FORTIS BC™

Diane Roy
Vice President, Regulatory Affairs

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

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

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

October 1, 2020

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

Attention: Ms. Leigha Worth, Executive Director

Dear Ms. Worth:

Re: FortisBC Inc. (FBC)

Project No. 1599119

Annual Review for 2020 and 2021 Rates (Application)

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

On August 19, 2020, FBC filed the Application referenced above. In accordance with British Columbia Utilities Commission Order G-211-20 setting out the Regulatory Timetable for the review of the Application, FBC respectfully submits the attached response to BCOAPO IR No. 1.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC INC.

Original signed:

Diane Roy

Attachments

cc (email only): Commission Secretary
Registered Parties

1.0 Reference: Exhibit B-2, page 1

Preamble: The Application states (page 1):

> FBC will continue to pursue productivity improvements as it seeks to manage its business needs within the challenges described above. While such potential productivity improvements may lead to cost reductions, FBC's focus will be on efficient allocation of resources within the business and "doing more with what we have".

1.1 Is it expected that FBC's focus on the efficient allocation of resources within the business and "doing more with what we have" will (all else being equal) have a favourable impact on the achieved ROE (i.e., actual ROE results that are above the allowed ROE)? If not, please explain why.

Response:

As described in the Application, during the MRP[1] term, FBC expects to face both continued and new cost pressures. Further, with the inclusion of a 0.5 percent Productivity Improvement Factor (PIF), which was directed by the BCUC as part of the MRP Decision, FBC will be challenged to achieve savings beyond the embedded PIF. As a result, for 2020, the first year of the MRP term, FBC anticipates relatively minor O&M savings and little favourable impact from O&M savings on the achieved ROE. FBC is unable to predict at this time what savings will be achieved in the remaining term of the MRP.

[1] FortisBC Multi-Year Rate Plan for 2020 through 2024.

2.0 Reference: Exhibit B-2, page 4

Preamble: The Application states (Table 1-1, Item 2):

> FBC has not identified any efficiency initiatives with a payback beyond the end of the MRP period.

2.1 Please provide a schedule setting out the specific efficiency initiatives that FBC considered in arriving at the above conclusion and for each document: i) when the initiative started/is expected to start, ii) the cost and iii) the anticipated payback period.

Response:

Pursuant to the MRP Decision, efficiency carry-over mechanism (ECM) initiatives need to meet two criteria: they can only be applied for during the last three years of the MRP term, and they must have a payback beyond the end of the MRP period. Since 2020 and 2021 are the first two years of the MRP term, there are no initiatives that meet both of these criteria.

For reference, the following is an excerpt from the MRP Decision describing the handling of an ECM application:[2]

> Therefore, the Panel determines the following process for the handling of an ECM application:
>
> 1. An ECM can be applied for at any time in the last three years of the MRPs, either in advance or following the action or initiative being undertaken
> 2. For proposed activities where identifiable savings are expected to extend beyond the term of the MRP, FortisBC is to file an ECM proposal describing the initiative, its timing, costs and benefits and savings.
> 3. Parties will have the opportunity to review and comment on the proposal and the BCUC will determine whether to approve the ECM proposal (an Approved ECM Initiative).
> 4. FortisBC must submit details of continued savings annually under an Approved ECM Initiative as part of the Annual Review process. The net savings will be shared equally between ratepayers and the Utilities and will carry forward past the end of the MRP for a maximum period of three years.

In future years, should FBC propose ECM treatment for any efficiency initiatives that qualify, FBC will submit an ECM application to the BCUC for consideration.

[2] MRP Decision and Orders G-165-20 and G-166-20, page 87.

3.0 Reference: Exhibit B-2, pages 4-5

Preamble: The Application states (page 4):

> FBC has calculated the 2020 revenue requirement using a combination of the approved formula for O&M and the approved forecasts for Regular Capital from the MRP Decision as well as projected 2020 amounts for items that are forecast annually. The projected 2020 amounts for these forecast items include six months of actual results up to June 30, 2020. FBC has not identified any efficiency initiatives with a payback beyond the end of the MRP period.

3.1 With respect to Figure 1-1, please indicate which of the eight items include six months of actual results up to June 30, 2020.

Response:

The majority of items include actuals to June 30, 2020 in order to reflect, as accurately as possible, the cost of service for 2020.

The following table provides the responses to BCOAPO IR1 3.1 and 3.2, listing the eight items, whether each of the items include six months of actuals, and their respective treatment of variances from forecast.

Item	Basis of Forecast	Treatment of Variances
Customer Growth and Volume	• Forecast sales load includes six months of actuals	• Captured in Flow-through deferral account
Power Supply	• Includes six months of actuals	• Captured in Flow-through deferral account
Other Revenue	• Includes six months of actuals	• Captured in Earnings Sharing
O&M Expense	• Formula O&M does not include actuals • Forecast O&M includes six months of actual	• Formula O&M variances captured in Earnings Sharing • Forecast O&M variances captured in Flow-through deferral account or other deferral accounts
Depreciation & Amortization	• Plant depreciation and amortization of CIAC based on opening balance at Jan. 1 2020 • Other amortization is booked to approved	• Depreciation on Clean Growth projects is captured in Flow-through deferral account • Other depreciation variances captured in Earnings Sharing (very little or no variance in 2020 as opening balance is actual) • No variance

Item	Basis of Forecast	Treatment of Variances
Financing & Return on Equity	• Determined by forecast rate base (including capital expenditures) and other revenue requirement items listed above. Re capital expenditures: ○ Approved capital does not include actuals ○ Major capital includes six months of actuals	• Interest rate variances and interest on Clean Growth projects captured in Flow-through deferral account • Other interest variances captured in Earnings Sharing • Return on Equity variance captured in Earnings Sharing
Taxes	• Property taxes include six months of actuals • Income Taxes determined by other revenue requirement items listed above	• Property taxes captured in Flow-through deferral account • Income Tax Rates and tax on Clean Growth projects captured in Flow-through deferral account • Other income tax variances captured in Flow-through deferral account or Earnings Sharing
Deficit/Surplus Account	• Booked to approved	• No variance

3.2 Are all of the Figure 1-1 items that included six months of actuals ones where annual variances between approved and actual amounts are captured in the Flow-Through Deferral Account or another approved deferral account? If not, please identify the exceptions.

<u>Response:</u>

Please refer to the response to BCOAPO IR1 3.1.

4.0 Reference: Exhibit B-2, pages 9-10

4.1 Please provide a schedule that sets out the derivation of the actual 2019 labour weighting of 62%. As part of the response, please provide references for the specific inputs used and where the source documents can be can accessed.

Response:

In the schedule below, FBC provides the numbers for the calculation of the 2019 actual labour to non-labour ratio of 62%:38%.

2019 Labour / Non-Labour Operating Expenses
($000's)

Labour	35,949	62%
Non-Labour	22,496	38%
Gross O&M	**58,445**	**100%**

Labour includes Salaries & Wages of $35.949 million and Non-Labour includes Contracted Manpower (with Consulting) of $12.469 million and other Operating Expenses of $10.027 million.

The Labour and Non-Labour numbers used are as recorded in FBC's SAP financial reporting system. Below is an extract from the SAP report source document, showing the parameters used to generate the report and the numbers used in the calculation of the labour and non-labour ratio for 2019.

Controlling Area	BCG1	FortisBC Consolidated
CFiscal Year	2019	
FFrom Period	1	
FTo Period	12	
TPlan Version		
VCost Center/Group	FBCCCGROUP	FORTIS BC O&M CC GROUP
CCost Element Group	CE-ALL	All Cost Elements

CCtr: A/P/V net Total   Date: 2020/09/15   Page: 2 / 5

Column: 1 / 4
Cost Center/Group   FBCCCGROUP   FORTIS BC O&M CC GROUP
Manager: *
Cost Element Group   All Cost Elements
Reporting period: 1 to 12 2019

Cost elements	Act.costs
**** Net Salaries & Wages	35,949,559.36
**** Contracted Manpower	12,468,820.10
***** Total Operating Labour	48,418,379.46
***** Total Non-Labour Operating Exp	10,026,782.04
****** Total Cost Elements	58,445,161.50
******* Total	58,445,161.50

4.2 Based on the Annual Review Applications for FBC's 2015-2019 rates plus the current Application, please provide a schedule that sets out the 12 Month Average Values for AWE ($) as of June for each year from 2013 to 2019 and the resulting % annual changes for 2014-2019.

4.3 The change in the monthly value for BC AWE ($) for April 2020 over March 2020 is materially higher than the monthly changes that have historically occurred. Can FBC explain why?

4.3.1 In particular, is the change at all attributable to the impacts of the COVID-19 pandemic (e.g., did those losing jobs in April 2020 due to the pandemic tend to be in job categories with lower average weekly earnings?)?

4.3.2 If the change is at all attributable to the COVID-19 pandemic, will FBC include these impacts on the approved O&M for 2020 in its evaluation (as discussed on page 140) of the COVID-19 incremental costs and related savings for purposes of determining the amounts to be included in the COVID-19 Customer Recovery Fund Deferral Account?

Response:

A schedule outlining the AWE percentage changes included in each year of the 2014-2019 PBR Plan term and in the Annual Review for 2020 and 2021 Rates Application is provided below.[3]

2014 PBR	
June 2012 - Average AWE ($)	850.51
June 2013 - Average AWE ($)	869.87
AWE % for 2014 PBR	2.277%

2015 PBR	
June 2013 - Average AWE ($)	869.87
June 2014 - Average AWE ($)	884.19
AWE % for 2015 PBR	1.646%

2016 PBR	
June 2014 - Average AWE ($)	884.83
June 2015 - Average AWE ($)	902.96
AWE % for 2016 PBR	2.050%

2017 PBR	
June 2015 - Average AWE ($)	903.61
June 2016 - Average AWE ($)	914.90
AWE % for 2017 PBR	1.250%

2018 PBR	
June 2016 - Average AWE ($)	915.04
June 2017 - Average AWE ($)	928.52
AWE % for 2018 PBR	1.473%

2019 PBR	
June 2017 - Average AWE ($)	929.33
June 2018 - Average AWE ($)	953.93
AWE % for 2019 PBR	2.646%

2020 MRP	
June 2018 - Average AWE ($)	954.51
June 2019 - Average AWE ($)	982.01
AWE % for 2020 MRP	2.881%

2021 MRP	
June 2019 - Average AWE ($)	982.01
June 2020 - Average AWE ($)	1,040.40
AWE % for 2021 MRP	5.946%

FBC took note of the comparatively high AWE values as of June 2020 and has investigated the drivers behind the increase with Statistics Canada. Statistics Canada confirmed that the March 2020 to May 2020 AWE data was impacted by the COVID-19 pandemic. During the March to May timeframe, there were significant layoffs in business sectors such as retail and accommodation and food services, typically comprised of lower paying jobs. There was also a

[3] AWE values shown for each Annual Review are Statistics Canada values at the time of compliance filings. June values are shown for comparison, however formulas are calculated using 12-month averages.

higher proportion of hourly paying job layoffs (which are generally lower paying) versus salaried employees. These two changes increased the AWE.

While it is clear that the pandemic has impacted AWE, FBC is unable to quantify that impact. Further, while in 2021 the increase to Formula O&M has been higher due to the higher I-Factor, this trend will likely reverse in 2022 as the labour impacts from COVID-19 lessen and AWE returns to more normal levels. The potential decrease in BC-AWE in 2021 will reduce, or potentially even create a negative I-Factor, which when applied to the calculation of 2022 Formula O&M would result in a smaller increase or decrease to the 2022 Formula O&M amount relative to 2021. Therefore, the impact on 2021 revenue requirements may be offset in subsequent years.

