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September 10, 2020

Sent via email/eFile

FBC ANNUAL REVIEW FOR 2020 AND 2021 RATES EXHIBIT A-3
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Ms. Diane Roy
Vice President, Regulatory Affairs
FortisBC Inc.
16705 Fraser Highway
Surrey, BC V4N 0E8
electricity.regulatory.affairs@fortisbc.com

Re: FortisBC Inc. – Annual Review for 2020 and 2021 Rates – BCUC Information Request No. 1

Dear Ms. Roy:

Further to your July 20, 2020 filing of the above-noted application, enclosed please find British Columbia Utilities Commission Information Request No. 1. In accordance with the regulatory timetable established by Order G-211-20, please file your responses on or before Thursday, October 1, 2020.

Sincerely,

Original signed by Jessica O'Brien for:

Marija Tresoglavic
Acting Commission Secretary

/mp
Enclosure



FortisBC Inc.
Annual Review for 2020 and 2021 Rates

INFORMATION REQUEST NO. 1 TO FORTISBC INC.

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A. LOAD FORECAST AND REVENUE AT EXISTING RATES

**1.0 Reference: LOAD FORECAST AND REVENUE AT EXISTING RATES
Exhibit B-2, Application, Section 3.2, p. 12
Load Forecast Methodology**

FortisBC Inc. (FBC) states on page 12 of the Application that the load forecast methodology for 2020 and 2021 is consistent with the forecasting method followed by FBC in previous years.

- 1.1 Please explain when FBC last conducted a comprehensive review of FBC’s current load forecast methodology for the purpose of setting rates.
 - 1.1.1 Please discuss whether FBC routinely conducts its load forecast methodology. If yes, please explain the frequency of when a comprehensive review of its load forecast methodology is conducted. If not, please explain why not.
 - 1.1.2 Please explain the factors that would suggest a need for a comprehensive review of FBC’s load forecast methodology.

2.0 Reference: LOAD FORECAST AND REVENUE AT EXISTING RATES
Exhibit B-2, Section 3.3, p. 14; Appendix A2, Section 5.3, p. 8; FBC Application for Approval of 2019–2022 Demand Side Management Expenditures Plan dated August 2, 2018, p. 14, Table 5-1
Demand Side Measures (DSM) savings

On page 14 of the Application, FBC provides Table 3-1 showing the breakdown of its DSM savings estimate for 2020 and 2021, respectively:

Table 3-1: Forecast Incremental 2020 and 2021 DSM Savings (GWh)⁶

Line		2020	2021
No.	Description		
1	Residential	(2)	(7)
2	Commercial	(7)	(20)
3	Wholesale	(2)	(7)
4	Industrial	(5)	(15)
5	Lighting	(0)	(1)
6	Irrigation	(0)	(0)
7	Net Load	(17)	(50)
8	Losses	(2)	(4)
9	Gross Load	(19)	(54)

FBC explains on page 6 of Appendix A3 that “[t]he forecast of DSM savings is consistent with the Company’s approved 2019 DSM Plan.”

Table 5-1 included in the FBC Application for Approval of 2019–2022 Demand Side Management Expenditures Plan shows the forecast DSM savings from years 2019 to 2022, and is replicated below:

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

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

2.1 Please reconcile the DSM savings forecasted for each customer class in 2020 and 2021 in the Application, respectively, with the energy savings estimates provided in Table 5-1 of FBC’s Application for Approval of 2019–2022 Demand Side Management Expenditures Plan.

2.1.1 If FBC has adjusted the estimated DSM savings from those included in Table 5-1 referenced above, please explain the basis (including inputs, assumptions and methodology) for any adjustments.

**3.0 Reference: LOAD FORECAST AND REVENUE AT EXISTING RATES
Exhibit B-2, Sections 3.4 and 3.4.7, pp. 14, 24
Losses**

On page 24 of the Application, FBC states it conducted a Losses Study in 2019 and, consistent with that study, has assumed a loss rate of 7.6 percent of gross load excluding company use. FBC forecasts the losses to be 276 gigawatt hours (GWh) and 279 GWh in 2020 (2020P) and 2021 (2020F), respectively.

On page 14 of the Application, FBC states that the total load, net of losses, is projected to be 3,273 GWh in 2020P, and 3,355 GWh in 2021F.

3.1 Please show the calculation for the forecast losses at 276 GWh and 279 GWh for year 2020P and 2021F, respectively. Please explain all inputs and assumptions.

3.1.1 If the forecast losses for 2020P and 2021F, respectively, do not equate to 7.6% of gross load excluding company use, please explain any difference.

**4.0 Reference: LOAD FORECAST AND REVENUE AT EXISTING RATES
Exhibit B-2, Appendix A2, Section 6, p. 9
Customer Count Variances to Forecast**

On page 9 of Appendix A2, FBC provides its customer count variance. The percent variance for commercial customer count for the years 2017, 2018 and 2019 was: -2.7%, -2.8%, -2.8%, respectively.

4.1 Please explain the attributable factors for the negative customer count variance for commercial customers over the 2017 to 2019 period.

4.1.1 Please explain which of the factors explained above are anticipated to persist into 2020 and/or 2021. Please explain why.

4.1.2 For the factors that are expected to persist into 2020 and/or 2021, please explain how they have been accounted for in the 2020P and/or 2021F commercial load forecast.

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

Page 9 of Appendix A2 also shows the actual customer count has been below forecast for lighting customers in each of year for 2014 through 2019. FBC explains on page 22 of the Application that the lighting customer count forecast method uses a five-year regression analysis.

4.2 Please explain the attributable factors for the negative customer count variance for lighting customers over the 2014 to 2019 period.

4.2.1 Please explain which of the factors explained above are anticipated to persist into 2020 and/or 2021. Please explain why.

4.2.2 For the factors that are expected to persist into 2020 and/or 2021, please explain how they have been accounted for in the 2020P and/or 2021F lighting load forecast.

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

4.3 Please discuss whether FBC considered using an alternative load forecast methodology to improve the forecast accuracy on the customer count forecast for the lighting customer class. If yes, please elaborate on FBC's findings. If not, please explain why not.

**5.0 Reference: LOAD FORECAST AND REVENUE AT EXISTING RATES
Exhibit B-2, Appendix A2, Section 6.4, p. 12
Residential Use per Account (UPC) Variances to Forecast**

On page 12 of Appendix A2 to the Application, FBC provides a table of Residential UPC, Normalized Actual to Forecast in Section 6.4. In the Table, 2019 percent variance is -8.0% actual to forecast.

