poles Towers & Fixtures		124,823		-	-	2,723	(123)		127,423	
16	356	Conductors and Devices		119,909		-	-	2,722	(132)		122,499	
17	359	Roads and Trails		1,121		-	-	-	-		1,121	
18			\$	511,065	\$	-	\$ 7,351	\$ 9,053	\$ (477)	\$	526,992	

Section 11

FORTISBC INC. Evidentiary Update - October 5, 2021

PLANT IN SERVICE CONTINUITY SCHEDULE FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

33

Cross Reference

Schedule 6.1

Line					(Opening Bal							
No.	Account	Particulars	12	2/31/2021		Adjustment	CPCN's	Additions	Reti	rements	12	2/31/2022	Cross Reference
	(1)	(2)		(3)		(4)	(5)	(6)		(7)		(8)	(9)
1		Distribution Plant											
2	360	Land Rights-R/W	\$	7,185	\$	-	\$ -	\$ -	\$	-	\$	7,185	
3	360.1	Land Rights-Clearing		11,630		-	-	-		-		11,630	
4	362	Station Equipment		288,129		-	-	17,616		(1,193)		304,552	
5	364	Poles Towers & Fixtures		248,163		-	-	10,454		(444)		258,173	
6	365	Conductors and Devices		414,631		-	-	23,371		(828)		437,174	
7	368	Line Transformers		187,028		-	-	6,912		(886)		193,054	
8	369	Services		9,521		-	-	-		-		9,521	
9	370.1	AMI Meters		41,331		-	-	129		-		41,460	
10	371	Installation on Customers' Premises		938		-	-	-		-		938	
11	373	Street Lighting and Signal System		14,123		-	-	74		(19)		14,178	
12			\$	1,222,679	\$	-	\$ -	\$ 58,556	\$	(3,370)	\$	1,277,865	
13													
14		General Plant											
15	389	Land	\$	11,184	\$	-	\$ -	\$ -	\$	-	\$	11,184	
16	390.1	Structures - Masonry		47,722		-	-	1,063		(122)		48,663	
17	390.2	Operation Building		18,419		-	-	1,063		(39)		19,443	
18	390.1	Leasehold Improvements		2,872		-	-	-		-		2,872	
19	391	Office Furniture & Equipment		5,355		-	-	295		(248)		5,402	
20	391.1	Computer Hardware		13,205		-	-	3,242		(3,059)		13,388	
21	391.2	Computer Software		41,359		-	-	4,565		(4,578)		41,346	
22	391.2	AMI Software		12,270		-	-	1,182		-		13,452	
23	392.1	Light Duty Vehicles		5,879		-	-	825		(728)		5,976	
24	392.1	Heavy Duty Vehciles		27,217		-	-	1,925		(443)		28,699	
25	394	Tools and Work Equipment		8,871		-	-	578		(936)		8,513	
26	397	Communication Structures & Equipment		13,808		-	-	2,872		(944)		15,736	
27	397.1	Fibre		10,315		-	-	-		(4,586)		5,729	
28	397.2	AMI Communications Structure & Equipment		4,970		-	-	-		-		4,970	
29			\$	223,446	\$	-	\$ -	\$ 17,610	\$	(15,683)	\$	225,373	
30			-										
31		Total Plant in Service	\$	2,279,834	\$	-	\$ 32,362	\$ 93,531	\$	(20,884)	\$	2,384,843	
32													

Schedule 5, Line 28, Column 2 Schedule 5, Line 22, Column 2

Schedule 7

FORTISBC INC. Evidentiary Update - October 5, 2021 Section 11

ACCUMULATED DEPRECIATION CONTINUITY SCHEDULE FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Line		Gro	ss Plant for D	epreciation			Ope	ening Bal	De	preciation				ost of					
No. Acco	ount Particulars	De	epreciation	Rate	12	2/31/2021	Ad	justment	E	Expense	Re	etirements	Re	emoval	Α	djustments	12	2/31/2022	Cross
(1)) (2)		(3)	(4)		(5)		(6)		(7)		(8)		(9)		(10)		(11)	(12
1	Hydraulic Production Plant																		
2 330	Land Rights	\$	962	1.07%	\$	(392)	\$	-	\$	10	\$	-	\$	-	\$	-	\$	(382)	
3 331	Structures and Improvements		20,611	1.68%		5,417		-		346		(51)		(8)		-		5,704	
4 332	Reservoirs, Dams & Waterways		100,437	1.90%		5,708		-		1,908		(373)		(259)		-		6,984	
5 333	Water Wheels, Turbines and Gen.		123,382	1.79%		20,505		-		2,209		(238)		(1,574)		-		20,902	
6 334	Accessory Equipment		53,309	3.13%		14,428		-		1,669		(471)		(409)		-		15,217	
7 335	Other Power Plant Equipment		47,667	2.12%		19,381		-		1,011		(221)		-		-		20,171	
8 336	Roads, Railroads and Bridges		1,287	1.44%		457		-		19		-		-		-		476	
9		\$	347,655		\$	65,504	\$	-	\$	7,172	\$	(1,354)	\$	(2,250)	\$	-	\$	69,072	
10			_																
11	Transmission Plant																		
12 350	Land Rights-R/W	\$	10,224	0.00%	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
13 350.	1 Land Rights-Clearing		9,449	1.27%		2,365		-		120		-		-		-		2,485	
14 353	Station Equipment		252,890	2.33%		97,022		-		5,892		(222)		(493)		-		102,199	
15 355	Poles Towers & Fixtures		124,823	2.52%		36,524		-		3,146		(123)		(421)		-		39,126	
16 356	Conductors and Devices		119,909	2.52%		25,713		-		3,022		(132)		(4,789)		-		23,814	
17 359	Roads and Trails		1,121	1.96%		413		-		22		-		-		-		435	
18		\$	518,416		\$	162,037	\$	-	\$	12,202	\$	(477)	\$	(5,703)	\$	-	\$	168,059	

Schedule 7.1

FORTISBC INC. Evidentiary Update - October 5, 2021 Section 11

ACCUMULATED DEPRECIATION CONTINUITY SCHEDULE FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Schedule 6.1, Line 31, Column 3+4+5

Line		D # 1		ss Plant for D	•	4.0	104 10004		pening Bal	preciation	Da	. ti	Cost of	۸ ما:	:ataa aata	40	10410000	Cross Def
No.				epreciation	Rate	12	2/31/2021	А	djustment	xpense	RE		Removal	Adj	justments	12	2/31/2022	Cross Ref
	(1)	(2)		(3)	(4)		(5)		(6)	(7)		(8)	(9)		(10)		(11)	(12)
1		Distribution Plant																
2	360	Land Rights-R/W	\$	7,185	0.00%	\$	-	\$	-	\$ -	\$	- \$	-	\$	-	\$	-	
3	360.1	Land Rights-Clearing		11,630	1.25%		2,790		-	145		-	-		-		2,935	
4	362	Station Equipment		288,129	2.61%		87,463		-	7,520		(1,193)	(469)		-		93,321	
5	364	Poles Towers & Fixtures		248,163	2.73%		74,579		-	6,775		(444)	(841)		-		80,069	
6	365	Conductors and Devices		414,631	2.38%		121,944		-	9,868		(828)	(1,357)		-		129,627	
7	368	Line Transformers		187,028	3.13%		42,327		-	5,854		(886)	(1,350)		-		45,945	
8	369	Services		9,521	0.51%		6,758		-	49		-	-		-		6,807	
9	370.1	AMI Meters		41,331	6.25%		10,314		-	2,583		-	-		-		12,897	
10	371	Installation on Customers' Premises		938	0.00%		937		-	-		-	-		-		937	
11	373	Street Lighting and Signal System		14,123	4.95%		5,579		-	699		(19)	-		-		6,259	
12			\$	1,222,679		\$	352,691	\$	-	\$ 33,493	\$	(3,370) \$	(4,017)	\$	-	\$	378,797	
13																		
14		General Plant																
15	389	Land	\$	11,184	0.00%	\$	34	\$	-	\$ -	\$	- \$	-	\$	-	\$	34	
16	390.1	Structures - Masonry		47,722	2.53%		11,921		-	1,207		(122)	-		-		13,006	
17	390.2	Operation Building		18,419	1.63%		6,820		-	300		(39)	-		-		7,081	
18	390.1	Leasehold Improvements		2,872	1.63%		2,653		-	47		-	-		-		2,700	
19	391	Office Furniture & Equipment		5,355	4.42%		1,512		-	237		(248)	-		-		1,501	
20	391.1	Computer Hardware		13,205	21.60%		4,703		-	2,852		(3,059)	-		-		4,496	
21	391.2	Computer Software		41,359	8.96%		17,240		-	3,706		(4,578)	-		-		16,368	
22	391.2	AMI Software		12,270	10.00%		6,400		-	1,227		-	-		-		7,627	
23	392.1	Light Duty Vehicles		5,879	3.81%		3,077		-	224		(728)	(45)		-		2,528	
24	392.1	Heavy Duty Vehciles		27,217	6.50%		6,845		-	1,769		(443)	(105)		-		8,066	
25	394	Tools and Work Equipment		8,871	4.11%		4,071		-	365		(936)	-		-		3,500	
26	397	Communication Structures & Equipment		13,808	3.44%		5,597		-	475		(944)	(62)		-		5,066	
27	397.1	Fibre		10,315	6.97%		6,353		-	719		(4,586)	-		-		2,486	
28	397.2	AMI Communications Structure & Equipmen	ıt	4,970	6.67%		2,059		-	332		-	-		-		2,391	
29			\$	223,446		\$	79,285	\$	-	\$ 13,460	\$	(15,683) \$	(212)	\$	-	\$	76,850	
30																		
31		Total	\$	2,312,196		\$	659,517	\$	-	\$ 66,327	\$	(20,884) \$	(12,182)	\$	-	\$	692,778	
32																		
33		Cross Reference	So	hedule 6.1,														

FORTISBC INC.	Evidentiary Update - October 5, 2021	Section 11
		Schedule 8

SCHEDULE NOT APPLICABLE

Schedule 9

Evidentiary Update - October 5, 2021 Section 11 FORTISBC INC.

CONTRIBUTIONS IN AID OF CONSTRUCTION CONTINUITY SCHEDULE FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

s	12	2/31/2022	Cross Reference
		(7)	(8)
	\$	244,003	
	\$	244,003	

Line No.	Particulars	12	/31/2021	CPCN / pen Bal Adjt	Adjustment	A	Additions	Re	tirements	12	2/31/2022	Cross Reference
	(1)		(2)	(3)	(4)		(5)		(6)		(7)	(8)
1 CIAC												
2 CIAC		\$	232,291	\$ -	\$ -	\$	11,712	\$	-	\$	244,003	
3 Total		\$	232,291	\$ -	\$ -	\$	11,712	\$	-	\$	244,003	
4												
5 Amortiza	ation											
6 Amortiz	ation	\$	(84,284)	\$ -	\$ -	\$	(4,646)	\$	-	\$	(88,930)	
7 Total		\$	(84,284)	\$ -	\$ -	\$	(4,646)	\$	-	\$	(88,930)	
8												
9 Net CIAC		\$	148,007	\$ -	\$ -	\$	7,066	\$	-	\$	155,073	

FORTISBC INC.	Evidentiary Update - October 5, 2021	Section 11
		Schedule 10

SCHEDULE NOT APPLICABLE

Schedule 11

FORTISBC INC. Evidentiary Update - October 5, 2021 Section 11

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

27

Line No.		12	/31/2021		ening Bal./ ansfer/Adj.		Gross Iditions		Less Taxes		ortization xpense 1	12/:	31/2022		Mid-Year Average	Cross Reference
	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)	(9)
1	1. Forecasting Variance Accounts															
2	BCUC Levies Variance Account	\$	5	\$	-	\$	-	\$	-	\$	(5) \$	\$	-	\$	3	
3																
4	2. Rate Smoothing Accounts															
5 6	3. Benefits Matching Accounts															
7	Preliminary and Investigative Charges	\$	1,382	\$	-	\$	22	\$	_	\$	- 9	\$	1,404	\$	1,393	Note 1
8	Demand Side Management	•	33,345	·	-	•	11,400	·	(3,078)	·	(5,408)		36,259	·	34,802	
9	Deferred Debt Issue Costs		4,150		-		-		(70)		(185)		3,895		4,023	
10	2021 Generic Cost of Capital Proceeding		-		-		150		(41)		-		109		55	
11	Annual Reviews for 2021-2024 Rates		151		-		180		(49)		(151)		131		141	
12	2021 Long Term Electric Resource Plan		248		-		320		(86)		(83)		399		324	
13	2020 Cost of Service Analysis		32		-		-		-		(32)		-		16	
14	BCUC-Initiated Inquiries		(30)		-		25		(7)		30		18		(6)	
15	Mandatory Reliability Standards 2021 Audit		255		-		-		- ` ´		(85)		170		213	
16		\$	39,533	\$	-	\$	12,097	\$	(3,331)	\$	(5,914) \$	\$	42,385	\$	40,961	
17																
18	4. Retroactive Expense Accounts															
19																
20	5.Other Accounts															
21	Pension and OPEB Liability	\$	(13,021)	\$	-	\$	3,730	\$	-	\$	- \$	\$	(9,291)	\$	(11,156)	
22	COVID-19 Customer Recovery Fund		433		-		442		(149)		-		726		580	
23	Indigenous Relations Agreement (Huth Substation)		-		-		-		-		-		-		-	
24		\$	(12,588)	\$	-	\$	4,172	\$	(149)	\$	- \$	\$	(8,565)	\$	(10,576)	
25			<u>, , , , , , , , , , , , , , , , , , , </u>				-		, ,					-		
26	Total Rate Base Deferral Accounts	\$	26,950	\$	-	\$	16,269	\$	(3,480)	\$	(5,919) \$	\$	33,820	\$	30,388	

Note 1: Gross Additions for Preliminary and Investigative Charges are after transfers to Construction Work in Progress. Additions of \$0.645 million - transfer of \$0.623 million = \$0.022 million.