5.0 Reference: Exhibit B-2, pages 10-11 and 39

Exhibit B-2, Schedule 11 – Schedule 18 (page 128)

BCUC Decision and Orders G-165-20 & G-166-20,

page 118

5.1 Please reconcile the Average Customer Forecasts for 2020 and 2021 per Table 2-2 (i.e., 141,189 and 142,754 respectively) with the Average Number of Customers Forecasts for 2020 and 2021 in Schedule 18 (page 128).

Response:

The Average Customer Forecasts for 2020 and 2021 of 141,189 and 142,754, respectively, in Line 2 of Table 2-2 align with the Average Customer Forecasts in Schedule 18. Table 2-2 and Schedule 18 are provided below for reference.

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

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

Schedule 18 – 2020:

FORTISBC INC. FBC Annual Review for 2020 and 2021 Rates Section 11 - 2020

REVENUE AT EXISTING AND REVISED RATES
FOR THE YEAR ENDING DECEMBER 31, 2020
($000s)

Schedule 18

Line No.	Particulars	2019 Approved Revenue	2020 Forecast: Revenue at Existing Rates	2020 Forecast: Effective Increase	2020 Forecast: Revenue at Revised Rates	Average Number of Customers	GWh	Cross Reference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Residential	$ 187,887	$ 178,565	$ 1,786	$ 180,351	122,412	1,289	
2	Commercial	94,508	89,191	892	90,083	16,187	899	
3	Wholesale	49,519	47,938	479	48,417	6	573	
4	Industrial	32,414	37,589	376	37,965	54	464	
5	Lighting	2,661	2,219	22	2,241	1,446	10	
6	Irrigation	3,544	3,166	32	3,198	1,084	37	
7								
8	Total	$ 370,534	$ 358,668	$ 3,587	$ 362,255	141,189	3,272	
9								
10	**Effective Increase**				1.00%			

Schedule 18 – 2021:

FORTISBC INC. FBC Annual Review for 2020 and 2021 Rates Section 11 - 2021

REVENUE AT EXISTING AND REVISED RATES Schedule 18
FOR THE YEAR ENDING DECEMBER 31, 2021
($000s)

Line No.	Particulars	2020 Projected Revenue	2021 Forecast At 2020 Approved Interim Rates	2021 Forecast Effective Increase	2021 Forecast Revenue at Revised Rates	Average Number of Customers	GWh	Cross Reference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Residential	$ 180,351	$ 176,095	$ 11,216	$ 187,311	124,055	1,252	
2	Commercial	90,083	95,850	6,105	101,955	16,148	937	
3	Wholesale	48,417	49,466	3,151	52,617	6	584	
4	Industrial	37,965	42,905	2,733	45,638	59	537	
5	Lighting	2,241	2,167	138	2,305	1,405	10	
6	Irrigation	3,198	3,160	201	3,361	1,082	36	
7								
8	Total	$ 362,255	$ 369,643	$ 23,544	$ 393,187	$\boxed{142,754}$	3,356	
9								
10	**Effective Increase**				6.37%			

5.2 Please provide a copy of FBC's MRP Decision Compliance filing which provides the calculation of the 2019 Base O&M per Customer of $412 (per page 39) and the 2019 customer count used in the calculation.

Response:

Please refer to Attachment 5.2 for a copy of the MRP Compliance Filing. The calculation of the 2019 Base O&M per Customer of $412 is shown on Table 4 at page 6.

The calculation of the 2019 Average Customers is provided in the table below.

	Customer Count	12 Month Average Customers
Jan-19	138,795	
Feb-19	138,938	
Mar-19	139,391	
Apr-19	139,566	
May-19	139,671	
Jun-19	139,833	
Jul-19	140,013	
Aug-19	140,069	
Sep-19	140,323	
Oct-19	140,602	
Nov-19	140,761	
Dec-19	141,027	139,916

5.3 If the 2019 customer count used in the MRP Compliance filing to determine the 2019 Base O&M per Customer differs from the 139,916 used in Table 2-2, please explain why the139,916 value is the appropriate one to use.

<u>Response:</u>

FBC confirms the amounts do not differ. The 2019 average customer count used in the MRP Compliance Filing of 139,916 also ties to Table 2-2 (Line 8) of the 2020 and 2021 FBC Annual Review Application. Please also refer to the responses to BCOAPO IR1 5.1 and 5.2.

6.0 Exhibit B-2, pages 13 and 15

Preamble: The Application states (page 13):

> The Projected Year is forecast based on the latest years of actual data available (through 2019). The January through June forecast values were then replaced with Actual 2020 values.

6.1 What is the impact on the 2020P forecast (as set out in Table 3-2) of replacing the January through June forecast values with actual values?

Response:

Please refer to the response to BCUC IR1 8.1.

7.0 Reference: Exhibit B-2, pages 13-14 and Appendix A2, page 8 (Table 5.3)

7.1 With respect to Table 5.3, the footnote on page 14 explains that the values for 2020P and 2021F are incremental values as compared the actual embedded 2019 savings. Please explain the basis for the values set out in Table 5.3 for the years 2015-2019 (e.g. are they: i) the incremental savings as compared to actual embedded 2014 savings, ii) the incremental savings in each year as compared to the actual embedded savings in the prior year, or iii) something else)?

Response:

The savings shown in Table 5.3 are the incremental savings in each year and do not include embedded savings from previous years.

7.2 With respect to Table 5.3, please provide the DSM with Losses values for each of the years 2010-2014 consistent with the approach used for 2015-2019.

7.3 For the years 2010-2019 please provide a breakdown of the annual reported DSM with Losses consistent line items set out in Table 3-1 (page 14).

Response:

The following table provides the DSM with Losses values by rate class for each of the years 2010-2014 consistent with the approach used for 2015-2019.

DSM Savings with Losses, GWh

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Residential	6	4	6	11	6	4	9	7	2	5
Commercial	11	19	13	8	3	4	5	13	17	10
Wholesale	8	10	9	6	3	2	4	5	6	4
Industrial	3	1	1	2	1	1	2	1	1	3
Lighting	0	0	0	0	0	0	1	0	2	2
Irrigation	0	0	0	0	0	0	0	0	0	0
Net Load	27	33	29	27	13	12	21	26	29	24
Losses	2	3	3	2	1	1	2	2	3	2
Gross Load	29	36	32	30	15	13	23	28	31	26

8.0 Reference: Exhibit B-2, pages 16-18 and Appendix A3, pages 3-4

Preamble: The Application states (Appendix A3, page 3):

"The formula to forecast the expected before-savings residential load in year t is:

$Before\ Savings\ Loadt = UPCt \times Average\ Customer\ Growtht$

where UPC (use per customer in MWh per customer per year) is before-savings".

The Application also states (Appendix A3, page 3):

"Next, average customer count in year t is calculated as:

$Average\ Customer\ Countt = (Year\ End\ Countt - Year\ End\ Countt)$

The year-end customer count was based on the least squares regression model below.

$Average\ Customer\ Countt = b0 + b1 \times Populationt$"

8.1 With respect to the first equation in the preamble, is the UPC multiplied by the "Average Customer Growth" or by the "Average Number of Customers" in order to derive the "Before Savings Load"? If "Average Customer Growth" is used, please explain why this is appropriate.

Response:

FBC provides the following corrected equations:

$$\text{Before Savings Load}_t = \text{UPC}_t \text{ x Average Customer Count}_t$$

$$Average\ Customer\ Count_t = \frac{(Year\ End\ Count_t + Year\ End\ Count_{t-1})}{2}$$

$$Year\ End\ Customer\ Count_t = b_0 + b_1 \times Population_t$$

The (before-savings) UPC is multiplied by the Average Customer Count, not the Average Customer Growth in order to derive the before-savings load.

8.2 With respect to the second equation in the preamble, please provide the historical and forecast population values used and indicate whether they are year-end or average annual values.

Response:

FBC assumes that BCOAPO is referring to the third equation (as corrected in the response to BCOAPO IR1 8.1):

$$Year\ End\ Customer\ Count_t = b_0 + b_1 \times Population_t$$

The regression for the residential customer count is based on 25 years of historical data. In the table below, FBC provides the population data requested, along with the residential customer count.

Year End Residential Customer Count and Population 1995 to 2021

Year	Customer Count	Population
1995	71,844	207,411
1996	73,413	210,841
1997	74,934	213,004
1998	76,172	214,041
1999	77,101	214,325
2000	78,008	214,653
2001	79,121	215,254
2002	80,421	216,302
2003	82,174	216,929
2004	84,008	218,585
2005	86,870	221,770
2006	89,181	225,673
2007	105,538	230,853
2008	107,926	235,288
2009	109,396	236,605
2010	110,735	237,083
2011	111,843	239,114
2012	112,295	241,327
2013	111,862	244,866
2014	113,431	249,754
2015	114,166	253,916
2016	115,772	257,308
2017	117,748	260,756
2018	120,291	263,745
2019	122,465	266,032
2020	123,407	268,429
2021	124,603	270,925

8.3 With respect to the second equation in the preamble, is the dependent variable the year-end customer count (as indicated by the text) or the average customer count (as indicated by the formula)?

Response:

FBC assumes this question pertains to the third equation in the preamble and not the second. Please refer to the response to BCOAPO IR1 8.1 for the corrected equation.

The dependent variable is the year-end customer count.

8.4 Please confirm that the values set out in Appendix A2, Table 3.1 are year-end values and the customer counts used to determine the UPC for each year are based on the average of the year-end customer count for the year concerned and the previous year.

Response:

Confirmed.

8.5 Please provide a schedule that for the years 2010-2019 sets out the annual cumulative Residential DSM savings per customer (using 2010 as the base year).

8.6 Over the 2010 to 2019 period is there a trend in the cumulative Residential DSM Saving per Customer that will be impacting the value for the UPC Slope set out in Table A3-3?

Response:

The following table sets out the annual cumulative Residential DSM savings per customer (using 2010 as the base year). DSM savings per customer are first calculated on an annual basis then added to previous years' values to show cumulative savings per customer.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Residential Program Savings (MWh)	11,638	11,393	12,758	16,200	8,686	5,639	12,538	10,154	6,553	7,850
Residential customer count	97,883	98,795	99,228	111,862	113,431	114,166	115,772	117,748	120,291	122,465
Annual savings per customer (kWh)	119	115	129	145	77	49	108	86	54	64
Cumulative savings per customer (kWh)	119	234	363	508	584	634	742	828	883	947

The cumulative savings per customer are embedded in the historical actuals used to forecast future UPC. As a result, the before-savings forecast UPC slope as shown in Table A3-3 includes the impact of the cumulative DSM. The slope assumes that DSM programs and adoption will continue at historical levels. New DSM programs are accounted for with incremental DSM, which is subtracted from the before-savings forecast to arrive at the after-savings forecast.

8.7 Is the Slope UPC coefficient (-0.24) statistically significant (i.e. statistically different from zero)?

Response:

Confirmed. The slope of the UPC coefficient of (-0.24) is statistically significant.

As shown in the regression output in the table below, the p-value for the UPC coefficient ("X Variable 1", highlighted below) is 0.00002.

The p-value is a measure of the probability that the UPC slope coefficient is zero. The low observed p-value shown above implies high confidence in the regression equation and the slope coefficient (-0.24) is concluded to be statistically significant.