- 5.1 Please explain the attributable factors for the forecast variance.
- 5.2 Please explain which of the factors explained above are anticipated to persist into 2020 and/or 2021. Please explain why.
 - 5.2.1 For the factors that are expected to persist into 2020 and/or 2021, please explain how they have been accounted for in the 2020P and/or 2021F residential load forecast.
 - 5.2.1.1 If the factors explained above have not been accounted for in the applicable load forecast, please explain why not.
- 5.3 Given the forecast variance experienced in 2019, please discuss whether FBC considered using an alternative load forecast methodology to improve the forecast accuracy on the residential UPC for 2020 and 2021. If yes, please elaborate on FBC's findings. If not, please explain why not.

**6.0 Reference: LOAD FORECAST AND REVENUE AT EXISTING RATES
Exhibit B-2, Appendix A2, Section 6.2, p. 10
Load Forecast Variance in 2019**

In Section 6.2 of Appendix A2, FBC presents the normalized actual to forecast load by customer class for each year from 2014 through 2019 and includes the forecast variance in terms of volume and percentage.

- 6.1 For each customer class that experienced a forecast variance of greater than 3% (in absolute value terms) in 2019, respectively, please explain the attributable factors for the forecast variance.
- 6.2 For each customer class addressed above, respectively, please explain which of the attributable factors for the forecast variance in 2019 are anticipated to persist into 2020 and/or 2021. Please explain why.
 - 6.2.1 For factors that are expected to persist into 2020 and/or 2021, please explain how they have been accounted for in the applicable load forecast for 2020P and/or 2021F for each customer class, respectively.
 - 6.2.1.1 If the factors explained above have not been accounted for in the applicable load forecast(s) in 2020 and/or 2021, please explain why not.

**7.0 Reference: LOAD FORECAST AND REVENUE AT EXISTING RATES
Exhibit B-2, Section 3.4.4, p. 22; Appendix A3, p. 5
Industrial Demand**

On page 21 of the Application, FBC describes its method to forecast industrial demand using a customer survey:

FBC sends all existing industrial customers a load survey that requests the customer's anticipated use for the next 5 years. A survey is used because individual industrial customers have the best understanding of what their future load will be. This year FBC received a response from 80 percent (41 of 51) of the surveys sent out. The responding customers represent approximately 92 percent of the total industrial load.

On page 5 of Appendix A3 to the Application, FBC further describes its load forecast method for industrial customers:

The before-savings industrial load is the sum of forecasts supplied by those individual customers who responded to the load survey and, for customers who did not respond, escalation of the customer's load in the preceding year by the CBOC forecast GDP growth rates for the industrial sector the customer is in.

- 7.1 Please compare the response rate and the corresponding load that the respondents represent as a percentage of industrial volume in years 2016 to 2020 in a table format.
 - 7.1.1 Please comment on the trend on the customer survey response rate.
 - 7.1.2 Please explain the measures that FBC has taken to improve the customer survey response rate since 2016.
- 7.2 If possible, please compare the forecast and actual load among non-respondents and respondents, respectively, from 2016 to 2020 in a bar graph and table format.
 - 7.2.1 Based on the response above, please comment on the forecast accuracy among respondents and non-respondents and explain the possible reasons for any difference between the two groups since 2016.

**8.0 Reference: LOAD FORECAST AND REVENUE AT EXISTING RATES
Exhibit B-2, Section 3.4.2.2, p. 19; Appendix A2, Section 2, pp. 2–4
Impact from COVID-19 pandemic**

FBC presents the monthly load forecast for each customer class under sections 2.3 through 2.8 in Appendix A2 of the Application. The monthly load forecast shows the normalized loads from January 2010 to December 2019, and actual loads from January 2020 to June 2020.

For the commercial customer class, FBC explains on page 19 of the Application that the 2020P and 2021F fluctuations are due to a Gross Domestic Product (GDP) projection from the Conference Board of Canada (CBOC) that includes COVID-19 impacts and the projected economic recovery.

- 8.1 Please compare the monthly forecast and actual load for each customer class presented in Section 2.3 through 2.8 of Appendix A2, respectively, for each month from January 2020 to June 2020 (inclusive) in a table format. Please also include the volume and percentage variance between forecast and actual for each month for each customer class, respectively.
 - 8.1.1 For each customer class, please compare the monthly forecast and actual customer count and UPC (if applicable), respectively, between January 2020 and June 2020.
 - 8.1.1.1 If the data requested above is not available, please explain why not.
 - 8.1.1.2 To the extent possible, please discuss the changes between customer count and UPC during the January 2020 and June 2020 period for each customer class, respectively.
- 8.2 Please discuss how much of the variance between forecast and actual customer count, UPC, and overall load experienced between January 2020 and June 2020 is attributable to the impact of the COVID-19 pandemic.
- 8.3 Please explain how the impact of the COVID-19 pandemic has been accounted for in FBC's load forecast for 2020P and 2021F for each customer class, respectively.

9.0 Reference: LOAD FORECAST AND REVENUE AT EXISTING RATES
Exhibit B-2, Section 11, pp. 76, 96–98, 107, 127–129
Revenue requirement and rate changes for 2020 and 2021

FBC presents the summary of rate change for 2020 in Schedule 1 in Section 11. FBC provides further details regarding energy volume sold and revenue at existing rates for 2020 in Schedule 17; the revenue at existing and revised rates for the year ending December 31, 2020 in Schedule 18; and the cost of energy for 2020 in Schedule 19.

FBC also provides equivalent financial schedules for year 2021 in Section 11.

9.1 In a table format, please calculate how the load forecast impacts FEI’s revenue surplus/deficiency and requested rate change for 2020 and 2021, respectively, if the gross load forecast was -10%, -5%, 0%, +5%, and +10% less/more than the forecast presented in the Application, respectively, assuming all else equal. Please explain all inputs and assumptions made.

9.1.1 Please also provide a revised Schedule 1, and Schedules 17 through 19 for year 2020 and 2021, respectively, in a functional excel spreadsheet with the above sensitivity analysis, if possible.

B. OTHER REVENUE

10.0 Reference: OTHER REVENUE
Exhibit B-2, Section 5.2, pp. 36–37
Apparatus and Facilities Rental

On pages 36 to 37 of the Application, FBC states “The 2020 Projected [Apparatus and Facilities Rental] is higher than 2019 Approved due to a new pole attachment contract as well as escalations in unit rental rates for continuing contracts. The 2021 Forecast is higher than 2020 Projected due to escalations in unit rental rates.”

10.1 Please provide further detail regarding the new pole attachment contract in 2020 (e.g. contract term, number of poles that are contacted, unit rate per pole contact).

10.2 Please explain the drivers of unit rental rates and discuss how much rates have gone up for continuing contracts in 2020 and 2021 Forecast.

10.3 Please provide a breakdown of the increases in 2020 Projected Apparatus and Facilities Rental between the new pole attachment contract and “escalations in unit rental rates” for continuing contracts.