FORTISBC INC. Evidentiary Update - October 5, 2021 Section 11

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

Schedule 12

Line					ning Bal./		Gross	Less		mortization			Mid-Year	
No.	Particulars	_12/31	1/2021	Tra	nsfer/Adj.	Ad	lditions	Taxes	E	Expense	12/	/31/2022	 Average	Cross Reference
	(1)	(2)		(3)		(4)	(5)		(6)		(7)	 (8)	(9)
1 2	Deferral Accounts Financed at Short Term Interest Rate													
3	1. Forecasting Variance Accounts													
4	Pension & Other Post Retirement Benefits (OPEB) Variance	\$	410	\$	-	\$	(400)	\$ -	\$	158	\$	169	\$ 289	
5														
6	2. Rate Smoothing Accounts													
7														
8	3. Benefits Matching Accounts													
9														
10	4. Retroactive Expense Accounts													
11														
12	5.Other Accounts													
13		,												
14	Total Deferral Accounts at Short Term Interest	\$	410	\$	-	\$	(400)	\$ -	\$	158	\$	169	\$ 289	
15		•												
16	Financing Costs at STI	\$	(1)	\$	-	\$	4	\$ -	\$	1	\$	4	\$ 2	

Schedule 12.1

FORTISBC INC. Evidentiary Update - October 5, 2021 Section 11

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

No. Particulars 12/31/2021 Transfer/Adj. Additions Taxes Expense 12/31/2022 Average Cross Ref (2) (3) (4) (5) (6) (7) (8) (9) (9)
Deferral Accounts Financed at Weighted Average Cost of Debt 1. Forecasting Variance Accounts 2. Rate Smoothing Accounts CPCN Projects Preliminary Engineering 1 \$ 2 \$ - \$ (2) \$ - \$ - \$ - \$ 1 1 1 1 1 1 1 1 1 1 1 1 1
1. Forecasting Variance Accounts 2. Rate Smoothing Accounts 3. Benefits Matching Accounts CPCN Projects Preliminary Engineering 1 \$ 2 \$ - \$ (2) \$ - \$ - \$ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1. Forecasting Variance Accounts 2. Rate Smoothing Accounts 2. Rate Smoothing Accounts 3. Benefits Matching Accounts 2. \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
2. Rate Smoothing Accounts 3. Benefits Matching Accounts CPCN Projects Preliminary Engineering 1 \$ 2 \$ - \$ (2) \$ - \$ - \$ 1 2016 Long Term Electric Resource Plan 104 (104) - 52 2017 Rate Design Application 354 (118) 236 295 2019 - 2024 Multi-Year Rate Plan Application 435 (145) 290 363 2019 - 2022 Multi-Year DSM Expenditure Schedule 36 (36) - 18 2018 Joint Pole Use Audit 27 (50) 99 123
Same Same
Same Same
Same Same
8 CPCN Projects Preliminary Engineering ¹ \$ 2 \$ - \$ (2) \$ - \$ - \$ - \$ 1 9 2016 Long Term Electric Resource Plan 104 (104) - 52 10 2017 Rate Design Application 354 (118) 236 295 11 2020 - 2024 Multi-Year Rate Plan Application 435 (145) 290 363 12 2019 - 2022 Multi-Year DSM Expenditure Schedule 36 (36) - 18 13 2018 Joint Pole Use Audit 27 (27) - 13 14 Rate Design and Rates for Electric Vehicle Direct Current Fast Charging Service Application 148 (50) 99 123
9 2016 Long Term Electric Resource Plan 104 - - - - (104) - 52 10 2017 Rate Design Application 354 - - - (118) 236 295 11 2020 - 2024 Multi-Year Rate Plan Application 435 - - - (145) 290 363 12 2019 - 2022 Multi-Year DSM Expenditure Schedule 36 - - - - (36) - 18 13 2018 Joint Pole Use Audit 27 - - - (27) - 13 14 Rate Design and Rates for Electric Vehicle Direct Current Fast Charging Service Application 148 - - - - (50) 99 123
10 2017 Rate Design Application 354 - - - - (118) 236 295 11 2020 - 2024 Multi-Year Rate Plan Application 435 - - - - (145) 290 363 12 2019 - 2022 Multi-Year DSM Expenditure Schedule 36 - - - - (36) - 18 13 2018 Joint Pole Use Audit 27 - - - - 13 14 Rate Design and Rates for Electric Vehicle Direct Current Fast Charging Service Application 148 - - - - (50) 99 123
11 2020 - 2024 Multi-Year Rate Plan Application 435 - - - - (145) 290 363 12 2019 - 2022 Multi-Year DSM Expenditure Schedule 36 - - - - (36) - 18 13 2018 Joint Pole Use Audit 27 - - - - (27) - 13 14 Rate Design and Rates for Electric Vehicle Direct Current Fast Charging Service Application 148 - - - (50) 99 123
12 2019 - 2022 Multi-Year DSM Expenditure Schedule 36 - - - - (36) - 18 13 2018 Joint Pole Use Audit 27 - - - - (27) - 13 14 Rate Design and Rates for Electric Vehicle Direct Current Fast Charging Service Application 148 - - - - (50) 99 123
13 2018 Joint Pole Use Audit 27 (27) - 13 14 Rate Design and Rates for Electric Vehicle Direct Current Fast Charging Service Application 148 (50) 99 123
14 Rate Design and Rates for Electric Vehicle Direct Current Fast Charging Service Application 148 (50) 99 123
Φ 4.400 Φ Φ (0) Φ Φ (400) Φ COF Φ OCF
15 <u>\$ 1,106 \$ - \$ (2) \$ - \$ (480) \$ 625 </u> <u>\$ 865</u>
16
17 <u>4. Retroactive Expense Accounts</u>
18
19 <u>5.Other Accounts</u>
20 US GAAP Pension and OPEB Transition Obligation \$ 695 \$ - \$ (347) \$ - \$ - \$ 348 \$ 522
21 Advanced Metering Infrastructure Radio-Off Shortfall 49 (24) 25 37
22 \$ 744 \$ - \$ (347) \$ - \$ (24) \$ 373 \$ 559
23
24 Total Deferral Accounts at Weighted Average Cost of Debt \$ 1,850 \$ - \$ (349) \$ - \$ (504) \$ 998 \$ 1,424
25
26 Financing Costs at WACD \$ 27 \$ - \$ 48 \$ - \$ (26) \$ 49 \$ 38

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

Schedule 12.2

FORTISBC INC. Evidentiary Update - October 5, 2021 Section 11

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

Line No.	Particulars	12	/31/2021	ening B ansfer/ <i>F</i>		ross ditions	Less Taxes	ortization xpense	12/	/31/2022	Mid-Year Average	Cross Reference
	(1)		(2)	(3)		(4)	(5)	(6)		(7)	(8)	(9)
1	Deferral Accounts Financed at Weighted Average Cost of Capital											
3 4	1. Forecasting Variance Accounts 2020 - 2024 Flow-Through Deferral Account	\$	(3,407)	\$	-	\$ -	\$ _	\$ 3,407	\$	_	\$ (1,704)	
5 6 7	2. Rate Smoothing Accounts											
8	3. Benefits Matching Accounts On Bill Financing (OBF) Participant Loans	\$	1	\$	-	\$ (1)	\$ -	\$ -	\$	-	\$ 1	
10 11 12	4. Retroactive Expense Accounts											
13 14 15	5.Other Accounts MRP Earnings Sharing Account	\$	(872)	\$	-	\$ -	\$ -	\$ 872	\$	-	\$ (436)	
16 17	Total Deferral Accounts at Weighted Average Cost of Capital	\$	(4,278)	\$	-	\$ (1)	\$ -	\$ 4,279	\$	-	\$ (2,139)	
18 19	Financing Costs at AFUDC	\$	(167)	\$	-	\$ (123)	\$ -	\$ 167		(123)	(145)	
20 21	Deferral Acconuts Non-Interest Bearing	\$	50	\$	-	\$ -	\$ -	\$ -	\$	50	\$ 50	
22 23	Total Non Rate Base Deferral Accounts (including financing)	\$	(2,109)	\$	-	\$ (821)	\$ -	\$ 4,075	\$	1,147	\$ (481)	

Evidentiary Update - October 5, 2021

Section 11

Schedule 13

WORKING CAPITAL ALLOWANCE FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Line		2	2021	2022		
No.	Particulars	Ар	proved	Forecast	Change	Cross Reference
	(1)		(2)	(3)	(4)	(5)
1	Cash Working Capital					
2	Cash Working Capital	\$	6,767 \$	7,060	\$ 293	Schedule 14, Line 32, Column 5
3						
4	Add/Less: Funds Unavailable/(Funds Available)					
5	Customers Loans		470	329	(141)	
6	Employee Loans		340	443	103	
7	Inventories - Materials and Supplies		630	612	(18)	
8	Employee Withholdings		(2,163)	(2,191)	(28)	
9	Total	\$	6,044 \$	6,253	\$ 209	

Evidentiary Update - October 5, 2021

Section 11

Schedule 14

CASH WORKING CAPITAL FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

TREVENUE Sales Revenue S	Line No.	Particulars	at R	2022 evised Rates	Lag (Lead) Days		Extended	Weighted Average Lag (Lead) Days	Cross Reference
Sales Revenue		(1)		(2)	(3)		(4)	(5)	(6)
Sales Revenue	1	REVENUE							
Residential Tariff Revenue 195,029 56.0 10,921,624 4 Commercial Tariff Revenue 104,301 45.1 4,703,975 1,921,763 6 Industrial Tariff Revenue 51,247 37.5 1,921,763 6 Industrial Tariff Revenue 40,798 38.0 1,550,324 1,55	2								
Commercial Tariff Revenue 104,301 45.1 4,703,975 1,921,763 1,000 1,550,324 1,000 1,0			\$	195,029	56.0	\$	10,921,624		
5 Wholesale Tariff Revenue 51,247 37.5 1,921,763 6 Industrial Tariff Revenue 40,798 38.0 1,550,324 7 Lighting Tariff Revenue 2,411 34.6 83,421 8 Irrigation Tariff Revenue 3,385 47.0 159,095 9 0 541,620 10 Poparatus and Facilities Rental 6,018 90.0 541,620 12 Contract Revenue 2,277 62.2 141,629 13 Transmission Access Revenue 1,771 65.2 115,469 14 Late Payment Charges 875 54.0 47,250 15 Connection Charges 875 54.0 47,250 16 Other Utility Income 386 63.4 24,472 17 Total \$ 409,003 \$ 20,226,045 49.5 18 PEXPENSES \$ 143,779 (51.5) \$ (7,404,619) 49.5 19 Water Fees 11,958 (1,4) (16,741) (16,741)			•			·			
Lighting Tariff Revenue 2,411 34.6 83,421 Irrigation Tariff Revenue 3,385 47.0 159,095 Other Revenue	5	Wholesale Tariff Revenue							
Irrigation Tariff Revenue 3,385 47.0 159,095	6	Industrial Tariff Revenue		40,798	38.0		1,550,324		
Other Revenue 11 Apparatus and Facilities Rental 6.018 90.0 541,620 12 Contract Revenue 2,277 62.2 141,629 13 Transmission Access Revenue 1,771 65.2 115,469 14 Late Payment Charges 875 54.0 47,250 15 Connection Charges 505 30.5 15,403 16 Other Utility Income 386 63.4 24,472 17 Total \$ 409,003 \$ 20,226,045 49.5 18 EXPENSES \$ 409,003 \$ 20,226,045 49.5 19 EXPENSES \$ 409,003 \$ 20,226,045 49.5 20 Power Purchases \$ 143,779 (51.5) \$ (7,404,619) 49.5 21 Wheeling 6,093 (46.9) (285,762) 49.5 22 Water Fees 11,985 (1.4) (16,741) 49.5 23 Operating and Maintenance 57,668 (28.6) (1,649,305) 49.5 <td>7</td> <td>Lighting Tariff Revenue</td> <td></td> <td>2,411</td> <td>34.6</td> <td></td> <td>83,421</td> <td></td> <td></td>	7	Lighting Tariff Revenue		2,411	34.6		83,421		
Other Revenue	8	Irrigation Tariff Revenue		3,385	47.0		159,095		
Apparatus and Facilities Rental 6,018 90.0 541,620	9								
12 Contract Revenue 2,277 62.2 141,629 13 Transmission Access Revenue 1,771 65.2 115,469 14 Late Payment Charges 875 54.0 47,250 15 Connection Charges 505 30.5 15,403 16 Other Utility Income 386 63.4 24,472 17 Total \$ 409,003 \$ 20,226,045 49.5 18 EXPENSES \$ 20,226,045 49.5 19 EXPENSES \$ (51.5) \$ (7,404,619) 20 Power Purchases \$ 143,779 (51.5) \$ (7,404,619) 21 Wheeling 6,093 (46.9) (285,762) 22 Water Fees 11,958 (1.4) (16,741) 23 Operating and Maintenance 57,668 (28.6) (1,649,305) 24 Property Taxes 17,887 (4.9) (87,646) 25 GST 505 (45.4) (22,932) 26 Income Tax 7	10	Other Revenue							
13 Transmission Access Revenue 1,771 65.2 115,469 14 Late Payment Charges 875 54.0 47,250 15 Connection Charges 505 30.5 15,403 16 Other Utility Income 386 63.4 24,472 17 Total \$ 409,003 \$ 20,226,045 49.5 18 EXPENSES \$ 20,226,045 49.5 20 Power Purchases \$ 143,779 (51.5) \$ (7,404,619) 21 Wheeling 6,093 (46.9) (285,762) 22 Water Fees 11,958 (1.4) (16,741) 23 Operating and Maintenance 57,668 (28.6) (1,649,305) 24 Property Taxes 17,887 (4.9) (87,646) 25 GST 505 (45.4) (22,932) 26 Income Tax 7,524 (15.2) (114,365) 27 Total \$ 245,414 \$ (9,581,370) (39.0) 28 Net Lag (Lead) Days \$ (9,581,370) (39.0) 30 Total Expenses <td></td> <td></td> <td></td> <td>,</td> <td></td> <td></td> <td>,</td> <td></td> <td></td>				,			,		
14 Late Payment Charges 875 54.0 47,250 15 Connection Charges 505 30.5 15,403 16 Other Utility Income 386 63.4 24,472 17 Total \$ 409,003 \$ 20,226,045 49.5 18 EXPENSES 20 Power Purchases \$ 143,779 (51.5) \$ (7,404,619) 21 Wheeling 6,093 (46.9) (285,762) 22 Water Fees 11,958 (1.4) (16,741) 23 Operating and Maintenance 57,668 (28.6) (1,649,305) 24 Property Taxes 17,887 (4.9) (87,646) 25 GST 505 (45.4) (22,932) 26 Income Tax 7,524 (15.2) (114,365) 27 Total \$ 245,414 \$ (9,581,370) (39.0) 28 29 Net Lag (Lead) Days 10.5 30 Total Expenses \$ 245,414 \$ 245,414									
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16 Other Utility Income 386 63.4 24,472 24,472 17 Total \$ 409,003 \$ 20,226,045 49.5 18 Total \$ 409,003 \$ 20,226,045 49.5 19 EXPENSES \$ 143,779 (51.5) \$ (7,404,619) \$ 245,762 20 Power Purchases \$ 143,779 (51.5) \$ (7,404,619) \$ 245,762 21 Wheeling 6,093 (46.9) (285,762) \$ 245,414 22 Water Fees 11,958 (1.4) (16,741) \$ 245,414 23 Operating and Maintenance 57,668 (28.6) (1,649,305) \$ (87,646) 25 GST 505 (45.4) (22,932) \$ (45.4) (22,932) 26 Income Tax 7,524 (15.2) (114,365) \$ (39.0) 28 Total \$ 245,414 \$ (9,581,370) (39.0) 29 Net Lag (Lead) Days \$ 245,414 \$ (45.4) (15.2) \$ (45.4) (15.2) \$ (45.4) (15.2) \$ (45.4) (15.2) \$ (45.4) (15.2) \$ (45.4) (15.2) \$ (45.4) (15.2) \$ (45.4) (15.2) \$ (45.4) (15.2) \$ (45.4) (15.2) \$ (45.4) (15.2) \$ (45.4) (15.2) \$ (45.4) (15.2) \$ (45.4) (15.2) \$ (45.4) (15.2)							,		
Total \$ 409,003 \$ 20,226,045 \$ 49.5							·		
18 19 EXPENSES 143,779 (51.5) \$ (7,404,619) (7,404,619)					63.4				
Power Purchases \$ 143,779 (51.5) \$ (7,404,619)		Total	\$	409,003	_	\$	20,226,045	49.5	
20 Power Purchases \$ 143,779 (51.5) \$ (7,404,619) 21 Wheeling 6,093 (46.9) (285,762) 22 Water Fees 11,958 (1.4) (16,741) 23 Operating and Maintenance 57,668 (28.6) (1,649,305) 24 Property Taxes 17,887 (4.9) (87,646) 25 GST 505 (45.4) (22,932) 26 Income Tax 7,524 (15.2) (114,365) 27 Total \$ 245,414 \$ (9,581,370) (39.0) 28 Net Lag (Lead) Days 10.5 30 Total Expenses \$ 245,414 \$ 245,414 31 ** **	18				-			•	
21 Wheeling 6,093 (46.9) (285,762) 22 Water Fees 11,958 (1.4) (16,741) 23 Operating and Maintenance 57,668 (28.6) (1,649,305) 24 Property Taxes 17,887 (4.9) (87,646) 25 GST 505 (45.4) (22,932) 26 Income Tax 7,524 (15.2) (114,365) 27 Total \$ 245,414 \$ (9,581,370) (39.0) 28 Net Lag (Lead) Days 10.5 30 Total Expenses \$ 245,414									
22 Water Fees 11,958 (1.4) (16,741) 23 Operating and Maintenance 57,668 (28.6) (1,649,305) 24 Property Taxes 17,887 (4.9) (87,646) 25 GST 505 (45.4) (22,932) 26 Income Tax 7,524 (15.2) (114,365) 27 Total \$ 245,414 \$ (9,581,370) (39.0) 28 Net Lag (Lead) Days 10.5 30 Total Expenses \$ 245,414 31 \$ 245,414			\$			\$, , ,		
23 Operating and Maintenance 57,668 (28.6) (1,649,305) 24 Property Taxes 17,887 (4.9) (87,646) 25 GST 505 (45.4) (22,932) 26 Income Tax 7,524 (15.2) (114,365) 27 Total \$ 245,414 \$ (9,581,370) (39.0) 28 10.5 30 Total Expenses \$ 245,414 31 \$ 245,414		•		•	` ,		, ,		
24 Property Taxes 17,887 (4.9) (87,646) 25 GST 505 (45.4) (22,932) 26 Income Tax 7,524 (15.2) (114,365) 27 Total \$ 245,414 \$ (9,581,370) (39.0) 28 10.5 30 Total Expenses \$ 245,414 31 \$ 245,414							, ,		
25 GST							,		
26 Income Tax 7,524 (15.2) (114,365) 27 Total \$ 245,414 \$ (9,581,370) (39.0) 28 29 Net Lag (Lead) Days 30 Total Expenses \$ 245,414					, ,				
27 Total \$ 245,414 \$ (9,581,370) (39.0) 28 29 Net Lag (Lead) Days 10.5 30 Total Expenses \$ 245,414 31 \$ 245,414					, ,		, ,		
28 29 Net Lag (Lead) Days 30 Total Expenses \$ 245,414 31					(15.2)		, ,		
29 Net Lag (Lead) Days 10.5 30 Total Expenses \$ 245,414 31		Total	\$	245,414	•	\$	(9,581,370)	(39.0)	
30 Total Expenses \$ 245,414 31									
31	29								
		Total Expenses						\$ 245,414	
32 Cash Working Capital \$ 7.060	31								
	32	Cash Working Capital						\$ 7,060	