Regression Statistics	
Multiple R	0.955541
R Square	0.913058
Adjusted R Square	0.90219
Standard Error	0.234118
Observations	10

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	4.604978	4.604978	84.01506	0.00002
Residual	8	0.438491	0.054811		
Total	9	5.043468			

	Coefficients	*Standard Err*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	487.6311	51.92493	9.391078	0.00001	367.8919649	607.3701725	367.8919649	607.3701725
X Variable 1	-0.23626	0.025776	-9.16597	0.00002	-0.295696703	-0.17681958	-0.295696703	-0.17681958

8.8 Is the year-end Residential Customer count forecast for 2020P based strictly on the results of the regression equation (per Appendix A3, page 4) or does it incorporate the information regarding the actual customer counts for January to June 2020?

Response:

The year-end Residential customer count forecast for 2020P is based strictly on the results of the regression and does not include actuals from January to June of 2020.

8.9 Is the average Residential Customer count forecast for 2020P (per page 11) based strictly on the average of: i) the results of the regression equation (per Appendix A3, page 4) for the 2020 year-end value and ii) the actual 2019 year-end value? If not, how was it determined?

Response:

The customer count shown on page 11 (line 2) used to calculate the average customer growth factor is the total number of customers, not residential customers. The 2020P value of 141,189 is the 12-month average customer forecast, shown below.

The December 2020P total customers of 141,616 agrees to Table 3-3 of the Application, which includes the Residential customers projection derived using the regression equation.

	2020
Jan	141,319
Feb	141,493
Mar	141,501
Apr	141,611
May	141,784
Jun	141,956
Jul	139,116
Aug	139,855
Sep	140,598
Oct	141,339
Nov	142,080
Dec	141,616
12 Month Average	141,189

8.10 What is the actual Residential customer count as of June 2020?

Response:

The total customer count as of June 2020 is 141,956, of which 123,289 customers are residential.

9.0 Reference: Exhibit B-2, pages 18-20 and Appendix A3, pages 4-5

9.1 Please provide the regression equation for the Commercial customer count and indicate the years used in the estimation.

Response:

The regression results for the Commercial customer count are shown below and are based on ten years of historical year-end customer counts, and GDP from the CBOC for the Province of British Columbia.

Commercial Customer Count Forecast Regression

Regression	Commercial
Start Year	2010
End Year	2019
R^2	0.96
Adjusted R^2	0.95
df	9
Intercept	615
Slope GDP	0.06

The regression equation is:

$$Commercial\ Customer\ Count\ Forecast_t = 615 + 0.06 \times GDP_t$$

9.2 Is the year-end Commercial Customer count forecast for 2020P based strictly on the results of the regression equation (per page 18) or does it incorporate the information regarding the actual customer counts for January to June 2020?

Response:

The year-end commercial customer count forecast for 2020P is based strictly on the results of the regression equation and does not rely on January to June 2020 actuals.

9.3 Over the 2005 to 2019 period is there a trend in the cumulative Commercial DSM Saving that will be impacting the value for the Slope GDP set out in Table A3-5?

Response:

The GDP slope is based on 15 years of historical normalized commercial actuals, which includes embedded DSM savings for each year.

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

9.4 What was FBC's actual Commercial customer count as of June 30, 2020?

Response:

FBC's actual commercial customer count as of June 30, 2020 was 16,071.

10.0 Reference: Exhibit B-2, page 20-21 and Appendix A3, page 5

Preamble: It is noted that the Commercial Load and Customer forecasts are based on a GDP forecast that includes impacts due to the COVID-19 pandemic.

10.1 In the case of the Wholesale forecast, was the timing of the survey such that the forecast can be viewed as including impacts due to the COVID-19 pandemic?

Response:

The wholesale survey responses were received between the middle of March through the start of April 2020. FBC cannot say for certain what impacts from the COVID-19 pandemic each wholesale customer incorporated into their forecast. However, FBC has not observed any substantial change in wholesale usage during the pandemic and, as shown in response to BCUC IR1 8.1, has only seen an average variance of 0.3 percent compared to forecast from January to June of 2020.

10.2 In the case of the Industrial forecast, was the timing of the load survey such that the forecast can be viewed as including impacts due to the COVID-19 pandemic?

Response:

Please refer to the response to CEC IR1 6.1.

11.0 Reference: Exhibit B-2, pages 15 and 24-25

11.1 Please explain why losses increase in 2020 versus 2019 (i.e., 276 GWh vs. 274 GWh) when the net load in 2020 is lower than that in 2019 (per Table 3-2).

Response:

The 2020 losses should have been stated as 270 GWh, as explained in the response to BCUC IR1 3.1, and are therefore forecast to be lower than the losses in 2019.

12.0 Reference: Exhibit B-2, pages 29 and 31-32

Preamble: The Application states (page 29):

> The decrease in the 2020 Projected Power Supply cost is attributed to increased market savings as well as a decrease in gross load, both of which result in decreased purchases under the Company's power purchase agreement with BC Hydro. This decrease is slightly offset by increased rates for Waneta Expansion supply.

The Application states (page 31)

> The reduction in 2020 Projected power purchase expense is attributed to decreased purchases from the BC Hydro PPA due to decreased gross load and lower cost wholesale market purchases.

12.1 Please provide a revised version of Table 4-2 that shows the GWh contribution associated with each of the rows towards the Approved 2019 total of 3,602 GWh, the Actual 2019 total of 3,616 GWh and the Projected 2020 total of 3,562 GWh. For each row please also include the resulting cost per MWh. In doing so, please include rows to account for FortisBC's own generation and, if necessary, any external sales.

<u>Response:</u>

The revised Table 4-2 is provided below. FBC notes the following regarding the revised Table 4-2:

- FBC's own generation is included in terms of GWh contribution, and has no associated Power Purchase Expense;
- The Waneta Expansion contract is a capacity only purchase agreement and therefore no has no resulting cost per MWh;
- The CPA Balancing Pool cost per MWh is $0 and any value shown is year to year timing differences in the storage of entitlement energy;
- The Transmission Service Loss Recoveries have no associated cost as the losses are physically delivered to FBC; and
- The Special and Accounting adjustments have no volumes associated, and therefore no resulting cost per MWh.

Revised Table 4-2: 2019 and 2020 Power Purchase Expense ($ millions)

Line No.	Description	Approved 2019	Actual 2019	Projected 2020	Difference
1	Brilliant	$ 41.865	$ 41.848	$ 41.505	$ (0.360)
2	BC Hydro PPA	52.174	40.740	42.088	(10.085)
3	Waneta Expansion	40.221	38.763	40.250	0.030
4	Market and Contracted Purchases	10.637	17.168	14.617	3.980
5	Sale of Surplus Power	-	(0.577)	-	-
6	Independent Power Producers	0.076	0.063	0.062	(0.014)
7	Self-Generators	0.093	0.059	0.110	0.017
8	CPA Balancing Pool	-	0.784	0.018	0.018
9	Transmission Service Loss Recoveries	-	-	-	-
10	Special and Accounting Adjustments	-	0.154	(0.039)	(0.039)
11	Total	$ 145.065	$ 139.002	$ 138.612	$ (6.453)
12					
13	Gross Load (GWh)	3,602	3,618	3,562	(40)
14					
15	FortisBC Entitlement	1,586	1,588	1,586	(0)
16	Brilliant Energy	911	897	918	8
17	BC Hydro PPA Energy	759	585	641	(118)
18	Waneta Expansion	-	-	-	-
19	Market and Contracted Energy	342	539	399	57
20	Surplus Power Energy	-	(24)	-	-
21	IPP and Self-Generators Energy	3	2	3	(0)
22	CPA Balancing Pool	-	16	0	0
23	Transmission Service Loss Recoveries	-	15	13	13
24	Special and Accounting Adjustments	-	(1)	0	0
25					
26	Total Brilliant CDN$/MWh	$ 45.98	$ 46.63	$ 45.21	$ (0.77)
27	Total BC Hydro PPA CDN$/MWh	68.72	69.63	65.65	(3.08)
28	Total Market and Contracted CDN$/MWh	31.09	31.86	36.64	5.55
29	Total Surplus Power CDN$/MWh	-	(23.56)	-	-
30	Total IPP/Self-Generators CDN$/MWh	49.83	56.30	51.19	1.35

12.2 With respect to Table 4-2, how much of the reduction in BC Hydro PPA costs and GWh (as between 2019 Projected vs. Approved) was due to being able to replace the PPA energy purchases with additional market purchases?

Response:

FBC assumes that the question is meant to compare 2019 Actual to 2019 Approved. The entirety of the reduction in Actual 2019 BC Hydro PPA costs (-$11.434 million) and GWh (-174) compared to 2019 Approved was due to being able to replace the more expensive PPA energy purchases with market purchases.

12.3 With respect to Table 4-2, is all of the increase in Market and Contract purchases (2019 Projected vs. Approved) the result of increases to replace more expensive PPA energy purchases? If not, how much of the increase (in both dollar and GWh terms) was for this reason?

<u>Response:</u>

The majority of the increase in Market and Contract purchases was a result of displacing more expensive PPA energy purchases. The increase in Market and Contract purchases was 197 GWh, which is 23 GWh higher than the decrease in BC Hydro purchases of 174 GWh. Therefore, only 174 GWh of the total increase of 197 GWh (or 88.3 percent) can be attributed to displacing BC Hydro purchases. Market and Contract expense increased by a total of $6.532 million, of which $5.768 million (88.3 percent) can be attributed to displacing BC Hydro purchases. The remaining Market and Contract purchases were bought to meet increased gross load as well as cover additional maintenance outages.

12.4 Please explain the increase in BC Hydro PPA costs as between Actual 2019 and Projected 2020. If the BC Hydro PPA purchased energy is higher in 2020, please explain why.

<u>Response:</u>

As shown in the revised Table 4-2 provided in response to BCOAPO IR1 12.1, the 2020 Projected BC Hydro PPA energy is 56 GWh greater than 2019 Actual. There are two reasons for this increase. First, the PPA nomination was greater for the 2019/20 contract year than it was for 2018/19 as a result of an increased load forecast. A greater 2019/20 PPA nomination increases the minimum take required under this contract during the first nine months of 2020 compared to the same period in 2019. In addition, FBC only forecasts firm contracted resources to meet its future load requirements. As real-time market opportunities arise in the second half of 2020, FBC may be able further reduce the amount of PPA required. However, market and load conditions will ultimately dictate the ability to displace PPA.

12.5 How do the 2020P forecast BC Hydro PPA purchases compare with the PPA Nomination for the same period?

12.6 If the 2020P forecast BC Hydro PPA purchases exceed 75% of the PPA Nomination, please explain why the purchases cannot be reduced further and substituted with Market and Contract Purchases.

Response:

The 2019/20 PPA Nomination of 842 GWh spans October 2019 through September 2020, and does not completely align with 2020 Projected. The 2020/21 PPA nomination is equal to 674 GWh and spans October 2020 through September 2021. The 2020P forecast BC Hydro PPA purchases align with FBC taking approximately 75 percent of its 2019/20 PPA Nomination, which is equal to the minimum take requirements under that contract, and approximately 100 percent of the 2020/21 PPA nomination. If 2020/21 gross load comes in below plan or if market conditions permit, FBC plans to use the 25 percent flexibility in the PPA nomination to manage reductions to load or purchase cheaper energy from the market.

13.0 Reference: Exhibit B-2, pages 29 and 32-34

Preamble: The Application states (page 29):

> The increase in the 2021 Forecast Power Supply cost is mainly due to a gross load increase from 2020 Projected gross load, and therefore increased purchases under the Company's power purchase agreement with BC Hydro, as well as increased rates for BC Hydro and Waneta Expansion supply.