11.0 Reference: OTHER REVENUE
Exhibit B-2, Section 5.3, p. 37; FortisBC Energy Inc. (FEI) and FortisBC Inc. (FBC)
(collectively FortisBC) Application for Approval of a Multi-Year Rate Plan for the Years
2020 through 2024 Decision and Orders G-165-20 and G-166-20 dated June 22, 2020
(MRP Decision), p. 74
Contract Revenues

On page 37 of the Application, FBC states: “The 2020 Projected and 2021 Forecast [Contract Revenues] are expected to be higher than 2019 Approved due to revenues received from a three-year asset refurbishment project for a third party that is beginning in 2020, based on customer requirements.”

Table 5-1 shows 2020 Projected and 2021 Forecast Contract Revenues are \$2.305 million and \$3.088 million, respectively, compared to 2019 Approved of \$1.766 million.

On page 74 of the MRP Decision, the British Columbia Utilities Commission (BCUC) states:

The Panel approves FortisBC’s proposal for forecast variances related to certain controllable Other Revenue components to be subject to the ESM rather than flow-through treatment. These controllable Other Revenue items approved are listed in Table 20 above. [Emphasis in original]

- 11.1 Please explain the forecast methodology for 2020 Projected and 2021 Forecast Contract Revenues. Are projected/forecast revenues based on firm contracts with the customer?
- 11.2 Please provide a table summarizing the differences between actual and projected/forecast Contract Revenues for the years 2014 through 2019.
 - 11.2.1 To the extent that there have been significant differences, please discuss what changes (if any) FBC has made to its forecasting methodology for 2020 and 2021 compared to previous years.

C. OPERATIONS & MAINTENANCE EXPENSE

- 12.0 Reference: **OPERATIONS & MAINTENANCE (O&M) EXPENSE**
Exhibit B-2, Section 6.3.2, p. 44
Insurance Premiums

On page 44 of the Application, FBC states that the forecast insurance premiums expense for 2021 is \$1.916 million. FBC explains:

The forecast for 2021 is calculated as the amount of the first six months of the known annual insurance premium for July 2020 to June 2021 of \$1.734 million and applying a 5 percent increase for the remaining six months, as well as including the annual cost of fire fighting premium of \$138,500. FBC has experienced significant increases in insurance expense in the last two renewals as a result of various insurers reducing their capacity and increasing restrictions and retentions.

- 12.1 Please discuss what actions FBC plans to undertake, or has undertaken, to control increases in insurance expense.

D. RATE BASE

- 13.0 Reference: **REGULAR CAPITAL EXPENDITURES**
Exhibit B-2, Section 7.2, p. 48
2019 Actual Capital Expenditures

On page 48 of the Application, FBC provides Table 7-2:

Table 7-2: Approved Capital Expenditures

Line No.	Description	Approved 2019	Actual 2019	Approved 2020	Approved 2021	Reference
1	Growth Capital	n/a	\$ 20.202	\$ 27.029	\$ 23.042	Section 11, Schedule 4, Line 2
2	Sustainment Capital	n/a	29.481	50.463	49.818	Section 11, Schedule 4, Line 3
3	Other Capital	n/a	11.802	15.752	14.712	Section 11, Schedule 4, Line 4
4	Total	\$ 48.474	\$ 61.485	\$ 93.244	\$ 87.572	Section 11, Schedule 4, Line 5

- 13.1 Please provide reasons for the variance on Line 4 “Total” between the 2019 Approved of \$48.474 million and the 2019 Actual of \$61.485 million. If possible, please provide separate explanations for each category of capital expenditures (i.e. Growth, Sustainment and Other).

14.0 Reference: MAJOR PROJECTS CAPITAL EXPENDITURES
Exhibit B-2, Section 7.3, pp. 49–50
Certificate of Public Convenience and Necessity (CPCN) Threshold

On page 49 of the Application, FBC explains that the BCUC set the major project financial threshold for CPCN applications at \$20 million for FBC for the MRP term.

On page 50 of the Application, FBC states:

In addition to the three projects described above that have already been approved, FBC is requesting approval under Section 44.2 of the UCA [*Utilities Commission Act*] for one new capital project, the Playmor Substation Upgrade Project, which is driven by new customer requests received after the preparation of the MRP capital plan...The forecast cost of the Playmor Substation Upgrade Project is \$10.922 million, inclusive of AFUDC and cost of removal, with expenditures of \$0.490 million, \$9.024 million, and \$1.408 million in 2020, 2021, and 2022, respectively.

14.1 Please explain why FBC is requesting approval of the Playmor project under Section 44.2 of the UCA when the forecast cost of the project is below the financial threshold of \$20 million for a major project filing.

14.1.1 Please compare and contrast the filing requirements of a Section 44.2 capital expenditure schedule filing and a CPCN application.

14.2 Please explain why FBC is not accounting for the cost of the Playmor project within the Regular Growth Capital expenditures approved in the MRP Decision.

14.3 Please explain the impacts to the Earning Sharing Mechanism (ESM) if FBC includes or excludes the Playmor project from the Regular Growth Capital expenditures approved in the MRP Decision.

14.4 Please explain any other benefits or drawbacks to FBC and/or its ratepayers from requesting a Section 44.2 approval versus accounting for the project under Regular Growth Capital.

15.0 Reference: NEW DEFERRAL ACCOUNTS
Exhibit B-2, Section 7.7.1.1, p. 54
Annual Review for 2020 – 2024 Rates

On page 54 of the Application, FBC states that it requests approval to establish a deferral account to capture costs related to the Annual Reviews for 2020 – 2024 Rates. FBC further states that it forecasts additions of \$0.140 million in each of 2020 and 2021 related to the proposed Annual Review for 2020 – 2024 Rates Deferral Account.

15.1 Please explain the basis for the \$0.140 million forecast for each of 2020 and 2021 related to the annual reviews considering that FBC has filed a joint application for setting 2020 and 2021 permanent rates.

15.2 Please provide Actual costs related to the annual reviews for 2015 through 2019.

16.0 Reference: NEW DEFERRAL ACCOUNTS
Exhibit B-2, Section 7.7.1.2, p. 54; Section 11 - 2020, Schedule 11
2021 Long-Term Electric Resource Plan

On page 54 of the Application, FBC states that it will file its 2021 Long-term Electric Resource Plan (LTERP) on or before December 1, 2021. FBC seeks a deferral account to capture the costs of external resources required for the 2021 LTERP that are incremental to the costs in FBC's Base O&M. FBC states

that annual expenditures are estimated to be \$0.260 million, \$0.145 million and \$0.320 million before tax in 2020, 2021 and 2022, respectively.

In its financial schedules, FBC shows a forecast “Opening Bal/Transfer Adj.” of \$0.019 million and “Gross Additions” of \$0.235 million for 2020 in Schedule 11 related to the proposed 2021 LTERP Deferral Account.

