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July 18, 2019

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

Attention: Mr. Patrick Wruck, Commission Secretary and Manager, Regulatory Support

Dear Mr. Wruck:

Re: FortisBC Energy Inc. (FEI)

Revelstoke Propane Portfolio Cost Amalgamation Application

FEI respectfully submits the Revelstoke Propane Portfolio Cost Amalgamation Application for approval.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC ENERGY INC.

Original signed:

Doug Slater

Attachments

cc (email only): Registered Parties to FEI's Annual Review for 2019 Rates



FORTISBC ENERGY INC.

Revelstoke Propane Portfolio Cost Amalgamation Application

July 18, 2019



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1 INTRODUCTION AND APPROVALS SOUGHT

1.1 BACKGROUND

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31 32 FortisBC Energy Inc. (FEI or the Company) currently operates a satellite, off-grid propane distribution system that serves approximately 1,500 residential and commercial customers in the Revelstoke area. Currently, propane is supplied to Revelstoke by railcars and tanker trucks, where it is offloaded into storage tanks, vaporized as needed, and distributed to customers through an underground piped distribution system. When the piped propane system was first introduced to Revelstoke in 1991, it was because Revelstoke was located at too great a distance from the natural gas distribution system and its forecast load was insufficient to make connection economic. Although FEI's customers in Revelstoke are charged the same delivery rate as those in other regions across BC (except Fort Nelson), they are charged a different cost for energy¹ relative to FEI's natural gas customers. Commodity prices for propane have historically been more volatile and higher than natural gas prices on an energy equivalent basis. As a result, Revelstoke propane customers have had less predictable and higher energy costs relative to FEI's natural gas customers. To address this disparity, FEI is applying to amalgamate its propane supply portfolio costs with its natural gas supply portfolio costs (the Application).

In this Application, FEI is proposing to amalgamate the Revelstoke propane supply costs with the FEI midstream natural gas supply resource costs in the Midstream Cost Reconciliation Account (MCRA) and to implement a revised propane gas cost rate setting mechanism. The proposed rate setting mechanism will provide Revelstoke customers with propane rate stability that matches the stability of FEI's natural gas customer rates, and can provide propane commodity rate relief to Revelstoke customers.

By capturing the small quantities of propane purchased for Revelstoke's requirements within the MCRA, alongside FEI's midstream natural gas supply resource costs, the cost fluctuations associated with the market price of propane will be neutralized. This results from combining a relatively small quantity of propane portfolio costs that is historically and typically more volatile, with a significantly more substantial quantity of natural gas midstream costs that is historically more stable than propane costs. Under the amalgamated cost portfolio, FEI proposes to set the same gas cost recovery rates for both FEI's natural gas customers and Revelstoke's propane customers. Propane customers will continue to pay higher carbon tax rates than natural gas customers, in alignment with BC's energy objectives.

¹ The propane cost for energy nomenclature is equivalent to the natural gas combined commodity and midstream (Storage and Transport) rates.

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² Under FEI's proposal, the cost of propane per GJ rate shown on the bill of FEI's Revelstoke customers will be equal to the sum of Cost of Gas per GJ and Storage and Transport cost per GJ that are shown on the bill of FEI's Mainland and Vancouver Island natural gas customers.



1.2 PROPOSED REGULATORY PROCESS

FEI believes that the approvals sought in this Application are limited and straightforward, and therefore can be addressed effectively by way of a written hearing process and one round of information requests. The proposed propane portfolio cost amalgamation supports a transparent and efficient single gas cost rate review and rate setting process for both FEI natural gas and Revelstoke propane customers and does not represent any significant change from the current FEI gas cost review practices. FEI's proposed changes will provide Revelstoke propane customers with gas cost rate stability matching that of natural gas customers while having minimal cost impacts to FEI natural gas customers in the Mainland and Vancouver Island service area.

- FEI's proposed draft regulatory timetable is set out below, which is predicated on the British Columbia Utilities Commission (BCUC) issuing a procedural order on or before August 19,
- 13 2019.

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Table 1-1: Proposed Regulatory Timetable

Action	Dates (2019)		
FEI Publishes Notice	Week of September 2		
Intervener Registration	Thursday, September 12		
BCUC and Intervener IR No. 1	Wednesday, September 18		
FEI Responses to IRs No. 1	Thursday, October 10		
FEI Final Written Argument	Thursday, October 31		
Intervener Final Written Argument	Thursday, November 14		
FEI Written Reply Argument	Thursday, November 28		

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1 2 COMMODITY RATE STABILITY IS IN THE PUBLIC INTEREST

- 2 This section explains that Revelstoke commodity rate stability is in the public interest because it
- 3 both provides benefits to customers and supports BC's energy objectives.

2.1 Commodity Rate Stability Provides benefits to Revelstoke Customers

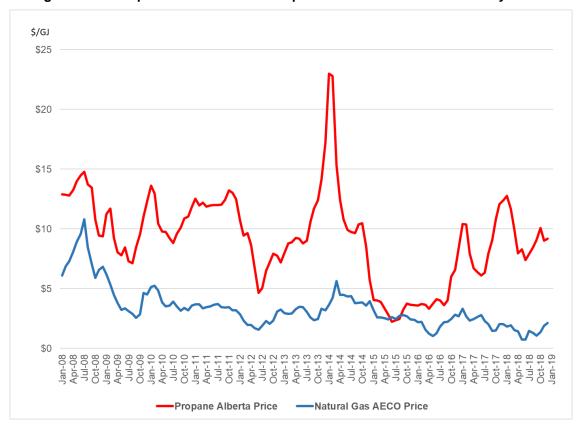
- Historically, in the Western Canadian propane and natural gas commodity supply markets, propane prices have been higher than natural gas prices on an energy equivalent basis, with propane experiencing much more price volatility than natural gas. This section explains the effect of the commodity price and volatility, its impact on FEI's customers in Revelstoke, and outlines how finding a solution that mitigates this impact benefits FEI's Revelstoke propane customers.
- 12 Figure 2-1 below compares historical monthly prices for Alberta Energy Company (AECO)
- 13 natural gas and Alberta propane from June 2008 until January 2019.³ The figure illustrates three
- 14 phenomena: (1) the magnitude of price spikes for propane is greater than that for natural gas,
- 15 (2) propane has historically sold at higher prices than natural gas on an energy equivalent basis,
- and (3) the frequency of price spikes is somewhat greater for propane than for natural gas.
- 17 Since these energy commodity prices are reflected in the cost of gas recovery portion of
- 18 customer rates, these three factors have a direct impact on FEI's Revelstoke customers.

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³ This intends to show a direct comparison as FEI procures Revelstoke propane supply from Alberta.



Figure 2-1: Comparison of Historical Propane and Natural Gas Commodity Prices



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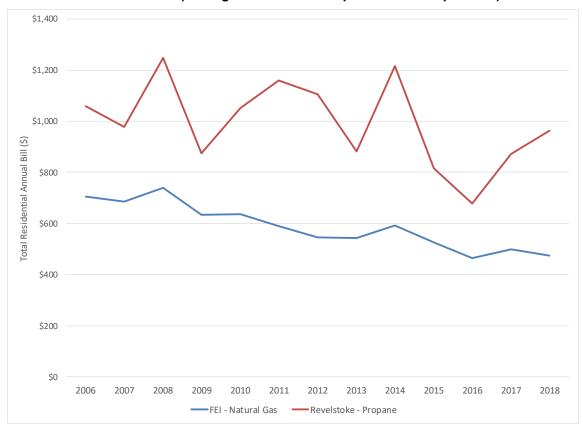
Figure 2-2 below shows the annual bill difference between a Revelstoke residential customer and a natural gas residential customer, based on a Rate Schedule (RS) 1 customer consuming an average 50 gigajoules (GJs) per year from 2006 to 2018.⁴ As illustrated below, the annual bill of Revelstoke residential customers is consistently higher than FEI's natural gas residential customers at the same consumption level. For the 2006 to 2018 period, Revelstoke RS 1 residential customers have paid, on average, \$405 per year (or approximately 69 percent) more than FEI's RS 1 residential natural gas customers, with a peak of \$624 (105 percent) more in 2014. Notably, Revelstoke customers⁵ have the same delivery rates as FEI's natural gas customers. The cost premium and the fluctuation in annual bills experienced by Revelstoke propane customers is due to the propane energy portion of the annual bill only (i.e., propane has historically sold at a higher prices than natural gas on an energy equivalent basis and has had greater market price volatility than natural gas).

⁴ A typical residential natural gas customer in the FEI Mainland and Vancouver Island service area uses on average 90 GJs and a typical residential propane customer in Revelstoke uses on average 50 GJs. The annual average use rate of 50 GJs is used for both FEI and Revelstoke for the purpose of comparison.

⁵ Applicable Revelstoke RS 1 (Residential Service), RS 2 (Small Commercial Service) and RS 3 (Large Commercial Service).



Figure 2-2: Comparison of Total Annual Residential Bill – Revelstoke Propane and FEI Natural Gas Customer (Average Annual Consumption of 50 GJs per Year)



2.2 Commodity Rate Stability Supports British Columbia's Energy **OBJECTIVES**

This Application proposes changes to reduce future commodity rate volatility for FEI's Revelstoke propane customers. The proposed mechanism will provide Revelstoke propane customers with propane rate stability matching that of FEI natural gas customer rates and, based on the historical relationship between the natural gas and propane commodities, could also reduce annual energy bills for Revelstoke propane customers. Volatile energy input costs in a specific region can be a disadvantage to households and businesses that can lead to diminished economic development and job creation opportunities. FEI believes that stabilizing propane rates is beneficial for Revelstoke customers and may contribute to encouraging other Revelstoke energy users to switch from higher-carbon heating oil to propane.⁶ As such, the proposed changes support the following two of BC's energy objectives under section 2 of the Clean Energy Act.7

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For example, at the following link: 2012 City of Revelstoke Community Energy and Emissions Inventory the Excel file indicates 12,723 GJs of residential heating oil consumption in Revelstoke.

http://www.bclaws.ca/civix/document/id/consol24/consol24/00 10022 01#part1.

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- 1 (h) to encourage the switching from one kind of energy source or use to another 2 that decreases greenhouse gas emissions in British Columbia; and
- 3 (k) to encourage economic development and the creation and retention of jobs.
- 4 The following section describes how FEI's proposed relief mechanism works and what options
- 5 FEI proposes for establishing the mechanism.



1 3 PROPOSED CHANGES

- 2 FEI proposes to amalgamate the costs of FEI's Revelstoke propane supply requirements with
- 3 the costs of FEI's natural gas supply requirements in order to reduce the propane commodity
- 4 rate volatility and historically higher prices for Revelstoke customers. The following sections
- 5 describe the proposed changes in the accounting treatment of FEI's propane supply portfolio
- 6 costs and the proposed changes to the rate setting mechanism for the commodity-related
- 7 charges to Revelstoke customers.

3.1 Changes to Accounting Treatment of Propane Supply Costs

- 9 Based on FEI's forecast for 2019, Revelstoke propane demand represents approximately 0.2
- percent of FEI's total energy demand under RS 1 to 7, including both natural gas and propane.8
- 11 As shown in Section 2 above, the market price for the natural gas commodity has historically
- been more stable than that for the propane commodity. Since FEI's annual Revelstoke propane
- supply cost is small compared to FEI's natural gas supply cost, the fluctuations in propane costs
- can be neutralized through amalgamation with FEI's natural gas supply portfolio costs.
- 15 Since the 2016/17 contracting year, FEI's Revelstoke propane supply portfolio has included a
- 16 combination of fixed price purchases for the winter season and floating price purchases
- 17 throughout the year for delivered propane, as well as the localized propane tank storage. The
- 18 cost of the propane supply portfolio is currently captured in the Propane Cost Deferral Account
- 19 (PCDA) and is accounted for separately from FEI's natural gas supply portfolio cost. With this
- 20 Application, FEI proposes to:
 - Amalgamate its Revelstoke propane supply portfolio costs with its natural gas supply portfolio costs by transferring the December 31, 2019 closing balance of the PCDA to FEI's existing MCRA as an opening balance adjustment, effective January 1, 2020;
 - Starting January 1, 2020, capture all Revelstoke propane supply portfolio costs in the MCRA; and
 - 3. Eliminate the PCDA.

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The proposed change will have a small midstream (Storage and Transport) rate impact to FEI's natural gas customers, as further discussed in Section 3.3 below. The reason that FEI proposes to capture the Revelstoke propane supply portfolio costs in the existing MCRA is because the profile of the Revelstoke propane supply varies with weather. As such, FEI's Revelstoke propane purchases are shaped to the relative level of seasonal consumption,

⁸ FEI's 2019 Annual Review approved under BCUC Order G-10-19. Natural gas demand under RS1 to 7 for the 2019 forecast is 135,901 terajoules (TJs) and Revelstoke propane demand under RS1 to 3 is 251 TJs for the 2019 forecast.

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- similar to how FEI currently captures the costs for seasonally shaping its natural gas supply in
- 2 the existing MCRA.9

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- 3 FEI notes that its proposal involves changes to the accounting treatment only and does not
- 4 involve any changes in how the physical propane and natural gas supply resources are planned
- 5 and managed. FEI will continue to manage the propane and natural gas supply requirements
- 6 separately for contracting, balancing, and mitigation of the physical supply portfolios. Separate
- 7 propane and natural gas Annual Contracting Plans, as well as the individual energy supply
- 8 agreements FEI executes with counterparties, will continue to be submitted to the BCUC for
- 9 review and acceptance prior to the contracting period.

3.2 CHANGES TO COMMODITY RATE SETTING FOR REVELSTOKE CUSTOMERS

- When amalgamating the costs of the propane supply portfolio with the costs of FEI's natural gas
- supply portfolio, it is necessary to develop a new mechanism for setting the propane gas cost
- 13 recovery rates for FEI's Revelstoke propane customers. FEI considered two options for
- 14 calculating the propane gas cost recovery rates for Revelstoke customers: 1) equal gas cost
- recovery and 2) a five-year rolling average of the price difference between propane and natural
- 16 gas. The remainder of this section discusses the two options in detail. This includes an
- 17 illustration of the commodity related charges for both FEI's natural gas customers and
- 18 Revelstoke propane customers under each option using the following assumptions:
- Commodity related charges are effective January 1, 2020, assuming the amalgamation occurs on January 1, 2020;
- Annual consumption of 50 GJ;
- Energy quantities are based on FEI's Revelstoke propane demand forecast for 2020 (see Section 4.1);
- Forecast natural gas midstream commodity related costs for January to December 2020 are based on FEI's 2019 Second Quarter Gas Cost Report, accepted on June 14, 2019, under BCUC Letter L-29-19;
 - Forecast propane gas costs for January to December 2020 are based on FEI's Revelstoke 2019 Second Quarter Gas Cost Report, approved on June 13, 2019, under BCUC Order G-129-19; and
 - Forecast closing balance of PCDA as of December 31, 2019 is based on FEI's Revelstoke 2019 Second Quarter Gas Cost Report, approved on June 13, 2019, under BCUC Order G-129-19.