The Application also states (page 32):

> The forecast increase from $138.612 million in 2020 to $146.260 million in 2021 is mainly a result of an increase in gross load and correspondingly, a greater reliance on higher cost energy supplied by BC Hydro. Also contributing to the increase are reduced surplus sale expectations along with escalations to BC Hydro and Waneta Expansion contract rates.

13.1 Please provide a revised version of Table 4-3 that shows the GWh contribution associated with each of the rows towards the Projected 2020 total of 3,562 GWh and the Forecast 2021 total of 3,646 GWh. For each row please also include the resulting cost per MWh. In doing so, please include rows to account for FortisBC's own generation and, if necessary, any external sales.

<u>Response:</u>

The revised Table 4-3 is provided below. FBC notes the following regarding the revised Table 4-3:

- FBC's own generation is included in terms of GWh contribution and has no associated Power Purchase Expense;
- The Waneta Expansion contract is a capacity only purchase agreement and therefore has no resulting cost per MWh;
- The CPA Balancing Pool cost per MWh is $0 and any value shown is year to year timing differences in the storage of entitlement energy;
- The Transmission Service Loss Recoveries have no associated cost as the losses are physically delivered to FBC; and
- The Special and Accounting adjustments have no volumes associated, and therefore no resulting cost per MWh.

Revised Table 4-3: 2020 and 2021 Forecast Power Purchase Expense ($ millions)

Line No.	Description	Projected 2020	Forecast 2021	Difference
1	Brilliant	$ 41.505	$ 41.027	$ (0.478)
2	BC Hydro PPA	42.088	48.882	6.794
3	Waneta Expansion	40.250	41.462	1.212
4	Market and Contracted Purchases	14.617	14.751	0.134
5	Independent Power Producers	0.062	0.076	0.014
6	Self-Generators	0.110	0.061	(0.049)
7	CPA Balancing Pool	0.018	(0.000)	(0.018)
8	Transmission Service Loss Recoveries	-	-	-
9	Special and Accounting Adjustments	(0.039)	-	0.039
10	Total	$ 138.612	$ 146.260	$ 7.648
11				
12	Gross Load (GWh)	3,562	3,646	85
13				
14	FortisBC Entitlement	1,585	1,608	22
15	Brilliant Energy	918	916	(2)
16	BC Hydro PPA Energy	642	740	97
17	Waneta Expansion	-	-	-
18	Market and Contracted Energy	399	367	(32)
19	IPP and Self-Generators Energy	3	2	(1)
20	CPA Balancing Pool	-	-	-
21	Transmission Service Loss Recoveries	13	14	1
22	Special and Accounting Adjustments	0	-	(0)
23				
24	Total Brilliant CDN$/MWh	$ 45.21	$ 44.77	$ (0.44)
25	Total BC Hydro PPA CDN$/MWh	65.52	66.10	0.57
26	Total Market and Contracted CDN$/MWh	36.64	40.24	3.60
27	Total IPP/Self-Generators CDN$/MWh	18.52	31.61	13.09

13.2 How do the 2021forecast BC Hydro PPA purchases compare with the PPA Nomination for the same period?

Response:

The 2020/21 PPA nomination is equal to 674 GWh and spans October 2020 through September 2021. Because FBC has not yet entered into the 2020/21 contract year, FBC plans to use the full required PPA nomination until such time that the 25 percent flexibility in the PPA nomination is needed to either manage reductions to actual load or there are real-time opportunities to purchase cheaper energy from the market.

FBC has not yet submitted a 2021/22 PPA Nomination for the October 2021 through September 2022 contract year, and will do so by the June 30, 2021 deadline. Before the nomination deadline, FBC will attempt to enter into firm forward market contracts as per the next Annual Electric Contract Plan, in order to reduce the initial nomination amount.

13.3 It is noted that the increase in BC Hydro PPA GWh purchases (97 GWh) exceeds the increase in Gross Load (85 GWh). Please explain why, on a planned basis, BC Hydro PPA purchases (as opposed to Market and Contract Purchases) are used to address the increase in Gross Load.

Response:

On a planning basis, FBC uses firm resources to meet forecast load, and only market contracts executed at the time of filing are included in forecast figures. FBC may still contract additional energy for the 2021 calendar year and further reduce the amount of PPA required. In addition, FBC retains 25 percent flexibility in its PPA nominations in order to manage load reductions or capitalize on real-time market opportunities.

14.0 Reference: Exhibit B-2, page 34-35

Preamble: The Application states:

"FBC includes transmission wheeling losses in its load forecast and also includes loss recovery as a firm resource."

14.1 Please explain how/where Tables 4-2 and 4-3 include loss recovery as a firm resource.

Response:

Please refer to the responses to BCOAPO IR1 12.1 and 13.1 for the volumes associated with loss recoveries. While they are included as a firm resource to meet gross load, there is no associated line items in the original Tables 4-2 or 4-3, as FBC takes physical delivery of these volumes at zero cost.

15.0 Reference: Exhibit B-2, pages 36-38

Preamble: The Application states (page 37):

> "FBC implemented a number of customer relief measures in 2020 due to the COVID-19 pandemic, including the suspension of Late Payment Charges. As a result, 2020 Projected Late Payment Charges are expected to be lower than 2019 Approved. In 2021, FBC expects the amount of Late Payment Charges to return to a more normal level."

15.1 Please confirm that the reduction in Late Payment Charges revenue in 2020 will not be captured in the deferral account for the COVID-19 Customer Recovery Fund.

<u>Response:</u>

Confirmed.

The Projected 2020 Late Payment Charges revenue of $0.205 million incorporates six months of actual results, which include the customer relief measures implemented due to the COVID-19 pandemic. Given the updated projection, FBC expects minimal variances between Projected 2020 and Actual 2020 Late Payment Charges. Any variance between Projected and Actual 2020 amounts will be subject to earnings sharing, consistent with the treatment approved in the MRP Decision.

16.0 Reference: Exhibit B-2, pages 39-42 and Appendix C2, page 2

16.1 Does the determination of the 2019 Approved Base O&M and resulting Approved UCOM capture the impact of the actual 2019 AMI Costs and AMI savings.

16.1.1 If not, how would the values change if adjusted to reflect the actual 2019 AMI Costs and AMI Savings?

Response:

The 2019 Approved Base O&M and UCOM captures the impact of the 2019 Approved AMI costs and savings, rather than the 2019 actual amounts. FBC's 2019 actual information was not available during the MRP proceeding and FBC's best information at the time the MRP Application was filed was that the Actual net savings would equal the Approved. As such, $1.161 million in net AMI savings is embedded in the Base O&M and UCOM approved by the BCUC in the MRP Decision (page 118).

As shown in Appendix C2, the actual net AMI savings were $1.296 million, for a difference of $135 thousand. The 2019 Base O&M and UCOM have already been approved by the BCUC and revisiting these amounts is not within the scope of this proceeding. Nonetheless, using the actual net AMI savings amount would have resulted in a 2019 Base O&M of $57.495 million and UCOM of $411 (instead of $412).

16.2 Are the 2019 AMI Costs and 2019 AMI Savings included in the 2019 Approved UCOM representative of the amounts to be expected in future years, subject to inflationary adjustments?

16.2.1 If yes, please explain why.

16.2.2 If not, what further adjustments are required to the Costs or Savings in either 2020 or 2021 and why are these amounts not included in Table 6-4 as adjustments outside the formula?

Response:

As explained in the response to BCUC IR1 38.1 in the MRP proceeding,[4] AMI is now fully embedded in the electric organization, meaning that all processes related to its ongoing operation have been stabilized and optimized. FBC does not expect further significant changes in AMI costs or savings, which is why the Approved 2019 net AMI savings were approved by the BCUC in the MRP Decision to be embedded within the 2019 Base O&M for calculation of the UCOM under the MRP. FBC also notes that the costs and savings related to AMI that were

[4] MRP Application, Exhibit B-10.

previously calculated and recorded outside of the formula during the 2014-2019 PBR Plan term were being determined annually based on a comparison to FBC's pre-AMI operating environment. Given the length of time since AMI has been implemented, such a comparison is no longer meaningful, which is also why the net AMI savings have now been approved to be embedded as part of FBC's formula O&M.

There are no further adjustments required to the AMI costs or savings in either 2020 or 2021. It would not be appropriate to record adjustments outside the O&M formula (i.e., as part of Forecast O&M), as net AMI savings have been embedded into the Approved Base O&M and will be escalated annually as part of the Formula O&M, as approved by the BCUC in the MRP Decision.

17.0 Reference: Exhibit B-2, page 47

Preamble: The Application states:

"FBC's 2020 Rate Base includes the full-year impacts of the 2019 closing plant balances as well as the impact of the following amounts:

- Mid-year impact of capital additions, net of Contributions in Aid of Construction (CIAC) additions, resulting from regular capital expenditures of $85.874 million
- Mid-year impact of plant depreciation, net of CIAC amortization, of $63.910 million"

FBC's 2021 Rate Base includes the full-year impacts of the 2020 closing projected plant balances as well as the impact of the following amounts:

- Mid-year impact of capital additions, net of CIAC additions, resulting from regular capital expenditures of $92.133 million
- Mid-year impact of plant depreciation, net of CIAC amortization, of $71.554 million"

17.1 With reference to the Tables in Section 7.0 and the Schedules in Section 11.0, please provide the sources/derivation of the $85.874 million and $92.133 million values for 2020 and 2021 respectively.

17.2 With reference to the Tables in Section 7.0 and the Schedules in Section 11.0, please provide the sources/derivation of the $63.910 million and $71.544 million values for 2020 and 2021 respectively.

Response:

A detailed breakdown of the 2020 and 2021 regular capital additions and plant depreciation totals noted above are summarized below. Cross-references to the corresponding financial schedules are also included for reference.

Line No.	Particulars	2020	2021	Cross Reference
	(1)	(2)	(3)	(4)
1	Capital additions	96.981	103.598	2020 - Schedule 6.1, Column 7, Line 19, 2021 - Schedule 6.1, Column 6, Line 19
2	CIAC additions	(11.107)	(11.465)	Schedule 9, Column 4, Line 1
3	Regular capital additions	85.874	92.133	

Line No.	Particulars	2020	2021	Cross Reference
	(1)	(2)	(3)	(4)
1	Depreciation	60.666	63.789	2020 - Schedule 7.1, Column 8, Line 19, 2021 - Schedule 7.1, Column 7, Line 19
2	Cost of removal	7.438	12.182	2020 - Schedule 7.1, Column 10, Line 19, 2021 - Schedule 7.1, Column 9, Line 19
3	CIAC amortization	(4.194)	(4.417)	Schedule 9, Column 4, Line 3
4	Plant depreciation	63.910	71.554	

18.0 Reference: Exhibit B-2, page 48

BCUC Decision and Orders G-165-20 & G-166-20, page 126

18.1 Please explain why the Sustainment Capital Expenditures for 2020 and 2021 as set out Table 7-2 of the Application do not match those set out in Table 44 from the BCUC's MRP Decision.

<u>Response:</u>

As part of the MRP Compliance Filing, FBC reduced the annual forecast Sustainment Capital expenditures by $280 thousand in years 2020 through 2023 and by $431 thousand in 2024 from what was presented in the MRP Application and included as Table 44 in the MRP Decision.

FBC had committed to making this adjustment in response to BCUC IR2 202.4 in the MRP proceeding[5] in order to remove a duplication of expenditures between FBC's Porcelain Cut-Out Replacement program and an allowance that was included in the Distribution Small Planned Capital program.

The revised Sustainment Capital forecasts for 2020 through 2024 provided in Table 5 of the MRP Compliance Filing are provided below. For a copy of the complete MRP Compliance Filing, please refer to FBC's response to BCOAPO IR1 5.2.