- 16.1 Please explain the basis for the forecast annual expenditures of \$0.260 million, \$0.145 million and \$0.320 million before tax in 2020, 2021 and 2022, respectively, related to the 2021 LTERP.
- 16.2 Please reconcile the 2020 forecast annual expenditures of \$0.260 million before tax on page 54 of the Application to the forecast “Opening Bal/Transfer Adj.” and “Gross Additions” amounts shown in Schedule 11.
- 16.3 Please provide the historical cost of FBC’s last LTERP.

**17.0 Reference: NEW DEFERRAL ACCOUNTS
Exhibit B-2, Section 7.7.1.3, p. 54
2020 Cost of Service Analysis**

On page 54 of the Application, FBC states that it will file a Cost of Service Analysis (2020 COSA) on or before December 31, 2020. FBC further states that it anticipates it will incur \$0.080 million of costs in 2020 and an additional \$0.020 million in 2021 before tax to manage any regulatory process.

- 17.1 Please explain the basis for the \$0.080 million and \$0.020 million forecasts in 2020 and 2021, respectively, related to the 2020 COSA.

**18.0 Reference: NEW DEFERRAL ACCOUNTS
Exhibit B-2, Section 7.7.1.4, pp. 54–55
BCUC-Initiated Inquiry Costs**

On page 54 of the Application, FBC seeks a deferral account to capture costs associated with its participation in BCUC-initiated inquiries and proceedings. FBC states on page 55 that the following proceedings and associated costs will be included in the proposed deferral account:

- BCUC Inquiry into the Regulation of Electric Vehicle Charging Service: FBC incurred \$0.066 million (\$0.048 after tax) for the Phase 1 and Phase 2 Inquiries.
- BCUC Indigenous Utilities Regulation Inquiry, which concluded in April 2020. To date, FBC has incurred \$0.093 million (\$0.068 million after tax) and anticipates additional costs of \$0.125 million before tax in 2020 related to the issuance of the final report and participant funding costs.
- BCUC Municipal Energy Utilities Inquiry, which is currently adjourned. FBC has incurred \$0.006 million (\$0.004 million after tax) to date. FBC forecasts further costs, before tax of \$0.005 million in 2020 and \$0.005 million in 2021.

In its financial schedules, FBC shows a forecast “Opening Bal/Transfer Adj.” of \$0.087 million and “Gross Additions” of \$0.176 million for 2020 in Schedule 11 related to the proposed BCUC-Initiated Inquiry Cost Deferral Account.

- 18.1 Please reconcile the 2020 incurred and forecast expenditures on page 55 of the Application to the forecast “Opening Bal/Transfer Adj.” and “Gross Additions” amounts shown in Schedule 11.
- 18.2 Please provide a breakdown of the 2020 costs incurred to-date and provide the basis for the remaining forecast for 2020 for each BCUC inquiry proceeding.

On page 54, FBC states, “[it] proposes to include the costs of these and future tariff-related applications in a single deferral account, in order to reduce the number of individual deferral account requests.”

18.3 For clarity, please confirm whether the proposed BCUC-Initiated Inquiry Costs Deferral Account would be limited to the three proceedings listed on page 55 of the Application (i.e. BCUC Inquiry into the Regulation of Electric Vehicle Charging Service, BCUC Indigenous Utilities Regulation Inquiry, BCUC Municipal Energy Utilities Inquiry) or not.

18.4 Please elaborate on what is meant by “and future tariff-related applications” in the preamble above.

19.0 Reference: NEW DEFERRAL ACCOUNTS
Exhibit B-2, Section 7.7.1.5, p. 55
Mandatory Reliability Standards (MRS) 2021 Audit

On page 55 of the Application, FBC requests the creation of a new deferral account for the 2021 MRS Audit. FBC states that eligible costs are incremental labour and expenses directly caused by the periodic audit and therefore not included in Formula O&M Expense. FBC states that, based on previous audits, it forecasts cost of \$0.350 million before tax in 2021.

19.1 Please confirm, or explain otherwise, that FBC has undertaken triennial MRS audits in the past and that the last audit was performed in 2018.

19.1.1 If confirmed, please explain how these costs were accounted for. If applicable, please explain whether FBC considered extending the same accounting treatment to the 2021 MRS Audit.

19.2 Please provide the historical actual cost for the last three triennial MRS audits.

On page 107 of the MRP Decision, the BCUC agreed to use 2018 Actual O&M as the starting point for determining FBC’s Base O&M for the MRP.

19.3 Please clarify why the costs of the 2018 MRS Audit are not included in 2018 Actual O&M and therefore are not included in FBC’s Formula O&M expense.

E. FINANCING AND RETURN ON EQUITY

20.0 Reference: FINANCING COSTS
Exhibit B-2, Section 8.3.1, p. 67
Long-term Debt

On page 67 of the Application, FBC states that in May 2020, it completed a private placement of \$75 million in long-term debt at a rate of 3.12 percent for a term of 30 years. FBC further states that it plans to issue additional long-term debt of approximately \$75 million in July 2021 at a rate of 3.90 percent.

20.1 Please explain why the forecast interest rate for the debt issuance in July 2021 is higher than the completed debt issuance in May 2020 given that interest rates have been falling.

F. TAXES

21.0 Reference: TAXES Exhibit B-2, Section 9.2, pp. 71–72 Property Taxes

On page 71 of the Application, FBC states that property taxes in 2021 are forecast to increase 7.4 percent compared to 2020 Projects and is primarily driven by increases in rates for transmission and distribution lines. FBC’s assumptions for the drivers of the changes, including changes in tax rates, changes in revenues to calculate grants in lieu of taxes and changes in assessed values, are provided on pages 71 to 72.

- 21.1 Please provide the rationale for the expected increases and decreases to the property tax cost drivers discussed on pages 71 to 72.
- 21.2 Please provide a breakdown of the forecast increase in property taxes for transmission and attribution lines based on the cost drivers discussed on pages 71 to 72.

G. FINANCIAL SCHEDULES

22.0 Reference: FINANCIAL SCHEDULES Exhibit B-2, Section 11 – 2020, Schedules 11 and 12 Unamortized Deferred Charges and Amortization

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

- 22.1 In the same format as is provided in Schedules 11 and 12 in Section 11 of the Application, please provide the previous years’ information on unamortized deferred charges by starting with the actual 2018 ending deferral account balances (i.e. 12/31/2018) and including the actual 2019 deferral account additions and the actual 2019 amortization to arrive at the actual ending 12/31/2019 balances.

Schedule 11 includes a \$625,000 addition for each of 2020 and 2021 to the Deferred Debt Issue Costs deferral account.

- 22.2 Please provide a breakdown of the \$625,000 additions for each of 2020 and 2021.

Schedule 11 includes a \$650,000 addition for 2020 and \$365,000 addition for 2021 to the Preliminary and Investigative Charges deferral account.