FORTISBC INC.	Evidentiary Update - October 5, 2021	Section 11
		Schedule 15

SCHEDULE NOT APPLICABLE

Schedule 16

FORTISBC INC. Evidentiary Update - October 5, 2021 Section 11

UTILITY INCOME AND EARNED RETURN FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Line			2021				2022 Forecast					
No.	Particulars	Δ	pproved	at 20	021 Approved Rates	R	Revised Revenue	at I	Revised Rates	С	Change	Cross Reference
	(1)		(2)		(3)		(4)		(5)		(6)	(7)
1	ENERGY VOLUMES											
2	Sales Volume (GWh)		3,374		3,306		-		3,306		(68)	Schedule 17, Line 8, Column 3
3	DEVENUE											
4	REVENUE	\$	207.040	φ	202.005	ው		ф	202.005	ተ	(0.747)	Cabadula 47 Lina 47 Caluman 2
5	Sales	Ф	387,642	Ф	383,895	Ф		\$	383,895	Ф	(3,747)	Schedule 17, Line 17, Column 3
6	Deficiency (Surplus)		<u> </u>		<u> </u>		13,276		13,276		13,276	
7	Total		387,642		383,895		13,276		397,171		9,529	Schedule 18, Line 7, Column 5
8												
9	EXPENSES											
10	Cost of Energy		161,559		161,830		-		161,830		271	Schedule 19, Line 31, Column 3
11	O&M Expense (net)		55,506		57,668		-		57,668		2,162	Schedule 20, Line 23, Column 4
12	Depreciation & Amortization		64,670		63,711		-		63,711		(959)	Schedule 21, Line 11, Column 3
13	Property Taxes		18,242		17,887		-		17,887		(355)	Schedule 22, Line 6, Column 3
14	Other Revenue		(12,221)		(11,832)		-		(11,832)		389	Schedule 23, Line 8, Column 3
15	Deferred 2021 Revenue Deficiency		(5,420)		<u> </u>		-		-		5,420	
16	Utility Income Before Income Taxes		105,306		94,631		13,276		107,907		2,601	
17												
18	Income Taxes		8,519		3,941		3,583		7,524		(995)	Schedule 24, Line 13, Column 3
19												
20	EARNED RETURN	\$	96,787	\$	90,690	\$	9,693	\$	100,383	\$	3,596	Schedule 26, Line 5, Column 7
21												
22	UTILITY RATE BASE	\$	1,479,236	\$	1,581,186			\$	1,581,554	\$	102,318	Schedule 2, Line 29, Column 3
23	RATE OF RETURN ON UTILITY RATE BASE		6.54%		5.74%				6.35%		-0.20%	
_												,

Evidentiary Update - October 5, 2021

Section 11

Schedule 17

VOLUME AND REVENUE FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Line			2021		2022			
No.	Particulars	Д	pproved	Fo	orecast	Char	nge	Cross Reference
	(1)		(2)		(3)	(4))	(5)
1	ENERGY VOLUME SOLD (GWh)							
2	Residential		1,255		1,283		28	
3	Commercial		952		946		(6)	
4	Wholesale		584		560		(24)	
5	Industrial		537		470		(67)	
6	Lighting		10		10		0	
7	Irrigation		36		37		1	
8	Total		3,374		3,306		(68)	
9								
10	REVENUE AT EXISTING RATES							
11	Residential	\$	184,235	\$	188,510	\$	4,275	
12	Commercial		101,451		100,815		(636)	
13	Wholesale		51,623		49,534		(2,089)	
14	Industrial		44,776		39,434		(5,342)	
15	Lighting		2,261		2,330		69	
16	Irrigation		3,298		3,272		(26)	
17	Total	\$	387,642	\$	383,895	\$	(3,747)	

Evidentiary Update - October 5, 2021

Section 11

REVENUE AT EXISTING AND REVISED RATES FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Schedule 18

			2021			2022	2 Forecast			Average		
Line		А	pproved	R	evenue at	Е	ffective	R	evenue at	Number of		
No.	Particulars	F	Revenue	2021 A	pproved Rates	Ir	ncrease	Rev	ised Rates	Customers	GWh	Cross Reference
	(1)		(2)		(3)		(4)		(5)	(6)	(7)	(8)
1	Residential	\$	184,235	\$	188,510	\$	6,519	\$	195,029	127,935	1,283	
2	Commercial		101,451		100,815		3,486		104,301	16,704	946	
3	Wholesale		51,623		49,534		1,713		51,247	11	560	
4	Industrial		44,776		39,434		1,364		40,798	43	470	
5	Lighting		2,261		2,330		81		2,411	1,415	10	
6	Irrigation		3,298		3,272		113		3,385	1,091	37	
7	Total	\$	387,642	\$	383,895	\$	13,276	\$	397,171	147,199	3,306	
8												
9	Effective Increase						3.46%					

FORTISBC INC. Evidentiary Update - October 5, 2021 Section 11

COST OF ENERGY FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Schedule 19

Line No.			2021		2022		Change	Cross Reference
INO.	Particulars (1)		Approved (2)		Forecast (3)		Change (4)	(5)
	(1)		(2)		(3)		(4)	(5)
1	POWER PURCHASES							
2	Gross Load (GWh)		3,664		3,591		(73)	
3								
4	Power Purchase Expense							
5	Brilliant	\$	41,009	\$	41,841	\$	832	
6	BC Hydro PPA		47,440		44,062		(3,378)	
7	Waneta Expansion		41,640		42,701		1,061	
8	Market and Contracted Producers		14,751		15,102		351	
9	Independent Power Producers		76		73		(3)	
10	Self-Generators		61		-		(61)	
11	CPA Balancing Pool		(0)		-		0	
12	Special and Accounting Adjustments		-		-		-	
13	Total	\$	144,977	\$	143,779	\$	(1,198)	
14							<u> </u>	
15	WHEELING							
16	Wheeling Nomination (MW months)							
17	Okanagan Point of Interconnection		2,400		2,475		75	
18	Creston		420		420		-	
19								
20	Wheeling Expense							
21	Okanagan Point of Interconnect	\$	4,694	\$	4,903	\$	209	
22	Creston		535		542		7	
23	Other		485		648		163	
24	Total	\$	5,714	\$	6,093	\$	379	
25								
26	WATER FEES							
27	Plant Entitlement Use in previous year (GWh)		1,559		1,679		120	
28			,		, -			
29	Water Fees	\$	10,868	\$	11,958	\$	1,090	
30		<u> </u>	•	•	•	-	·	
31	Total	\$	161,559	\$	161,830	\$	271	
		-						

Evidentiary Update - October 5, 2021

Section 11

Schedule 20

OPERATING AND MAINTENANCE EXPENSE FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Line		Inflat	ion Indexed	Fore	ecast	Total	
No.	Particulars		O&M	0	&M	O&M	Cross Reference
	(1)		(2)	(3)	(4)	(5)
1	Inflation Indexed O&M						
2	2021 Base Unit Cost O&M	\$	437				
3	2022 Net Inflation Factor		4.089%				Schedule 3, Line 9, Column 5
4	2022 Base Unit Cost O&M	\$	455				Line 2 x (1 + Line 3)
5							
6	2022 Average Customer Forecast - Rate Setting Purpose		145,378				Schedule 3, Line 22, Column 6
7							
8	2022 Inflation Indexed O&M before prior year True-up	\$	66,147				Line 4 x Line 6 / 1000
9							
10	2020 Average Customer True-up		53				
11							
12	2022 Inflation Indexed O&M	\$	66,200			\$ 66,200	Sum of Lines 8 and 10
13							
14	O&M Tracked Outside of Formula						
15	Pension & OPEB (O&M Portion)			\$	(1,716)		
16	Insurance Premiums				2,223		
17	BCUC Levies				373		
18	MRS				765		
19	Sub-total		_	\$	1,645	1,64	Sum of Lines 15 through 18
20			-				-
21	Total Gross O&M				_	\$ 67,845	
22	Capitalized Overhead					(10,17	') -15 % x Line 21
23	Net O&M Expense				-	\$ 57,668	
	•				_	. ,	

DEPRECIATION AND AMORTIZATION EXPENSE FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Evidentiary Update - October 5, 2021

Section 11

Schedule 21

Line			2021	2022			
No.	Particulars	A	Approved	Forecast	Ch	nange	Cross Reference
	(1)	(2)		(3)	(4)		(5)
1	Depreciation						
2	Depreciation Expense	\$	63,791	\$ 66,327	\$	2,536	Schedule 7.1, Line 31, Column 7
3							
4	Amortization						
5	Rate Base Deferrals	\$	5,493	\$ 5,919	\$	426	Schedule 11, Line 26, Column 6
6	Non-Rate Base Deferrals		(383)	(4,075)		(3,692)	Schedule 12.2, Line 23, Column 6
7	Utility Plant Acquisition Adjustment		186	186		-	
8	CIAC		(4,417)	(4,646)		(229)	Schedule 9, Line 7, Column 5
9			879	(2,616)		(3,495)	
10							
11	Total	\$	64,670	\$ 63,711	\$	(959)	

Evidentiary Update - October 5, 2021

Section 11

Schedule 22

PROPERTY AND SUNDRY TAXES FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Line No.		 2021 Approved (2)		2022 Forecast (3)	С	hange (4)	Cross Reference (5)
	(1)	(2)	(3)		(¬)		(5)
1	Generating Plant	\$ 3,087	\$	3,210	\$	123	
2	Transmission and Distribution	8,075		7,426		(649)	
3	Substation Equipment	3,843		3,948		105	
4	Land and Buildings	1,112		1,165		53	
5	1% In-Lieu of Municipal Taxes	2,125		2,138		13	
6	Total	\$ 18,242	\$	17,887	\$	(355)	

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Section 11

OTHER REVENUE FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Schedule 23

Line			2021	2022			
No.	Particulars	Α	pproved	Forecast	Ch	ange	Cross Reference
	(1)		(2)	(3)		(4)	(5)
1	Apparatus and Facilities Rental	\$	5,930	\$ 6,018	\$	88	
2	Contract Revenue		3,088	2,277		(811)	
3	Transmission Access Revenue		1,501	1,771		270	
4	Interest Income		20	20		-	
5	Late Payment Charges		829	875		46	
6	Connection Charges		476	505		29	
7	Other Recoveries		377	366		(11)	
8	Total	\$	12,221	\$ 11,832	\$	(389)	

Schedule 24

FORTISBC INC. Evidentiary Update - October 5, 2021 Section 11

INCOME TAXES FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Line			2021		2022			
No.	Particulars		Approved		Forecast	(Change	Cross Reference
	(1)		(2)		(3)		(4)	(5)
1	EARNED RETURN	\$	96,787	\$	100,383	\$	3,596	Schedule 16, Line 20, Column 5
2	Deduct: Interest on Debt	Ψ	(42,647)	Ψ	(42,498)	Ψ	149	Schedule 26, Line 1+2, Column 7
3	Adjustments to Taxable Income		(31,107)		(37,541)		(6,434)	Line 32
4	Accounting Income After Tax	\$	23,033	\$	20,344	\$	(2,689)	
5	7.000 Griding moonie 7 mor 1 ax	Ψ	20,000	Ψ	20,011	Ψ	(2,000)	
6	1 - Current Income Tax Rate		73.00%		73.00%		0.00%	
7	Taxable Income	\$	31,552	\$	27,868	\$	(3,684)	
8			•		,		, ,	
9	Current Income Tax Rate		27.00%		27.00%		0.00%	
10	Income Tax - Current	\$	8,519	\$	7,524	\$	(995)	
11								
12	Previous Year Adjustment		-		-		-	
13	Total Income Tax	\$	8,519	\$	7,524	\$	(995)	
14								
15								
16	ADJUSTMENTS TO TAXABLE INCOME							
17	Addbacks:			_		_		
18	Depreciation	\$	63,791	\$	66,327	\$	2,536	Schedule 21, Line 2, Column 3
19	Amortization of Deferred Charges		5,110		1,844		(3,266)	Schedule 21, Line 5+6, Column 3
20	Amortization of Utility Plant Acquisition Adjustment		186		186		- (4 4 4 7)	Schedule 21, Line 7, Column 3
21 22	Pension Expense		4,231		84		(4,147) 34	
23	OPEB Expense		1,573		1,607		34	
24	Deductions:							
25	Capital Cost Allowance		(85,236)		(86,381)		(1,145)	Schedule 25, Line 17, Column 6
26	CIAC Amortization		(4,417)		(4,646)		(229)	Schedule 21, Line 8, Column 3
27	Pension Contributions		(4,505)		(4,419)		86	
28	OPEB Contributions		(734)		(655)		79	
29	Overheads Capitalized Expensed for Tax Purposes		(9,795)		(10,177)		(382)	Schedule 20, Line 22, Column 4
30	Removal Costs		(1,200)		(1,200)		-	
31	All Other		(111)		(111)			
32	Total	\$	(31,107)	\$	(37,541)	\$	(6,434)	