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In contrast, FEI's existing Commodity Cost Recovery Account (CCRA) captures the volumetric purchases for the baseload that is purchased 365 days per year.



- 1 The commodity related charges shown in this section are for illustration purposes only. As FEI
- 2 proposes to implement the amalgamation of the propane and natural gas costs effective
- 3 January 1, 2020, the actual midstream rates under the commodity related charges for FEI's
- 4 natural gas customers and the actual cost of propane rate for Revelstoke's customers for
- 5 January 1, 2020 will be set based on the 2019 fourth guarter gas cost review of FEI's natural
- 6 gas portfolio and Revelstoke propane cost portfolio, which will be filed for BCUC approval in the
- 7 fourth quarter of 2019.

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3.2.1 Option 1 - Equal Gas Cost Recovery

9 Option 1 treats Revelstoke propane customers and FEI's natural gas customers the same with

10 respect to the commodity related charges. Under this option, Revelstoke propane customers

- 11 would pay the same gas cost recovery rates as FEI's natural gas customers. Table 3-1 below
- 12 illustrates this treatment with reference to RS 1 based on the assumptions shown in Section 3.2
- 13 above. Please refer to Appendix A-1 for the calculation of the commodity related charges under
- 14 Option 1 for FEI rate schedules (RS 1 to 7), including Revelstoke customers.

Table 3-1: Illustration of Equal Gas Cost Recovery Option

			FEI	Premium	
Line	Particular	Reference	Natural Gas	Multiplier	Revelstoke
1	Rate Schedule 1 (Residential Service) - January 1, 2020				
2	Commodity Related Charges				
3	Cost of Gas per GJ (\$/GJ)	Appendix A-1, Line 15	1.549		
4	Storage and Transport per GJ (\$/GJ)	Appendix A-1, Line 67 + Line 72	1.233		
5	Total Commodity Related Charges per GJ (\$/GJ)	FEI: Line 3 + Line 4; Revelstoke: Line 5 x Multiplier	2.782	x 1.000	2.782
6	Carbon Tax Rate (\$/GJ)	Current Rate from April 2019 to March 2020	1.986		2.407
7					
8	Average Demand per Year (GJ)		50.00		50.00
9	Total Commodity Related Charges (\$)	Line 5 x Line 8	139.10		139.10
10	Carbon Tax (\$)	Line 6 x Line 8	99.32		120.36
11	Total Commodity Related Charges, incl Carbon Tax (\$)	Line 9 + Line 10	238.42		259.46
12	-				
13	Annual difference between FEI Natural Gas and Propa	ne (\$)			21.04

Under this equal commodity cost recovery option, FEI's Revelstoke propane and FEI's natural gas customers will pay the same commodity related charges per GJ¹⁰, but alignment with BC's energy objectives is preserved as propane customers will continue to pay higher carbon tax rates than natural gas customers. Table 3-1 above illustrates that, even though the cost of gas recovery rates are identical, the carbon tax rate charged to Revelstoke customers is that applicable to propane.

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FEI's natural gas customers' bill includes both Cost of Gas per GJ and Storage and Transport charge per GJ under commodity related charges while FEI's Revelstoke customers' bill only includes a single line item of Cost of Propane under commodity related charges.



3.2.2 Option 2 - Five-Year Rolling Price Difference between Propane and Natural Gas

Under Option 2, FEI proposes to set the propane gas cost recovery rate with a premium multiplier based on the five-year rolling average of annual propane to natural gas price ratios¹¹ (AECO natural gas prices and Alberta Propane prices). As an example, Figure 3-1 below shows the five-year rolling average of annual propane to natural gas price ratios from 2012 to 2018, with a comparison of the annual propane to natural gas price ratio. The 2018 five-year rolling average of the ratio is 3.064. It can be seen from Figure 3-1 that the five-year rolling average of the price ratios remains relatively flat. If the propane gas cost recovery rate is set based on the five-year rolling average of the price ratios as an index multiplier the resulting propane cost recovery rate will mitigate the rate volatility for Revelstoke propane customers.



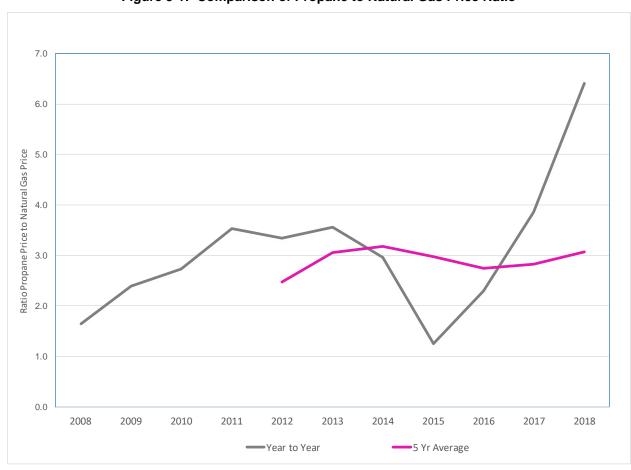


Table 3-2 below compares the total commodity charge of a Revelstoke RS 1 propane customer and a RS 1 natural gas customer using the five-year rolling average-indexed multiplier applied to Revelstoke's customers and based on the assumptions shown in Section 3.2 above. Please

¹¹ Annual propane and natural gas prices calculated on a weighted-average basis.



- 1 refer to Appendix A-2 for the calculation of the commodity related charges under Option 2 for
- 2 rate schedules (RS 1 to 7), including Revelstoke customers.
- 3 FEI notes that this rate setting mechanism does not provide rate relief to Revelstoke customers
- 4 as, over the long term, the negative and positive variances between the current price difference
- 5 of propane versus natural gas and the price difference set by the five-year rolling average-
- 6 indexed multiplier will tend to counterbalance each other. 12
- 7 With Option 2, FEI proposes to review and reset the index multiplier annually as part of the
- 8 fourth quarter gas cost review when midstream rates are normally reset. This approach enables
- 9 the index multiplier to take into account longer-term changes in the propane and natural gas
- 10 markets.

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Table 3-2: Illustration of 5-year Rolling Average-Indexed Gas Cost Recovery Option

			FEI	Premium	
Line	Particular	Reference	Natural Gas	Multiplier	Revelstoke
1	Rate Schedule 1 (Residential Service) - January 1, 2020				
2	Commodity Related Charges				
3	Cost of Gas per GJ (\$/GJ)	Appendix A-3, Line 15	1.549		
4	Storage and Transport per GJ (\$/GJ)	Appendix A-3, Line 67 + Line 72	1.227		
5	Total Commodity Related Charges per GJ (\$/GJ)	FEI: Line 3 + Line 4; Revelstoke: Line 5 x Multiplier	2.776	x 3.064	8.506
6	Carbon Tax Rate (\$/GJ)	Current Rate from April 2019 to March 2020	1.986		2.407
7					
8	Average Demand per Year (GJ)		50.00		50.00
9	Total Commodity Related Charges (\$)	Line 5 x Line 8	138.80		425.30
10	Carbon Tax (\$)	Line 6 x Line 8	99.32		120.36
11	Total Commodity Related Charges, incl Carbon Tax (\$)	Line 9 + Line 10	238.12		545.66
12					
13	Annual Variance to FEI Natural Gas Charges (\$)				307.54

3.3 MIDSTREAM (STORAGE AND TRANSPORT) RATE IMPACT TO FEI'S NATURAL GAS CUSTOMERS

Table 3-3 below shows that the rate impact to FEI's natural gas customers resulting from FEI's proposal to amalgamate Revelstoke's propane supply costs with FEI's natural gas supply costs in the MCRA is small. Based on the current forecasts of FEI's natural gas midstream commodity related costs and Revelstoke's propane gas costs for the period of January to December 2020¹³, the January 1, 2020 impacts to FEI's natural gas customers through the midstream rate would be as follows:

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For example, the positive price variances of propane to natural gas shown in Figure 3-1 from 2012 to 2014 and from 2016 to 2018 will counterbalance the negative price variances from 2014 to 2016. Thus, Revelstoke's customers will pay mostly the same amount over a five-year period but without the volatility in comparison to cost of propane rates that are reviewed quarterly on a separate (not amalgamated) portfolio. However, since the premium multiplier is proposed to be reviewed and reset annually, there will be small rate impacts, either positive or negative, in each year. Furthermore, since rates are not set retroactively, there might be small residual variances of the price difference over the long term that will be embedded in rates for all FEI customers, including Revelstoke customers.

¹³ Based on FEI's 2019 Q2 Gas Cost Report and FEI's 2019 Q2 Revelstoke Gas Cost Report



- Option 1: An increase of just over one cent per GJ or an annual increase of just under
 one dollar for a typical residential natural gas customer;¹⁴ or
 - Option 2: An increase of just over half a cent per GJ or an annual increase of just over 50 cents for a typical residential natural gas customer.¹⁵

Table 3-3: Incremental Midstream Rate Impact to FEI's Natural Gas Customers

Lina	Particular	Reference	Option 1 - Equal Cost	Option 2 - 5-Year Rolling Average- Indexed
1	Estimated FEI Revelstoke Propane Costs (\$000s)	See note 1	Recovery 2,239	2,239
2	Estimated PEr Neverstoke Propane Costs (3000s) Estimated Propane recovery via Commodity Recovery Charge (\$000s)	See note 2	(373)	(1,144)
3	Total Propane Costs transfer to FEI MCRA (\$000s)	Line 1 + Line 2	1,865	1,094
4				
5	FEI Natural Gas Total Midstream Costs (\$000S)	See note 3	149,526	149,526
6	FEI MCRA Amortization (\$000S)	See note 4	13,907	13,907
7	TOTAL Natural Gas Midstream Costs (incl. MCRA Amortization)	Line 5 + Line 6	163,433	163,433
8				
9	Revelstoke Propane Demand Forecast (2020F) - TJ	Appendix A, Line 1 (RS-1R, 2R, 3R)	241	241
10	FEI MCRA Demand (Natural Gas Only) - TJ	Appendix A, Line 1 (RS-1 to 7)	138,206	138,206
11	TOTAL Demand (Natural Gas & Propane) - TJ	Line 9 + Line 10	138,447	138,447
12				
13	Average Midstream Rate - Natural Gas Only (\$/GJ)	Line 7 / Line 10	1.183	1.183
14	Average Midstream Rate - Natural Gas & Propane (\$/GJ)	(Line 3 + Line 7) / Line 11	1.194	1.188
15				
16	Average Midstream Rate Impact to FEI's Customer (\$/GJ)	Line 14 - Line 13	0.011	0.006
17	% Average Midstream Rate Impact to FEI's Customer	Line 16 / Line 13	0.93%	0.51%

 $[\]hbox{1-Appendix A, Line 11; Forecast Jan to Dec 2020 based on FEI Revelstoke 2019 Q2 Gas Cost Report}\\$

Table 3-4 below illustrates that the midstream rate impact to FEI's natural gas customers will remain small even if both of the following unlikely events occur:

- Propane supply costs return to the historical peak level of approximately \$3.3 million from 2014 (as shown in Figure 2-1 in Section 2) instead of the currently forecast level of approximately \$2.4 million for 2020; and
- All residential dwellings in Revelstoke that are within 30 metres of an existing main but currently use heating oil or other fuel types decide to convert to propane in the first year after the proposed amalgamation becomes effective, resulting in total Revelstoke propane forecast demand of 298 TJ for 2020 instead of 241 TJ under the current forecast for 2020 (see Section 4.1).

In this extreme but unlikely scenario, the midstream rate impact to FEI's natural gas customers will be an average increase of just over two cents per GJ under Option 1 Equal Cost Recovery.

19 This means that a typical residential natural gas customer in the FEI Mainland and Vancouver

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^{2 -} Appendix A, Line 17; Assumed Commodity Cost Recovery Charge of \$1.549 per GJ (Eff. Jan 1, 2019) plus Propane Premium Multiplier

^{3 -} Forecast Jan to Dec 2020 based on FEI 2019 Q2 Gas Cost Report, exclude T-Service UAF

^{4 -} Forecast as of Jan 1, 2020 based on FEI 2019 Q2 Gas Cost Report (1/2 of Pre-Tax Amortization MCRA Deficit/(Surplus)

¹⁴ \$0.011 per GJ or average annual of \$0.99 based on 90 GJs per year.

¹⁵ \$0.006 per GJ or average annual of \$0.54 based on 90 GJs per year.

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1 Island service area would experience an average annual increase of approximately two dollars¹⁶, based on an average annual usage of 90 GJs per year.

Table 3-4: Incremental Midstream Rate Impact to FEI's Natural Gas Customers (Based on 2014 Historical Peak Propane Supply Cost)

				Option 2 -
			Option 1 -	5-Year Rolling
			Equal Cost	Average-
Line	Particular		Recovery	Indexed
1	Estimated FEI Revelstoke Propane Costs (\$000s)	See note 1	3,904	3,904
2	Estimated Propane recovery via Commodity Recovery Charge (\$000s)	See note 2	(461)	(1,413)
3	Total Propane Costs transfer to FEI MCRA (\$000s)	Line 1 + Line 2	3,443	2,491
4				
5	FEI Natural Gas Total Midstream Costs (\$000S)	See note 3	149,526	149,526
6	FEI MCRA Amortization (\$000S)	See note 4	13,907	13,907
7	TOTAL Natural Gas Midstream Costs (incl. MCRA Amortization)	Line 5 + Line 6	163,433	163,433
8				
9	Revelstoke Propane Demand Forecast (2020F) - TJ ⁵	Appendix A, Line 1 (RS-1R, 2R, 3R)	298	298
10	FEI MCRA Demand (Natural Gas Only) - TJ	Appendix A, Line 1 (RS-1 to 7)	138,206	138,206
11	TOTAL Demand (Natural Gas & Propane) - TJ	Line 9 + Line 10	138,504	138,504
12				
13	Effective Midstream Rate - Natural Gas Only (\$/GJ)	Line 7 / Line 10	1.183	1.183
14	Effective Midstream Rate - Natural Gas & Propane (\$/GJ)	(Line 3 + Line 7) / Line 11	1.205	1.198
15				
16	Midstream Rate Impact to FEI's Customer (\$/GJ)	Line 14 - Line 13	0.022	0.015
17	% Midstream Rate Impact to FEI's Customer	Line 16 / Line 13	1.86%	1.27%

- 1 Estimated based on hisotrical highest propane cost at FEI Revelstoke 2014 Q4 Gas Cost Report
- 2 Assumed Commodity Cost Recovery Charge of \$1.549 per GJ (Eff. Jan 1, 2019) plus Propane Premium Multiplier
- 3 Forecast Jan to Dec 2020 based on FEI 2019 Q2 Gas Cost Report, exclude T-Service UAF
- 4 Forecast as of Jan 1, 2020 based on FEI 2019 Q2 Gas Cost Report (1/2 of Pre-Tax Amortization MCRA Deficit/(Surplus)
- 5 Assume all conversion to occur in 2020

3.4 COMPARISON OF OPTIONS

- 7 Table 3-5 below compares the two propane gas cost recovery options considering the benefits
- 8 to Revelstoke customers and BC's energy objectives as described in Section 2 of this
- 9 Application, and against the projected midstream rate impact on FEI's natural gas customers.
- 10 Based on this comparison, Option 1 (Equal Natural Gas and Propane Cost Recovery) is FEI's
- 11 preferred option. Option 1 provides rate stability with the added benefit of rate relief to FEI's
- 12 Revelstoke propane customers, while the impact to FEI's natural gas customers remains small
- 13 (as illustrated in Table 3-4). Both options provide benefits to Revelstoke customers and support
- 14 BC's energy objectives as described in Section 2 of this Application.