- 22.3 Please provide a breakdown of the \$650,000 additions for 2020.
- 22.4 Please provide a breakdown of the \$365,000 additions for 2021.

H. ACCOUNTING MATTERS

23.0 Reference: EXOGENOUS (Z) FACTORS Exhibit B-2, Sections 1 and 12.2.1, pp. 3, 139 COVID-19 Pandemic

On page 3 of the Application, FBC states that it seeks approval “To record COVID-19 incremental costs and related savings from 2020 and 2021 into the previously approved COVID-Customer Recovery Fund Deferral Account...”

On page 139 of the Application, FBC states that it has incurred incremental O&M expenditures for COVID-19 related items in 2020, including the following:

- Cleaning and disinfecting of facilities;
- Sequestering of system control centre employees from having to return to their homes; and
- Public Affairs Emergency communication activities to keep customers informed of the assistance available.

FBC states that it expects to continue to incur additional expenditures for the remainder of the year but is unable to provide a forecast of the cost for 2020 or for future years. FBC states:

Due to the uncertainty, FBC is not seeking approval of exogenous factor treatment for incremental impacts related to COVID-19 at this time. Instead, over the coming months, FBC will evaluate the COVID-19 incremental costs and related savings. If the incremental costs and related savings are determined to be significant, FBC proposes to include the amounts in the previously approved COVID-Customer Recovery Fund Deferral Account. The amounts will then be reviewed in 2021 when actual 2020 amounts and forecasts for future years can be ascertained, and an appropriate recovery method can be determined.

23.1 Please confirm that FBC did not seek approval to record the incremental costs and savings to the COVID-19 Customer Recovery Fund Deferral Account in the original FBC COVID-19 Customer Recovery Fund Deferral Account Application.

23.1.1 If confirmed, please explain why FBC is now asking to include these incremental costs and savings, when it did not ask for their inclusion in the original application. Please discuss the changes in factors/circumstances, if any.

23.2 Please provide a breakdown of the incremental O&M expenditures incurred to date in 2020 for COVID-19 related items, broken down by category.

23.2.1 If possible, please provide a forecast for these costs for the remainder of 2020 and for 2021. Please include assumptions and any new costs which are anticipated.

23.3 Please provide a breakdown of incremental savings experienced to date in 2020 related to COVID-19, broken down by category.

23.3.1 If possible, please provide a forecast for these savings for the remainder of 2020 and for 2021. Please include assumptions and any new savings which are anticipated

23.4 If approved, please confirm, or explain otherwise, that the COVID-19 incremental costs and related savings from 2020 and 2021 will be separately tracked in the FBC COVID-19 Customer Recovery Fund Deferral Account. If not, please explain why not.

23.5 If approved, please confirm, or explain otherwise, that the recovery of any amounts included in the COVID-19 Customer Recovery Fund Deferral Account related to this approval (i.e. COVID-19 incremental costs and related savings from 2020 and 2021) will remain subject to future BCUC determination based on the established exogenous factor criteria, including the materiality threshold.

**24.0 Reference: EXISTING DEFERRAL ACCOUNTS
Exhibit B-2, Section 12.4.1.3, p. 145
2020 Flow-through Deferral Account Balance**

On page 145 of the Application, FBC states:

FBC is not projecting a Flow-through balance for 2020. This is because FBC has included

actual amounts up until June 30, 2020 within its Projected 2020 revenue requirement throughout this Application and is not projecting any further variances for the remainder of the year from the amounts included in this Application. Therefore, there are no amounts to include within the 2020 Flow-through projection.

On page 7 of the Application, FBC states that amortization expense in 2021 increases by \$7.759 million primarily from the elimination of the credit flow-through variance embedded in 2020 rates.

- 24.1 Please provide a summary of the historical projected flow-through deferral account balances embedded in rates for the years 2014 through 2019. Please specify whether the amounts were credits to be distributed to customers or amounts to be recovered from customers.
- 24.2 Please discuss whether it would be appropriate to determine a projected flow-through deferral account balance to be amortized in rates for 2021 based on either prior years' projected or actual flow-through deferral account balances. Please explain why or why not.

I. SERVICE QUALITY INDICATORS

25.0 Reference: SERVICE QUALITY INDICATORS Exhibit B-2, Section 13.2.2, p. 153 Customer Satisfaction Index

On page 153 of the Application, FBC discusses the Customer Satisfaction Index:

The average index score for June 2020 year-to-date is 8.4... Of the five measures that make up the overall customer satisfaction score, the results for June 2020 year-to-date were lower in three, higher in one, and static in another category compared to June 2019 year-to-date performance. Customer attitudes about the Company's contact centre decreased by two points from 8.5 to 8.3. There are small decreases in scores for both accuracy of meter reading and energy conservation information metrics, with the former decreasing from 8.3 to 8.2, and the latter from 7.7 to 7.6. Satisfaction with field services increased from 8.9 to 9.0, while overall satisfaction remained static at 8.4.

- 25.1 Please discuss the factors that contributed to the decrease in customer attitudes about the Company's contact centre.
- 25.2 Please discuss the factors that contributed to the decrease in scores for the accuracy of meter reading metric.
- 25.3 Please discuss the factors that contributed to the decrease in scores for the energy conservation metric.
- 25.4 Please discuss the factors that contributed to the increase in satisfaction with field services.

26.0 Reference: SERVICE QUALITY INDICATORS Exhibit B-2, Section 13.2.3, pp. 154-157; Exhibit A2-1, FortisBC 2020-2024 MRP compliance filing dated July 20, 2020 (MRP Compliance Filing), p. 3 Reliability Service Quality Indicators

On page 3 of Exhibit A2-1, FBC states:

For the benchmarks, and as outlined in the Application, FBC proposed to update the existing SAIDI [System Average Interruption Duration Index] and SAIFI [System Average Interruption Frequency Index] 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 [Outage Management System]. For the thresholds... 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.

The annual results from 2010 to 2019 and proposed benchmarks and thresholds are shown in the following table:

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

- 26.1 Considering that 2010 through 2016 Actual results are each before the implementation of the OMS, please explain why reported values for 2011 Actual SAIDI results were lower than the other years in this time period.
 - 26.1.1 Please discuss whether FBC considers 2011 Actual results to be an outlier. Please explain why or why not.
- 26.2 Considering that 2017 through 2019 Actual results are each after the implementation of the OMS, please explain why reported values for 2017 Actual SAIDI results were higher than 2018 and 2019 Actual.
 - 26.2.1 Please discuss whether FBC considers 2017 Actual results to be an outlier. Please explain why or why not.
 - 26.2.2 Please explain why reported values for SAIDI have been decreasing since the OMS was first implemented in 2017. Does FBC expect this trend to continue? Please explain why or why not.
- 26.3 Considering that 2010 through 2016 Actual results are each before the implementation of the OMS, please explain why reported values for 2010 Actual SAIFI results were higher than the other years in this time period.
 - 26.3.1 Please discuss whether FBC considers 2010 Actual results to be an outlier. Please explain why or why not.
- 26.4 Please explain whether FBC considered any other methods to determine the new SAIDI and SAIFI benchmarks. If yes, please discuss what methods were considered and why they were not selected. If not, please explain why not.
- 26.5 Please explain whether FBC considered any other methods to determine the new SAIDI and SAIFI thresholds. If yes, please discuss what methods were considered and why they were not selected. If not, please explain why not.
- 26.6 Please explain why the updated benchmarks for SAIDI and SAIFI are based on three years of annual results whereas the updated thresholds for SAIDI and SAIFI are based on nine years of annual results. As part of the explanation, please discuss why annual results from 2010 to 2016 are relevant to setting the updated thresholds.