Table 5: FBC Regular Capital Expenditures 2020-2024 ($millions)

	Average 2017-2019P	2020	2021	2022	2023	2024
Growth Capital	$ 21,285	$ 27,029	$ 23,042	$ 24,339	$ 26,283	$ 23,170
Sustainment Capital	30,403	50,463	49,818	42,830	44,377	53,470
Other Capital	13,683	15,752	14,712	14,756	15,281	15,134
Total Regular Capital	65,371	93,244	87,573	81,925	85,940	91,773
Regular Capital, MRP Application Table C3-20		93,524	87,853	82,205	86,220	92,204
Reduction in Distr. Small Planned Capital		(280)	(280)	(280)	(280)	(431)

18.2 With respect to Table 7-1 in the Application, did the BCUC also approve the 2020 and 2021 values for CIAC?

18.2.1 If yes, please indicate where.

18.2.2 If not, please explain the basis for the values used in the Application.

---

[5] MRP proceeding, Exhibit B-12.

Response:

The 2020 and 2021 CIAC forecasts presented in Table 7-1 of the Application are consistent with the 2020 and 2021 CIAC forecasts presented in the MRP Application.[6] The CIAC forecasts are a component of FBC's forecast Regular Capital expenditures, which the BCUC approved on page 131 of the MRP Decision. On page 131 of the MRP Decision, the BCUC stated the following:

> The Panel approves the level of forecast FEI Sustainment capital and FBC Regular capital to be incorporated in rates for the three-year period 2020-2022.

[6] Table C3-42, p. C-106.

19.0 Reference: Exhibit B-2, page 50

19.1 How does the expected cost of $74.405 M for the Corra Linn Dam Spillway Gate Replacement Project compare with the expected cost at the time of its approval (per Order C-1-17)? If the variance is greater than 5% (plus or minus), please provide an explanation as to why.

Response:

The forecast Project cost of $74.405 million is approximately $12 million (19 percent) higher than the original Class 3 budget of $62.694 million approved by Order C-1-17, and approximately $7.6 million (11 percent) higher than the revised Class 1 budget of $66.8 million provided in the contract finalization report submitted to the BCUC in 2018.

In accordance with Order C-1-17, FBC submitted a contract finalization report to the BCUC after completing the Open Book Phase (OBP) of the Project. This report outlined, among other things, that the revised Class 1 budget to complete the Project was approximately $66.8 million. FBC explained the reason for the increase in the contract finalization report and the BCUC advised no further action was required. FBC has since compared all Project cost variances to the revised Class 1 budget.

The forecast Project cost of $74.405 million is approximately 11 percent higher than the revised Class 1 budget. The primary reason for the increase is the condition of the concealed components supporting the spillway gates. The condition of the concealed components is an ongoing Project risk that FBC continues to evaluate as more of the spillway gates are inspected.

During the OBP, FBC and the contractor developed pass/fail criteria for various aspects (plumb, alignment, corrosion, etc.) of the concealed components to determine if the concealed components could be repaired or if they needed to be replaced. During the Design Build Phase, an inspection of the concealed components supporting spillway gates 6, 7, 8, 9, 10 and 11 revealed that the concealed components were in poor condition and met the replacement criteria outlined within the technical specification. The added scope of work to replace the concealed components, combined with the increased FBC labour, AFUDC, and other costs resulting from the Project delay required to replace the concealed components, are the primary drivers behind the increased Project forecast.

As the remaining eight spillway gates are the same vintage and have been exposed to the same operating environment as spillway gates 6 through 11, it is expected that the remaining eight spillway gates will also require replacement. The forecast Project cost, should the remaining eight spillway gates' concealed components require replacement, is estimated to increase from $74.405 million to $82.250 million, which is an increase of $15.406 million (23 percent) from the revised Class 1 budget of $66.8 million. Any such changes will not be reflected in rates until 2022, and FBC will provide an update in its Annual Review for 2022 Rates.

20.0 Reference: Exhibit B-2, pages 50-51 and Appendix B, pages 4-5

20.1 For which years in Appendix B, Figure 3 is the Peak Load (solid blue line) based on actual vs. forecast loads and what accounts for the large increase in 2019?

Response:

In Figure 3 of Appendix B, the solid blue line "Actual/Forecast Winter Peak Load (MVA)" shows the actual winter peak load from 2015 to 2019. The first forecast year is 2020. The large increase from 2019 to 2020 is due to customer interconnections expected to materialize in 2020, with the bulk of the increase from a single large industrial customer.

20.2 How is the Peak Load forecast (solid blue line) in Figure 3 impacted by the CIVID-19 pandemic?

Response:

FBC's peak demand forecast was prepared in 2019, before the onset of the COVID-19 pandemic. Since the onset, FBC has not observed a decrease in loading on PLA T1 and has no reason to expect that the peak load forecast shown in Figure 3 should be revised.

20.3 Are the two potential new loads still expected to materialize if the station capacity is increased?

Response:

Please refer to the response to BCUC IR1 31.1.

21.0 Reference: Exhibit B-2, pages 50-51 and Appendix B, pages 6-7

21.1 How many transformers are located at the PAS substation and at the Tarry substation.

<u>Response:</u>

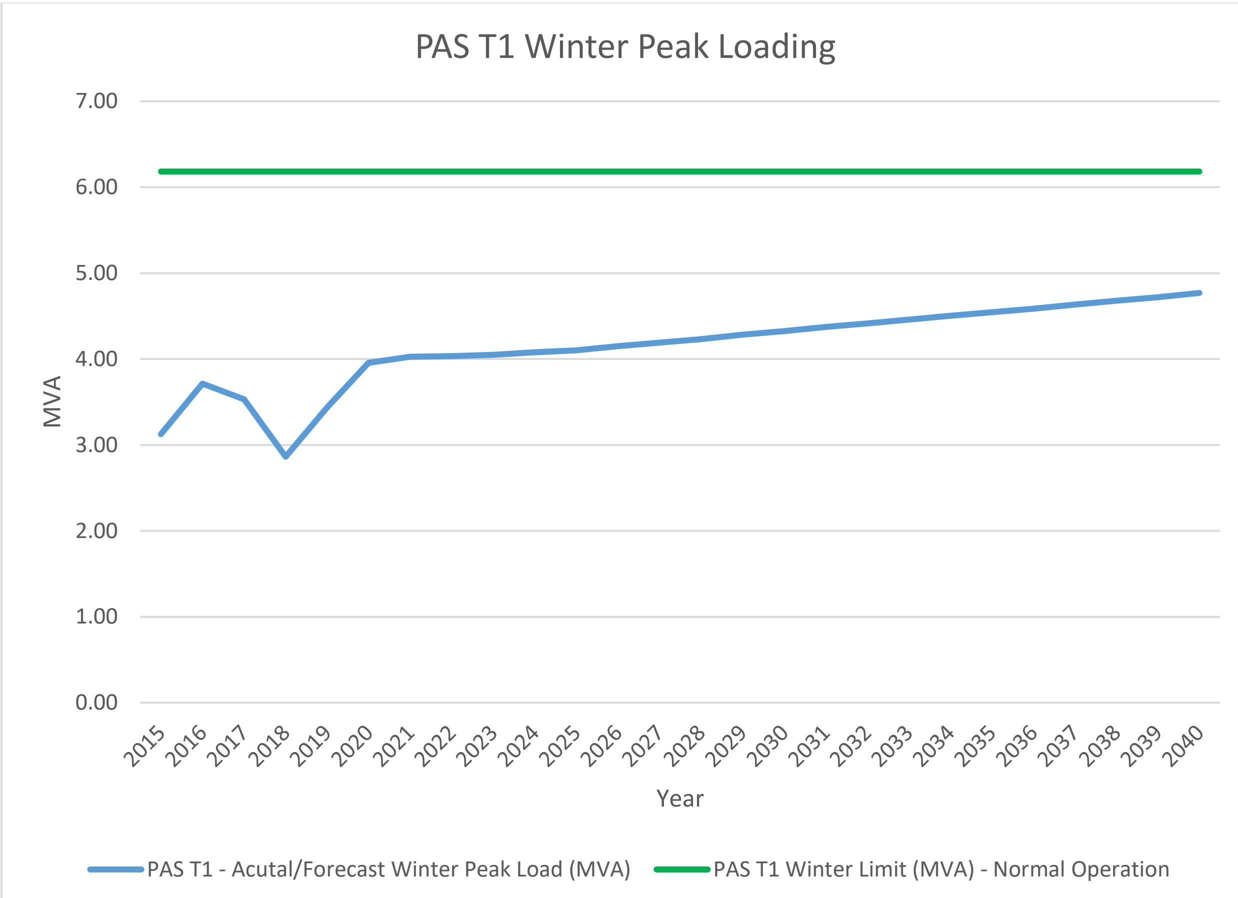
There is one transformer located at the Passmore (PAS) substation and one transformer located at the Tarrys (TAR) substation.

21.2 For each of the PAS and Tarry substations please provide a graph that sets out the historic and forecasts winter peak load along with their winter normal limits.

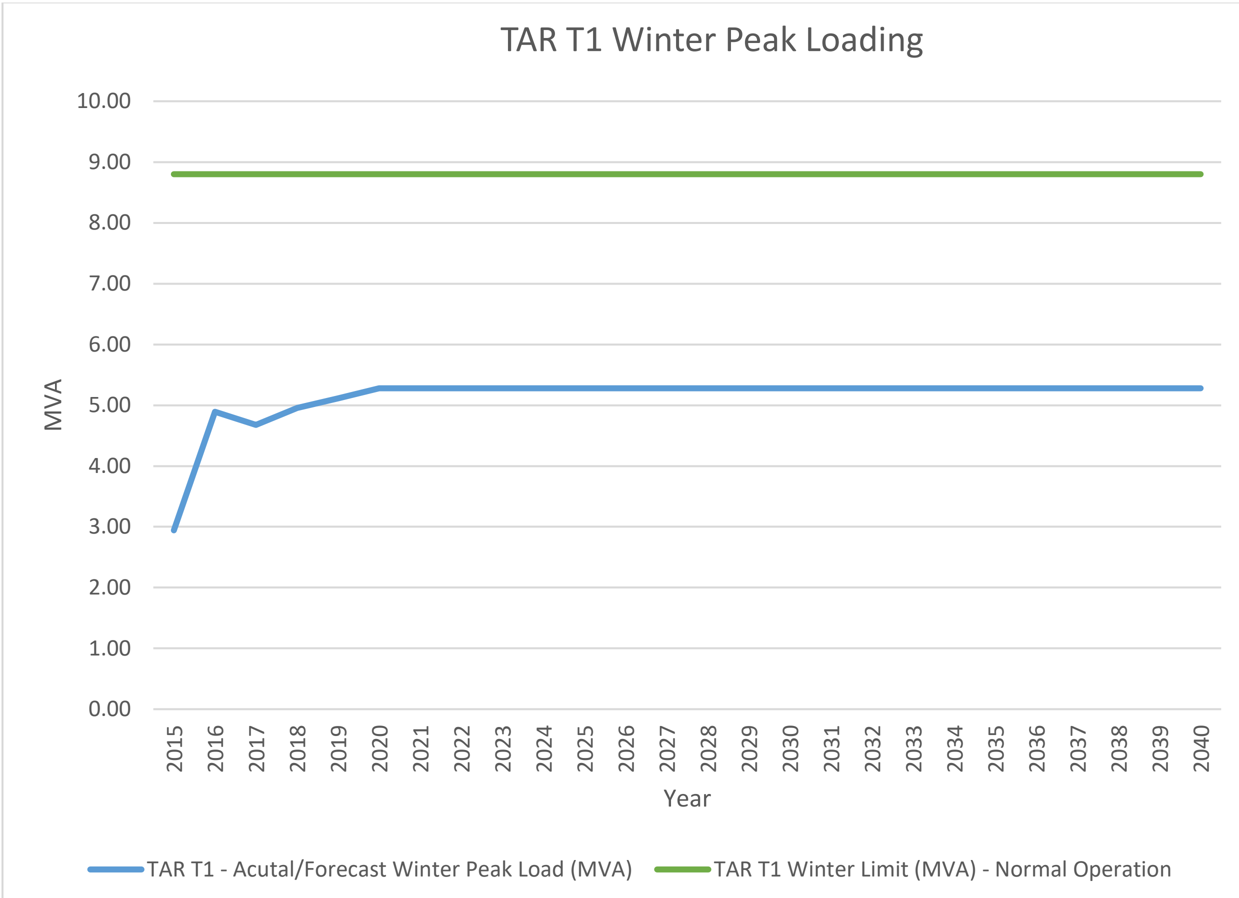
<u>Response:</u>

Please find below the graphs that set out the historical and forecast winter peak loads along with their winter normal limits for the PAS and TAR substations.