FORTISBC INC. Evidentiary Update - October 5, 2021 Section 11

CAPITAL COST ALLOWANCE Schedule 25

FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

											Forecast
Line		CCA	1	2/31/2021	2	2022	U	JCC Adjustment		2022	12/31/2022
No.	Class	Rate	UC	CC Balance	Ad	ditions		for AIIP *	CCA		UCC Balance
	(1)	(2)		(3)		(4)		(5)		(6)	(7)
1	1(a)	4%	\$	160,505	\$	-	\$	-	\$	(6,420) \$	154,085
2	1(b)	6%		33,395		1,895		947		(2,174)	33,116
3	2	6%		12,131		-		-		(728)	11,403
4	3	5%		682		-		-		(34)	648
5	6	10%		3		-		-		-	3
6	8	20%		3,947		778		389		(1,023)	3,702
7	10	30%		4,831		2,450		1,225		(2,552)	4,729
8	13	0%		11		-		-		-	11
9	14.1 (pre 2017)	7%		7,447		-		-		(521)	6,926
10	14.1 (post 2016)	5%		3,220		978		489		(234)	3,964
11	17	8%		145,639		30,502		15,250		(15,312)	160,829
12	42	12%		8,615		2,559		1,280		(1,494)	9,680
13	45	45%		1		-		-		-	1
14	46	30%		3,869		-		-		(1,161)	2,708
15	47	8%		482,599		66,379		33,189		(46,573)	502,405
16	50	55%		2,815		8,009		4,004		(8,155)	2,669
17	Total		\$	869,710	\$	113,550	\$	56,773	\$	(86,381) \$	896,879
18											

^{19 *} Note - Accelerated Investment Incentive Property

FORTISBC INC. Evidentiary Update - October 5, 2021 Section 11

RETURN ON CAPITAL FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Schedule 26

Line No.		2021 Approved Particulars Earned Return			Amount Ratio Cost Component Return					I	Earned Return Change	Cross Reference		
	(1)		(2)		(3)	(4)	(5)	(6)	(7)		(8)	(9)		
1 2 3 4	Long Term Debt Short Term Debt Common Equity	\$	41,714 933 54,140	\$	860,000 88,932 632,622	54.38% 5.62% 40.00%	1.51%	0.08%	\$ 41,155 1,343 57,885	\$	(559) 410 3,745	Schedule 27, Line 11, Column 6		
5 6	Total	\$	96,787	\$	1,581,554	100.00%	•	6.35%	\$ 100,383	\$	3,596			
7	Cross Reference			S	schedule 2,									

Schedule 2, Line 29, Column 3

Average Embedded Cost

13

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4.79%

Section 11

Schedule 27

EMBEDDED COST OF LONG TERM DEBT FOR THE YEAR ENDING DECEMBER 31, 2022 (\$000s)

Average Line Issue Maturity Principal Interest Interest No. Cross Reference **Particulars** Date Date Outstanding Rate Expense (1) (2) (3) (4) (6) (7) (5) 1993 Debt Issue - Series G August 28, 1993 August 28, 2023 \$ 25,000 8.800% \$ 2,200 2005 Debt Issue - Series 1 - 05 November 9, 2005 November 9, 2035 100,000 5.600% 5,600 2007 Debt Issue - Series 1 - 07 July 4, 2007 July 4, 2047 105,000 5.900% 6,195 June 2, 2009 June 2, 2039 105,000 2009 Debt Issue - MTN - 09 6.100% 6,405 5 2010 Debt Issue - MTN - 10 November 24, 2010 November 24, 2050 100,000 5.000% 5,000 6 2014 Debt Issue - MTN - 14 October 28, 2014 October 28, 2044 200,000 4.000% 8,000 2017 Debt Issue - MTN - 17 December 4, 2017 **December 6, 2049** 75,000 3.620% 2,715 2020 Debt Issue - MTN - 20 May 11, 2020 May 11, 2050 75,000 2,340 8 3.120% 9 2021 Debt Issue - MTN - 21 November 1, 2021 November 1, 2051 75,000 3.600% 2,700 10 11 Total \$ 860,000 41,155 12

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ANNUAL REVIEW FOR 2022 RATES



1 12. ACCOUNTING MATTERS

12.1 Introduction and Overview

- In this section, FBC discusses "Exogenous Factors" under its MRP, identifying one new
 exogenous factor for Mandatory Reliability Standards (MRS) Assessment Report No. 13 (AR13)
- 5 and an update on the exogenous factor treatment for the impacts of the COVID-19 pandemic.
- 6 FBC also discusses emerging accounting guidance, and the status of its non-rate base deferral
- 7 accounts. With respect to its non-rate base deferral accounts, FBC requests approval for the
- 8 disposition of one existing deferral account and provides information on the Flow-through
- 9 deferral account.

10 12.2 Exogenous (Z) Factors

- FBC is permitted to adjust the cost of service for "Exogenous Factors" under the MRP. The BCUC established the following criteria for evaluating whether the impact of an event qualifies for exogenous factor treatment:
 - The costs/savings must be attributable entirely to events outside the control of a prudently operated utility;
 - The costs/savings must be directly related to the exogenous event and clearly outside the base upon which the rates were originally derived;
 - 3. The impact of the event was unforeseen;
 - 4. The costs must be prudently incurred; and
 - The costs/savings related to each exogenous event must exceed the BCUC-defined materiality threshold.

The materiality threshold (item 5) for FBC has been established at \$0.150 million, as approved in the MRP Decision.

FBC has identified one new exogenous factor related to MRS Assessment Report No. 13 that affects 2021, 2022 and future years. FBC also has identified the impact on its O&M and capital costs in 2021 from ongoing wildfires in its service area and, similar to the Z-factor treatment approved for the costs of repair associated with wildfires in 2015, FBC is requesting exogenous factor treatment for the costs related to the Nk'Mip Creek wildfire which exceeded the materiality threshold. Please refer to Appendix A of FBC's Evidentiary Update, filed on October 5, 2021, for further details related to FBC's wildfire-related exogenous factor treatment request in 2021.

In the Annual Review for 2020 and 2021 Rates, FBC identified the COVID-19 pandemic as a potential exogenous factor affecting 2020 and future years, and the BCUC approved FBC's request to record COVID-19 pandemic incremental costs and cost reductions from 2020 and

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Section 12: Accounting Matters

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³⁰ Order G-202-15.



- 1 2021 into the previously approved COVID-19 Customer Recovery Fund Deferral Account.³¹
- 2 FBC also stated in the Annual Review for 2020 and 2021 Rates application that it would review
- 3 the amounts in 2021 when actual 2020 amounts and forecasts for future years could be
- 4 ascertained, and an appropriate recovery method could be determined. FBC provides an update
- on the COVID-19 pandemic net incremental costs (costs less cost reductions) in Section 12.2.2.

6 12.2.1 Mandatory Reliability Standards

- 7 In the MRP Decision, the BCUC stated that continuing with exogenous factor treatment for costs
- 8 associated with future policy changes such as new MRS standards, consistent with the
- 9 approach taken during the 2014-2019 PBR Plan term, was appropriate, as FBC would still be
- allowed to recover costs that have been reviewed and approved by the BCUC.³²
- 11 FBC accordingly requests exogenous factor treatment for the incremental MRS costs for 2021
- 12 and 2022 related to MRS Assessment Report No. 13. The MRS costs identified in this
- 13 Application meet the exogenous factor criteria, consistent with past MRS assessment report
- 14 costs which were approved for exogenous factor treatment during the 2014-2019 PBR Plan
- 15 term.³³

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- The costs are entirely attributed to complying with the changes in BC's MRS program approved by Order R-19-20, which are events outside the control of FBC. These changes were developed by regulatory bodies in the US, assessed for adoption by BC Hydro and then adopted by the BCUC. FBC is legally obligated to comply with the new reliability standards.
- The costs are directly and solely attributable to complying with the changes to the BC MRS program approved by the BCUC. These costs have not been previously incurred and were not known at the time of setting the 2019 Base O&M used to determine formula O&M during the MRP term.
- The costs to comply with the reliability standards that were approved by Order R-19-20 could not have been foreseen at the time the 2019 Base O&M was set as the new standards were either non-existent or under preliminary development at the time.
- FBC will manage its costs to comply with the reliability standards in a prudent manner and the BCUC will have the opportunity to review the costs in subsequent annual reviews.
- For 2021, the incremental MRS costs that qualify for exogenous factor treatment are projected to be \$0.100 million and are all O&M expenditures. For 2022, the incremental MRS costs that qualify for exogenous factor treatment are forecast to be \$1.700 million, comprised of \$0.765 million in incremental O&M expenses and \$0.935 million in

³¹ FBC Annual Review for 2020 and 2021 Rates Decision and Order G-42-21.

³² MRP Decision, p. 75.

²² O 1 O 000 15 O 0 1

³³ Orders G-202-15, G-8-17, G-38-18 and G-246-18.



incremental capital expenditures. Please refer to Section 6.3.5 and Section 7.2.2 for 1 2 details on the incremental O&M and capital expenditures, respectively.

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- As detailed above. FBC's incremental costs related to MRS AR13 satisfy the exogenous factor criteria. FBC has therefore forecast these costs outside of the O&M and capital formulas described in Sections 6 and 7 of the Application. FBC expects to incur additional costs related to
- 7 AR13 in 2023 and will provide a forecast of these costs in the 2023 Annual Review.

12.2.2 COVID-19 Pandemic

- 9 During the COVID-19 pandemic, FBC has taken the necessary steps as a critical infrastructure
- 10 service provider to ensure the health, safety and well-being of its customers, employees and
- 11 their communities, and to continue to operate its system safely and reliably. This has resulted in
- 12 net incremental O&M impacts to date.

12.2.2.1 FBC Has Reasonably Tracked the Impact of the COVID-19 Pandemic on **Net Operating Costs**

Consistent with the MRP, FBC's general approach to managing its formula O&M funding is at an overall Company level. O&M funding is prioritized and allocated as required to meet the business environment, conditions and requirements the Company faces. Funding utilized for a specific purpose in one year may be used differently in the following year. As a result, this makes the determination of COVID-19 pandemic net incremental O&M costs from year to year challenging and fluid, particularly for cost reductions, as the Company reprioritizes its funding regularly to meet its needs to provide safe and reliable operations.

- 22 Recognizing the above circumstances, FBC has undertaken its best efforts to track and report on the net incremental O&M costs that are directly related to the COVID-19 pandemic. FBC has 23 24 included in this section all costs that are specifically identifiable as attributable to activities 25 required to respond to the COVID-19 pandemic as part of the overall net incremental costs 26 (costs less cost reductions) discussed below.
 - However, the COVID-19 pandemic, unlike other events experienced by the Company (e.g. responding to an emergency situation affecting delivery of energy), has a broader impact throughout the organization, making the determination of the incremental costs more challenging. The impact of the COVID-19 pandemic varies in different parts of the business, affecting the determination of the costs that are attributable to the pandemic. For example, there may be incremental costs such as additional overtime costs in departments that are indirectly influenced by the pandemic (e.g. less internal resources available due to reassignment to assist with other priorities) which are difficult to specifically identify. Also, there may be delays in work scheduled as a result of the pandemic that may increase the total cost of the work required which are not specifically identified as COVID-19 pandemic related. While acknowledging these uncertainties, the following summary of net incremental costs provides a reasonable representation of the overall COVID-19 pandemic impact on the Company.



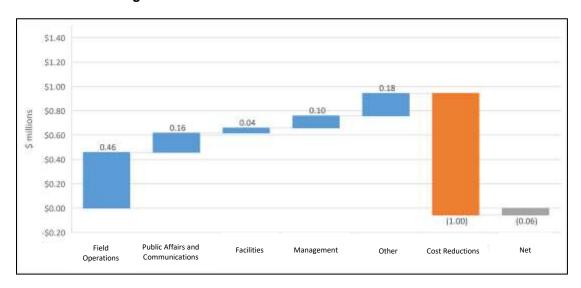
1 12.2.2.2 Summary of Net Incremental Costs

- 2 Overall, in 2020, as a result of the COVID-19 pandemic, the Company's net incremental O&M
- 3 (costs less cost reductions) decreased by approximately \$0.060 million.

4 12.2.2.3 2020 COVID-19 Pandemic Impact

While the COVID-19 pandemic increased O&M costs in 2020, these costs were offset by lower employee related expenses. As of December 2020, FBC incurred approximately \$0.94 million in O&M costs related to the COVID-19 pandemic. These costs were primarily to ensure the health, safety and well-being of FBC's customers, employees, and their communities, and to continue to operate the system safely and reliably. The incremental costs were offset by approximately \$1.0 million in cost reductions. The figure below shows the categories of costs incurred and the offsetting savings. Each of the categories is described further below.

Figure 12-1: FBC COVID-19 Pandemic Net O&M Costs



12.2.2.3.1 INCREASED O&M EXPENDITURES DUE TO THE COVID-19 PANDEMIC

In Field Operations, FBC incurred approximately \$0.46 million. Of this amount, \$0.39 million was related to the sequestering of system control centre employees from having to return to their homes to ensure a safe and healthy work environment for this critical function (i.e., 10 employees were sequestered from April 3 to May 14, both for days on and off shift). FBC also incurred costs for Personal Protective Equipment (PPE).

In Public Affairs Emergency Team and Communications, FBC spent approximately \$0.16 million on activities to keep FBC's customers and key stakeholders informed of the Company's assistance available during the COVID-19 pandemic. FBC incurred costs for advertising, various communication materials such as bill inserts, and labour and consultant services required to develop the materials and to monitor and maintain messaging as needed.

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- 1 FBC incurred approximately \$0.04 million for Facilities-related resources and activities, including
- 2 safety supplies, additional cleaning, first aid coverage, and signage.
- 3 Under the category of Management, approximately \$0.10 million in management resource costs
- 4 were added to support the following areas: the operation of the Emergency Operating Centre
- 5 (EOC); the Human Resources and Environmental, Health and Safety groups' response to
- 6 COVID-19 pandemic incidents and issues for employees and contractors; and the increased
- 7 needs of supporting departments such as Information Systems, Supply Chain, Communications
- 8 and Business Continuity. The resources were necessary to respond to the COVID-19 pandemic
- 9 and to address the various needs of the health authorities, regulators and organizations like
- 10 Emergency Management BC.
- 11 The Other category of approximately \$0.18 million includes miscellaneous items such as
- different support group costs (e.g. Information Systems and Telus Babylon health service).