- 26.7 Using the proposed approach to measuring volatility (i.e. two standard deviations), please provide an alternative calculation of the SAIDI and SAIFI thresholds from the following scenarios:
- *Scenario 1:* Using the annual results from 2017 to 2019 only (i.e. after OMS); and
 - *Scenario 2:* Using the annual results from 2010 to 2016 only (i.e. before OMS);

26.7.1 Please discuss whether FBC would be amenable to the thresholds calculated in each scenario above. If not, please explain why not.

26.7.1.1 Please discuss whether FBC would be amenable to a threshold based on a weighted-average calculation of two standard deviations before and after-OMS.

- 26.8 Using the proposed approach to measuring volatility (i.e. two standard deviations), please provide an alternative calculation of the SAIDI and SAIFI thresholds using the annual results from 2010 to 2019 but excluding 2011 and 2017 Actual for SAIDI and 2010 Actual for SAIFI.

26.8.1 Please discuss whether FBC would be amenable to the thresholds calculated above. If not, please explain why not.

On page 154 of the Application, FBC states regarding SAIDI: “The June 2020 year-to-date result of 3.36 is consistent with the proposed benchmark and threshold set out in the MRP Compliance Filing.”

On page 55, FBC provides Table 13-11:

Table 13-11: Historical SAIDI Results

Description	2014	2015	2016	2017	2018	2019	June 2020 YTD
Annual normalized results	2.32	2.13	2.10	4.05	3.15	2.45	3.36
Benchmark	2.22	2.22	2.22	2.22	2.22	2.22	3.22
Threshold	2.62	2.62	2.62	2.62	2.62	2.62	4.52

On page 155 of the Application, FBC states regarding SAIFI: “The June 2020 year-to-date result of 1.74 is consistent with the proposed benchmark and threshold set out in the MRP Compliance Filing.”

On page 156 of the Application, FBC provides Table 13-12:

Table 13-12: Historical SAIFI Results

Description	2014	2015	2016	2017	2018	2019	June 2020 YTD
Annual normalized results	1.64	1.56	1.34	1.78	1.73	1.21	1.74
Benchmark	1.64	1.64	1.64	1.64	1.64	1.64	1.57
Threshold	2.50	2.50	2.50	2.50	2.50	2.50	2.19

- 26.9 Please explain whether there have been any major events relevant to the SAIDI and SAIFI results for 2020 to date.
- 26.10 Please explain the factors that led to a SAIDI result above the proposed benchmark for June 2020 year-to-date (YTD).
- 26.11 Please explain the factors that led to a SAIFI result above the proposed benchmark for June 2020 YTD.

On page 156 of the Application, FBC provides Table 13-13:

Table 13-13: Historical Generator Forced Outages

	2014	2015	2016	2017	2018	2019	June 2020 YTD
FBC	1.7%	0.1%	0.8%	0.6%	0.4%	0.1%	1.0%
CEA	6.3%	6.2%	6.2%	6.2%	6.7%	TBD	TBD

Further, FBC states: “The June 2020 year-to-date result of 1.0 percent is generally consistent with prior years’ results. The year-to-date result was impacted by an outage in June 2020 at the UBO [Upper Bonnington Old Units Refurbishment] Unit 1 related mainly to the generator, lasting approximately 14 days.”

26.12 Please explain the root cause(s) of the UBO Unit 1 forced outage of June 2020.

26.12.1 Please explain whether these root causes have been addressed. If not, please explain when they will be addressed.

On page 157 of the Application, FBC provides Table 13-14:

Table 13-14: Interconnection Utilization

Description	2014	2015	2016	2017	2018	2019	June 2020 YTD
Interconnection Utilization	99.99%	99.94%	99.99%	99.95%	99.96%	99.98%	99.90%
Benchmark	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Threshold	n/a	n/a	n/a	n/a	n/a	n/a	n/a

26.13 Please provide statistics and root causes for the interconnection outages leading to the drop in 2020 YTD Interconnection Utilization compared to past years.

26.14 Please explain whether FBC has received any customer complaints related to interconnection outages 2020 YTD.

**27.0 Reference: SERVICE QUALITY INDICATORS (SQI)
FortisBC MRP Decision, p. 168
Content for Annual Review Filings**

On page 168 of the MRP Decision, the BCUC directed that the content for annual review filings must include the following, among other things:

4. Review of the Utilities’ performance with respect to SQI’s. Bring forward recommendations to the BCUC where there have been a “sustained serious degradation” of service;
5. Assess and make recommendations with respect to any SQIs that should be reviewed in future Annual Reviews

27.1 Please explain whether FBC views any of its SQIs as having a ‘sustained serious degradation of service.’ Please explain why or why not.

27.2 Please explain whether FBC recommends any new SQIs that should be reviewed in future Annual Reviews. In your response, please provide any relevant assessments.

J. PERFORMANCE BASED RATEMAKING ELEMENTS

28.0 Reference: PERFORMANCE BASED RATEMAKING (PBR) ELEMENTS Exhibit B-2, Section 14.3, p. 159 2019 Flow-through Deferral Account Additions

On page 159 of the Application, FBC states that the final amount to be distributed to customers in 2020 is a credit of \$7.475 million (after tax), as shown in Table 14-1, which is comprised of:

- A net variance between approved and actual of \$6.352 million (credit) in flow-through items for 2019; and
- A true-up to actual of \$1.122 million (credit) to the projected ending 2018 Flow-through account balance.

For 2019 variances, FBC states, “The variance is primarily the result of lower power purchase expense, lower income taxes and higher apparatus rental revenue, partially offset by lower sales revenue.”

FBC states that the \$1.122 million credit is the difference between the projected ending 2018 Flow-through deferral account balance embedded in 2019 rates of \$12.788 million (credit) and the actual ending 2018 deferral account balance of \$13.910 million (credit).