The PAS T1 transformer has a winter limit of 6.2 MVA. The forecast winter peak load for 2020 is approximately 4 MVA. Given the existing switch locations, approximately 2.2 MVA of PLA load can be transferred to PAS, which loads PAS T1 to its winter limit.



TAR T1 has a winter limit of 8.8 MVA. The forecast winter peak load for 2020 is 5.3 MVA. Given the system configuration, a small number (approximately 13 percent) of PLA customers could be transferred to TAR T1 during a PLA T1 outage; however, power quality issues originating with an industrial customer prevent the transfer of PLA customers to TAR supply.



Given winter peak loading, 13 percent of PLA area customers (approximately 2.2 MVA) can be supplied during a PLA T1 outage by transferring a portion of load to PAS T1. TAR T1 could supply an additional 13 percent of PLA area customers (approximately 1.2 MVA) if power quality issues did not prevent the load transfer. However, while some customers can be offloaded during a PLA T1 outage to neighbouring substations, this offload capability does not solve the capacity constraint at PLA in normal operation.

21.3 What are the planning criteria for the PLA substation (e.g. is it N-1 or N-0) and why?

Response:

Please refer to the response to BCUC IR1 30.4.

22.0 Reference: Exhibit B-2, pages 50-51 and Appendix B, page 7

22.1 If the only consideration was the aging infrastructure and equipment condition, when (in FBC opinion) would the transformer at PLA need to be replaced?

Response:

If only aging infrastructure and equipment condition were considered, the PLA transformer would need to be replaced by 2026 at the latest.

23.0 Reference: Exhibit B-2, pages 50-51 and Appendix B, page 19

23.1 Has FortisBC received any feedback from local residents or other parties regarding the proposed project and footprint expansion?

23.2 If yes, what concerns have been expressed and how does FortisBC plan on addressing them?

<u>Response:</u>

Please refer to the responses to BCUC IR1 34.1 and 34.2.

24.0 Reference: Exhibit B-2, page 77 (Schedule 2)

24.1 Please explain why the 2020 Beginning Plant in Service ($2,112,240) does not equal the Ending Plant in Service for 2019 ($2,119,226).

Response:

The 2020 Beginning Plant in Service of $2,112,240 in Column 3 ("2020 at Revised Rates") does not equal the 2019 Approved Ending Plant in Service of $2,119,226 in Column 2 ("2019 Approved") because the 2019 Approved balance was based on FBC's forecast at the time of filing the 2019 Annual Review. The 2020 Beginning Plant in Service balance incorporates 2019 actuals. Therefore, the variance is a result of changes between actual and forecast 2019 closing balances.

25.0 Reference: Exhibit B-2, pages 2-3 and 53

Preamble: The Application (page 53) states:

> Based on amortizing the opening deferral account balances using the approved and proposed amortization periods, the 2020 amortization expense for rate base deferral accounts is calculated as $4.691 million and the 2021 amortization expense is calculated as $5.536 million.

25.1 For which Rate Base Deferral Accounts is the current Application proposing and seeking approval of the amortization period?

25.1.1 For each of these accounts please either: i) provide the proposed amortization period and the associated rationale or ii) indicate where in the Application the proposed amortization period is explained.

Response:

FBC's requests for approval are set out in the Approvals Sought in Section 1.2 of the Application. FBC is seeking approval of the amortization period for two rate base deferral accounts: BCUC-Initiated Inquiry Costs and Annual Reviews for 2020-2024 Rates. For both deferral accounts, FBC has proposed to amortize the balances in the following year.

FBC believes a one-year amortization period for both rate base deferral accounts is appropriate as it is consistent with the recovery period of other similar regulatory application and proceeding type deferrals, including the Annual Reviews for 2015-2019 Rates deferral account. FBC also considered factors such as the potential rate impacts to customers, and matching the amortization period with the benefits and timeframe the Application was applicable for, when making a determination on the requested amortization period.

26.0 Reference: Exhibit B-2, pages 54-55, 88 (2020-Schedule 11) and 119 (2021-Schedule 11)

26.1 Please reconcile the 2020 Gross Additions and Transfers/Adjustments set out in 2020-Schedule 11 for the BCUC-Initiated Inquiry Cost Deferral Account with the 2020 and prior costs described on page 55.

26.2 Please reconcile the 2021 Gross Additions set out in 2021-Schedule 11 for the BCUC-Initiated Inquiry Cost Deferral Account with the 2021 costs described on page 55.

<u>Response:</u>

Please refer to the response to BCUC IR1 18.1.

27.0 Reference: Exhibit B-2, pages 53-56 and 89-90

27.1 Please explain why each of six deferral accounts are proposed to be Rate Base Deferral Accounts.

27.1.1 In particular please explain why the four accounts related to regulatory proceedings are rate base deferral accounts when the deferral accounts for many previous regulatory proceedings (see pages 89-90) were non-rate base deferral accounts financed at rates other than the weighted average cost of capital.

Response:

FBC considers that rate base treatment of its deferral accounts is the correct regulatory treatment because it results in the amounts expended on behalf of customers (or, if credits, collected from customers) being financed for rate making purposes at the same rate they are financed by the utility. FBC plans to request a rate base treatment (or weighted average cost of capital return) for new deferral accounts in most circumstances.

Deferrals attract a rate base rate of return (or an equivalent weighted average cost of capital return for non-rate base deferral accounts) to recognize the financing costs that are associated with the timing difference when there is an outlay of funds and when those costs are recovered from ratepayers (or between when there are costs recovered from customers that will subsequently be returned).

The rate base treatment is consistent with the approved regulatory treatment of other items where there is a deferred recovery of FBC costs financed by the utility:

1. Capital expenditures are included in rate base and earn a rate base rate of return because there is an outlay of cash in one year and a recovery in subsequent years that is being financed by the utility. This is equivalent to a deferred cost.
2. To the extent there is a timing difference between when revenues and operating expenses are incurred and recovered within a year, the financing of this is recognized through the inclusion of a working capital component in rate base, often supported by a lead lag study such as that recently approved in FBC's MRP Decision.

In its recent decisions, the BCUC has supported FBC's requests for rate base or weighted average cost of capital (WACC) treatment of deferral accounts. For example, in the MRP Decision, the BCUC approved FBC's request to establish a rate base deferral account for variances between forecast and actual BCUC Levies to be financed at FBC's WACC and FBC's request to establish a non-rate base Earnings Sharing deferral account attracting WACC. As part of Order G-133-20 regarding FBC's Application for Approval of the COVID-19 Customer Recovery Fund Deferral Account, the BCUC approved FBC's request for the aforementioned deferral account to be treated as rate base.

28.0 Reference: Exhibit B-2, pages 64-65

Preamble: The Application (page 64) states:

> "Unrecovered revenues are representative of accounts receivable balances that are determined to be uncollectible due to COVID-19 and therefore include the write-offs of bad debts. These forecast balances are meant to represent the unrecovered revenues specific to COVID-19 that are recognized in the deferral account and therefore are in excess of the normal course forecast bad debt expense that is recognized in indexed-based O&M."

28.1 Please indicate the level of bad-debt expense included in the indexed O&M for 2020 and 2021 and show how it is determined.

Response:

The indexed O&M represents an envelope amount of funding managed by FBC. As such, the annual indexed amount for O&M is determined on a total basis and does not identify or escalate specific cost items, such as bad debt expense, which may change year to year based on FBC's customers' ability to pay their bills. However, in order to be responsive, applying the approved O&M escalation factors to the amount of bad debt expense embedded in the 2019 Base (as approved in the MRP Decision), results in 2020 and 2021 indexed bad debt O&M amounts that approximate $1.055 million and $1.104 million, respectively. The calculations are shown in the table below:

Setting 2019 Base		
2018 Bad Debt Expense ($000)	$ 1,000	
2019 Inflator	1.02382	Order G-166-20
Bad Debt Expense in Base O&M ($000)	$ 1,024	
Average Number of Customers	139,916	
Bad Debt Expense per Customer	$ 7.32	
2020 Annual Review		
Inflation Factor	2.309%	
Indexed Bad Debt Expense per Customer	$ 7.49	
Average Customer Forecast - Rate Setting Purposes	140,871	
Bad Debt Expense in 2020 Indexed O&M ($000)	**$ 1,055**	
2021 Annual Review		
Inflation Factor	3.793%	
Indexed Bad Debt Expense per Customer	$ 7.77	
Average Customer Forecast - Rate Setting Purposes	142,045	
Bad Debt Expense in 2021 Indexed O&M ($000)	**$ 1,104**	

28.2 Does FortisBC intend on recognizing in the deferral account all bad debt expense in excess of the forecast bad debt expense that has been included in the indexed-based O&M for 2020 and 2021?

28.2.1 If yes, please explain why this approach is reasonable.

28.2.2 If not, please outline how FortisBC intends on determining the portion of actual bad debt expense for 2020 and 2021 that will be included in the deferral account.

Response:

FortisBC intends to adhere to two key principles for 2020 and beyond to recognize bad debt additions to the COVID-19 Customer Recovery Fund deferral account:

- Customer write-off balances recognized in the COVID-19 Customer Recovery Fund deferral account will be reasonably verifiable as being caused by COVID-19, with customer input being a primary consideration. Conversations and communications with customers throughout the various steps in the collections process will provide an indication as to the impact that COVID-19 has had on the outstanding balance and the ability of the customer to pay; and;
- Bad debts associated with COVID-19 should not have a significant impact on index-based O&M. It is generally expected that bad debt expense not attributable to COVID-19 would approximate the index-based O&M amount, and bad debts specific to COVID-19 would be in excess of the index-based O&M amount and therefore captured in the deferral account.

These principles would then ensure that the effect of COVID-19 on bad debt expense does not result in a significant impact on the determination of earnings sharing.

While FortisBC will continue to adhere to these main principles, there is some uncertainty in how bad debt expense will be impacted in 2020 and beyond. As the collections process has recently re-commenced, FortisBC is just beginning to gain additional information from customers on the impact of COVID-19 on their ability to pay their natural gas and electricity bills. As more customer information becomes available in the coming weeks and throughout the course of the pandemic, this will help to better define the allocation of bad debt expense between index-based O&M and the deferral account. A review of the index-based O&M expense in comparison to historical levels will also provide useful information.