13 12.2.2.3.2 O&M COST REDUCTIONS OFFSET INCREASED COSTS

- 14 The cost reductions that FBC achieved consist primarily of lower employee expenses, in part as
- 15 a response to the travel restrictions, including in and out of province travel, and the effect that
- 16 the COVID-19 pandemic has had on social interactions. Employee expenses include course
- 17 fees, travel, meals and accommodation, company function expenses, and employee hiring and
- 18 relocation expenses.
- 19 As at December 2020, the reduced employee expenses identified and reprioritized by
- 20 departments for addressing COVID-19 pandemic costs were estimated at approximately \$0.9
- 21 million. In addition to reduced employee expenses, there was an estimated \$0.1 million
- 22 reduction in employee health benefits (dental, employee health spending, etc.) used by
- 23 employees, bringing the total cost reductions to approximately \$1.0 million in 2020.

24 12.2.2.3.3 **NET IMPACT IN 2020 IS NOT MATERIAL**

- 25 The variances for the net incremental O&M (costs less cost reductions) total to a net decrease
- of approximately \$0.060 million in 2020.

27 12.2.2.4 2021 COVID-19 Pandemic Impact

- 28 Based on the current outlook regarding the COVID-19 pandemic in BC, FBC expects the impact
- on the Company's operating costs to decline in the coming months and eventually end. FBC's
- 30 current plans are to resume normal operations coinciding with the Province achieving Step 4 of
- 31 the Province of BC Four Step Restart Plan, currently planned for September 7, 2021. Step 4
- 32 includes the lifting of restrictions with normal social contact allowed and workplaces fully
- 33 reopened.
- 34 To date in 2021, FBC is continuing to incur additional expenditures to manage the impact of the
- 35 COVID-19 pandemic. The nature of the costs being incurred is similar to that observed in 2020
- 36 and includes costs for activities in Field Operations, Public Affairs Emergency Team and



- 1 Communications and Facilities. FBC expects to continue to incur additional expenditures to
- 2 approximately when Step 4 of the Province of BC Four Step Restart Plan begins, at which time
- 3 the majority of incremental expenditures related to the COVID-19 pandemic, except for
- 4 expenditures related to the Company's reintegration efforts, will have occurred. FBC is also
- 5 monitoring for any significant cost reductions related to COVID-19 such as a continued
- 6 temporary reduction in employee-related expenses that may help to offset the incremental
- 7 expenditures.
- 8 Upon resumption of normal operating conditions expected later this year, FBC will no longer be
- 9 tracking COVID-19 pandemic related net incremental O&M costs.

10 **12.2.2.5 Conclusion**

- 11 FBC will report to the BCUC on the final 2021 estimated net incremental O&M costs in the
- 12 Annual Review for 2023 Rates application. At that time, when the total of the 2020 and 2021 net
- incremental O&M costs will be available, FBC can make a final recommendation on whether or
- 14 not the amounts exceed the materiality threshold.

15 **12.3** ACCOUNTING MATTERS

16 In the following section, FBC provides information on emerging accounting guidance.

17 12.3.1 Emerging Accounting Guidance

- 18 In the PBR Plan decision, the BCUC directed FBC to "communicate any accounting policy
- 19 changes and updates to the Commission and other stakeholders as part of the Annual Review
- 20 process during the PBR period." While this directive was not included as part of the MRP
- 21 Decision, FBC will continue to provide accounting policy changes and updates as part of the
- 22 Annual Review materials.

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- 23 There are no new accounting policy changes that FBC is proposing, or that are required to be
- implemented under US GAAP, that result in a change in accounting for 2022.

12.4 Non Rate Base Deferral Accounts

- 26 FBC maintains both rate base and non-rate base deferral accounts. Rate base deferral
- 27 accounts are included in rate base and earn a rate base return. In contrast, non-rate base
- deferral accounts are outside of rate base and may have varying rates of return, depending on
- the nature of the account and the return approved by the BCUC.
- 30 In the following sections, FBC requests disposition of one previously approved deferral account,
- 31 and provides information on its Flow-through deferral account. Information on FBC's non-rate
- 32 base earnings sharing deferral account is included in Section 10.

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12.4.1 Existing Deferral Accounts

12.4.1.1 Rate Design and Rates for Electric Vehicle Direct Current Fast Charging Service Application Deferral Account

- 4 In the Annual Review for 2019 Rates Decision and Order G-246-18, FBC received approval to
- 5 establish a non-rate base deferral account to capture the regulatory proceeding costs
- 6 associated with the FBC Rate Design and Rates for Electric Vehicle (EV) Direct Current Fast
- 7 Charging (DCFC) Service proceeding.
- 8 The FBC Rate Design and Rates for EV DCFC Service application was filed in 2018 and the
- 9 proceeding was subsequently adjourned; however, in July 2020 the BCUC re-started the review
- 10 process. On July 14, 2021, the BCUC issued Order G-215-21 finding that FBC's EV DCFC
- 11 stations are prescribed undertakings under section 5 of the GGRR and approving FBC to
- include the assets in FBC's rate base. However, as part of Order G-215-21, the BCUC sought
- 13 submissions on a potential adjournment of the proceeding and established a regulatory
- 14 timetable for these submissions. FBC filed its submission on August 3, 2021 and also sought
- 15 clarity on the directives contained in Order G-215-21.
- 16 The forecast opening 2022 balance in the Rate Design and Rates for EV DCFC Service
- 17 Application deferral account is \$0.203 million (\$0.148 million after-tax). At this time, given the
- 18 uncertainty regarding the potential adjournment of the proceeding and the potential future
- 19 regulatory process, FBC anticipates that further additions to the deferral account may be
- 20 required in 2021 and 2022 but is unable to estimate the amounts. The actual costs for 2021
- 21 and 2022 will be added to the deferral account and the updated balance will be reported on in
- the next annual review.
- 23 FBC seeks approval to amortize the Rate Design and Rates for EV DCFC Service Application
- 24 deferral account over three years, commencing January 1, 2022. FBC believes a three-year
- 25 amortization period is appropriate as it is consistent with the recovery period of other similar
- 26 regulatory proceeding applications and it takes into consideration potential rate impacts.

27 *12.4.1.2* Flow-Through Deferral Account (2020-2024)

- 28 As approved by Order G-166-20, the Flow-through deferral account is used to capture the
- 29 annual variances between the approved and actual amounts for all costs and revenues which
- 30 are forecast annually, are not subject to earnings sharing, and which do not have a previously
- 31 approved deferral account. The specific items included in the Flow-through deferral account
- were set out in Table C4-1 of the MRP Application, reproduced below.

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Table 12-1: Variances Captured in the Flow-through Deferral Account

	FEI	FBC
Delivery Revenues (FEI):		
Residential and commercial use rate variances	RSAM	N/A
Customer variances	Flow-through deferral	N/A
Industrial and all other revenue variances	Flow-through deferral	N/A
Revenues and Power Supply (FBC):		
Revenue variances	N/A	Flow-through deferral
Power Supply variances net of PSI	N/A	Flow-through deferral
Gross O&M:		
Index-based O&M variances	Subject to earnings sharing	Subject to earnings sharing
BCUC fees variances	BCUC variances deferral	BCUC variances deferral
Pension & OPEB variances	Pension/OPEB variances deferral	Pension/OPEB variances deferral
All other O&M variances 1,3	Flow-through deferral	Flow-through deferral
Capitalized Overhead:		
Capitalized overhead variances	No variance	No variance
Depreciation and Amortization:		
Depreciation rate variances	No variance	No variance
Depreciation on Clean Growth Projects ^{2,3}	Flow-through deferral	Flow-through deferral
Other depreciation variances	Subject to earnings sharing	Subject to earnings sharing
Amortization of deferrals	No variance	No variance
Property Tax:		
Property tax variances	Flow-through deferral	Flow-through deferral
Other Revenues :		
SCP Mitigation revenues variances	SCP Revenues deferral	N/A
CNG/LNG Recoveries variances	CNG/LNG Recoveries deferral	N/A
Revenues from Clean Growth Projects ^{2,3}	Flow-through deferral	Flow-through deferral
All other other revenue/income variances	Subject to earnings sharing	Subject to earnings sharing
Interest Expense/Cost of Debt:		
Interest on RSAM/CCRA/MCRA/Gas storage	Interest on RSAM/CCRA/MCRA/Gas Storage	N/A
Interest rate variances	Flow-through deferral	Flow-through deferral
Interest on Clean Growth Projects ^{2,3}	Flow-through deferral	Flow-through deferral
Other interest variances	Subject to earnings sharing	Subject to earnings sharing
Income Tax:		
Income tax rate variances	Flow-through deferral	Flow-through deferral
Income tax on Clean Growth Projects 2,3	Flow-through deferral	Flow-through deferral
Other income tax variances	Subject to earnings sharing	Subject to earnings sharing

- 1: Including items forecast outside of the formula such as insurance premiums, NGT stations, biomethane, variable LNG production, integrity digs and EV charging stations.
- 2: Cost of service for NGT fueling stations and tankers, variable LNG production, and EV stations will be captured in the Flow-through deferral account.
- 3: Biomethane other revenues will continue to capture the actual cost of service of the biomethane capital assets and transfer it to the BVA

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In accordance with the method set out in the table above, the calculation of the 2021 Projected Flow-through amount of \$4.247, million credit is shown in Table 12-2 below. To calculate the amount to be distributed to customers, FBC has also included the following adjustments:

• A \$0.627 million debit to correct the forecast Cost of Removal in the 2021 financial schedules, as explained further and shown in Table 12-3 below; and

The \$0.213 million debit difference between the projected ending 2020 deferral account balance of zero³⁴ embedded in 2021 rates, and the actual ending 2020 deferral debit balance of \$0.213 million. A more detailed breakout of the 2020 variance is provided in Table 12-4 below. FBC notes that the financing return on this account is included in the aggregate financing of deferral accounts at Section 11, Schedule 12.2, Line 18.

Table 12-2: 2021 Projected Flow-through Deferral Account Additions (\$ millions),

				After-Tax
Line		2021	2021	Flow-Through
No.	Particulars	Approved	Projected	Variance
	(1)	(2)	(3)	(4)
1 2	Total Revenue	\$ (387.642)	\$ (389.100)	\$ (1.458)
3 4	Total Power Purchase Expense	144.977	141.747	(3.230)
5	Total Wheeling	5.714	5.836	0.122
7 8	Total Water Fees	10.868	10.878	0.010
9	Net O&M Expense			
10	Pension & OPEB	0.775	0.775	-
11	Insurance	1.916	2.022	0.107
12	BCUC Fees	0.350	0.350	
13	MRS	-	0.100	0.100
14	2021 Wildfires	_	0.155	0.155
15	Capitalized Overhead	(9.795)	(9.795)	-
16	·	, ,	. ,	
17	Depreciation and Amortization			
18	Amortization of Deferrals	5.110	5.110	-
19	Depreciation variance on Clean Growth Projects/CPCNs/Exogenous Capital	-	-	-
20	CIAC Amortization variance on Clean Growth Projects/CPCNs/Exogenous Capital	-	-	-
21				
22	Total Property Taxes	18.242	17.225	(1.017)
23				
24	Interest Expense			
25	Long-term debt interest expense variance	41.714	40.698	(1.016)
26	Interest variance on Clean Growth Projects/CPCNs/Exogenous Capital	-	-	-
27	Short-term debt rate variance	-	(0.500)	(0.500)
28	Short-term debt volume variance from long-term debt issue variance	-	-	-
29	Short-term debt timing variance from long-term debt issue timing	-	0.910	0.910
30				
31	Income Tax Expense			
32	Income tax variance on Clean Growth Projects/CPCNs/Exogenous Capital	-	-	-
33	Income tax/CCA rate changes	-	-	-
34 35	Income tax on taxable flowthrough variances above (excl. Clean Growth Projects/CPCNs/Exogenous Capital)	-	1.571	1.571
36 37	2021 After-Tax Flow-Through Amount (excluding Financing and net salvage adjustment)			(4.247)
38 39	Net salvage forecast adjustment			0.627
40	2021 After-Tax Flow-Through Addition to Deferral Account (excluding Financing)			(3.620)
41	3,			(,
42	2020 Ending Deferral Account Balance True-up			0.213
43	•			
44	2022 After-Tax Amortization			(3.407)

Particular: (1) No. Total Revenue Total Power Purchase Expense Total Wheeling **Total Water Fees** 8 9 10 Net O&M Expense Pension & OPEB Insurance 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 BCUC Fees MRS Capitalized Overhead Depreciation and Amortization Amortization of Deferrals Depreciation variance on Clean Growth Projects/CF CIAC Amortization variance on Clean Growth Proje Interest Expense Long-term debt interest expense variance Interest variance on Clean Growth Projects/CPCNs Short-term debt rate variance Short-term debt volume variance from long-term de Short-term debt timing variance from long-term deb Income Tax Expense
Income tax variance on Clean Growth Projects/CPC 30 31 32 33 34 35 36 37 Income tax/CCA rate changes
Income tax on taxable flowthrough variances above

2021 After-Tax Flow-Through Amount (excluding F

2021 After-Tax Flow-Through Addition to Deferral 2020 Ending Deferral Account Balance True-up

Net salvage forecast adjustment

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³⁴ FBC Annual Review for 2020 and 2021 Rates, October 28, 2020 Evidentiary Update financial schedules, Section 11 - 2021, Schedule 12.2, Line 4, Column 2,



1 12.4.1.2.1 2021 PROJECTED FLOW-THROUGH VARIANCES

- 2 FBC provides the following explanations for the 2021 Projected flow-through variances shown in
- 3 Table 12-2 above:

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- The variance in revenue is due to increased residential load which is partially offset by decreased industrial, commercial and wholesale loads;
 - The variance in power purchase expense is primarily due to additional market purchases used to displace BC Hydro PPA energy and capacity purchases at a lower total cost, as well as a reduction in gross load;
- Variances in wheeling and water fees are discussed in Section 4;
- Flow-through O&M amounts are discussed in Section 6;
- Amortization expense is equal to the approved value;
- Variances in property taxes are described in Section 9;
- The projected interest expense variances are derived from FBC expecting to issue longterm debt later in 2021 than forecast, and FBC projecting a lower short-term interest rate than the approved short-term interest rate, both as described in Section 8; and
 - The income tax variance is derived as 27 percent of the aforementioned variances.

An adjustment to include the difference between the projected and final actual amounts for 2021 subject to flow-through will be recorded in the deferral account in 2021 and amortized in 2023

20 rates.

21 12.4.1.2.2 2021 FORECAST COST OF REMOVAL

- 22 FBC has included a line item in the Flow-through deferral account to correct an error in the
- financial schedules filed in the FBC Annual Review for 2020 and 2021 Rates, October 28, 2020
- 24 Evidentiary Update. This error was recently discovered during the preparation of the 2020 FBC
- 25 Annual Report to the BCUC. The Cost of Removal amounts shown on Schedules 7 and 7.1, for
- both 2020 and 2021, were incorrectly shown as positive amounts, when they were in fact
- 27 negative amounts. Excerpts of both the 2020 and 2021 Schedules 7.1 are provided below in
- Figures 12-2 and 12-3 below for ease of reference. The Cost of Removal shown in column (10)
- 29 should have been in parentheses to indicate it was negative, consistent with the format of other
- 30 numbers in the table. The total Cost of Removal amounts are also shown on Line 10 of Table
- 31 12-3 below.