- 28.1 Please explain why 2019 Actual power purchase expenses were \$6.063 million less than 2019 Approved, as shown in line 3 of Table 14-1.
- 28.2 Please explain why 2019 Actual income taxes were \$2.436 million less than 2019 Approved, as shown in line 25 of Table 14-1.
- 28.3 Please explain and provide the variance in 2019 Actual apparatus rental revenue compared to 2019 Approved as a component of the \$1.359 variance in Other Revenue shown in line 21 of Table 14-1.
- 28.4 Please explain why 2019 Actual sales revenue were \$2.885 million less than 2019 Approved, as shown in line 2 of Table 14-1.
- 28.5 Please provide a table in the same format as Table 14-1, showing the breakdown of the projected ending 2018 Flow-through deferral account balance embedded in 2019 rates of \$12.788 (credit) and actual ending 2018 deferral account balance of \$13.910 million (credit), in order to explain the 2018 ending deferral account balance true-up of \$1.122 million (credit).
 - 28.5.1 Please provide an explanation for significant variances identified in the response above.
- 28.6 Please provide the percentage impact of the \$7.475 million (after tax) credit on the calculated 1.93 percent rate increase for 2020 (i.e. in the absence of this credit, what would be the calculated rate increase for 2020?)

**29.0 Reference: PBR ELEMENTS
Exhibit B-2, Section 14.5, p. 164
2019 SQI Results**

On pages 164-165 of the Application, FBC provides Table 14-7. An excerpt with respect to 2019 SAIDI and SAIFI results is as follows:

Performance Measure	Description	Benchmark	Threshold	2019 Results
Reliability SQIs				
System Average Interruption Duration Index (SAIDI) – Normalized	3 year average of SAIDI (average of cumulative customer outage time)	<=2.22	2.62	3.22
System Average Interruption Frequency Index (SAIFI) – Normalized	3 year average of SAIFI (average customer outage)	<=1.64	2.50	1.57

On page 165 of the Application, FBC explains that its SAIDI results have been influenced by the implementation of the OMS. On page 166 of the Application, FBC quotes BCUC Order G-246-18 regarding FBC’s 2018 results:

The Panel finds no evidence to suggest a serious degradation of service has occurred and, accordingly, does not consider that a financial penalty is warranted. Notwithstanding, the Panel takes note of the potential decline in SAIDI performance created by the implementation of the OMS, and encourages FBC to incorporate the impact of the OMS in setting a future benchmark for SAIDI.

- 29.1 Please explain whether FBC has experienced any factors in 2019 regarding its SAIDI results to suggest a ‘serious degradation of service has occurred’ or will occur.
 - 29.1.1 Please explain whether it would be difficult to discern if a serious degradation in SAIDI and SAIFI results was occurring due to implementation of the OMS.

K. PLAYMOR STATION UPGRADE BUSINESS CASE

**30.0 Reference: PLAYMOR SUBSTATION UPGRADE BUSINESS CASE
Exhibit B-2, Appendix B, Section 2, pp. 1-7
Project Need**

On page 1 of Appendix B, FBC describes the location of the Playmor (PLA) substation: “The PLA substation is located on Sentinel Rd in South Slokan, BC between Castlegar and Nelson.”

On page 4 of Appendix B, FBC describes the drivers for the project:

- There are three primary drivers for the PLA Station Upgrade Project.
1. Station capacity constraints are preventing growth in the PLA area for new and existing customers;
 2. FBC customers in the PLA area are potentially exposed to lengthy outages, due to the limited ability of the neighbouring substations to support the PLA load in the event of an outage to PLA T1; and
 3. Station equipment is aging, poor health, and/or obsolete, presenting safety and reliability risks in the event of a failure.

On pages 5-6 of Appendix B, FBC describes its load growth under Alternative A and Alternative B.

30.1 Please provide copies of Figures 3 and 4 with the Time axis extended to 2060.

30.2 Please indicate when the Forecast Winter Peak Load will exceed the Post Upgrade winter limits under Alternative A and Alternative B.

On page 6 of Appendix B, FBC discusses Reliability as a project driver: “only 13 percent of the total PLA customers could be supplied during a PLA T1 transformer outage under peak load conditions. During a PLA T1 outage, all customers supplied by distribution feeders PLA1 and PLA3, and 866 customers supplied by PLA2 would be without service.”

30.3 Please provide outage statistics for the PLA T1 transformer for the past 10 years. Please indicate customer outage data in the statistics.

30.3.1 Please compare customer outage statistics for customers served from PLA substation with customers served from other similar rural substations in FBC’s service territory.

30.4 Please explain whether FBC is required to have N-1 reliability for the customer fed from the PLA substation.

30.4.1 Please explain why N-1 reliability for customers in South Slocan is reasonable, including a discussion of the reliability for other similar rural substations.

On page 7 of Appendix B, FBC describes the aging condition of PLA T1.

30.5 Please provide any maintenance records or condition assessment reports for PLA T1 to support the analysis.

30.6 Please compare the age and condition of PLA T1 to other similar transformers in the FBC system.

Further on page 7, FBC states:

Furthermore, there is a deficiency in the station DC [Direct Current] system that continues to trigger ground fault alarms. Properly addressing this issue requires replacing the station circuitry and the obsolete DC panel.

As a result of these equipment deficiencies, it is not feasible to replace these individual components, and it is therefore necessary to rebuild the substation.

30.7 Please explain whether it would be possible to troubleshoot and repair the station DC system without replacing it.

30.8 Please explain whether FBC considered a project alternative that doesn’t involve rebuilding the substation. Please explain whether it would be possible to replace only the failed or faulty pieces of equipment without rebuilding the entire substation.

**31.0 Reference: PLAYMOR SUBSTATION UPGRADE BUSINESS CASE
Exhibit B-2, Appendix B, Section 3, pp. 9–12
Project Alternatives**

On page 9 of the Application, FBC describes the advantages of Alternative A:

- Installed capacity summer limit 40 MVA and winter limit 47.5 MVA;
- Ability to supply large load requests in the area and native load growth;
- Reliability concerns addressed with redundant transformer. The remaining transformer can carry peak station load during a PLA transformer outage with

no customers outages required;

- Mobile transformer no longer required for PLA transformer outage given redundant transformer; and
- Aging infrastructure and obsolete equipment replaced. Non arc-flash rated switchgear and asbestos exposure risks removed.

31.1 Please explain whether FBC expects further large load requests. If yes, please provide any details of the anticipated requests, including the size of the load and the expected service date.

31.2 Please explain how many substations share the mobile transformer availability today.

31.3 Please explain how frequently FBC employees are exposed to the arc-flash and asbestos hazard at PLA substation.

31.3.1 Please explain what safety precautions are taken in the face of these hazards.

31.4 Please explain what FBC's standard station configuration for a new 40MVA substation would be today, if FBC was building a new substation in a new location. Please explain whether FBC would install a single-transformer substation, or a two-transformer substation. Please explain why, weighing costs and benefits.