The impacts of COVID-19 will not be limited to 2020 and as such, review of account additions and the method for the determination of those additions will occur once more information is known, and prior to the determination of the method of recovery of deferral account balances from customers.

29.0 Reference: Exhibit B-2, pages 67-68

Preamble: The Application states (page 67):

"Any variances from interest rates used to set rates, and any variances in interest resulting from items subject to flow-through in the Flow-through deferral account, will be flowed through to customers. All other differences in interest expense will affect the achieved ROE and be subject to earnings sharing".

The Application states (page 68):

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

29.1 Please indicate what would give rise to "other differences in interest expense" that would be subject to earnings sharing.

Response:

Other differences in interest expense that would be subject to earnings sharing are primarily associated with changes in the volume of short-term debt caused by variances in the rate base (excluding Major Projects and Clean Growth Projects, if any). For clarification, other differences in interest expense do not include variances associated with long-term interest rates, timing and amount of long-term debt issuances, and short-term interest rates, all of which are subject to flow-through treatment.

29.2 Please provide a schedule that sets out the derivation of the 3.9% rate for the July 2021 debt issuance based on the forecast for benchmark Government of Canada Bond interest rates.

Response:

FBC's 3.9 percent rate for the July 2021 debt issuance was forecast as follows:

FBC's Long-Term Debt Rate	2021
30-year GOC Benchmark Bond Yield	1.60%
Indicative Credit Spread	1.90%
FEI's Long-Term Debt Rate	3.50%
Liquidity Premium	0.40%
FBC's Long-Term Debt Rate	**3.90%**

Notes:

[1] Liquidity premium is an estimate of additional spread required for a low-liquidity issuance of under $100 million, thus ineligible for index-tracking.

29.3 What is the timing of the sources for the benchmark Government of Canada Bond interest rates underpinning the 3.9% interest rate used for the July 2021 debt issuance? Is there a more recent forecast available and, if so, what is it?

Response:

To estimate future long-term debt interest rates, FBC uses 30-year benchmark Government of Canada Bond interest rate forecasts. These forecasts are based on projections provided by Canadian Chartered banks upon request. The timing of the sources for the benchmark Government of Canada Bond interest rates underpinning the 3.9 percent interest rate was the second quarter of 2020. FBC typically updates its forecasts annually as there is traditionally limited variability in forecasts from quarter-to-quarter and, in the continued economic uncertainty, an updated forecast would provide limited additional value at this time.

30.0 Reference: Exhibit B-2, page 72

30.1 Are the 20% and 30% increases in the assessed values for distribution and transmission based on the actual results of the major review by BC Assessment?

30.1.1 If not, what is the basis and is there a further update on the expected results of the review?

<u>Response:</u>

Yes, the increases are based on a three-year phase-in of actual results of the Major Review by BC Assessment.

31.0 Reference: Exhibit B-2, pages 138-139

31.1 Is the COVID-19 pandemic expected to have any impact (e.g. delay) on the timing of regular capital expenditures forecast approved as part of the MRP?

31.1.1 If not, why not?

31.1.2 If yes, will the revenue requirement impacts be included in any approval FBC seeks exogenous factor treatment for incremental impacts related to COVID-19?

<u>Response:</u>

Please refer to the response to BCUC IR1 32.1.

32.0 Reference: Exhibit B-2, page 147

32.1 Please update the 2020 results in Table 13-1 to include all months for which data is currently available.

Response:

FBC has updated Table 13-1 below for August 2020 YTD results, the most recent data available.

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

Performance Measure	Description	Benchmark	Threshold	August 2020 YTD
Safety SQIs				
Emergency Response Time	Percent of calls responded to within two hours	>=93%	90.6%	92%
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	0.78
Responsiveness to Customer Needs SQIs				
First Contact Resolution	Percent of customers who achieved call resolution in one call	>=78%	74%	81%[7]
Billing Index	Measure of customer bills produced meeting performance criteria	<=3.0	5.0	0.17
Meter Reading Accuracy	Number of scheduled meters that were read	>=98%	96%	99%
Telephone Service Factor (Non-Emergency)	Percent of non-emergency calls answered within 30 seconds or less	>=70%	68%	74%
Customer Satisfaction Index	Informational indicator - measures overall customer satisfaction	-	-	8.4
Average Speed of Answer	Informational indicator – the amount of time it takes to answer a call (seconds)	-	-	48

[7] First Contact Resolution surveying was suspended from March 23 to May 3 2020 as a result of the COVID-19 pandemic. The YTD figure does not contain data for the period that surveys were suspended.

Performance Measure	Description	Benchmark	Threshold	August 2020 YTD
Reliability SQIs				
System Average Interruption Duration Index (SAIDI) – Normalized	Annual SAIDI (average of cumulative customer outage time)	3.22[8]	4.52	3.17
System Average Interruption Frequency Index (SAIFI) - Normalized	Annual SAIFI (average customer outage)	1.57	2.19	1.63
Generator Forced Outage Rate	Informational indicator – Percent of time a generating unit is removed from service due to component failure or other events.	-	-	1.7%
Interconnection Utilization	Informational indicator – percent of time that an interconnection point was available and providing electrical service to wholesale customers.	-	-	99.92%

1

8 Benchmarks and thresholds for SAIDI and SAIFI are as calculated in the MRP Compliance Filing.

33.0 Reference: Exhibit B-2, page 150

Preamble: The Application states:

> "The June 2020 year-to-date performance 82 percent. This result excludes the period of March 23 to May 3, 2020, as all Service Quality Measurement (SQM) surveys were suspended during that time due to the COVID-19 pandemic."

33.1 Was the calculation of any other Service Quality Indicators impacted by the suspension of SQM surveys for the period March 2, 2020 to May 3, 2020?

Response:

No, the only Service Quality Indicator impacted by the suspension of SQM surveys for the period of March 2, 2020 to May 3, 2020 was First Call Resolution (FCR).

34.0 Reference: Exhibit B-2, pages154-56

34.1 With respect to Tables 13-11 and 13-12 please explain how the Annual Normalized Results for the June 2020 YTD values for SAIDI and SAIFI were determined.

<u>Response:</u>

The Annual Normalized Results for June 2020 YTD values for SAIDI and SAIFI were determined using a combination of actual results to the end of June, combined with a forecast for the remaining months of the year. The forecast for the remaining six months was calculated as a three-year average for those same months (July-December 3-year average for 2017 to 2019). This approach "annualizes" the YTD results and provides for an appropriate comparison of the current year's results to the benchmark, which is an annual number.

35.0 Reference: Exhibit B-2, Appendix C3, pages 2 and 11

35.1 Do the expenditures set out in Table C3-2 include the contributions to CoGF and Interfor (per page 2)?

<u>Response:</u>

Yes. Both the Interfor and CoGF contributions are included in Table C3-2.

Attachment 5.2

Doug Slater
Director, Regulatory Affairs

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

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

FortisBC
16705 Fraser Highway
Surrey, B.C. V4N 0E8
Tel: (778) 578-3874
Cell: (778) 214-3842
Fax: (604) 576-7074
Email: doug.slater@fortisbc.com
www.fortisbc.com

July 20, 2020

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

Attention: Ms. Marija Tresoglavic, Acting Commission Secretary

Dear Ms. Tresoglavic:

Re: FortisBC Energy Inc. and FortisBC Inc. (collectively FortisBC, the Companies or the Utilities)

Multi-Year Rate Plans for 2020 through 2024 (MRPs) approved by British Columbia Utilities Commission (BCUC) Decision and Orders G-165-20 and G-166-20 (Decision)

Decision – Compliance Filing

On June 22, 2020, the BCUC issued its Decision and Orders G-165-20 (FEI) and G-166-20 (FBC) setting out the approved MRP Plans for FEI and FBC for the period from 2020 through 2024 in response to the Application for FortisBC's MRPs for 2020-2024 (Application). The Decisions directed FEI and FBC to file a compliance filing with the BCUC for the Panel's approval incorporating the impacts of all adjustments as outlined in the Decision, within 30 days of the issuance of the Orders.

In this Compliance Filing, FortisBC provides the following in accordance with the directives in the Decision:

1. Directive 11: Revised 2020 I-factor for FEI and FBC reflecting the Companies' prior year labour and non-labour ratio;
2. Directive 35: Propose new benchmarks and thresholds for FBC's SAIDI and SAIFI;
3. Directive 43: Revised 2019 Base O&M per customer calculations for each of the Companies;
4. Directive 47: Revised 2019 Growth Capital Base Unit Cost calculation for FEI;
5. Directive 61: Implementation of FEI's Clean Growth Innovation Fund Rate Rider;

6. Commitment to Update FBC's Distribution Small Planned Capital Expenditures; and
7. Commitment to Update Lead-Lag Days in this Compliance Filing.

1. *Directive 11: Inflation Factor Calculation*

Directive 11 from pages 47 to 48 of the Decision states:

> …there is no disagreement among the parties with respect to the reference indexes being proposed (Statistics Canada CPI:BC and AWE:BC) which were relied upon in the Current PBR Plans… the Panel agrees with FortisBC and is persuaded that relying on more recent information rather than taking an average of recent time periods is likely to provide more accurate results… The Panel finds that the combination of these influences may result in differences in labour to non-labour ratios that could not be adequately captured by taking a five or ten-year average…. Therefore, to attain a higher degree of accuracy, the Panel finds that it is more appropriate to set the labour to non-labour ratio annually and to base it on the most recently completed year.

Based on the Panel's determinations, and consistent with the method used throughout the Companies' prior PBR term, FortisBC has calculated the I-Factor incorporating actual CPI-BC and actual AWE-BC data using the most current July to June indices incorporating the individual Utilities' labour and non-labour ratios from their most recently completed year, 2019.

On page 48 of the Decision the Panel set out the formula below to determine the I factor.

$$I = X \ x\, AWE{:}BC_{t-1} + Y \ x\, CPI{:}BC_{t-1}$$

Where:

- **I = Inflation Factor**
- **AWE:BC = labour index**
- **CPI:BC = non - labour index**
- **t - 1 = most recent July to June value**
- **X = the previous year's labour ratio; and**
- **Y = the previous year's non-labour ratio.**

Based on the Panel's determinations, the Utilities have calculated their respective 2020 Inflation Factors below.

Table 1: 2020 Inflation Factor Calculation

I Factor Calculation	FEI	FBC
CPI	2.692%	2.692%
AWE	2.873%	2.873%
Ratio		
Non Labour	48.000%	38.000%
Labour	52.000%	62.000%
Resulting I Factor	2.786%	2.804%

2. Directive 35: Updated Benchmarks and Thresholds for FBC's SQIs SAIDI and SAIFI

Directive 35 from pages 98 to 99 of the Decision states:

> In the view of the Panel a rolling three-year average benchmark would make it difficult to detect changes in service quality and therefore, rejects ICG's suggestion that FBC calculate the benchmark on that basis. Given the requirement for updated benchmarks and thresholds for SAIDI and SAIFI, the Panel directs FBC to propose new benchmarks and thresholds in the compliance filing to this decision.

For the benchmarks, and as outlined in the Application, to adjust for the influence of the Outage Management System (OMS) on the reported results, FBC proposed to update the existing SAIDI and SAIFI three year rolling average benchmark using the most recent three full years of results 2017, 2018 and 2019, which incorporate the impact of the OMS.

For the thresholds, and consistent with the change approved by the BCUC to report the results on an annual basis instead of a three-year rolling average, the thresholds below are calculated based on the annual results. Similar to the approach used to determine the thresholds for the prior PBR term, the proposed thresholds are based on statistical analysis (i.e., standard deviation) of the SAIDI and SAIFI historical results from 2010 to 2019.