 $^{^{16}}$ \$0.022 per GJ or average annual of \$1.98 based on 90 GJs per year.



Table 3-5: Comparison of Propane Gas Cost Recovery Rates Calculation Options

	Option 1 – Equal Natural Gas and Propane Cost Recovery	Option 2 – Five-Year Rolling Price Difference
Mitigates Propane Rate Volatility	Yes	Yes
Provides Rate Relief for Revelstoke Propane Customers	Yes	No
Midstream Rate Impact for FEI Natural Gas Customers	Small	Small
Supports BC's Energy Objectives	Yes	Yes

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Fully amalgamating the propane and natural gas portfolio costs on an equal basis (as proposed in Option 1) ensures that FEI customers in Revelstoke do not experience differing cost of energy recovery rates due to their location within FEI's service territory. This supports equality of investment and job creation across the province. With the exception of Revelstoke and Fort Nelson¹⁷, FEI's customers already pay the same cost of energy recovery rates no matter where they are located within the service area. FEI's Revelstoke propane customers are different from FEI's natural gas customers because they use a different fuel type. However, geographical location itself is the key cause for this difference in fuel type. As such, applying equal cost of energy recovery rates to FEI's Revelstoke propane customers represents an improvement to the current situation in line with the accepted principle of common rates across geographical locations within FEI's service territory.

- Further, neither of the options preclude future review of potential options to upgrade the Revelstoke propane system to natural gas, which may include consideration of alternatives such as a natural gas pipeline, liquefied natural gas (LNG) supply, or compressed natural gas (CNG)
- supply in consideration of both the economic and non-financial benefits at the time.

¹⁷ Fort Nelson's rates differ from FEI's common rates for Mainland and Vancouver Island for historical reasons. In contrast to Revelstoke, Fort Nelson represents a separate service area that is subject to its own tariff schedules.

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4 FORECAST LOAD GROWTH AND IMPACTS ON THE REVELSTOKE DISTRIBUTION SYSTEM

Another benefit of the rate stability and rate relief offered to Revelstoke customers by the proposed amalgamation of FEl's propane supply costs into the natural gas supply costs would be accelerated load growth in Revelstoke with conversions from other fuel types (e.g., from heating oil to propane, which would provide associated GHG emissions benefits). This potential load growth could also lead to accelerated capital upgrade requirements for the Revelstoke distribution system. In this section, FEI quantifies the potential impact of conversions on customer delivery rates by using an Upper Bound scenario and calculating the associated delivery rate impact of a large number of conversions occurring in the first year after the proposed changes become effective (i.e., 2020 or Year 1). This, in turn, triggers the need for immediate capital upgrades to the existing propane distribution system in order to serve the additional load. This Upper Bound scenario represents the Upper Bound rate and bill impact on FEI and Revelstoke customers as all conversions and capital upgrades would occur in the first year after the proposed amalgamation rather than gradually over time. FEI believes the Upper Bound scenario is unlikely due to the practicalities involved with conversions (energy users making conversion decisions over time, planning their conversions, purchasing new appliances, having to rely on contractor capacity for completing their conversions, etc.), but this is still useful as it helps to illustrate the Upper Bound rate and bill impact on FEI and Revelstoke customers if conversions occur rapidly.

4.1 UPPER BOUND DEMAND FORECAST

Based on FEI's geographic information system (GIS), FEI identified 1,063 residential dwellings within 30 metres of an existing main in Revelstoke that are currently not FEI Revelstoke propane customers. Since there are incremental connection costs associated with residential dwellings that are greater than 30 metres from an existing main¹⁸, FEI believes these dwellings represent the extent of the customers that are likely to consider conversion to propane service. Since the number and evolution of conversions over time is uncertain, FEI assumed all identified 1,063 residential dwellings will connect to FEI's propane system in Revelstoke in 2020 to illustrate an Upper Bound delivery rate impact¹⁹ on FEI and Revelstoke customers. FEI notes that no conversion additions were forecasted for commercial customers in Revelstoke under this Upper Bound scenario as FEI assumes commercial customers that have the ability to take propane service have done so already.

Figure 4-1 below shows the forecast of total residential customer count in Revelstoke and Figure 4-2 below shows forecast total energy demand (residential and commercial normalized

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¹⁸ In addition to the Application Charge of \$15, the cost to connect to FEI's distribution system is dependent on the distance from FEI's main to where the gas meter will be installed at the property. If the residential dwelling is less than 30 metres away from FEI's distribution mains, the cost to connect (i.e. new service line and meter) is typically covered by FEI's service line cost allowance per FEI's General Terms and Conditions.

¹⁹ Incremental levelized delivery rate impact based on 20-year demand forecast under the Upper Bound scenario including incremental offsetting revenues from increase of customers and demand.



demand) under the Upper Bound scenario as compared to the Current Forecast. The Current Forecast assumes no conversions from residential dwellings within 30 metres of an existing main. The forecasts shown in Figures 4-1 and 4-2 are consistent with the forecasting process in FEI's annual submissions to the BCUC. The annual demand forecast for residential and commercial customers relies on two components:

- Average use per customer (UPC) forecast; and
- Customer forecast.

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Specifically, the average UPC is estimated for customers served under RS 1, 2 and 3 and is then multiplied by the corresponding forecast of the number of customers (opening number of customers plus average net customer additions during the year) in these rate schedules to derive energy consumption. Please refer to Appendix B for the discrete residential and commercial demand forecasts as well as further discussion of the UPC and customer additions forecast methods.



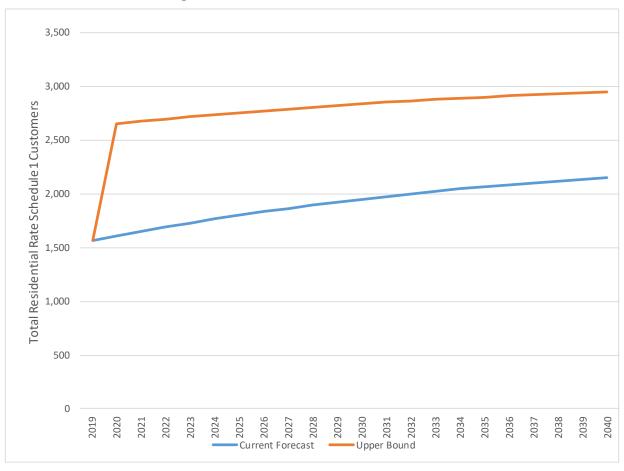
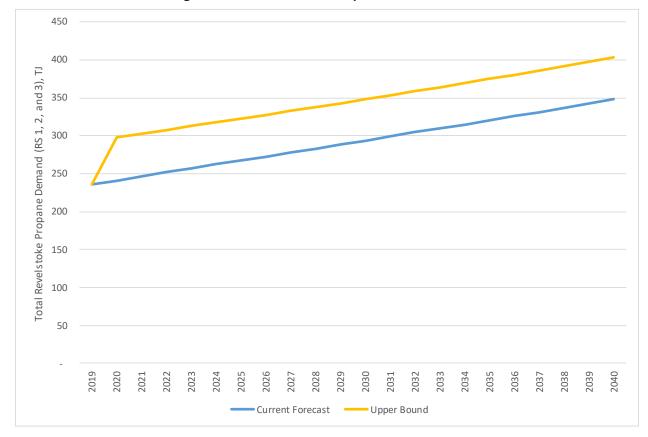




Figure 4-2: Total Annual Propane Demand in TJs



Figures 4-1 and 4-2 above show that, in the unlikely event that all 1,063 residential dwellings identified within 30 metres of an existing main in Revelstoke convert to propane immediately in 2020, the total propane demand in Revelstoke is forecasted to increase by approximately 26 percent, from the current forecast demand of 236 TJ to 298 TJ in 2020. In the following sections, FEI outlines the capital upgrades that would be required to Revelstoke's propane distribution system based on this Upper Bound demand forecast as shown in Figure 4-2 above and the resulting Upper Bound delivery rate impact to both FEI's and Revelstoke's customers if the Upper Bound scenario were to occur.

4.2 REQUIRED DISTRIBUTION SYSTEM UPGRADES

FEI applied its standard peak demand forecast method to the customer forecasts discussed in Section 4.1. Hydraulic models were then developed to determine the extent of system upgrades required to support the growth within the 20-year forecast horizon under the Upper Bound scenario. Based on the forecasted growth under the Upper Bound scenario, the existing distribution system in Revelstoke will require three additional propane storage tanks and a distribution main upgrade in order to serve Revelstoke's existing customers as well as the additional load from the conversions as described in Section 4.1 above. The capital upgrades will have to be implemented immediately in the first year after the proposed amalgamation of propane and natural gas costs begins as the Upper Bound scenario assumes all additional



- 1 conversions occur in the first year after the proposed amalgamation becomes effective. The
- 2 total capital cost for the upgrade is estimated to be \$2.798 million in 2019 dollars. Table 4-1
- 3 below summarizes the estimated cost of system upgrade requirements for the Upper Bound

4 scenario.

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Table 4-1: Upper Bound Scenario System Upgrades

System Upgrade Type	Project Description	Project Estimate (2019 \$000s)
Propane Storage	3 new 30,000 USG storage Vessels	\$2,000
Distribution Mains	SI - 1140m x 219 DPPE Oscar St	\$798

4.3 Delivery Rate Impact to FEI and Revelstoke Customers

Based on the estimated cost of the hypothetical capital upgrades to Revelstoke's propane distribution system and the forecast load growth shown in previous sections under the Upper Bound scenario, Table 4-2 below outlines the resulting incremental delivery rate impact on all of FEI's non-bypass customers (natural gas and Revelstoke propane customers). The delivery rate impact analysis includes the incremental capital and operating & maintenance costs²⁰ required for the additional customers as well as the resulting incremental revenues from the additional customers that would occur under the Upper Bound scenario. Please refer to Appendix C for the financial and incremental delivery rate impact analysis of the Upper Bound scenario.

Table 4-2: Net Incremental Delivery Rate Impact

lino	Particular	Reference	Incremental Impact (Upper Bound)
Lille	ratticulai	Reference	boulluj
1	2020 Incremental Revenue Requirement to 2019 Approved (\$000s)	Appendix C, Line 11	(63)
2	2021 Incremental Revenue Requirement to 2019 Approved (\$000s)	Appendix C, Line 11	91
3	Cumulative Incremental Revenue Requirement - first two years (\$000s)	Line 1 + Line 2	28
4	2019 Approved Revenue Requirements, Non-Bypass (\$000s)	BCUC Order G-10-19	814,155
5			
6	2020 % Delivery Rate Increase to 2019 Rates	Appendix C, Line 17	(0.008%)
7	2021 % Delivery Rate Increase to 2020 Rates	Appendix C, Line 17	0.019%
8	Cumulative % Increase to 2019 Rates, Non-Bypass - first two years	Line 6 + Line 7	0.011%
9			
10	2019 Approved Effective Delivery Rate (\$/GJ)	Line 4 / 2019 Non-bypass TJ	4.039
11	Cumulative Effective Rate Increase - first two years (\$/GJ)	Line 8 x Line 10	0.0004
12	Annual Delivery Rate Impact @ 50 GJ per year (\$)	Line 11 x 50 GJ/yr	0.02
13	Annual Delivery Rate Impact @ 90 GJ per year (\$)	Line 11 x 90 GJ/yr	0.04

The net incremental delivery rate impact analysis shows that, in the event of the Upper Bound scenario occurring, FEI's non-bypass customers will experience a delivery rate impact of \$0.0004 per GJ (or 0.011 percent) over the first two years after the proposed amalgamation of

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²⁰ Includes incremental capital costs for new distribution service line and meter set installations, and the incremental annual operational and maintenance costs for the additional customers.

FORTISBC ENERGY INC.

REVELSTOKE PROPANE PORTFOLIO COST AMALGAMATION APPLICATION



- 1 propane and natural gas supply costs comes into effect (i.e. effective date of January 1, 2020,
- 2 with the first two years occurring in 2020 and 2021). A typical residential natural gas customer
- 3 in the FEI Mainland and Vancouver Island service area would experience an approximate
- 4 overall annual increase of \$0.04, based on an average usage of 90 GJs per year²¹.

5 FEI notes that the comparison of delivery rate impacts in Table 4-2 above is based on a two-

- 6 year period following the effective date of the proposed amalgamation. This is because the
- 7 plant additions of the capital upgrades are assumed to occur mid-year and the incremental
 - depreciation expense resulting from the plant additions will not occur until the following year
- 9 (e.g., depreciation expense of the revenue requirement is based on the opening balance of
- 10 plant additions). As such, using the delivery rate impact over the first two years following the
- 11 effective date of the proposed amalgamation is a more accurate representation of the delivery
- rate impact of the proposed changes from the amalgamation of FEI's propane and natural gas
- 13 supply portfolio costs.

²¹ There will be no actual delivery rate impact experienced by FEI's customers as rates are typically rounded to three decimal places in customer bills.



1 5 TOTAL BILL IMPACTS TO FEI AND REVELSTOKE CUSTOMERS

Table 5-1 below summarizes the total cost of commodity recovery rate impact and the total annual bill impact for RS 1 to 3 customers resulting from the proposed amalgamation of FEI's propane and natural gas supply costs and the preferred rate setting Option 1 (equal commodity cost recovery between propane and natural gas). For detailed calculations as well as the total annual bill impact for FEI's RS 4 to 7 customers, please refer to Appendix D. FEI notes the total annual bill impact includes the impact to the commodity cost recovery rate only as discussed in Section 3. There is no delivery rate impact when rounded to three decimal places even under the Upper Bound scenario where all residential dwellings within 30 metres of an existing main convert to propane immediately in the first year of the proposed amalgamation (as discussed in Section 4 above).

Table 5-1: Summary of Average Annual Bill Impact for Revelstoke Propane and FEI Natural Gas Customers (RS 1 to 3)²²

Rate Schedule Revelstoke Customers (Propane)	Average UPC (GJ)	Α	Average nnual Bill mpact (\$)	Average Annual Bill Impact (%)
Rate Schedule 1 - Residential Service	50	\$	(407)	(45%)
Rate Schedule 2 - Small Commerical	300	\$	(2,116)	(49%)
Rate Schedule 3 - Large Commerical	6,650	\$	(48,259)	(56%)
FEI's Mainland and Vancouver Island (Natural Gas)				
Rate Schedule 1 - Residential Service	90	\$	0.98	0.12%
Rate Schedule 2 - Small Commerical	340	\$	4.00	0.16%
Rate Schedule 3 - Large Commerical	3,770	\$	33.72	0.15%

Table 5-1 above shows that FEI's natural gas customers will experience a small annual bill impact under the proposed amalgamation and the preferred rate setting option of equal commodity cost recovery between propane and natural gas. For a typical residential customer consuming 90 GJs per year in FEI's Mainland and Vancouver Island service area, the average annual bill increase for Option 1 – equal commodity costs recovery is \$0.98 (or 0.12 percent). For Revelstoke, a typical residential customer will experience an estimated average annual bill decrease of \$407 (or 45 percent) based on an average usage of 50 GJs per year.