On page 11, FBC lists some disadvantages of Alternative B, including: "During a PLA transformer outage, restoring customers will require the use of the mobile transformer. Availability of the mobile transformer will be dependent on BC road conditions, BC road restrictions (March to June), and if it is already designated to another station;"

31.5 Please explain how many days, annually, FBC has experienced road conditions that would affect the transportation of the Mobile Transformer from its current location to South Slokan. In your response, please indicate how many days, annually, the required roads are closed to traffic.

31.6 Please explain how many times in the past FBC has experienced road conditions that have prevented FBC from moving a mobile transformer when necessary due to a forced outage or transformer failure.

Further on page 11, FBC explains that beyond 2036, the M18 mobile would be insufficient to carry the winter peak station load.

31.7 Please explain whether there may be other forces driving FBC to purchase a replacement mobile transformer on or before 2036, such as increased load at other substations that also rely on the M18 mobile transformer, in the event of an outage or failure.

On pages 11-12, FBC discusses Option C: Do Nothing.

31.8 Please discuss whether FBC considers a Do Nothing project alternative to be a viable solution.

31.9 Please discuss whether FBC considered any other project alternatives in its analysis.

**32.0 Reference: PLAYMOR SUBSTATION UPGRADE BUSINESS CASE
Exhibit B-2, Appendix B, Section 4.1, p. 17
Project Risks**

On page 17 of Appendix B to the Application, FBC discusses the project risks. Among the risks, FBC states:

Availability of labour and materials may be at risk due to Covid-19 and the current state of the economy. FBC has partially mitigated the risk of any financial or schedule pressures by developing preliminary equipment specifications and obtaining quotes

from vendors. Any residual risk will be managed through project planning and contractual performance guarantees;

32.1 Please discuss whether FBC has experienced any availability of labour and materials issues on its other capital projects in 2020 as a result of COVID-19.

**33.0 Reference: PLAYMOR SUBSTATION UPGRADE BUSINESS CASE
Exhibit B-2, Appendix B, Section 4.2, p. 17
Project Cost Estimate**

On page 17 of Appendix B to the Application, FBC provides Table 2. Table 2 contains a project cost estimate summary.

Table 2: Total estimate project cost summary (\$ millions)

Project Component	Total Project Cost	As Spent \$
Station Work (incl. 15% contingency)	\$ 8.672	\$ 8.848
T&D Line Work (incl. 10% contingency)	0.799	0.815
Land	0.076	0.076
AFUDC	0.866	0.866
Construction Cost	\$ 10.413	\$ 10.605
Station Work COR	0.251	0.260
T&D Line Work COR	0.038	0.039
AFUDC	0.018	0.018
Net Removal Cost	\$ 0.307	\$ 0.318
Total Project Cost	\$ 10.719	\$ 10.922

33.1 Please provide a breakdown of the project costs in further detail, separating out overhead and contingency. In your estimate, please include line items for labour, materials, engineering, dismantling, etc.

**34.0 Reference: PLAYMOR SUBSTATION UPGRADE BUSINESS CASE
Exhibit B-2, Appendix B, Section 5, p. 19
Consultation**

On page 19 of Appendix B to the Application, FBC explains the public consultation it has undertaken to date and how FBC has planned its work to minimize disturbance to neighbours. FBC states: “Letters were sent out to residents within 150 meters of the project in August of 2020 notifying them of the project and footprint expansion.”

34.1 Please provide any responses or contact FBC has received as a result of sending the letters to residents.

34.2 Please explain any feedback FBC has received on the project.

34.3 Please explain FBC’s plan for further consultation with local residents and neighbours.

On page 19 of Appendix B to the Application, FBC states:

The PLA station upgrade does not trigger a requirement for First Nations consultation, as FBC believes that Aboriginal Rights and Title will not be affected by this Project. The proposed substation site is not near any known archaeological site and is not in a zone of high archeological potential.

- 34.4 Please explain whether FBC has notified any First Nations of the PLA project.
- 34.4.1 If not, please explain why not.
- 34.5 Please explain further why FBC has determined that consultation was not required with First Nations for the PLA project.

L. PRIOR YEAR DIRECTIVES

**35.0 Reference: AMI PROJECT NET O&M COSTS AND SAVINGS
Exhibit B-2, Appendix C2, pp. 6–7
Unit 3 Deficiency**

On page 3 of Appendix C2, FBC explains the changes resulting from monthly billing options for customers under the Advanced Metering Infrastructure (AMI) project:

Order G-16-14 approved the introduction of a monthly billing option for customers previously billed on a bi-monthly basis, and ordered that any incremental working capital benefits resulting from an increase in monthly billings be returned to customers during the PBR term.

Further, on page 7 of Appendix C2, FBC states: “Overall, the proportion of FBC customers billed on a monthly basis increased from less than 6 percent prior to the implementation of AMI to approximately 26.5 percent at year-end 2019.”

- 35.1 Please explain whether FBC anticipates further customers to sign up for monthly billing in future years.
- 35.1.1 If yes, please explain whether FBC will return any working capital benefits from these changes to customers.

**36.0 Reference: UPPER BONNINGTON UNIT REFURBISHMENT PROJECT STATUS REPORT
Exhibit B-2, Appendix C4, pp. 6–7
Unit 3 Deficiency**

On page 2 of Appendix C4, FBC describes the Upper Bonnington (UBO) Refurbishment Project budget:

The UBO Refurbishment Project was approved with a Class 4 capital cost estimate of \$31.783 million in as-spent dollars (including \$0.867 million of AFUDC and \$1.880 million of removal costs). Project expenditures to May 30, 2020 are approximately \$28.534 million. Final project costs (including \$1.096 million of AFUDC and \$1.679 million of removal costs) are currently forecast to be \$34.180 million.

On pages 6-7 of Appendix C4, FBC describes the UBO Unit 3 deficiency:

The rotor spider on Unit 3 is an original 1908 cast steel component that as designed allows lubricating oil to return from the upper guide bearing back through the center of the spider to the reservoir. As Unit 2 and Unit 3 rotor spiders are identical, the same issue exists on Unit 2. FBC is currently developing a repair procedure for Unit 2 and is planning to re-use the existing spider. The source of the problem is suspected to be voids within the casting at the microscopic level and therefore it is not possible to predict the success of the planned repair. Once Unit 2 is returned to service, FBC will be able to determine if the repair was successful. If successful, Unit 3 will be removed from service in Q1 2021 to have the same repair applied. The current cost forecast includes this repair on Unit 3 at an estimated cost of \$0.166 million and a schedule delay of four weeks. If the repair is not successful for Unit 2, both rotor spiders will need to be

replaced. FBC is currently exploring options and costing to replace the rotors if required.

- 36.1 Please explain whether the updated project budget includes the cost of performing the repair on Unit 2.
- 36.2 Please explain the range of possible costs and options for Unit 2 and Unit 3 if the repair described in the preamble is not successful.