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Figure 12-2: 2020 Approved Financial Schedule 7.1

| Formation | Particular | Part

Figure 12-3: 2021 Approved Financial Schedule 7.1

| ACCUMULATED DEPRECIATION CONTINUITY SCHEDULE | FORTHEY VIAX ENDING DECEMBER 31, 2021 | (160045) | Total (1

The inadvertent error by FBC in its 2020 and 2021 financial schedules resulted in a reduction to the approved rate base amounts for both 2020 and 2021, and resulted in an under-forecasting of the related revenue requirement amounts and an under-collection of rate revenues. The impact of the under-collection of rate revenues is partially mitigated by FBC's approved earnings sharing mechanism, which will recover half the rate base revenue requirement impacts of the error and record them in the Earnings Sharing deferral account to be recovered in future revenue requirements.

FBC incurred an after-tax revenue shortfall of \$166 thousand in 2020 due to the error. FBC is not proposing any mechanism to recover this amount given that 2020 actuals have been finalized.

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FBC is, however, requesting approval to recover its unrecovered <u>after-tax</u> revenue in 2021 of \$627 thousand through a one-time adjustment to the Flow-through deferral account. The 2021 amount of \$627 thousand is shown on Line 38 in Table 12-2 above, and a calculation of how that amount was derived is included in Table 12-3 below.

FBC apologizes for the error in its 2020 and 2021 financial schedules. FBC makes best efforts to avoid such errors; however, the scope and complexity of modern regulatory processes makes a standard of perfection unachievable. While correcting for the impacts of the error in 2021 requires the collection of unrecovered 2021 revenue in FBC's proposed 2022 rates, the unrecovered revenue was due to an unintentional clerical error, rather than any inaccuracy in FBC's forecast that would properly be the responsibility of FBC to manage. While in this instance the error resulted in an under-collection from customers, clerical errors of this nature could positively or negatively impact customers. Had the error resulted in an over-collection from customers, FBC would have refunded the amounts to customers, as has been the practice with similar items in the past. It is also relevant that FBC is applying to correct the error in 2021 rates during 2021, before 2021 actuals have been finalized and as part of the flow-through of other variances that occurred in 2021. In these circumstances, FBC submits that its proposal to remedy the impacts of the error in 2021 through a one-time adjustment to the Flow-through deferral account reflects a just balancing of interests between FBC and its customers.

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ANNUAL REVIEW FOR 2022 RATES



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

ino .	Particular	Approved	Corrected	2021	Corrected
Line F	Particular	Approved	Corrected	Approved	Corrected
1 (Gross Plant in service, Beginning	\$ 2,112,240	\$ 2,112,240	\$ 2,162,849	\$ 2,162,849
	Opening Balance Adjustment	(47,893)	(47,893)	,,	-,,
	CPCN's	20,427	20,427	40,407	40,407
	Additions	97,027	97,027	103,626	103,626
	Disposals/Retirements	(18,951)	(18,951)	(17,208)	(17,208
	Gross Plant in service, Ending	2,162,849	2,162,849	2,289,676	2,289,676
7	or out the service, Ending	2,102,013	2,102,045	2,203,070	2,203,070
	Accumulated Depreciation Beginning - Plant	(664,986)	(664,986)	(641,268)	(626,392
	Opening Balance Adjustment	72,871	72,871	(= :=,===)	(,
	Cost of Removal	(7,438)	7,438	(12,182)	12,182
	Additions and Retirements	(41,715)	(41,715)	(46,583)	(46,583
	Accumulated Depreciation Ending - Plant	(641,268)	(626,392)	(700,033)	(660,793
13	Accumulated Depredation Ending - Hant	(041,200)	(020,332)	(700,033)	(000,755
	Contributions in aid of construction, Beginning	(209,719)	(209,719)	(220,826)	(220,826
	Opening Balance Adjustment	(205,715)	(205,715)	(220,620)	(220,620
	Contributions in aid of construction, Ending	(220,826)	(220,826)	(232,291)	(232,291
17	contributions in aid of construction, Ending	(220,020)	(220,020)	(232,231)	(232,251
	Accumulated Amortization Beginning - CIAC	75 673	75 673	70.007	70.007
		75,672	75,672	79,867	79,867
	Opening Balance Adjustment			- 04 202	
_	Accumulated Amortization Ending - CIAC	79,867	79,867	84,283	84,283
21					
		\$ 1,359,404	\$ 1,366,842		\$ 1,438,187
	Adjustment for timing of Capital additions	10,214	10,214	20,204	20,204
	Capital Work in Progress, No AFUDC	11,228	11,228	11,228	11,228
25					
	Sub-total	1,380,846	1,388,284	1,442,560	1,469,618
27					
	Unamortized Deferred Charges	20,398	20,398	25,696	25,696
	Working Capital	5,788	5,788	6,044	6,044
	Utility Plant Acquisition Adjustment	5,121	5,121	4,935	4,935
	Mid-Year Utility Rate Base	1,412,153	1,419,591	1,479,236	1,506,294
32					
	Revenue Requirement Impact				
	Capital Structure				
	STD Rate	1.86%	1.86%	2.22%	2.229
36 5	STD Ratio	4.55%	4.55%	2.84%	2.849
37 L	LTD Rate	5.05%	5.05%	4.93%	4.939
38 L	LTD Ratio	55.45%	55.45%	57.16%	57.169
39 F	ROE	9.15%	9.15%	9.15%	9.159
40 E	Equity Thickness	40.00%	40.00%	40.00%	40.009
41					
42 E	Earned Return				
43 5	Short Term Debt (assumes corrected amount would have impacted ST debt onl	1,195	1,278	933	1,294
	Long Term Debt	39,566	39,566	41,714	41,714
45 F	ROE	51,685	51,957	54,140	55,130
	Total Earned Return	92,446	92,801	96,787	98,138
47		-	•	•	
	Income Taxes				
49 E	Earned Return	92,446	92,801	96,787	98,138
	Deduct - Interest on Debt	(40,761)	(40,844)	(42,647)	(43,008
	Net Additions (Deductions)	(38,386)	(38,386)	(31,107)	(31,107
52	/ (= =======)	(30,300)	120,000,	(32,237)	(32,207
	Tabable Income before Tax	13,299	13,571	23,033	24,023
54		10,200	-5,5,1	25,033	2-1,020
	Income Tax Rate (Current Tax)	27%	27%	27%	279
	1 - Current Income Tax Rate	73%	73%	73%	739
57	2 Content modifie fax nate	/370	13/0	/370	/37
	Income Tax Expense	4,919	5,019	8,519	8,885
59	meonie rax Expense	4,319	3,013	0,519	0,000
	Davissia Davidsonad				
	Revenue Requirement	02.4:5	02.004	00	00
	Earned Return	92,446	92,801	96,787	98,138
	Income Tax	4,919	5,019	8,519	8,885
	Total	97,365	97,821	105,306	107,023
	Surplus / (Deficiency)		(456)		(1,717
	Sharing %		50%		509
	Customers share of Surplus / (Deficit) Revenue/Earnings (Pre-tax)		(228)		(859
67 <u>l</u>	Less: Income Tax Customers share of Surplus / (Deficit) Revenue/Earnings (After-tax)		62 (166)		232

-	Line	Particular
	1	Gross Plant in service, Beginning
	2	Opening Balance Adjustment
	3	CPCN's
	4	Additions
	5 6	Disposals/Retirements
	7	Gross Plant in service, Ending
	8	Accumulated Depreciation Beginning - Plant
	9	Opening Balance Adjustment
	10	Cost of Removal
	11	Additions and Retirements
	12	Accumulated Depreciation Ending - Plant
	13	
	14 15	Contributions in aid of construction, Beginning Opening Balance Adjustment
	16	Contributions in aid of construction, Ending
	17	contributions in the or construction, Entiting
	18	Accumulated Amortization Beginning - CIAC
	19	Opening Balance Adjustment
	20	Accumulated Amortization Ending - CIAC
	21	
	22	Net plant in service, Mid-year
	23	Adjustment for timing of Capital additions Capital Work in Progress, No AFUDC
	25	Capital Work III Frogress, No Arobe
	26	Sub-total
	27	
	28	Unamortized Deferred Charges
	29	Working Capital
	30	Utility Plant Acquisition Adjustment
	31 32	Mid-Year Utility Rate Base
	33	Revenue Requirement Impact
	34	Capital Structure
	35	STD Rate
	36	STD Ratio
	37	LTD Rate
	38	LTD Ratio ROF
	39 40	Equity Thickness
	41	Equity Trickiess
	42	Earned Return
	43	Short Term Debt (assumes corrected amount would ha
	44	Long Term Debt
	45	ROE
	46 47	Total Earned Return
	47	Income Taxes
	49	Earned Return
	50	Deduct - Interest on Debt
	51	Net Additions (Deductions)
	52	
	53	Tabable Income before Tax
	54 55	Income Tay Pate (Current Tay)
	55 56	Income Tax Rate (Current Tax) 1 - Current Income Tax Rate
	57	2 Content monte tax nate
	58	Income Tax Expense
	59	·
	60	Revenue Requirement
	61	Earned Return
	62	Income Tax
	63 64	Total Surplus / (Deficiency)
	65	Sharing %
Deleted:	66	Customers share of Surplus / (Deficit) Earnings (net of
- Scietter.		

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1 12.4.1.2.3 2020 FLOW-THROUGH DEFERRAL ACCOUNT TRUE-UP

- 2 As mentioned above, FBC is also providing a breakdown of the 2020 true-up amount of \$0.213
- 3 million debit in Table 12-4 below, along with an explanation of the variances.

Table 12-4: 2020 Actual vs. Projected Flow-through Deferral Account Additions (\$ millions)

Line No.	Particulars (1)	_ <u>F</u>	2020 Projected (2)	2020 Actual (3)		After-Tax Flow-Through Variance (4)	
1	Total Revenue	\$	(366.652)	\$	(367.196)	\$	(0.544)
2							
3	Total Power Purchase Expense		138.772		139.354		0.582
4							
5	Total Wheeling		5.747		5.846		0.099
6	T . 1W . T		40.000		40.000		
7	Total Water Fees		10.968		10.968		-
8	Not COM Firmance						
9	Net O&M Expense Pension & OPEB		0.470		0.470		
10 11	Insurance		0.470 1.691		0.470 1.691		-
12	Upper Bonnington Old Unit Inspections		(0.043)		(0.043)		-
13	BCUC Fees		0.330		0.330		-
14	Capitalized Overhead		(9.330)		(9.330)		
15	Capitalized Overhead		(3.550)		(9.550)		_
16	Depreciation and Amortization						
17	Amortization of Deferrals		(2.759)		(2.759)		_
18	Depreciation variance on Clean Growth Projects/CPCNs		(2.700)		(0.017)		(0.017)
19	CIAC Amortization variance on Clean Growth Projects/CPCNs		_		(0.017)		(0.011)
20	on to randinada on oldan oldani riojosa, or olda						
21	Total Property Taxes		16.993		16.990		(0.003)
22	· · · · · · · · · · · · · · · · · · ·						(/
23	Interest Expense						
24	Long-term debt interest expense variance		39.565		39.565		-
25	Interest variance on Clean Growth Projects/CPCNs		-		0.000		0.000
26	Short-term debt rate variance		-		0.245		0.245
27	Short-term debt volume variance from long-term debt issue variance		-		-		-
28	Short-term debt timing variance from long-term debt issue timing		-		-		-
29							
30	Income Tax Expense						
31	Income tax variance on Clean Growth Projects/CPCNs		-		(0.047)		(0.047)
32	Income tax/CCA rate changes		-		-		-
33	Income tax on taxable flowthrough variances above (excl. Clean Growth Projects/CPCNs)		-		(0.102)		(0.102)
34							
35	2020 Ending Deferral Account Balance True-up						0.213

- The 2020 Actual variances shown in Table 12-4 above are described as follows:
 - The variance in revenue of \$0.544 million was due to higher than forecast customer growth, higher residential UPC and increased commercial loads. Favourable variances in residential (\$1.163 million), commercial (\$1.558 million) and lighting (\$0.662 million) revenue were partially offset by unfavourable variances in wholesale (\$0.550 million), industrial (\$1.817 million), and irrigation (\$0.471 million) revenue;
 - The increase in power purchase expense of \$0.582 million was primarily due to market savings coming in below forecast. FBC had included \$1.500 million in forecast savings for the fourth quarter of 2020 in the 2020 Projected amount but, due to system and market conditions, was not able to realize those savings. This increase was partially offset by total actual 2020 gross load coming in lower than approved;
 - The increase in wheeling costs of \$0.099 million was primarily due to increased use of both the Open Access Transmission Tariff and Teck 71L wheeling;



- Actual property tax expenses were \$0.003 million lower, which is comparable to the
 approved amount;
 - The variance between the actual (2.24 percent) and approved (1.86 percent) short-term debt interest rates results in an amount recoverable from customers of \$0.245 million,³⁵ shown on Line 26 of the table above:
 - The favourable income tax variance of \$0.102 million is calculated as 27 percent of the aforementioned variances; and
 - The combined favourable variance of \$0.064 million related to depreciation, CIAC amortization, interest and tax variances on Clean Growth/CPCN amounts, shown on Lines 18, 19, 25 and 31, respectively, were derived for 2020 by comparing the actual 2020 cost of service impacts of the UBO and Corra Linn projects to the amounts forecast for those same projects.

12.5 SUMMARY

FBC has discussed one new exogenous factor that affects rates in 2022 and provided an update on a previously discussed potential exogenous factor, has provided an update on certain accounting related matters, requested approval for the disposition of one existing deferral account, and included information on the Flow-through deferral account.

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^{35 (2.24% - 1.86%)} x \$64.292 million forecast 2020 short-term debt in Schedule 26 of October 28, 2020 Evidentiary Update financial schedules.



13. SERVICE QUALITY INDICATORS

13.1 Introduction and Overview

- 3 Under the MRP, SQIs are used to monitor the Utility's performance to ensure that any
- 4 efficiencies and cost reductions do not result in a degradation of the quality of service to
- 5 customers.

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- 6 In the MRP Decision and Order G-166-20, the BCUC approved a balanced set of SQIs for FBC,
- 7 covering safety, responsiveness to customer needs, and reliability. Eight of the SQIs have
- 8 benchmarks and performance ranges set by a threshold level. Four of the SQIs are for
- 9 information only and as such do not have benchmarks or performance ranges.
- 10 In the subsections below, FBC reports on its 2020 and June 2021 year-to-date performance as
- 11 measured against the SQI benchmarks and thresholds. The 2020 and June 2021 year-to-date
- 12 SQI results indicate that the Company's overall performance to date meets service quality
- 13 requirements. In 2020, for the eight SQIs with benchmarks, six met or were better than the
- benchmark, with two better than the threshold. For the four SQIs that are informational only,
- 15 performance generally remains at a level consistent with prior years. In 2021 to date,
- 16 performance for the metrics with benchmarks are trending towards meeting the benchmark or
- 17 the threshold.
- 18 Consistent with how SQIs were reviewed during the 2014-2019 PBR Plan term,³⁶ FBC has
- 19 provided 2020 and year-to-date 2021 SQI results in this annual review. In accordance with
- 20 Order G-44-16, the BCUC will evaluate FBC's actual 2021 SQI performance in the Annual
- 21 Review for 2023 Rates when actual SQI results are known. FBC also notes that it will provide
- 22 information on the 2022 year-to-date SQI results in the Annual Review for 2023 Rates.