[.]

Comparison for illustrative purpose only as the Storage and Transport rates for FEI's natural gas customers and Cost of Propane for Revelstoke customers' rates discussed in Section 3 are forecasts only assuming an effective date of January 1, 2020, calculated based on the 2019 Second Quarter Gas Cost Report.



5.1 CHANGES TO REVELSTOKE CUSTOMER BILLS AND ELIMINATION OF PROPANE RATE RIDER 1

If the amalgamation is approved, FEI proposes to eliminate and cancel the existing Propane Rate Rider 1 under FEI's RS 1 (Residential Service), RS 2 (Small Commercial Service) and RS 3 (Large Commercial Service) Rate Schedules as the proposed Option 1 will set the total commodity related charge equally between FEI's natural gas customers and Revelstoke's propane customers. Currently, Revelstoke customers pay the same basic charge and delivery rate as other FEI customers. However, for commodity charges, Revelstoke customers currently see only the Cost of Propane listed in their bills while FEI's customers see both Storage and Transport and Cost of Gas listed on their bills. The Cost of Propane charges on Revelstoke customers' bills are made up of the existing Propane Rate Rider 1, the same Storage and Transport charge as FEI's natural gas customers and the same Cost of Gas charge as FEI's natural gas customers for the same period. Propane Rate Rider 1 is currently calculated such that the total Cost of Propane for Revelstoke Customers is equal to the cost of propane energy delivered to Revelstoke.

Table 5-2 below is an illustration of how the cost of propane rate is calculated for Revelstoke under the current separate commodity portfolios using the Propane Rate Rider 1 and also how the cost of propane rate will be calculated under the proposed equal natural gas and propane cost recovery (Option 1). As seen with the illustration, the Propane Rate Rider 1 will no longer be needed under Option 1; therefore, FEI is proposing to eliminate and cancel this rate rider from FEI's RS 1, 2, and 3 that are applicable to Revelstoke customers. FEI notes that no change is required to the bill structure and layout for Revelstoke customers. Revelstoke customers will continue to see only the Cost of Propane listed in their bills. FEI also notes that after the proposed amalgamation of FEI's propane and natural gas supply portfolio costs, Revelstoke customers would also pay for the MCRA Rate Rider 6 as part of the Cost of Propane rate since all propane costs will be recorded in the MCRA. Currently, MCRA Rate Rider 6 is excluded in the calculation of the Cost of Propane for Revelstoke.



1 Table 5-2: Calculations of Revelstoke Cost of Propane Rate (Current and Post-Amalgamation)

Line	Particular	Reference	Current (Separate Commodity Portfolio) ¹	Proposed - Equal Cost Recovery (Amalgamated Commodity Portfolio)
	Rate Schedule 1 (Residential Service)			
1	FEI Mainland and Vancouver Island Customers			
2	Cost of Gas (\$/GJ)	Appendix D2, RS1-ML and VI, Line 15	1.549	1.549
3	Storage and Transport (\$/GJ)	Appendix D2, RS1-ML and VI, Line 11	1.118	1.130
4	Rate Rider 6 - MCRA (\$/GJ)	Appendix D2, RS1-ML and VI, Line 12	0.104	0.103
5	Total Commodity Related Charges	Sum of Line 2 to Line 4	2.771	2.782
6				
7	Revelstoke Propane Customers			
8	Cost of Gas (\$/GJ)	Line 2	1.549	1.549
9	Storage and Transport, excl. Rate Rider 6 (\$/GJ)	Line 3	1.118	1.130
10	Rate Rider 6 - MCRA (\$/GJ)	Current: \$0/GJ; Proposed: Line 4	-	0.103
11	Rider 1 Propane Surcharge (\$/GJ)	Current: Appendix D2, RS1-R, Line 17; Proposed: \$0/GJ	8.263	
12	Total - Cost of Propane	Sum of Line 8 to Line 11	10.930	2.782
13				·
14	Ratio of Cost of Propane to Cost of Gas	Line 12 / Line 5	3.944	1.000

^{1 -} January 1, 2020 Forecast based on FEI's 2019 Q2 Gas Cost Report and FEI's 2019 Q2 Revelstoke Gas Cost Report



1 6 APPROVALS SOUGHT

- FEI hereby applies to the BCUC, pursuant to sections 58 to 61 of the *Utilities Commission Act* (UCA), effective January 1, 2020, for approval of the following changes:
- To amalgamate FEI's Revelstoke propane supply portfolio costs with FEI's natural gas supply portfolio costs by transferring the closing balance of the Propane Cost Deferral Account (PCDA) as of December 31, 2019 to FEI's existing MCRA as an opening balance adjustment and thereafter to begin capturing all costs of the Revelstoke propane supply portfolio in the MCRA²³;
- To include Rate Rider 6 Midstream Cost Reconciliation Account (MCRA Rate Rider 6), in the calculation of cost of propane per GJ rate for Revelstoke propane customers because all propane costs will be recorded in the MCRA after the proposed changes are implemented; and
- Approval of the following amendments to FEI Rate Schedules 1, 1B, 1U, 1X, 2, 2B, 2U, 2X,
 3, 3B, 3U, 3X, 4, 5, 5B, 6, 6P, 7, 22, 22A, 22B, 23, 25, 26 and 27 as set out in Appendix E:
- For Rate Schedules 1, 2 and 3:
 - Approval of the proposed amendment to eliminate and cancel Rate Rider 1
 Propane Surcharge (Propane Rate Rider 1), from the table of charges calculations for the Cost of Gas Related Charges for Revelstoke customers.
- For Rate Schedules 1, 1B, 1U, 1X, 2, 2B, 2U, 2X, 3, 3B, 3U, 3X, 4, 5, 5B, 6, 6P and 7:
 - Approval of the proposed housekeeping amendment to the reference to MCRA Rate Rider 6, removing the reference to "excluding Revelstoke".
- For Rate Schedules 1, 1B, 1U, 1X, 2, 2B, 2U, 2X, 3, 3B, 3U, 3X, 4, 5, 5B, 6, 6P, 7, 22, 22A, 22B, 23, 25, 26 and 27:
 - Approval of the proposed housekeeping amendment to Propane Rate Rider 1 upon cancellation, setting it "(Reserved for future use.)".
- 26 Draft forms of orders sought are provided in Appendix F.

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²³ After the balance is transferred, the PCDA will be closed.



7 SUMMARY

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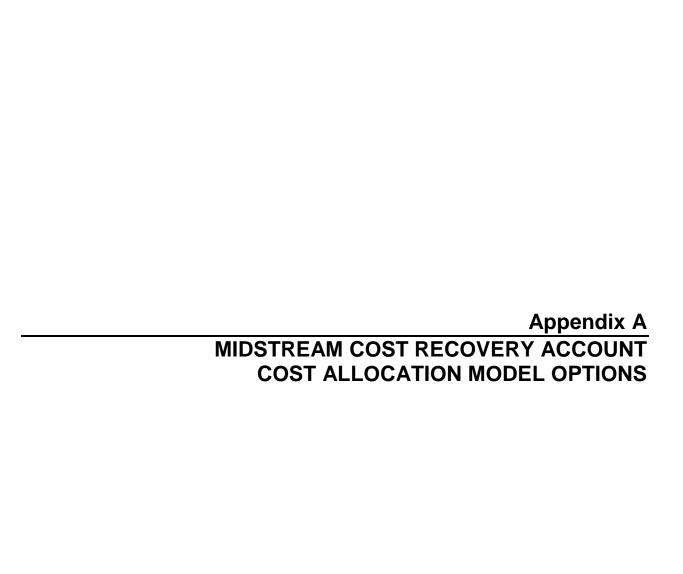
7.1 Propane Price Risk Management

- 3 To date, FEI has carried out price risk management strategies utilizing fixed price propane
- 4 purchases or propane storage contracts to meet a portion of the winter demand for Revelstoke
- 5 with the primary aim of reducing exposure to propane market price volatility, the effects of which
- 6 are ultimately passed on to Revelstoke propane customers. Since FEI's proposed changes
- 7 would mitigate propane price volatility by including propane supply costs in the MCRA, FEI
- 8 would cease price risk management activities that focus on propane rate stability. This does not
- 9 preclude the opportunity for future price risk management activities that focus on procuring the
- 10 lowest cost propane supply (i.e., opportunistic hedging using instruments such as financial
- 11 derivatives).

12 **7.2** CONCLUSION

- 13 The proposed amalgamation of FEI's Revelstoke propane supply portfolio costs with FEI's
- 14 natural gas supply portfolio costs and implementation of the related balance transfers and rate
- 15 riders for setting the Revelstoke cost of propane rates (Option 1) provides a simple and
- 16 transparent solution to address the price volatility and higher energy costs experienced by
- 17 Revelstoke propane customers. FEI believes the proposed solution is a reasonable approach
- 18 because it is administratively efficient and requires no changes to the rate structure and layout
- 19 of Revelstoke propane customers' bills.
- 20 In addition, the proposed solution does not involve any changes in how the physical propane
- 21 and natural gas supply resources are managed by FEI.
- 22 Finally, the proposed solution maintains price signals set by the province in the BC carbon tax
- 23 for fuels of differing carbon intensity whilst ensuring that Revelstoke customers do not
- 24 experience differing cost of energy recovery rates due to their location within FEI's service
- 25 territory. This supports equality of investment and job creation across the province. The
- 26 proposed changes also do not preclude future consideration and review of potential upgrades to
- the Revelstoke propane system to natural gas should the opportunity arise.

Section 7: Summary Page 24



FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA STORAGE AND TRANSPORT RELATED CHARGES (NATURAL GAS & PROPANE) FLOW-THROUGH BY RATE SCHEDULE FOR THE FORECAST TEST PERIOD JAN TO DEC 2020 - EQUAL COST RECOVERY

As the T-Service UAF costs are recovered via delivery revenues, they are excluded from the storage and transportation flow-through calculation.

											General Firm			General			Term & Spot Gas	Off-System Interruptible
Line	- · · ·				Reside				nercial		Service	NGV	Seasonal	Interruptible	RS-1 to RS-7	LNG	Sales	Sales
No.	Particulars (1)	Unit		Total n of (3) to (10)	RS-1 (3)	RS-1R (4)	RS-2 (5)	RS-2R (6)	RS-3 (7)	(8)	RS-5 (9)	(10)	(11)	RS-7 (12)	Summary (13)	RS-46 (14)	(15)	(16)
	(1)		(2) - Sui	11 01 (3) 10 (10)	(3)	(4)	(5)	(6)	(1)	(0)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1 2	MCRA Demand (Natural Gas & Propane)	TJ		138,447.3	82,158.2	87.6	30,708.6	85.3	22,203.2	68.2	3,095.9	40.3	141.3	315.5	138,904.1	1,696.5	1,300.0	33,084.3
_	Load Factor Adjusted Quantity																	
4	Load Factor (a)	%			31.59%	31.59%	31.48%	31.48%	37.69%	37.69%	45.58%	100.00%						
5	Load Factor Adjusted Quantity (Line 1 / Line 4)	TJ		424,129.0	260,109.9	277.3	97,553.1	271.1	58,904.8	180.9	6,791.5	40.3						
6	Load Factor Adjusted Volumetric Allocation (Line 5 / Line 5, Col. 2)	%		100.00%	61.33%	0.07%	23.00%	0.06%	13.89%	0.04%	1.60%	0.01%						
7																		
9	Midstream Commodity Related Costs (Combined Portfolio) for Allocation																	
10	Natural Gas Costs		\$	33,792.7														
11	Propane Costs		·	2,238.7														
12	Midstream Commodity Related Costs		\$	36,031.5														
13	Commodity for T-Service UAF (b) (to be recovered via delivery margin)		\$	(936.8)														
14	Revelstoke Commodity Costs Recovery and GHS Index-Based Premium			, ,														
15		.549 /GJ																
16		.00																
17	Revelstoke Commodity Costs Recovery incl Index-Based Premium		\$	(373.5)		\$ (135.7)		\$ (132.2)		\$ (105.6)								
17	(Line 15 * Line 16 * Line 1)																	
	Midstream Commodity Related Costs for Allocation	\$000	\$	34,721.2														
	(Line 12 + Line 13 + Line 17)																	
19																		
20 21	MCRA Cost of Gas for Load Factor Adjusted Allocation																	
22	Midstream Commodity Related Costs for Allocation (Line 18)		\$	34.721.2	\$ 21.293.8	¢ 22.7	\$ 7.986.2	¢ 22.2	\$ 4.822.2	\$ 14.8	\$ 556.0	\$ 3.3				\$ 2.325.9	¢ 10616	¢ 22.200.0
23	Midstream Commodity Related Costs for Allocation (Line 16)		Ф	(31,885.6)	(19,554.8)	(20.8)		(20.4)		(13.6)	(510.6)	э з.з (3.0)				\$ 2,325.9 (4,410.5)	(4,367.6)	
24	Allocated Midstream Commodity Related Costs (Net of Mitigation)	\$000	\$	2,835.6	\$ 1,739.0	-		\$ 1.8			\$ 45.4	\$ 0.3				\$ (2,084.6)		
25	Storage Related Costs	****	\$	57.384.0	\$ 35,192.5		\$ 13.198.8		\$ 7.969.7								\$ -	\$ -
26	Storage Related Costs Storage Related Mitigation		φ	57,364.0	φ 35,192.5 -	φ 31.5 -	φ 13,190.0 -	φ 30. <i>i</i>	φ 1,909.1 -	φ 24.5 -	\$ 910.9 -	φ 5.5 -				Φ -	φ -	φ - -
27	Allocated Storage Related Costs (Net of Mitigation)	\$000	\$	57,384.0	\$ 35,192.5	\$ 37.5	\$ 13,198.8	\$ 36.7	\$ 7,969.7	\$ 24.5	\$ 918.9	\$ 5.5				\$ -	\$ -	\$ -
28	Transportation Related Costs		\$	161.602.3	\$ 99.107.5		\$ 37.169.8		\$ 22,444.0								\$ 677.9	
29	Transportation Related Costs Transportation Related Mitigation		φ	(74,987.1)	(45,988.1)	(49.0)		(47.9)		(32.0)		(7.1)				φ 697.0	φ 011.9 -	φ - -
30	Allocated Transportation Related Costs (Net of Mitigation)	\$000	\$	86,615.2	\$ 53,119.4		\$ 19,922.2		\$ 12,029.5		\$ 1,387.0					\$ 897.0	\$ 677.9	\$ -
31	Allocated GSMIP Incentive Sharing	\$000		1,000.0	\$ 613.3												\$ -	\$ -
32	Allocated Core Market Administration Costs	\$000		3,556.0	\$ 2,180.8			\$ 2.3				\$ 0.1				Φ -	φ -	φ - -
	Total Midstream Cost of Gas Allocated by Rate Class	\$000	\$	151,390.8	\$ 92,845.0	\$ 99.0	\$ 34,821.1	\$ 96.8	\$ 21,025.8	\$ 64.6	\$ 2,424.2	\$ 14.4				<u>\$ (1,187.6)</u>	\$ (1,728.1)	\$ -
34	(sum of Lines 24, 27, 30, 31, 32)																	
	MCRA Rate Rider 6																	
	1/2 of Pre-Tax Amort. MCRA Deficit/(Surplus) as of Jan 1, 2020	\$000	\$	13,827.8	\$ 8,480.3	\$ 9.0	\$ 3,180.5	\$ 8.8	\$ 1,920.5	\$ 5.9	\$ 221.4	\$ 1.3						
36	(including Revelstoke PCDA December 31, 2019 balance)		-															
	(Schedule to continue on next page)																	
	Notes:		1-400															
	(a) Based on the historical 3-year (2015, 2016, and 2017 data) rolling average load factors for (b) The total cost of UAF (Sales Rate Classes and T-Service) is included as a component of				covered via dec co	et recovery rote	e e											
	As the T Service LIAE costs are recovered via delivery revenues, they are evaluded from					or rootery rate	···											

FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA STORAGE AND TRANSPORT RELATED CHARGES (NATURAL GAS & PROPANE) FLOW-THROUGH BY RATE SCHEDULE FOR THE FORECAST TEST PERIOD JAN TO DEC 2020 - EQUAL COST RECOVERY

Line						Reside	ntial		Comme	ercial		General Firm Service NGV		Seasonal	General Interruptible	RS-1 to RS-7	LNG	Term & Spot Gas Sales	Off-System Interruptible Sales
No.	Particulars		Unit	Total	RS	S-1	RS-1R	RS-2	RS-2R	RS-3	RS-3R	RS-5	RS-6	RS-4	RS-7	Summary	RS-46	RS-14A	RS-30
	(1)			(2) = sum of (3) to (10)	(3	3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
37 38 39 40																			
41	MCRA Cost of Gas Unitized			AVERAGE	RS	S-1	RS-1R	RS-2	RS-2R	RS-3	RS-3R	RS-5	RS-6						
42 43 44 45 46	Allocated Storage Related Costs (Net of Mitigation) Allocated Transportation Related Costs (Net of Mitigation) Allocated GSMIP Incentive Sharing	ation)				0.0212 0.4284 0.6466 0.0075 0.0265	\$ 0.0212 \$ 0.4284	0.0212 0.4298 0.6487 0.0075 0.0266	\$ 0.0212 0.4298 0.6487 0.0075 0.0266	\$ 0.0177 0.3589 0.5418 0.0063 0.0222	\$ 0.0177 0.3589 0.5418 0.0063 0.0222	\$ 0.0147 0.2968 0.4480 0.0052 0.0184	\$ 0.0067 0.1353 0.2042 0.0024 0.0084						
47	MCRA Flow-Through Costs before MCRA deferral amortization		\$/GJ	\$ 1.0935	\$	1.1301	\$ 1.1301	1.1339	\$ 1.1339	\$ 0.9470	\$ 0.9470	\$ 0.7830	\$ 0.3569						
48 49 50	MCRA Deferral Amortization via Rate Rider 6		\$/GJ	\$ 0.0999	\$	0.1032	\$ 0.1032	0.1036	\$ 0.1036	\$ 0.0865	\$ 0.0865	\$ 0.0715	\$ 0.0326						
51			\$/GJ	\$ 1.1934	\$	1.2333	\$ 1.2333	1.2375	\$ 1.2375	\$ 1.0335	\$ 1.0335	\$ 0.8546	\$ 0.3895						
52 53 54 55 56 57	Revelstoke Rate Rider 1 (Index-Based Premium) Tariff - Commodity Cost Recovery Charge Index-Based Premium Multiplier - Revelstoke Rate Rider 1 - Commodity component (Line 54 * (Line 55 - 1))	\$ 1.549 1.00	\$/GJ				\$ -		\$ -		\$ -								
58							-		-		-								
59	, (<u></u>						s -		\$ -		s -								
60 61 62 63 64 65		ted Charges (Combi	ned Po	ortfolio)	RS	S-1	RS-1R	RS-2	RS-2R	RS-3	RS-3R	RS-5	RS-6	Tariff Rate 5 for RS-4	Tariff Rate 5 for RS-7				
	Storage and Transport Flow-Through (Line 47)				\$		\$ 1.130 \$							\$ 0.783					
68			***			1.485	1.485	1.490	1.490	1.245	1.245	1.029	0.469	1.029	1.029				
69 70		crease / (Decrease)				(0.355)	\$ (0.355) § -23.91%	(0.356) -23.89%	\$ (0.356) -23.89%	\$ (0.298) -23.94%	\$ (0.298) -23.94%	\$ (0.246) -23.91%	\$ (0.112) -23.88%	\$ (0.246) -23.91%					
71		crease / (Decrease)	70			23.9170	-23.9170	-23.0970	-23.0970	-23.9470	-23.9470	-23.9170	-23.00 /0	-23.9170	-23.9170				
72 73	MCRA Rate Rider 6 Flow-Through (Line 49) Existing MCRA Rate Rider 6 (effective Jan 1, 2019)	(//////////////////////////////////////			\$	(0.023)	\$ 0.103 \$	(0.023)	-	\$ 0.086 (0.019)		(0.016)	\$ 0.033 (0.007)	(0.016)	(0.016)				
74 75		crease / (Decrease)			φ	0.126 47.83%	\$ 0.103	-552.17%	\$ 0.104	\$ 0.105 -552.63%	\$ 0.086	\$ 0.088 -550.00%	\$ 0.040 -571.43%	\$ 0.088	\$ 0.088 -550.00%				
76		cicase / (Deciedse)	70		-04	-+1 .00 70		-332.17%		-552.0376		-000.00%	-31 1.43%	-000.00%	-550.00%				
77	Revelstoke Rate Rider 1 (Line 59)					-	\$ -	-	\$ -	-	\$ -								
	Slight differences in totals due to rounding																		

Slight differences in totals due to rounding.

FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA STORAGE AND TRANSPORT RELATED CHARGES (NATURAL GAS & PROPANE) FLOW-THROUGH BY RATE SCHEDULE FOR THE FORECAST TEST PERIOD JAN TO DEC 2020 - 5-YEAR ROLLING AVERAGE INDEXED

Line					Reside	ntial		Comm	ercial		General Firm Service	NGV	Seasonal	General Interruptible	RS-1 to RS-7	LNG	Term & Spot Gas Sales	Off-System Interruptible Sales
No.	Particulars	U	nit	Total	RS-1	RS-1R	RS-2	RS-2R	RS-3	RS-3R	RS-5	RS-6	RS-4	RS-7	Summary	RS-46	RS-14A	RS-30
	(1)		(2)	= sum of (3) to (10)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1 2	MCRA Demand (Natural Gas & Propane)		ΓJ	138,447.3	82,158.2	87.6	30,708.6	85.3	22,203.2	68.2	3,095.9	40.3	141.3	315.5	138,904.1	1,696.5	1,300.0	33,084.3
3	Load Factor Adjusted Quantity																	
4	Load Factor (a)		%		31.59%	31.59%	31.48%	31.48%	37.69%	37.69%	45.58%	100.00%						
5	Load Factor Adjusted Quantity (Line 1 / Line 4)		ΓJ	424,129.0	260,109.9	277.3	97,553.1	271.1	58,904.8	180.9	6,791.5	40.3						
6	Load Factor Adjusted Volumetric Allocation (Line 5 / Line 5, Col. 2)		%	100.00%	61.33%	0.07%	23.00%	0.06%	13.89%	0.04%	1.60%	0.01%						
7 8																		
9	Midstream Commodity Related Costs (Combined Portfolio) for Allocation	1																
10	Natural Gas Costs		\$	33,792.7														
11	Propane Costs		_	2,238.7														
12			\$	36,031.5														
13	Commodity for T-Service UAF (b) (to be recovered via delivery margin)		\$	(936.8)														
14	Revelstoke Commodity Costs Recovery and GHS Index-Based Premium																	
15 16		1.549 /GJ 3.064																
	Revelstoke Commodity Costs Recovery incl Index-Based Premium	3.064	\$	(1,144.4)		\$ (415.7)		\$ (405.0)		\$ (323.6)								
17	(Line 15 * Line 16 * Line 1)		_							,								
18	Midstream Commodity Related Costs for Allocation (Line 12 + Line 13 + Line 17)	\$0	00 <u>\$</u>	33,950.3														
19																		
20																		
21	MCRA Cost of Gas for Load Factor Adjusted Allocation Midstream Commodity Related Costs for Allocation (Line 18)		•	00.050.0			A 70000	0.4.7	A 745 O	\$ 14.5	\$ 543.6					# 0.00F.0		# 00 000 0
22 23	Midstream Commodity Related Costs for Allocation (Line 18) Midstream Commodity Related Mitigation		\$	33,950.3 (31,885.6)	\$ 20,821.1 (19,554.8)	\$ 22.2 (20.8)	\$ 7,808.8 (7,333.9)	\$ 21.7 (20.4)	\$ 4,715.2 (4,428.4)	(13.6)	\$ 543.6 (510.6)	\$ 3.2 (3.0)				\$ 2,325.9 (4,410.5)	\$ 1,961.6 (4,367.6)	
24	Allocated Midstream Commodity Related Costs (Net of Mitigation)	\$0	00 \$	2,064.7	\$ 1,266.2		\$ 474.9		$\overline{}$			\$ 0.2				\$ (2,084.6)		
25	Storage Related Costs		\$	57,384.0	\$ 35,192.5	\$ 37.5	\$ 13,198.8	\$ 36.7	\$ 7,969.7	\$ 24.5	\$ 918.9	\$ 5.5				\$ -	\$ -	\$ -
26	Storage Related Mitigation		_															
27	Allocated Storage Related Costs (Net of Mitigation)	\$0	00 \$	57,384.0	\$ 35,192.5	\$ 37.5	\$ 13,198.8	\$ 36.7	\$ 7,969.7	\$ 24.5	\$ 918.9	\$ 5.5				<u>\$ -</u>	\$ -	\$ -
28	Transportation Related Costs		\$,	\$ 99,107.5		+,		\$ 22,444.0							\$ 897.0	\$ 677.9	\$ -
29	Transportation Related Mitigation		00 \$	(74,987.1)	(45,988.1)	(49.0)		(47.9)	(10,414.5)	(32.0)		(7.1)						
30	Allocated Transportation Related Costs (Net of Mitigation)		υυ <u>ψ</u>	86,615.2	\$ 53,119.4		\$ 19,922.2		\$ 12,029.5		* .,	\$ 8.2				\$ 897.0		
31	<u> </u>	\$0 \$0	00 \$	1,000.0 3.556.0	\$ 613.3 \$ 2,180.8			\$ 0.6 \$ 2.3				\$ 0.1 \$ 0.3				\$ -	\$ -	\$ -
32			-	.,,														
33	Total Midstream Cost of Gas Allocated by Rate Class (sum of Lines 24, 27, 30, 31, 32)	\$0	00 \$	150,619.9	\$ 92,372.2	\$ 98.5	\$ 34,643.8	\$ 96.3	\$ 20,918.7	\$ 64.2	\$ 2,411.9	\$ 14.3				<u>\$ (1,187.6)</u>	\$ (1,728.1)	\$ -
34	(sum of Lines 24, 27, 30, 31, 32)																	
35	MCRA Rate Rider 6																	
36	1/2 of Pre-Tax Amort. MCRA Deficit/(Surplus) as of Jan 1, 2020	\$0	00 \$	13,827.8	\$ 8,480.3	\$ 9.0	\$ 3,180.5	\$ 8.8	\$ 1,920.5	\$ 5.9	\$ 221.4	\$ 1.3						
	(including Revelstoke PCDA December 31, 2019 balance)																	
	(Schedule to continue on next page)																	
	Notes: (a) Based on the historical 3-year (2015, 2016, and 2017 data) rolling average load facts	ore for rate och	adula 1	2 3 and 5														
	(b) The total cost of UAF (Sales Rate Classes and T-Service) is included as a componer				covered via gas cos	t recovery rate	3.											

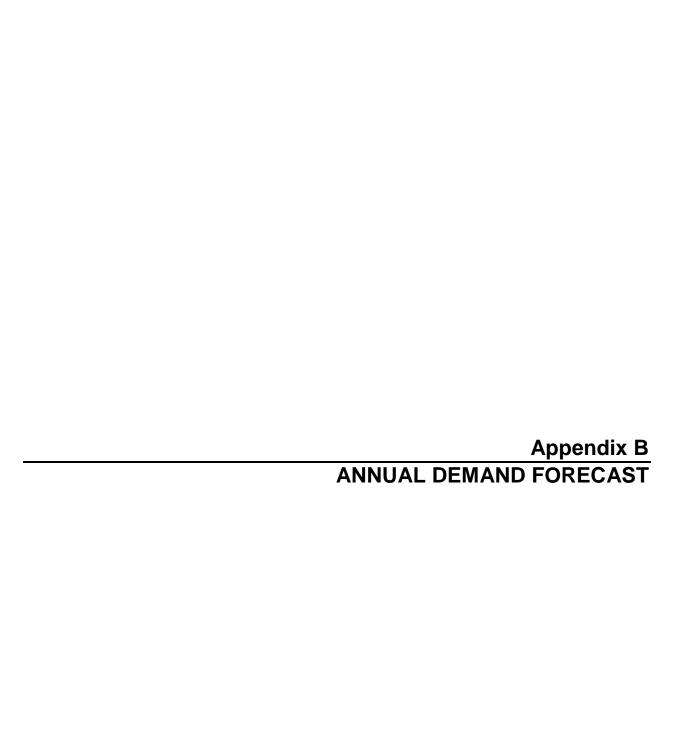
⁽b) The total cost of UAF (Sales Rate Classes and T-Service) is included as a component of gas purchased. Sales UAF costs are recovered via gas cost recovery rates.

As the T-Service UAF costs are recovered via delivery revenues, they are excluded from the storage and transportation flow-through calculation.

FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA STORAGE AND TRANSPORT RELATED CHARGES (NATURAL GAS & PROPANE) FLOW-THROUGH BY RATE SCHEDULE FOR THE FORECAST TEST PERIOD JAN TO DEC 2020 - 5-YEAR ROLLING AVERAGE INDEXED

Line					Pa	sidential		Comm	ercial		NGV	Seasonal	General Interruptible	RS-1 to RS-7	LNG	Term & Spot Gas Sales	Off-System Interruptible Sales	
No.	Particulars	Un	it	Total	RS-1	RS-1R	RS-2	RS-2R	RS-3	RS-3R	Service RS-5	RS-6	RS-4	RS-7	Summary	RS-46	RS-14A	RS-30
	(1)			n of (3) to (10)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
37 38 39 40																		
41	MCRA Cost of Gas Unitized		AV	ERAGE	RS-1	RS-1R	RS-2	RS-2R	RS-3	RS-3R	RS-5	RS-6						
42 43 44 45 46	Allocated Storage Related Costs (Net of Mitigation) Allocated Transportation Related Costs (Net of Mitigation) Allocated GSMIP Incentive Sharing	,			\$ 0.018 0.428 0.646 0.003 0.026	0.4284 0.6466 0.0075	\$ 0.0155 0.4298 0.6487 0.0075 0.0266	\$ 0.0155 0.4298 0.6487 0.0075 0.0266	\$ 0.0129 0.3589 0.5418 0.0063 0.0222	\$ 0.0129 0.3589 0.5418 0.0063 0.0222	\$ 0.0107 0.2968 0.4480 0.0052 0.0184	\$ 0.0049 0.1353 0.2042 0.0024 0.0084						
47	MCRA Flow-Through Costs before MCRA deferral amortization	on \$/0	J \$	1.0879	\$ 1.12	43 \$ 1.1243	\$ 1.1281	\$ 1.1281	\$ 0.9421	\$ 0.9421	\$ 0.7791	\$ 0.3551						
48 49 50	MCRA Deferral Amortization via Rate Rider 6	\$/0	J \$	0.0999	\$ 0.10	32 \$ 0.1032	\$ 0.1036	\$ 0.1036	\$ 0.0865	\$ 0.0865	\$ 0.0715	\$ 0.0326						
51		\$/0	J \$	1.1878	\$ 1.22	75 \$ 1.2275	\$ 1.2317	\$ 1.2317	\$ 1.0286	\$ 1.0286	\$ 0.8506	\$ 0.3877						
52 53 54 55 56 57 58	Revelstoke Rate Rider 1 (Index-Based Premium) Tariff - Commodity Cost Recovery Charge Index-Based Premium Multiplier - Revelstoke Rate Rider 1 - Commodity component (Line 54 * (ILine 55 - 1)) Rate Rider 1 - Midstream component (Line 47 * (ILine 55 - 1))	\$ 1.549 \$/6 3.064	'n			\$ 3.1971 2.3206 0.2130		\$ 3.1971 2.3285 0.2138		\$ 3.1971 1.9446 0.1785								
59		,				\$ 5.7300		\$ 5.7394		\$ 5.3203								
60 61 62 63 64 65		elated Charges (Combine	d Portfolio)		RS-1	RS-1R	RS-2	RS-2R	RS-3	RS-3R	RS-5	RS-6	Tariff Rate 5 for RS-4	Tariff Rate 5 for RS-7				
67	Storage and Transport Flow-Through (Line 47)				\$ 1.13	24 \$ 1.124	\$ 1.128	\$ 1.128	\$ 0.942	\$ 0.942	\$ 0.779	\$ 0.355	\$ 0.779	\$ 0.779				
	Existing Storage and Transportation (effective Jan 1, 2019)				1.48		1.490	1.490	1.245	1.245	1.029	0.469	1.029	1.029				
69		Increase / (Decrease) \$/0	J		\$ (0.36			+ (+.++-)		\$ (0.303)		\$ (0.114)						
70		Increase / (Decrease)	6		-24.3	1% -24.31%	-24.30%	-24.30%	-24.34%	-24.34%	-24.30%	-24.31%	-24.30%	-24.30%				
71 72 73 74 75 76	MCRA Rate Rider 6 Flow-Through (Line 49) Existing MCRA Rate Rider 6 (effective Jan 1, 2019)	Increase / (Decrease) \$/0 Increase / (Decrease) 9			\$ 0.10 (0.02 \$ 0.12 -547.83	26 \$ 0.103	\$ 0.104 (0.023) \$ 0.127 -552.17%	<u> </u>	\$ 0.086 (0.019) \$ 0.105 -552.63%	\$ 0.086 - \$ 0.086	\$ 0.072 (0.016) \$ 0.088 -550.00%	\$ 0.033 (0.007) \$ 0.040 -571.43%	\$ 0.072 (0.016) \$ 0.088 -550.00%	(0.016) \$ 0.088				
	Revelstoke Rate Rider 1 (Line 59) Slight differences in totals due to rounding.					\$ 5.730		\$ 5.739		\$ 5.320								

Slight differences in totals due to rounding.





Appendix B

Annual Demand Forecast

June 2019



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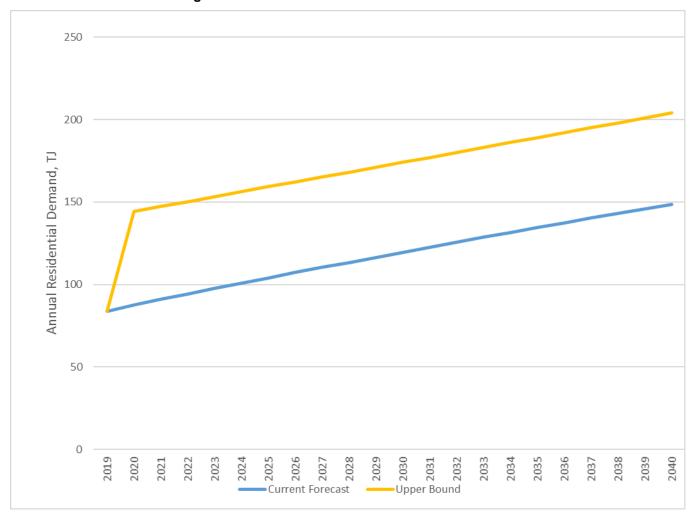
1.	Annual Demand Forecast Results Residential and Commercial Use Per Customer									
2.										
3.	Residential and Commercial Net Customer Additions Forecast									
	3.1	Residential Customers	5							
	3.2	Commercial Customers	7							
	3.3	Scenarios	0							



1. ANNUAL DEMAND FORECAST RESULTS

- 2 Consistent with past forecast methods, FortisBC Energy Inc. (FEI or the Company) developed
- 3 the annual demand forecast for Revelstoke propane customers by multiplying average use per
- 4 customer (UPC) for Rate Schedules 1, 2, and 3 with the corresponding forecast number of
- 5 customers (opening number of customers plus average net customer additions during the year)
- 6 in these rate schedules to derive energy consumption.
- 7 The remainder of this section provides discrete residential and commercial demand forecast
- 8 results. Section 2 of this appendix outlines the forecast UPC for Rate Schedules 1, 2, and 3.
- 9 Section 3 provides details on FEI's customer additions forecast and method.
- 10 Figure B-1 below compares residential rate class annual demand results of the two customer
- 11 additions scenarios that FEI investigated.

12 Figure B-1: Normalized Residential Demand

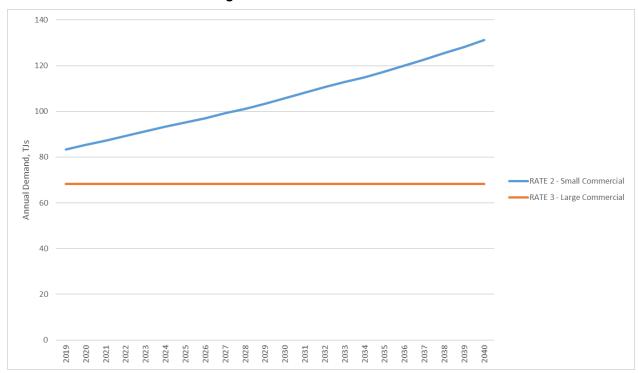




As seen in Figure B-2 below, demand in Rate Schedule 2 is forecast to grow based on recent consumption data. Given the small number of Rate Schedule 3 customers FEI has used a naïve (same as last year) forecast for this rate schedule rather than the downward trend that would have resulted from reliance on recent data.

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Figure B-2: Commercial Demand



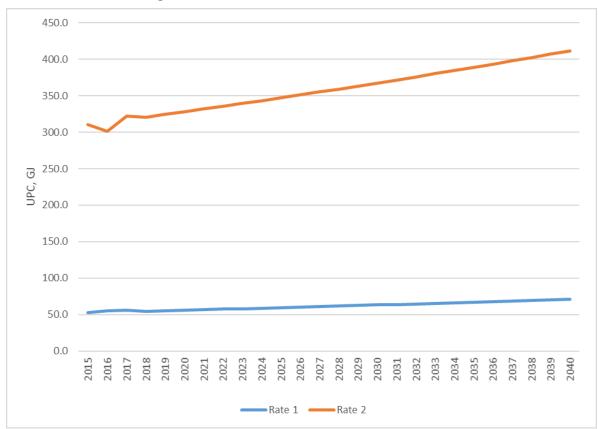
6



1 2. RESIDENTIAL AND COMMERCIAL USE PER CUSTOMER

- 2 As shown in Figure B-3 below, individual UPC projections for each residential and commercial
- 3 rate schedule are developed by considering the recent (three-year) historical weather-
- 4 normalized UPC.

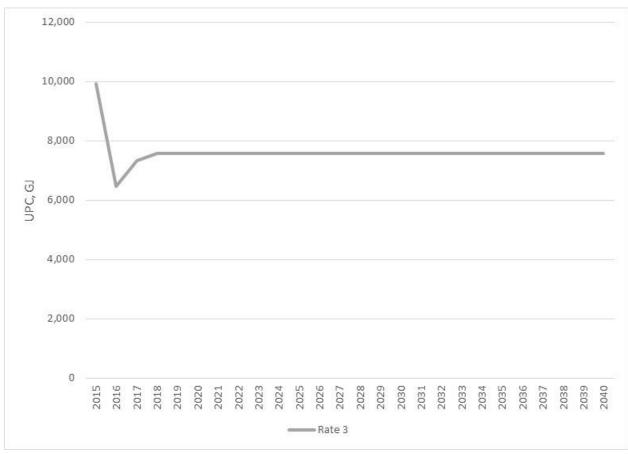
Figure B-3: Rate Schedule 1 and Rate Schedule 2 UPC





As shown in Figure B-4 below, the Large Commercial (Rate Schedule 3) UPC is forecast to remain constant through 2040 rather than follow the significant decline observed in recent years.

Figure B-4: Rate Schedule 3 UPC



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3. RESIDENTIAL AND COMMERCIAL NET CUSTOMER ADDITIONS FORECAST

- 3 The 20-year customer forecast for residential and commercial customers was developed using
- 4 FEI's existing methods for customer additions. The residential forecast was based on the
- 5 Conference Board of Canada (CBOC) predictions for both single family and multi-family
- 6 dwellings. The commercial forecast was based on three year average of additions.
- 7 For the purpose of this analysis FEI will refer to these customer additions as the "natural"
- 8 additions. These additions are assumed to occur over time regardless of changes to the rate
- 9 structure.

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3.1 Residential Customers

As shown in Table B-1 below, the growth rates from the CBOC forecast¹ are applied to the historic actual additions to develop a forecast of future additions. The 63 residential customer additions observed in 2018 was based on the year-end total of 1,503 less the prior year total of 1,440. Customer additions are assumed to be a combination of single (SFD) and multi-family units (MFD). Based on historic FEI data 94% of the additions were single family dwellings while the remaining 6% were multi-family dwellings. The 63 additions observed in 2018 (B4) were then split into 59 SFDs (D4) and 4 MFDs (F4). The total year end customers were 1,503 (G4).

Table B-1: Future Residential Customer Additions Based on Historic Actuals

	Α	В	С	D	Е	F	G
		Customer	S	FD	М	FD	Year End
1		Additions					Customers
2			Split	Count	Split	Count	
3	2017						1,440
4	2018	63	94%	59	6%	4	1,503

The customer additions forecast is then developed using the CBOC growth rates as shown in Table B-2 below. The 55 SFD additions in 2019 (C4) is a result of 59 additions in 2018 (C3) multiplied by the growth rate of -6.7% (B4). Similarly the 4 MFD additions in 2019 (E4) is a result of 4 additions in 2018 (E3) multiplied by the growth rate of -7.8% (D4). The total additions in column F is the sum of the customer additions in columns C and E. The total customers in column G is the addition of the customer additions to the prior year forecast.

CBOC Forecast:
 December 6, 2018
 Provincial Medium Term
 Forecast: 20183 Run: 19

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Table B-2: Residential Customer Additions Growth Rate

	А	В	С	D	E	F	G
		SI	FD	M	FD	Total	Year End
1						Additions	Customers
2		Growth	Count	Growth	Count		
3	2018		59		4		1,503
4	2019	-6.7%	55	-7.8%	4	59	1,562
5	2020	-17.6%	45	-10.0%	3	49	1,610
6	2021	-13.8%	39	-9.2%	3	42	1,653
7	2022	-7.2%	36	-5.1%	3	39	1,692
8	2023	-3.6%	35	-2.5%	3	38	1,730
9	2024	-1.4%	35	-0.5%	3	37	1,767
10	2025	-4.3%	33	-3.1%	3	36	1,803
11	2026	-9.8%	30	-8.4%	2	32	1,835
12	2027	-7.4%	28	-6.0%	2	30	1,865
13	2028	-1.6%	27	-0.4%	2	29	1,894
14	2029	-4.7%	26	-3.4%	2	28	1,922
15	2030	-3.5%	25	-2.3%	2	27	1,950
16	2031	-4.0%	24	-2.8%	2	26	1,976
17	2032	-5.6%	23	-4.4%	2	25	2,000
18	2033	-5.3%	21	-4.1%	2	23	2,024
19	2034	-5.5%	20	-4.4%	2	22	2,046
20	2035	-6.9%	19	-5.9%	2	21	2,066
21	2036	-8.4%	17	-7.4%	2	19	2,085
22	2037	-7.3%	16	-6.4%	2	18	2,103
23	2038	-5.2%	15	-4.2%	1	17	2,119
24	2039	-7.1%	14	-6.0%	1	15	2,135
25	2040	-3.6%	14	-2.7%	1	15	2,150

The natural additions that occur every year are a combination of conversions (e.g., customers converting from wood burning heat source to propane) and new services.

Data from the FEI geographic information system identified 1,063 residential customers within 30 meters of an existing main. These customers represent the extent of the conversion

customers that may take propane service if postage stamp rates are approved. To avoid double counting of potential conversion customers, the conversion component present in the natural

additions needs to be accounted for and removed from the scenarios that follow.