Using the annual results from 2010 to 2019, the volatility as measured by two standard deviations are 1.30 for SAIDI and 0.62 for SAIFI. The proposed thresholds are then determined by adding the volatility calculated to the proposed benchmarks. For SAIDI, the proposed threshold of 4.52 is the sum of the proposed benchmark of 3.22 plus 1.30 (two standard deviations). For SAIFI, the proposed threshold of 2.19 is the sum of the proposed benchmark of 1.57 plus 0.62 (two standard deviations).

The benchmarks and thresholds using the above calculations are provided in Table 2.

Table 2: FBC Proposed Benchmarks and Thresholds for SAIDI and SAIFI

Service Quality Indicator	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	Proposed Benchmark	Proposed Threshold
System Average Interruption Duration Index - Normalized	2.84	1.86	1.95	2.01	2.32	2.13	2.10	4.05	3.15	2.45	3.22	4.52
System Average Interruption Frequency Index - Normalized	2.27	1.38	1.27	1.27	1.64	1.56	1.34	1.78	1.73	1.21	1.57	2.19

3. *Directive 43: 2019 Base O&M per Customer*

Directive 43 from pages 114 to 119 of the Decision states:

> The Panel approves the following incremental O&M funding for FEI: Controllable LNG O&M – 100 percent of the incremental amount requested of $1.853 million; Customer Expectations and Customer Engagement – 50 percent of the incremental amount requested resulting in a total for both categories being set at $2.36 million; Indigenous Relations – 100 percent of the incremental amount requested of $0.888 million; and System Operations, Integrity and Security – 100 percent of the incremental amount requested of $4.808 million.... Accordingly, the Panel finds FEI's request for this incremental funding to be necessary to ensure safe and reliable service and the amounts requested to be just and reasonable for inclusion in the FEI 2019 Base O&M.... The Panel approves the following incremental O&M funding for FBC: Engagement - 50 percent of the incremental amount requested being $0.040 million; and System Operations, Integrity and Safety – 100 percent of the incremental amount requested of $0.683 million.... Accordingly, the Panel finds FBC's request for this incremental funding to be necessary to ensure safe and reliable service and the amounts requested to be just and reasonable for inclusion in the FBC 2019 Base O&M.

Further to the adjustments made by the Panel, in Final Argument the Companies committed to update the Base O&M per Customer amount using the actual 2019 average number of customers in this Compliance Filing. Consequently, based on the Panel's determinations, and the commitment to use actual 2019 customer counts, FEI and FBC have recalculated their respective Base O&M per Customer amounts below.

FEI's Base O&M per Customer is reduced from $250 per customer as set out in the Application[1] to $246 as a result of the directed reductions in funding in addition to a higher than forecast 2019 customer count.

FBC's Base O&M per Customer is reduced from $416 per customer as set out in the Application[2] to $412, primarily as a result of a higher than forecast 2019 customer count.

---

[1] $256.150 million (response to BCUC IR1 24.1) divided by 1,024,962 customers (Application page C-19) = $250.
[2] $57.670 million (response to BCUC IR1 34.1) divided by 138,649 customers (Application page C-44) = $416.

Table 3: FEI Base O&M ($ millions) and Base O&M per customer

2018 actual Base O&M	$	238.693
Add temporary savings		1.677
Shared Services Studies Impact		(0.338)
Deduct 2018 actual FHI Management Fee		(12.383)
Adjusted 2018 Base O&M	$	227.649
2019 Inflator		1.02198
2019 Base O&M before adjustments	$	232.653
Adjustments:		
Exogenous Factors:		
2019 Z factor (EHT net of MSP)	$	0.972
Deferrals:		
FAES overhead		0.786
BCUC levies		(2.839)
NGIF funding		(0.409)
Flow Through treatment:		
Integrity Digs		(2.600)
LNG Plant O&M		5.101
2019 Normalized Forecast FHI Management Fee		11.682
2019 Reclass of FHI corporate services charged only to FEI		0.387
Total adjustments	$	13.081
New funding for MRP term		
Customer Expectations ***- 50 percent G-165-20***	$	0.680
Engagement ***- 50 percent G-165-20***		1.680
Indigenous Relations		0.888
System Operations, Integrity and Security		4.808
Total New Funding	$	8.056
2019 Base O&M	$	253.790
2019 Average Customers (Actual)		1,031,862
2019 Base O&M per Customer	$	246

Table 4: FBC Base O&M ($ millions) and Base O&M per customer

2018 actual Base O&M	$	53.839
Add temporary savings		0.500
Shared Services Studies Impact		0.338
Deduct 2018 actual FHI services direct charged to FBC		(1.023)
Deduct 2018 actual FI services direct charged to FBC		(1.615)
Adjusted 2018 Base O&M	$	52.039
2019 Inflator		1.02382
2019 Base O&M before adjustments	$	53.279
Adjustments:		
Exogenous Factors:		
2019 Z factor (EHT net of MSP)	$	0.240
2019 Z factor - MRS		1.540
Deferrals:		
Manual meter read		0.180
Flow Through treatment:		
AMI Project cost reductions		(1.161)
BCUC levies		(0.237)
2019 Normalized Forecast FHI Management Fee		3.374
FBC Costs included in FHI Corporate Services		(0.308)
Total adjustments	$	3.628
New funding for MRP term		
Engagement - ***50 percent G-166-20***		0.040
System Operations, Integrity and Security		0.683
Total New Funding	$	0.723
2019 Base O&M	$	57.630
2019 Average Customers (Actual)		139,916
2019 Base O&M per Customer	$	412

4. *Directive 47: 2019 Growth Capital Base Unit Cost for FEI*

Directive 47 from pages 119 to 122 of the Decision states:

> … the Panel considers that using an average cost of actual costs over a recent three-year period is a reasonable approach to calculate a representative cost…. The Panel approves FortisBC's proposal to adjust the 2016-2018 average actual unit costs for the increase related to the contractor pricing, regional growth activity and testing installations…. The Panel rejects FortisBC's proposal to

> adjust the 2016-2018 average actual unit costs for an increase in the field quality assurance costs and for muster kit & material allocation…. the Panel agrees with the CEC's view that inflation rates essentially reflect the cost changes for these items over time.

FEI has provides the recalculated 2019 Base Growth Capital per Customer below.

2019 Base Growth Capital per Customer is reduced from $3,811 per customer as proposed[3] to $3,704 per customer, as a result of the field quality assurance and muster kit and material allocation reductions.

Table 5: FEI Growth Capital per Gross Customer Addition

Line	Growth Capital ($000)	2016 Actual	2017 Actual	2018 Actual	Average	Reference
1	New Customer Mains	$ 12,823	$ 16,467	$ 24,494		
2	New Customer Services	31,246	39,149	53,993		
3	New Customer Meters	3,430	3,927	4,397		
4	System Improvements (DP)	2,953	3,566	4,433		
5	**Subtotal Growth (Gross)**	$ 50,452	$ 63,108	$ 87,316		Sum of Lines 1 through 4
6	CIAC	(2,505)	(2,770)	(2,529)		
7	**Total Growth (Net of CIAC)**	$ 47,947	$ 60,339	$ 84,787		Line 5 + Line 6
8	**Inflation Adjustment**	107.30%	104.86%	102.08%		
9	**Infl Adj Growth (Net)**	$ 51,447	$ 63,271	$ 86,551	$ 67,090	Line 7 x Line 8
10	**Gross Customer Additions**	17,261	20,825	22,439	20,175	
11	**Unit Cost Growth Capital $/GCA (Net of CIAC)**				$ 3,325	Line 9 / Line 10 x 1000
12						
13	Construction Price Increase				$ 9,146	
14	Field Quality Assurance				$ (1,515)	**G-165-20**
15	Muster Kit & Material alloc impact				-	**G-165-20**
16	**Incremental**				$ 7,631	Sum of Lines 13 through 15
17	**Average Gross Customer Additions**				20,175	Line 10
18	**Unit Cost Growth Capital $/GCA Incremental**				$ 378	Line 16 / Line 17 x 1000
19						
20	**Total Unit Cost Growth Capital $/GCA (Net of CIAC)**				$ 3,704	Line 11 + Line 18

5. *Directive 61: Implementation of FEI's Clean Growth Innovation Fund Rate Rider*

Directive 61 from pages 154 to 157 of the Decision states:

> … the Panel finds that FortisBC has demonstrated it needs to accelerate its innovation activities for FEI… FEI is unable to keep pace with the ambitious renewable gas targets set out in the CleanBC Plan. Given these circumstances, the Panel believes incremental funding for FEI to pursue such initiatives is warranted and required.

[3] Application, Table C3-3.

On July 9, 2020, FEI filed its quarterly gas cost filing for the Mainland and Vancouver Island Service Area effective August 1, 2020. Within this filing, FEI included the implementation of the Clean Growth Innovation Fund Rate Rider. FEI noted that the tariff continuity and bill impact schedules provided at Tabs 4 and 5 included the basic charge rate rider for the Clean Growth Innovation Fund. Therefore, pursuant to BCUC Order G-165-20, effective August 1, 2020, FEI will commence assessing a basic charge rate rider equaling $0.40 per month per customer as funding for FEI's Clean Growth Innovation Fund.

6. ***Commitment to Update FBC's Distribution Small Planned Capital Expenditures***

In its response to BCUC IR2 202.4, a duplication was noted between FBC's now-approved Porcelain Cut-Out Replacement program and an allowance included in the Distribution Small Planned Capital program for the replacement of only the highest-risk porcelain cut-outs. FBC committed to updating its capital expenditures forecast to remove this duplication upon approval of the separate replacement program, resulting in a reduction to the Distribution Small Planned Capital program of $0.280 million in each year from 2020 to 2023, and $0.431 million in 2024. The revised capital expenditures forecast is provided in the table below.

Table 5: FBC Regular Capital Expenditures 2020-2024 ($millions)

	Average 2017-2019P	2020	2021	2022	2023	2024
Growth Capital	$ 21,285	$ 27,029	$ 23,042	$ 24,339	$ 26,283	$ 23,170
Sustainment Capital	30,403	50,463	49,818	42,830	44,377	53,470
Other Capital	13,683	15,752	14,712	14,756	15,281	15,134
Total Regular Capital	65,371	93,244	87,573	81,925	85,940	91,773
Regular Capital, MRP Application Table C3-20		93,524	87,853	82,205	86,220	92,204
Reduction in Distr. Small Planned Capital		(280)	(280)	(280)	(280)	(431)

7. ***Commitment to Update Lead-Lag Days***

In FortisBC's Final Submission,[4] FEI and FBC committed to use the updated lead-lag days to calculate the cash working capital requirements in this compliance filing. Upon further contemplation, the Companies realize that applying the updated lead-lag days to the interim rate filings[5] serves no purpose as the interim rates are being recalculated on a permanent basis in the Annual Reviews for 2020 and 2021 rates being filed in August. Consequently, the approved lead-lag days will be used by both FEI and FBC when calculating the revenue requirements for each Company in its respective Annual Review processes.

The Companies also note one minor typographical error will respect to the allocation methodologies for corporate services. On page 140 of the Decision and Directive 57, the Panel approves:

> ...corporate services between FHI and FEI; and corporate services between FEI and FBC.

[4] Dated January 10, 2020, para. 650.
[5] Exhibits B-21 and B-22.

As corporate services are provided by FHI, the passage should read:

> ...corporate services between FHI and FEI; and corporate services between FHI and FBC.

If further information is required, please contact the undersigned.

Sincerely,

on behalf of FORTISBC

Original signed:

Doug Slater