13.2 REVIEW OF THE PERFORMANCE OF SERVICE QUALITY INDICATORS

- 24 For each SQI, Table 13-1 provides a comparison of FBC's 2020 and June year-to-date
- 25 performance for 2021 to the proposed benchmarks and thresholds approved as part of the
- 26 MRP. Actual 2020 and June year-to-date results for 2021 are also provided for the four
- 27 informational SQIs.

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³⁶ MRP Decision page 99: "the Panel determines that the existing approved process for interpreting metric performance is to remain in effect over the term of the MRPs."



Table 13-1: Approved SQIs, Benchmarks and Actual Performance

	• • • • • • • • • • • • • • • • • • • •				
Performance Measure	Description	Benchmark	Threshold	2020 Results	June 2021 YTD Results
Safety SQIs					
Emergency Response Time	Percent of calls responded to within two hours	>=93%	90.6%	92%	94%
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	0.87	0.65
Responsiveness to	Customer Needs SQIs				
First Contact Resolution	Percent of customers who achieved call resolution in one call	>=78%	74%	82% ³⁷	81%
Billing Index	Measure of customer bills produced meeting performance criteria	<=3.0	5.0	0.13	0.16
Meter Reading Accuracy	Number of scheduled meters that were read	>=98%	96%	99%	98%
Telephone Service Factor (Non- Emergency)	Percent of non-emergency calls answered within 30 seconds or less	>=70%	68%	70%	69%
Customer Satisfaction Index	Informational indicator - measures overall customer satisfaction	-	-	8.5	8.4
Average Speed of Answer	Informational indicator – the amount of time it takes to answer a call (seconds)	-	-	71	66
Reliability SQIs					
System Average Interruption Duration Index (SAIDI) – Normalized	Annual SAIDI (average of cumulative customer outage time)	3.22 ³⁸	4.52	3.17	2.90
System Average Interruption Frequency Index (SAIFI) - Normalized	Annual SAIFI (average customer outage)	1.57	2.19	1.64	1.64
Generator Forced Outage Rate	Informational indicator – Percent of time a generating unit is removed from service due to component failure or other events.	-	-	1.26%	0.04%

³⁷ First Contact Resolution surveying was suspended from March 23 - May 3, 2020 as a result of the COVID-19 pandemic, thus the 2020 results do not contain data for the period that surveys were suspended.

³⁸ 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	2020 Results	June 2021 YTD Results
Interconnection Utilization	Informational indicator – percent of time that an interconnection point was available and providing electrical service to wholesale customers.	-	-	99.89%	99.87%

In the following sections, FBC reviews each SQI's year-to-date individual performance in 2020

13.2.1 Safety Service Quality Indicators

5 Emergency Response Time

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Emergency Response Time is the time elapsed from the initial identification of a loss of electrical power (via a customer call or internal notification) to the arrival of FBC personnel on site at the trouble location. This metric provides ongoing information to assess FBC crew sizes and crew locations in response to system trouble. The target measures the percentage of emergency calls responded to within two hours. The measure is calculated as follows:

Number of emergency calls responded to within two hours Total number of emergency calls in the year

There are many variables affecting the response time, including time of day (i.e., during business hours or after business hours), number and type of events (i.e., widespread outages), available resources, location (i.e., travel times and traffic congestion) and weather conditions.

The 2020 result was 92 percent which was better than the threshold of 90.6 percent. The June 2021 year-to-date performance is 94 percent, which is better than the benchmark of 93 percent.

For comparison, the Company's annual results under the 2014-2019 PBR Plan, the 2020 results and the June 2021 year-to-date emergency response time results are provided below. While the results have been relatively consistent, variables such as the location and severity of outage and the number of trouble calls contribute to the observed volatility in the annual performance for this metric.

Table 13-2: Historical Emergency Response Time

Description	2014	2015	2016	2017	2018	2019	2020	June 2021 YTD			
Results	91%	92%	97%	93%	94%	92%	92%	94%			
Benchmark				93	%						
Threshold		90.6%									

³ and 2021. Discussion is also provided for the informational SQIs.



1 All Injury Frequency Rate

- 2 The All Injury Frequency Rate (AIFR) is an employee safety performance indicator based on
- 3 injuries per 200,000 hours worked, with injuries defined as lost time injuries (i.e., one or more
- 4 days missed from work) and medical treatments (i.e., medical treatment was given or
- 5 prescribed). The annual performance for this metric is calculated as:

Number of Employee Injuries x 200,000 hours

Total Exposure Hours Worked

- 8 For the purpose of this SQI, the measurement of performance is based on the three-year rolling
- 9 average of the annual results.
- 10 The 2020 (three-year rolling average) result was 0.87 which was better than the benchmark of
- 11 1.64. The 2020 annual AIFR was 0.66 which reflected 1 Medical Treatment and 2 Lost Time
- 12 Injuries.

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- 13 The June 2021 year-to-date performance (three-year rolling average) result is 0.65 which is
- 14 better than the benchmark. The June 2021 year-to-date performance (annual) is 1.67 and
- 15 reflects 1 Medical Treatment and 3 Lost Time Injuries.
- 16 Strengthening the safety culture continues to be a key driver for FBC, building on the
- 17 commitment to learn from safety events, identify safety hazards, assess risk and continually
- improve through the implementation and sustainment of robust safety barriers and controls.
- 19 For comparison, the Company's results under the 2014 to 2019 PBR Plan, the 2020 results and
- the June 2021 year-to-date AIFR results are provided below.

Table 13-3: Historical All Injury Frequency Rate Results

Description	2014	2015	2016	2017	2018	2019	2020	June 2021 YTD		
Annual Results	3.21	1.54	1.15	1.13	1.56	0.46	0.66	1.67		
Three year rolling average	2.58	2.52	1.97	1.27	1.28	1.06	0.87	0.65		
Benchmark		1.64								
Threshold				2.3	39					

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13.2.2 Responsiveness to Customer Needs Service Quality Indicators

First Contact Resolution

- 25 First Contact Resolution (FCR) measures the percentage of customers who receive resolution
- 26 to their issue in one contact with FBC. The Company determines the FCR results using a
- 27 customer survey, tracking the number of customers who responded that their issue was



- 1 resolved in the first contact with the Company. The FCR rate is impacted by factors such as the
- 2 quality and effectiveness of the Company's coaching and training programs and the composition
- 3 of the different call drivers.
- 4 The 2020 result was 82 percent which was better than the benchmark of 78 percent. This result
- 5 excludes surveys from March 23 to May 3, 2020, as all Service Quality Measurement (SQM)
- 6 surveys were suspended during that time due to the COVID-19 pandemic. The June 2021 year-
- 7 to-date performance is 81 percent which is also better the benchmark.
- 8 For comparison, the Company's results under the 2014 to 2019 PBR Plan, the 2020 results and
- 9 the June 2021 year-to-date results are provided below.

Table 13-4: Historical First Contact Resolution Levels

Description	2014	2015	2016	2017	2018	2019	2020	June 2021 YTD	
Annual Results	73%	76%	79%	80%	82%	82%	82%	81%	
Benchmark		78%							
Threshold			74	! %					

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Billing Index

- 13 The Billing Index indicator tracks the effectiveness of the Company's billing system by
- 14 measuring the percentage of customer bills produced meeting performance criteria. The Billing
- 15 Index is a composite index with three components:
- Billing completion (percent of accounts billed within two days of the billing due date);
- Billing timeliness (percent of invoices delivered to Canada Post within two days of file creation); and
 - Billing accuracy (percent of bills without a production issue based on input data).

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- 21 The objective is to achieve a score of five or less.
- 22 The Billing Index is impacted by factors such as the performance of the Company's billing
- 23 system, weather variability, which can cause a high volume of billing checks and estimation
- 24 issues, and mail delivery by Canada Post.
- 25 The 2020 result was 0.13 which was better than the benchmark of 3.0. No significant billing
- issues occurred in 2020. The June 2021 year-to-date result is 0.16, which is also better than the
- 27 benchmark.
- 28 The 2020 Billing Index sub-measures calculation is as follows.



Table 13-5: Calculation of 2020 Billing Index

Billing sub-measure	Percent Achieved (PA)	Forr	nula	Result
Billing Accuracy (Percent of bills without a Production Issue, based on input data); Target: 99.9%	100.00%	If (PA≥99.9%,5000*(1 - PA),100*(1.05-PA))	=5000*(1-1)	0.00
Billing Timeliness (Percent of invoices delivered to Canada Post within 2 days of file creation); Target: 95%	100.00%	(100%-PA)*100	=(100%-100%)*100	0.00
Billing Completion (Percent of accounts billed within 2 days of the billing due date); Target: 95%	99.60%	(100%-PA)*100	=(100%- 99.60%)*100	0.40
Billing Service Quality Indicator; Target < 3.0		(Accuracy PA+Timeliness PA+Completion PA)/3	=(0+0+0.40) /3	0.13

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For comparison, the Company's results under the 2014 to 2019 PBR Plan, the 2020 results and the June 2021 year-to-date results are provided below.

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Table 13-6: Historical Billing Index Results

Description	2014	2015	2016	2017	2018	2019	2020	June 2021 YTD		
Annual Results	2.34	0.39	0.57	0.15	0.29	1.96	0.13	0.16		
Benchmark		5.0								
Threshold		5.0								

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Meter Reading Accuracy

- This SQI compares the number of meters that are read to those scheduled to be read.
 Providing accurate and timely meter reads for customers is a key driver for the Company and its customers. The results are calculated as:
- Number of scheduled meters read
 Number of scheduled meters for reading
- The 2020 result was 99 percent, which was better than the benchmark. The June 2021 year-todate result is 98 percent, which meets the benchmark.



- For comparison, the Company's results under the 2014 to 2019 PBR Plan, the 2020 results and the June 2021 year-to-date results are provided below.
 - Table 13-7: Historical Meter Reading Accuracy Results

Description	2014	2015	2016	2017	2018	2019	2020	June 2021 YTD
Annual Results	98%	96%	99%	99%	99%	99%	99%	98%
Benchmark			98	3%				
Threshold			96	5%				

Telephone Service Factor (Non-Emergency)

The Telephone Service Factor (Non-Emergency) measures the percentage of non-emergency calls that are answered in 30 seconds. It is calculated as:

Number of non-emergency calls answered within 30 seconds Number of non-emergency calls received

The TSF is a measure of how well the Company can balance costs and service levels with the overall objective to maintain a consistent TSF level. This ensures the Company is staying within appropriate cost levels and maintaining adequate service for its customers. The principal factors influencing the TSF results include volume and type of inbound calls received and the resources available to answer those calls. Staffing is matched to the expected call volume based on historical data in order to reach the service level benchmark desired. Other factors that can influence the TSF are billing system related issues and weather patterns that may generate high numbers of billing related gueries and the complexity of the calls.

The 2020 result was 70 percent which met the benchmark. The June 2021 year-to-date performance is 69 percent, which is above the threshold. Although lower than the benchmark on a mid-year basis, the Company expects to achieve the benchmark performance level for 2021.

For comparison, the Company's results under the 2014 to 2019 PBR Plan, the 2020 results and the June 2021 year-to-date results are provided below. As discussed in the Annual Review for 2015 Rates, the 2014 result was negatively impacted by events such as the first verified meter readings occurring after the IBEW labour disruption ended in December 2013, introduction of the Residential Conservation Rate, and the integration of the City of Kelowna customers.

Table 13-8: Historical TSF Results

Description	2014	2015	2016	2017	2018	2019	2020	June 2021 YTD		
Annual Results	48%	71%	70%	70%	72%	70%	70%	69%		
Benchmark		70%								
Threshold		68%								



1 Customer Satisfaction Index

- 2 The Customer Satisfaction Index (CSI) is an informational indicator that measures overall
- 3 customer satisfaction with the Company. The index reflects customer feedback about important
- 4 service touch points including the contact centre, perceived accuracy of meter reading, energy
- 5 conservation information and field services. The index includes feedback from both residential
- 6 and commercial customers. The survey is conducted quarterly and results are presented as a
- 7 score out of ten.

- 8 The CSI survey investigates service quality as well as customer attitudes that are often
- 9 influenced by factors outside the Company's control. Important examples include storm-related
- 10 unplanned outages and media coverage.
- 11 The annual CSI score for 2020 was 8.5, the same as that obtained in 2019. There were no
- 12 statistically significant shifts from 2019 to 2020 in the five measures that make up the overall
- 13 customer satisfaction score. The score for overall satisfaction, which has the highest weighting,
- 14 increased from 8.4 in 2019 to 8.5 in 2020. The scores for satisfaction with the accuracy of
- meter reading and energy conservation metrics decreased from 8.3 in 2019 to 8.2 in 2020, and
- 7.7 in 2019 to 7.6 in 2020, respectively. In addition, the scores for the satisfaction with the
- 17 contact centre and field services metrics decreased from 8.6 in 2019 to 8.5 in 2020, and 9.1 in
- 18 2019 to 9.0 in 2020, respectively.
- 19 The score for 2021 year-to-date is 8.4 which is lower than the 8.5 annual score recorded for
- 20 2020. Of the five measures that make up the overall customer satisfaction score, the results for
- June 2021 year-to-date were lower in three areas, higher in one, and static in one when
- 22 compared to the annual 2020 scores. The scores for overall satisfaction and satisfaction with
- energy conservation information decreased from 8.5 to 8.3 and 7.6 to 7.5, respectively. Also,
- 24 satisfaction with the contact centre decreased from 8.5 to 8.4. For satisfaction with field
- 25 services, the 2021 year-to-date score increased from 9.0 to 9.1 compared to the 2020 annual
- 26 score. The score for the accuracy of meter reading metric was static at 8.2, from results
- 27 achieved in 2020. None of these changes are statistically significant.
- For comparison, the Company's results under the 2014 to 2019 PBR Plan, the 2020 results and
- the June 2021 year-to-date results are provided below.

Table 13-9: Historical Customer Satisfaction Results

Description	2014	2015	2016	2017	2018	2019	2020	June 2021 YTD		
Annual Results	8.1	8.1	8.2	8.2	8.3	8.5	8.5	8.4		
Benchmark		n/a								
Threshold		n/a								



1 Average Speed of Answer

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- 2 The Average Speed of Answer (ASA) is an informational indicator that measures the amount of
- 3 time it takes for a customer service representative to answer a customer's call (seconds).
- 4 The 2020 result was 71 seconds and the June 2021 year-to-date performance is 66 seconds.
- 5 For comparison, the Company's results under the 2014 to 2019 PBR Plan, the 2020 results and
- 6 the June 2021 year-to-date results are provided below.³⁹ As with previous years, both 2020 and
- 7 2021 remain within a reasonable range from a customer experience perspective in that, on
- 8 average, calls to the contact centre were answered in and around the one minute mark.
- 9 The 2021 year-to-date results are improving over the 2020 results and FBC expects this to continue.