FEI internal data was used to split the natural additions above into conversions and new services as shown in Table B-3 below:

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Table B-3: Splitting Residential Natural Additions into Conversions and New Services

	Α	В	С	D	Е
	Year	Customers		Natural Additio	ns
1			Total	New Service (55%)	Conversion (45%)
2	2018	1,503	55	30	25
3	2019	1,562	59	32	26
4	2020	1,610	49	27	22
5	2021	1,653	42	23	19
6	2022	1,692	39	22	18
7	2023	1,730	38	21	17
8	2024	1,767	37	21	17
9	2025	1,803	36	20	16
10	2026	1,835	32	18	15
11	2027	1,865	30	16	13
12	2028	1,894	29	16	13
13	2029	1,922	28	15	13
14	2030	1,950	27	15	12
15	2031	1,976	26	14	12
16	2032	2,000	25	14	11
17	2033	2,024	23	13	11
18	2034	2,046	22	12	10
19	2035	2,066	21	11	9
20	2036	2,085	19	10	8
21	2037	2,103	18	10	8
22	2038	2,119	17	9	7
23	2039	2,135	15	8	7
24	2040	2,150	15	8	7

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3.2 COMMERCIAL CUSTOMERS

- 4 The commercial customer forecast was prepared using the existing three year average method.
- 5 Customer additions for each of the prior three years are shown in cells E4 through E6 (Rate
- 6 Schedule 2) and cells G4 through G6 for Rate Schedule 3. FEI assumed that commercial
- 7 customers that could take propane service already have, so no conversion additions were
- 8 forecast.
- 9 Table B-4 below shows that the average annual customer additions for Rate Schedule 2 is three
- while no customer additions are anticipated for Rate Schedule 3.

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Table B-4: Average Annual Commercial Customer Additions

	Α	D	Е	F	G
1		Rate Sch	edule 2	Rate Sch	edule 3
2		Customers	Additions	Customers	Additions
3	2015	247		10	
4	2016	253	6	10	0
5	2017	251	-2	9	-1
6	2018	257	6	9	0
7	Average A	dditions	3		0

The forecast for commercial additions is then developed using the average additions and the last year of actual data. For 2019, the customer total for Rate Schedule 2 is the 257 year end customers from cell D6 in Table B-4 above plus three customer additions for a total of 260 customers shown in cell D3 of Table B-5 below. No additions are anticipated for Rate Schedule 3 so the current total of nine customers is expected for the duration of the forecast.

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Table B-5: Commercial Customer Additions Forecast

	Α	D	E	F	G
1		Rate Sch	edule 2	Rate Sch	edule 3
2		Customers	Additions	Customers	Additions
3	2019	260	3	9	0
4	2019	263	3	9	0
5	2020	266	3	9	0
6	2021	269	3	9	0
7	2022	272	3	9	0
8	2023	275	3	9	0
9	2024	278	3	9	0
10	2025	281	3	9	0
11	2026	284	3	9	0
12	2027	287	3	9	0
13	2028	290	3	9	0
14	2029	293	3	9	0
15	2030	296	3	9	0
16	2031	299	3	9	0
17	2032	302	3	9	0
18	2033	305	3	9	0
19	2034	308	3	9	0
20	2035	311	3	9	0
21	2036	314	3	9	0
22	2037	317	3	9	0
23	2038	320	3	9	0
24	2039	323	3	9	0
25	2040	326	3	9	0
26	2041	329	3	9	0
27	2042	332	3	9	0

3.3 SCENARIOS

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4 FEI identified 1,063 potential residential conversion customers and, as shown in Table B-6

5 below, developed the following comparison to model the impacts on the system from the

6 addition of conversion customers.

Table B-6: Residential Customer Conversion Scenarios

Forecast	Name	Description
1	Current Forecast	None of the identified 1,063 residential customers connects to the Revelstoke propane system
2	Upper Bound	All identified 1,063 residential customers connect in Year 1



- 1 Based on the descriptions from Table B-6 above, the 1,063 residential conversion customers
- were distributed as shown in Table B-7 below.

Table B-7: Residential Additions from Customer Conversions by Forecast

Year	Conversion Add	itions (within 30m)
	Current Forecast	Upper Bound
2020	ı	1,063
2021	ı	-
2022	ı	-
2023	-	-
2024	-	-
2025	-	-
2026	-	-
2027	-	-
2028	-	-
2029	-	-

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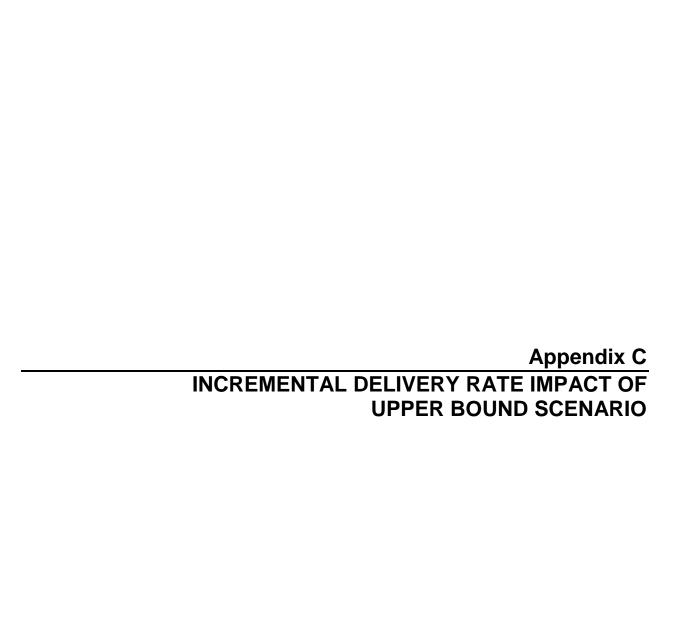
- 5 Where residential conversion customers are identified (Upper Bound scenario in 2020 in Table
- 6 B-7 above), FEI only considered "new service" additions to avoid double counting of
- 7 conversions. Combining the "new service" natural additions with the conversion scenarios
- 8 results in the total residential customer counts shown in Table B-8 below:

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Table B-8: Rate Schedule 1 Customers by Forecast

Year	Total Cu	stomers
	Current	Upper
	Forecast	Bound
2018	1,503	1,503
2019	1,562	1,562
2020	1,610	2,652
2021	1,653	2,675
2022	1,692	2,696
2023	1,730	2,717
2024	1,767	2,738
2025	1,803	2,757
2026	1,835	2,775
2027	1,865	2,791
2028	1,894	2,808
2029	1,922	2,823
2030	1,950	2,838
2031	1,976	2,852
2032	2,000	2,866
2033	2,024	2,879
2034	2,046	2,891
2035	2,066	2,902
2036	2,085	2,913
2037	2,103	2,922
2038	2,119	2,931
2039	2,135	2,940
2040	2,150	2,948



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Line	Particulars	Reference	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
1	Cost of Service																					
2	Cost of Energy		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Operation & Maintenance	Line 28	44	58	58	58	58	58	59	59	59	60	60	60	61	61	62	62	63	64	64	65
4	Property Taxes	Line 33	-	-	(1)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Depreciation Expense	Line 59	-	142	141	140	139	138	137	136	136	135	134	134	133	132	132	135	134	134	133	133
6	Amortization Expense on Deferred Charges	Line 108	-	38	37	36	36	35	35	34	34	33	33	32	32	31	31	30	30	29	29	29
7	Amortization Expense on CIAC	Line 72		-		-	-	-	-		-	-	-	-		-	-	-		-	-	-
8	Other Revenue (Offseting Revenue)		(156)	(512)	(502)	(493)	(483)	(474)	(465)	(457)	(448)	(440)	(431)	(423)	(415)	(407)	(399)	(392)	(385)	(378)	(371)	(365)
9	Income Taxes	Line 116	(37)	28	32	35	38	41	43	45	47	48	50	51	52	52	52	53	53	54	54	54
10	Earned Return	Line 97	87	337	325	312	300	287	275	263	251	240	228	217	205	194	190	185	174	163	152	141
11 12	Incremental Annual Revenue Requirement PV of Revenue Requirement (After-tax WACC of 5.65%	Sum of Line 2 to Line 10 5) Line 11 / (1 + Line 99)^Yr	(63) (60)	91 81	89 75	89 71	88 67	86 62	84 57	81 52	79 48	76 44	74 40	71 37	68 33	65 30	67 29	74 31	70 27	66 24	61 22	57 19
13	Total PV of Annual Revenue Requirement	Sum of Line 12	791																			
14		=																				
15	2019 Approved Revenue Requirement (G-10-19 Comp	liance Filing)	814,155	814.155	814.155	814,155	814.155	814.155	814.155	814,155	814,155	814,155	814.155	814,155	814,155	814.155	814.155	814.155	814,155	814.155	814,155	814,155
16	% Increase on 2019 Rate	Line 11 / Line 15	(0.008%)	0.011%	0.011%	0.011%	0.011%	0.011%	0.010%	0.010%	0.010%	0.009%	0.009%	0.009%	0.008%	0.008%	0.008%	0.009%	0.009%	0.008%	0.008%	0.007%
17	Incremental % Increase (Year-over-Year)		(0.008%)	0.019%	(0.000%)	0.000%	(0.000%)	(0.000%)	(0.000%)	(0.000%)	(0.000%)	(0.000%)	(0.000%)	(0.000%)	(0.000%)	(0.000%)	0.000%	0.001%	(0.000%)	(0.001%)		(0.001%)
18	,		(,		,		,	,	, ,	(,	,	(,	, ,	,	, , , , ,	, ,			(,	, ,	(,	,
19	PV of Annual 2019 Approved Revenue Requirement	Line 15 / (1 + Line 99)^Yr	770,651	729,471	690,492	653,596	618,671	585,613	554,321	524,701	496,664	470,125	445,004	421,225	398,717	377,412	357,245	338,155	320,086	302,982	286,793	271,468
20	Total PV of 2019 Approved Revenue Requirement	Sum of Line 19	9,613,391																			
21	Levelized % Increase (20 yrs) on 2019 Rate	Line 13 / Line 20	0.008%																			
22																						
23	Operation & Maintenance																					
24	Labour Costs		49	65	66	66	66	66	66	67	67	68	68	69	69	70	70	71	72	72	73	74
25	Non-Labour Costs								-													
26	Total Gross O&M Expenses	Line 24 + Line 25	49	65	66	66	66	66	66	67	67	68	68	69	69	70	70	71	72	72	73	74
27	Less: Capitalized Overhead	Overhead Rate of 12%	(6)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(9)	(9)	(9)	(9)
28	Net O&M Expenses	Line 26 + Line 27	44	58	58	58	58	58	59	59	59	60	60	60	61	61	62	62	63	64	64	65
29																						
30	Property Taxes																					
31	General, School and Other		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	1% in Lieu of General Municipal Tax 1	1% of Line 11	-	-	(1)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33	Total Property Taxes	Line 31 + Line 32	-	-	(1)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34	1 - Calculation is based on the second preceding year, e.g. 20	019 is based on 2017 revenue			` '																	
35																						
36	Capital Spending																					
37	Project Capital Spending ²		5,282	(46)	(44)	(43)	(43)	(42)	(39)	(37)	(37)	(36)	(35)	(35)	(34)	(32)	175	(34)	(32)	(30)	(29)	(28)
38	AFUDC		-			- '						- '					-		- '	- '		
39	Total Annual Capital Spending & AFUDC	Sum of Line 37 to 40	5,282	(46)	(44)	(43)	(43)	(42)	(39)	(37)	(37)	(36)	(35)	(35)	(34)	(32)	175	(34)	(32)	(30)	(29)	(28)
40	Cost of Removal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	Contributions in Aid of Construction (CIAC)																					
42 43	Total Annual Project Cost - Capital	Line 39 + Line 40	5,282	(46)	(44)	(43)	(43)	(42)	(39)	(37)	(37)	(36)	(35)	(35)	(34)	(32)	175	(34)	(32)	(30)	(29)	(28)
43	Total Project Cost (incl. AFUDC)	Sum of Line 39	4,801																			
45	Net Project Cost (incl. Removal and/or CIAC)	Sum of Line 42	4,801																			
46	Excluding capitalized overhead; First year of analysis inclu		4,801																			
47	2 - Excluding Capitalized Overhead, First year or analysis mich	dues all prior year speriding																				
47	Gross Plant in Service (GPIS)																					
	GPIS - Beginning ³	Brocoding Voor Line E2		E 200	E 2E0	E 214	E 170	E 1/12	E 100	E 079	E 040	E 020	4 002	4.065	4 020	4 012	4 000	4.016	4 904	4 974	4 055	4 927
49		Preceding Year, Line 53	-	5,288	5,250	5,214	5,179	5,143	5,109	5,078	5,049	5,020	4,992	4,965	4,938	4,913	4,889	4,916	4,894	4,874	4,855	4,837
50	Additions to Plant ⁴		5,288	(38)	(36)	(35)	(35)	(34)	(31)	(29)	(29)	(28)	(27)	(27)	(25)	(24)	183	(25)	(23)	(21)	(21)	(19)
51	Retirements										 -						(156)	3	3	3	3	3
52	Net Addition to Plant	Sum of Line 50 to 51	5,288	(38)	(36)	(35)	(35)	(34)	(31)	(29)	(29)	(28)	(27)	(27)	(25)	(24)	27	(22)	(20)	(19)	(18)	(16)
53	GPIS - Ending	Line 49 + Line 52	5,288	5,250	5,214	5,179	5,143	5,109	5,078	5,049	5,020	4,992	4,965	4,938	4,913	4,889	4,916	4,894	4,874	4,855	4,837	4,821
54 55	Consistent with treatment of CPCN, additions (when wor Includes capitalized overhead	κ complete and placed in-service) is shown in the opening b	parance of plant of	on Jan 1 of fol	iowing year)																	