Table 13-10: Average Speed of Answer

Description	2014	2015	2016	2017	2018	2019	2020	June 2021 YTD				
Annual Results	226	49	48	49	49	49	71	66				
Benchmark		n/a										
Threshold		n/a										

13.2.3 Reliability Service Quality Indicators

- FBC measures transmission and distribution system reliability according to the Institute of Electrical and Electronics Engineers (IEEE) method of normalizing reliability statistics by excluding "major events". Major events are identified as those that cause outages exceeding a threshold number of customer-hours. Threshold values are calculated by applying a statistical method called the "2.5 Beta" adjustment to historical reliability data. Any single outage event that exceeds the threshold value is excluded from the reliability data. Excluding major events allows them to be studied separately and reveals trends in daily operations that would be hidden or skewed if they were included in the data set. Major event days in the FBC service territory have been caused by mudslides, wind or snow storms, and wildfires.
- Reported outages included in these measures are of one minute or longer in duration, which is consistent with the Canadian Electricity Association (CEA) standard for reporting.

System Average Interruption Duration Index (SAIDI) - Normalized

SAIDI is the amount of time the average customer's power is off during the year (i.e., the total amount of time the average customer's clock would lose during a year), after adjusting for the impact of major events as described above, and is calculated as follows:

ASA in 2014 is higher than other years due to the impact of the six months of job action that took place in Q3 and Q4 of 2013. This job action resulted in a higher number of bill estimates, which led to a higher volume of customer inquiries in 2014 as bill adjustments were made reflecting actual meter reads.



Total Customer Hours of Interruption Total Number of Customers Served

- Customer Hours of Interruption related to a power outage are calculated by multiplying the number of customers affected by the outage by the duration of the outage.
- 5 For the purpose of this SQI, the measurement of performance is based on the annual results.
- 6 The 2020 result was 3.17 and the June 2021 year-to-date performance is 2.90, which are both
- 7 better than the benchmark of 3.22. In 2020, there were four days that qualified as a "major
- 8 event" day. The first major event day was a heavy snowstorm that started in the afternoon of
- 9 December 31, 2019 and continued to January 1, 2020. It resulted in approximately 20,000
- 10 customer hours interrupted and impacted 1,100 customers on December 31. The January 1,
- 11 2020 totals were approximately 37,000 customer hours interrupted and impacted 5,000
- 12 customers. The second major event day was on March 4, 2020 due to a major windstorm. It
- impacted approximately 13,750 customers and 63,800 customer hours. The third major event
- 14 day occurred on September 7, 2020 where a major wind storm moved through the West
- 15 Kootenay causing outages to approximately 12,000 customers with 19,600 customer-
- 16 interruptions and 212,800 customer-hours of interruption. This event is the highest total
- 17 customer hours FBC has on record (dating back to 2003). Restoration efforts took over three
- 18 days to complete and required support from FBC crews from the Okanagan, contractor crews
- 19 from across the Province as well as mutual aid from BC Hydro. The fourth major event day was
- 20 on December 21, 2020 where a major snowstorm moved through the Okanagan and Kootenays
- 20 On December 21, 2020 White a major one with meved through the changes and recording
- 21 causing approximately 15,000 customer-interruptions and 60,600 customer-hours of
- 22 interruption.
- 23 In 2021 to-date, there have been two days that qualified as a "major event" day. On January
- 24 13, a major wind storm across the Okanagan and Kootenays caused approximately 11,000
- 25 customer-interruptions and totaled over 155,000 customer hours of interruption. Additionally, on
- 26 April 18, a major wind storm across the West Kootenays caused approximately 19,800
- 27 customer-interruptions and totaled over 200,800 customer-hours of interruption. Of note, this
- 28 event is the second highest total customer hours interrupted FBC has on record since 2003.
- 29 For comparison, the Company's results under the 2014 to 2019 PBR Plan, the 2020 results and
- 30 the June 2021 year-to-date results are provided below. From 2014 to 2019, the benchmark and
- 31 the threshold reflect the values established under the PBR Plan using three-year rolling average
- 32 results. Starting in 2020, the benchmark and threshold reflect the values approved by the BCUC
- 33 for the MRP term. 40

⁴⁰ The benchmark and threshold for SAIDI were approved in the FBC Annual Review for 2020 and 2021 Rates Decision and Order G-42-21.



Table 13-11: Historical SAIDI Results

Description	2014	2015	2016	2017	2018	2019	2020	June 2021 YTD
Annual normalized results	2.32	2.13	2.10	4.05	3.15	2.45	3.17	2.90
Benchmark		2.22						
Threshold			4.	52				

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System Average Interruption Frequency Index (SAIFI) - Normalized

SAIFI is the average number of interruptions per customer served per year (i.e., the number of times the average customer would have to reset their clock during the year), after adjusting for the impact of major events as described above, and is calculated as follows:

Total Number of Customer Interruptions

Total Number of Customers Served

- 9 The Number of Customer Interruptions related to a power outage is the number of customers 10 affected by the outage.
- 11 For the purpose of this SQI, the measurement of performance is based on the annual results.
- The 2020 and June 2021 year-to-date performances are 1.64 which are better than the threshold of 2.19, but worse than the benchmark of 1.57.
- For comparison, the Company's results under the 2014 to 2019 PBR Plan, the 2020 results and the June 2021 year-to-date results are provided below. From 2014 to 2019, the benchmark and the threshold reflect the values established under the PBR Plan using three-year rolling average results. Starting in 2020, the benchmark and threshold reflect the values approved by the BCUC
- 18 for the MRP term.41

Table 13-12: Historical SAIFI Results

Description	2014	2015	2016	2017	2018	2019	2020	June 2021 YTD
Annual normalized results	1.64	1.56	1.34	1.78	1.73	1.21	1.64	1.64
Benchmark	1.64						1.57	
Threshold	2.50						2.19	

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⁴¹ The benchmark and threshold for SAIFI were approved in the FBC Annual Review for 2020 and 2021 Rates Decision and Order G-42-21.

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Generator Forced Outage Rate

2 Generator Forced Outage Rate (GFOR), an informational indicator, is a measure of the 3 percentage of time in one year that the generating units experienced forced outages compared 4

to the amount of time they could have operated without a forced outage. A forced outage

means the removal of a generating unit from service due to the occurrence of a component

6 failure or other event, making it unavailable to produce power due to the unexpected

7 breakdown. The GFOR is defined by the CEA as follows:

10 The 2020 result for GFOR was 1.3 percent. The result was due mainly to an outage in June

11 (339 hours) and in July (377 hours) at the UBO Unit 1, related primarily to the oil contamination

of the generator field winding, lasting approximately 30 days. Crews were not able to perform

13 the cleaning of the generator field winding due to the high water levels in the tailrace during the 14

freshet period which made isolation of the unit very difficult. In addition, there was an outage on

15 South Slocan Unit 2 related to the malfunction of a speed switch lasting approximately 9 days.

16 The June 2021 year-to-date performance is 0.04 percent.

17 For comparison, the Company's results under the 2014 to 2019 PBR Plan, the 2020 results and

18 the June 2021 year-to-date results are provided below.

Table 13-13: Historical Generator Forced Outages

	2014	2015	2016	2017	2018	2019	2020	June 2021 YTD
FBC	1.7%	0.1%	0.8%	0.6%	0.4%	0.1%	1.3%	0.04%
CEA	6.3%	6.2%	6.2%	6.2%	6.7%	4.9%	TBD	

Interconnection Utilization

- 21 Interconnection Utilization, an informational indicator, is a measurement of the time that an
- 22 interconnection point was available and providing electrical service to the municipal wholesale
- 23 customers (City of Penticton, City of Summerland, City of Grand Forks and City of Nelson).
- 24 There are twelve points of interconnection combined between the four customers.

25 The Interconnection Utilization metric for the interconnection points listed is calculated as 26 follows:

27 **Total Operating Hours** Total Operating Hours + Total Outage Time 28

The 2020 result of 99.89 percent and June 2021 year-to-date result of 99.87 percent are generally consistent with prior years' results. The City of Nelson interconnection at Coffee Creek has been negatively impacted by both "major events" on the FBC system described in the



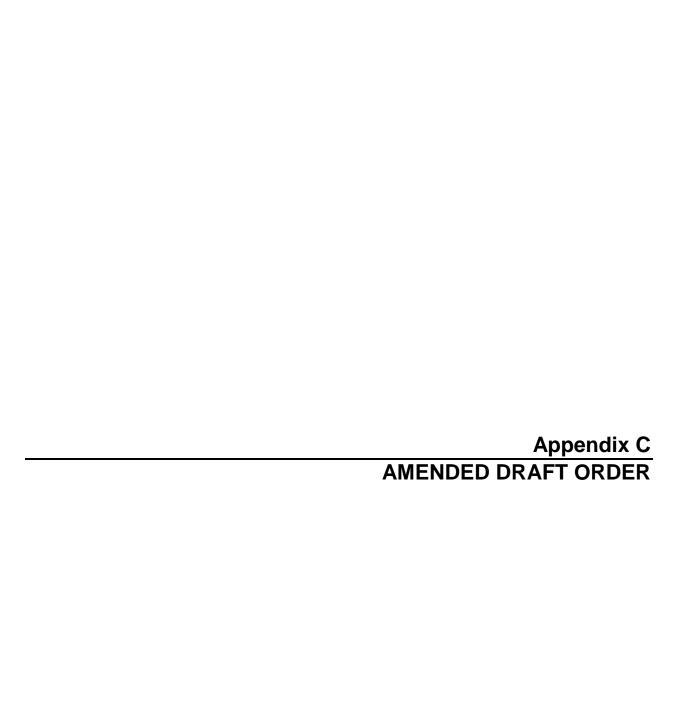
- 1 SAIDI section. For comparison, the Company's results under the 2014 to 2019 PBR Plan, the
- 2 2020 results and the June 2021 year-to-date results are provided below.

3 Table 13-14: Interconnection Utilization

Description	2014	2015	2016	2017	2018	2019	2020	June 2021 YTD
Interconnection Utilization	99.99%	99.94%	99.99%	99.95%	99.96%	99.98%	99.89%	99.87%
Benchmark	n/a							
Threshold	n/a							

4 13.3 *SUMMARY*

- 5 In summary, FBC's 2020 and June 2021 year-to-date SQI results indicate that the Company's
- 6 overall performance meets service quality requirements. In 2020, for the eight SQIs with
- 7 benchmarks, six met or were better than the benchmark with two better than the threshold. For
- 8 the four SQIs that are informational only, performance generally remained at a level consistent
- 9 with prior years.





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ORDER NUMBER G-xx-xx

IN THE MATTER OF the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

FortisBC Inc.
Annual Review for 2022 Rates

BEFORE:

[Panel Chair] Commissioner Commissioner

on Date

ORDER

WHEREAS:

- A. On June 22, 2020, the British Columbia Utilities Commission (BCUC) issued its Decision and Orders G-165-20 for FortisBC Energy Inc. (FEI) and G-166-20 for FortisBC Inc. (FBC) approving a Multi-Year Rate Plan (MRP) for 2020 through 2024 (MRP Decision). In accordance with the MRP Decision, FBC is to conduct an annual review process to set rates for each year;
- B. By letter dated July 13, 2021, FBC proposed a regulatory timetable for its annual review for 2022 rates;
- C. By Order G-226-21 dated July 27, 2021, the BCUC established the regulatory timetable for the Annual Review for FBC's 2022 rates, which included FBC filing its Annual Review materials, intervener registration, one round of information requests, a workshop, FBC's response to undertakings at the workshop, and written final and reply arguments;
- D. On August 6, 2021, FBC submitted its materials for the Annual Review for 2022 Rates Application and on October 5, 2021 submitted an Evidentiary Update (Application). In the Application, FBC forecasts a 3.46 percent rate increase over 2021 rates, effective January 1, 2022;
- E. The Application also requests the following deferral account approvals as described in Sections 7.6 and 12.4 of the Application:
 - 1. Creation of a rate base deferral account for the 2021 Generic Cost of Capital proceeding;
 - 2. Amortization periods for the following previously approved deferral accounts:
 - i. A one-year amortization period for the 2020 Cost of Service Analysis (COSA) deferral account commencing January 1, 2022;

- ii. A three-year amortization period for the Mandatory Reliability Standards (MRS) 2021 Audit deferral account commencing January 1, 2022;
- iii. A three-year amortization period for the 2021 Long-term Electric Resource Plan (LTERP) deferral account commencing January 1, 2022;
- iv. A three-year amortization period for the Rate Design and Rates for Electric Vehicle (EV)
 Direct Current Fast Charging (DCFC) Service Application deferral account commencing
 January 1, 2022;
- F. The Application also requests approval of the following:
 - 1. Approval to change the frequency of reporting on the COVID-19 Customer Recovery Fund Deferral Account from monthly to quarterly, as described in Section 7.6.2.1 of the Application;
 - 2. Z-factor treatment for the incremental O&M and capital expenditures related to MRS Assessment Report No. 13, as described in Section 12.2.1 of the Application;
 - 3. Z-factor treatment for incremental O&M and capital expenditures related to the prevention and repair of damages resulting from the Nk'Mip Creek wildfire, as described in the Evidentiary Update; and
- G. The BCUC has reviewed the Application and makes the following determinations.

NOW THEREFORE pursuant to sections 59 to 61 of the UCA, for the reasons stated in the decision issued concurrently with this order, the BCUC orders as follows:

- 1. FBC is approved to recover the 2022 revenue requirement and resultant rate changes on a permanent basis, effective January 1, 2022, as filed in the Application, subject to any adjustments identified by FBC during the regulatory process and from any directives or determinations made in the reasons for decision issued concurrently with this order.
- 2. The following deferral account treatments are approved:
 - a. Creation of a rate base deferral account for the 2021 Generic Cost of Capital proceeding;
 - b. Amortization periods for the following previously approved deferral accounts:
 - i. A one-year amortization period for the 2020 COSA deferral account commencing January 1, 2022;
 - ii. A three-year amortization period for the MRS 2021 Audit deferral account commencing January 1, 2022;
 - iii. A three-year amortization period for the 2021 LTERP deferral account commencing January 1, 2022; and
 - iv. A three-year amortization period for the Rate Design and Rates for EV DCFC Service Application deferral account commencing January 1, 2022.
- 3. FBC is approved to change the frequency of reporting on the COVID-19 Customer Recovery Fund Deferral Account from monthly to quarterly, as described in Section 7.6.2.1 of the Application.

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- 4. FBC is approved for Z-factor treatment for the incremental O&M and capital expenditures related to MRS Assessment Report No. 13, as described in Section 12.2.1 of the Application.
- 5. FBC is approved for Z-factor treatment for the incremental O&M and capital expenditures related to the prevention and repair of damages resulting from the Nk'Mip Creek wildfire, as described in the Evidentiary Update.
- 6. FBC is directed to file with the BCUC, within 30 days of the issuance of this order, amended tariff pages in accordance with the terms of this order.

DATED at the City of Vancouver, in the Province of British Columbia, this (XX) day of (Month Year).

BY ORDER

(X. X. last name) Commissioner