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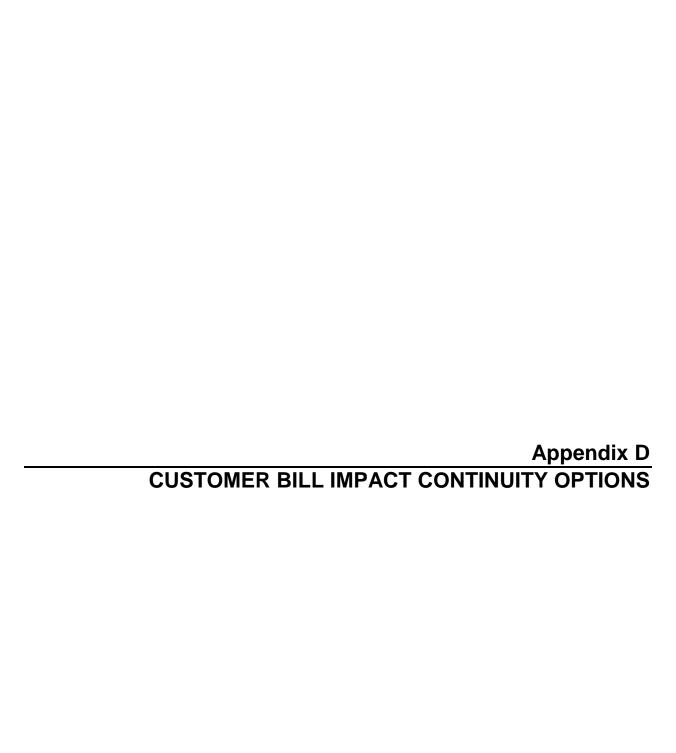
(5000	s), unicss otherwise stated																					
Line	Particulars	Reference	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
57	Accumulated Depreciation																					
58	Accumulated Depreciation - Beginning	Preceding Year, Line 61	-	-	(142)	(282)	(422)	(561)	(698)	(835)	(972)	(1,107)	(1,242)	(1,376)	(1,510)	(1,643)	(1,775)	(1,750)	(1,888)	(2,025)	(2,161)	(2,297)
59	Depreciation Expense ⁵	Line 49 @ 1.54%	-	(142)	(141)	(140)	(139)	(138)	(137)	(136)	(136)	(135)	(134)	(134)	(133)	(132)	(132)	(135)	(134)	(134)	(133)	(133)
60	Retirements		-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	(3)	(3)	(3)	(3)	(3)
61	Accumulated Depreciation - Ending	Sum of Line 58 to 60	-	(142)	(282)	(422)	(561)	(698)	(835)	(972)	(1,107)	(1,242)	(1,376)	(1,510)	(1,643)	(1,775)	(1,750)	(1,888)	(2,025)	(2,161)	(2,297)	(2,433)
62	5 - Depreciation & Amortization Expense calculation is base	d on opening balance x composite depreciation rate; The com	posite rate of all	l assets addition	on to plant is	1.54%																
63	Contributions in Aid of Construction (CLAC)																					
64 65	Contributions in Aid of Construction (CIAC) CIAC - Beginning	Preceding Year, Line 68																				
66	Additions	Freceding rear, Line 06				_																
67	Retirements		_	_	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
68	CIAC - Ending	Sum of Line 65 to 67																				
69	CIAC Ending	Sum of Line 05 to 07																				
70	Accumulated Amortization of Contributions in Aid of	f Construction (CIAC)																				
71	Accumulated Amortization of CIAC - Beginning	Preceding Year, Line 74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
72	Amortization (over 0 yrs)	Line 65 @ 0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
73	Retirements	_				-	-		-	-	-						-	-		-	-	
74	Accumulated Amortization of CIAC - Ending	Sum of Line 71 to 73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
75	_																					
76	Rate Base and Earned Return																					
77	Gross Plant in Service - Beginning	Line 49	-	5,288	5,250	5,214	5,179	5,143	5,109	5,078	5,049	5,020	4,992	4,965	4,938	4,913	4,889	4,916	4,894	4,874	4,855	4,837
78	Gross Plant in Service - Ending	Line 53	5,288	5,250	5,214	5,179	5,143	5,109	5,078	5,049	5,020	4,992	4,965	4,938	4,913	4,889	4,916	4,894	4,874	4,855	4,837	4,821
79																						
80	Accumulated Depreciation - Beginning	Line 58	-	-	(142)	(282)	(422)	(561)	(698)	(835)	(972)	(1,107)	(1,242)	(1,376)	(1,510)	(1,643)	(1,775)	(1,750)	(1,888)	(2,025)	(2,161)	(2,297)
81	Accumulated Depreciation - Ending	Line 61	-	(142)	(282)	(422)	(561)	(698)	(835)	(972)	(1,107)	(1,242)	(1,376)	(1,510)	(1,643)	(1,775)	(1,750)	(1,888)	(2,025)	(2,161)	(2,297)	(2,433)
82																						
83	CIAC - Beginning	Line 65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
84	CIAC - Ending	Line 68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
85																						
86	Accumulated Amortization of CIAC - Beginning	Line 71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
87	Accumulated Amortization of CIAC - Ending	Line 74				<u> </u>			<u> </u>	<u> </u>											<u> </u>	
88																						
89	Net Plant in Service, Mid-Year	(Sum of Lines 77 to Line 87) / 2	2,644	5,198	5,020	4,844	4,670	4,497	4,327	4,160	3,995	3,832	3,670	3,509	3,350	3,192	3,140	3,086	2,927	2,771	2,617	2,464
90	Adjustment to 13-month average	6	(1,311)	-	- (+ 0)	- (0.7)	-	(200)	- (0.4)	- (400)	(405)	- (4.40)	(4.50)	- ()	- (****)	(0.07)	(000)	(0.00)	(0.00)	- (0.00)	(000)	-
91 92	Unamortized Deferred Charges, Mid-Year	Line 145	- 4	- 4	(19)	(37)	(55) 4	(73) 4	(91) 4	(108)	(125) 4	(142) 4	(159) 4	(175)	(191) 4	(207)	(222)	(238)	(253)	(268)	(282)	(297)
	Cash Working Capital	Line 53 x FBC CWC/Closing GPIS %			4									4		4			4		4	4
93	Total Rate Base	Sum of Line 89 to 92	1,337	5,203	5,006	4,811	4,619	4,428	4,240	4,056	3,874	3,694	3,515	3,338	3,163	2,990	2,922	2,852	2,679	2,508	2,338	2,171
94 95	Faulty Potuse	Line 03 v BOE v Favity 9/	45	175	160	162	156	140	142	127	121	124	110	112	107	101	98	06	00	84	79	73
95 96	Equity Return Debt Component	Line 93 x ROE x Equity %	45 42	175 162	169 156	162 150	156 144	149 138	143 132	137 126	131 121	124 115	118 110	112 104	107 99	101 93	98 91	96 89	90 84	78	79 73	68
97	Total Earned Return	Line 95 + Line 96	87	337	325	312	300	287	275	263	251	240	228	217	205	194	190	185	174	163	152	141
98	Return on Rate Base %	Line 95 + Line 96 Line 97 / Line 93	6.49%	6.49%	6.49%	6.49%	6.49%	6.49%	6.49%	6.49%	6.49%	6.49%	6.49%	6.49%	6.49%	6.49%	6.49%	6.49%	6.49%	6.49%	6.49%	6.49%
99	After- Tax Weighted Average Cost of Capital (WACC)	8	5.65%	5.65%	5.65%	5.65%	5.65%	5.65%	5.65%	5.65%	5.65%	5.65%	5.65%	5.65%	5.65%	5.65%	5.65%	5.65%	5.65%	5.65%	5.65%	5.65%
100	6 - (Line 52 + Line 59 + Line 66) x [(Days In-service/365)-1/2]	1	3.03%	3.03%	3.03/6	3.03/6	3.03/6	3.0376	3.0376	3.0376	3.03%	3.0376	3.03%	3.0376	3.0376	3.0376	3.03/6	3.0376	3.03/6	3.0370	3.0370	3.0376
101	7 - Line 93 x (LTD Rate x LTD% + STD Rate x STD %)	1																				
102	8 - ROE Rate x Equity Component + [(STD Rate x STD Portion	n) + (LTD Rate x LTD Portion)] x (1- Income Tax Rate)]																				
103	4.7,	, , , , , , , , , , , , , , , , , , , ,																				
104	Income Tax Expense																					
105	Earned Return	Line 97	87	337	325	312	300	287	275	263	251	240	228	217	205	194	190	185	174	163	152	141
106	Deduct: Interest on debt	Line 96	(42)	(162)	(156)	(150)	(144)	(138)	(132)	(126)	(121)	(115)	(110)	(104)	(99)	(93)	(91)	(89)	(84)	(78)	(73)	(68)
107	Add: Depreciation Expense	Line 59	-	142	141	140	139	138	137	136	136	135	134	134	133	132	132	135	134	134	133	133
108	Add: Amortization of Deferred Charges		-	38	37	36	36	35	35	34	34	33	33	32	32	31	31	30	30	29	29	29
109	Deduct: CIAC Amortization	Line 72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
110	Deduct: Overhead Capitalized Expenses for Tax Purp		(2)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
111	Deduct: Removal Costs	Line 40	(4.42)	(276)	(250)	(244)	(225)	(240)	(400)	(400)	(474)	(450)	(4.40)	(420)	(420)	(420)	(440)	(446)	(4.07)	(400)	(02)	(06)
112	Deduct: Capital Cost Allowance	Line 124	(142)	(276)	(258)	(241)	(225)	(210)	(196)	(183)	(171)	(159)	(148)	(138)	(129)	(120)	(118)	(116)	(107)	(100)	(93)	(86)
113	Taxable Income After Tax	Sum of Line 105 to 112	(99)	76	86	95	103	110	116	121	126	130	134	137	139	141	140	142	144	145	145	146
114	Income Tax Rate		27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%
115	Tabella and Tables	Una 443 //4 Una 444) or Una 444	(27)	20	22	25	20		40	45	47	40										
116 117	Total Income Tax Expense	Line 113 / (1 - Line 114) x Line 114	(37)	28	32	35	38	41	43	45	47	48	50	51	52	52	52	53	53	54	54	54
117	Canital Cost Allowanse																					
118	Capital Cost Allowance Opening Balance	Proceeding Year, Line 125	_	5,140	4,818	4,516	4,233	3,964	3,712	3,477	3,257	3,050	2,854	2,670	2,497	2,335	2,183	2,240	2,090	1,951	1,821	1,699
120	Additions to Plant	Line 39	5,282	(46)	4,818 (44)	(43)	4,233 (43)	(42)	(39)	(37)	(37)	(36)	(35)	(35)	(34)	(32)	2,183 175	(34)	(32)	(30)	(29)	(28)
121	Less: AFUDC	Line 38		- (40)	- ()	- (+3)	- (43)	(+ 2)	(33)	- (3/)	- (3/)	(30)	- (22)	- (22)	(34)	(32)	-	- (34)	(32)	- (30)	(43)	(40)
122	Less: CIAC	Line 41	-	-	_		_	_	_	-	_	-	_	_	-	_	_	-	_	_	-	_
123	Net Addition for CCA	Sum of Line 120 through 122	5,282	(46)	(44)	(43)	(43)	(42)	(39)	(37)	(37)	(36)	(35)	(35)	(34)	(32)	175	(34)	(32)	(30)	(29)	(28)
	NEC AGGICION TO CCA	Julii of Line 120 tillough 122																				
	CCA	[Line 119 + (Line 123/2)] x CCA Rate	(142)	(276)	(258)	(241)	(225)	(210)	(196)	(183)	(371)	(159)	(148)	(138)	(129)	(120)	(118)	(116)	(107)	(100)	(93)	(86)
124 125	CCA Closing Balance	[Line 119 + (Line 123/2)] x CCA Rate Line 119 + Line 123 + Line 124	(142) 5,140	(276) 4,818	(258) 4,516	(241) 4,233	(225) 3,964	(210) 3,712	(196) 3,477	(183) 3,257	(171) 3,050	(159) 2,854	(148) 2,670	(138) 2,497	(129) 2,335	(120) 2,183	(118) 2,240	(116) 2,090	(107) 1,951	(100) 1,821	(93) 1,699	(86) 1,585

FortisBC Energy Inc.

Revelstoke_Upper Bound (Incremental) May 2019

(\$000s), unless otherwise stated

Line	Particulars	Reference	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
127	Deferred Charge - non-Rate Base																					
128	Opening Balance	Proceeding Year, Line 134	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
129	Gross Additions	•	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
130	Tax	-Line 129 x Line 114	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
131	Short Term Debt @ 3.1%	[Line 128 + (Line 129 + Line 130/2)] x STD Rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
132	Net Additions	Sum of Line 128 through 131	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
133	Amortization Expense	Amortization = 20 Years + Interest			-	-			-	-	-		-		-	-	-	-		-		-
134	Closing Balance	Line 128 + Line 132 + Line 133	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
135																						
136	Deferred Charge - Rate Base																					
137	Opening Balance	Proceeding Year, Line 143	-	-	(38)	(75)	(111)	(147)	(182)	(217)	(251)	(284)	(317)	(350)	(382)	(414)	(445)	(475)	(505)	(535)	(565)	(594)
138	Gross Additions		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
139	Tax	-Line 138 x Line 114	-	-	-	=	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
140	AFUDC/WACC	[Line 137 + (Line 138 + Line 139/2)] x AFUDC Rate																				-
141	Net Additions	Sum of Line 137 through 140	-	-	(38)	(75)	(111)	(147)	(182)	(217)	(251)	(284)	(317)	(350)	(382)	(414)	(445)	(475)	(505)	(535)	(565)	(594)
142	Amortization Expense			(38)	(37)	(36)	(36)	(35)	(35)	(34)	(34)	(33)	(33)	(32)	(32)	(31)	(31)	(30)	(30)	(29)	(29)	(29)
143	Closing Balance	Line 137 + Line 141 + Line 142	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
144																						
145	Deferred Charge, Mid-Year	(Line 137 + Line 143)/2	-	-	(19)	(37)	(55)	(73)	(91)	(108)	(125)	(142)	(159)	(175)	(191)	(207)	(222)	(238)	(253)	(268)	(282)	(297)
146																						



COMMODITY RELATED CHARGES CHANGES

RATE SCHEDULE 1 - RESIDENTIAL SERVICE

Line <u>No.</u>	PARTICULARS			IO (CURRENT MECH NUARY 1, 2020 RATE	,	FORE		MATED PORTFOLIO Y 1, 2020 RATES - F		Annual Increase/Decrease							
1 2	MAINLAND AND VANCOUVER ISLAND SERVICE AREA (Revelstoke Customers)	Quant	tity	Rate	Annual \$	Quar	ntity	Rate	Annual \$	Rate		Annual \$	% of Previous Annual Bill				
3 4	RATE SCHEDULE 1 - RESIDENTIAL SERVICE																
5 6	<u>Delivery Margin Related Charges</u> Basic Charge per Day	365.25	days x \$	0.4085 = \$	149.2046	365.25	days x \$	0.4085 = \$	149.2046	\$	-	\$ -	-				
8 9	Delivery Charge per GJ Rider 3 BVA Rate Rider per GJ	50.0 50.0	GJ x GJ x	4.376 = 0.018 =	218.8000 0.9000	50.0 50.0	GJ x GJ x	4.376 = 0.018 =	218.8000 0.9000		-	-	-				
10 11	Rider 5 RSAM per GJ Subtotal Delivery Margin Related Charges	50.0	GJ x	(0.045) = 4.349 \$	(2.2500) 366.65	50.0	GJ x	(0.045) = 4.349 \$	(2.2500) 366.65		- -	-	-				
12 13	Commodity Related Charges																
14 15 16	Storage and Transport Charge per GJ Rider 6 MCRA per GJ Cost of Gas	50.0 50.0 50.0	GJ x GJ x GJ x	1.118 = \$ - = 1.549 =	55.9038 - 77.4500	50.0 50.0 50.0	GJ x GJ x	1.130 = \$ 0.103 = 1.549 =	56.5000 5.1500 77.4500	\$	0.012	\$ 0.5962 5.1500	0.07% 0.56% -				
17 18	Rider 1 Propane Surcharge / Index-Based Premium Subtotal Commodity Related Charges	50.0	GJ x	8.263 = 10.930 \$	413.1462 546.50	50.0	GJ x	2.782 =	139.10		(8.263)	(413.1462) \$ (407.40)	(45.24%) (44.61%)				
19 20	Total (with effective \$/GJ rate)	<u>50.0</u>	\$	18.263 \$	913.15	50.0	\$	10.115 \$	505.75	\$	(8.148)	\$ (407.40)	(44.61%)				

Notes: Tariff rate schedule per GJ charges are set at 3 decimals. Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight differences in totals due to rounding

FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA

COMMODITY RELATED CHARGES CHANGES RATE SCHEDULE 1 - RESIDENTIAL SERVICE

Line	2	SEPA	ARATE PORTFOL	LIO (CURRENT M	ECHANIS	SM)		AMALGA	MATED PORTFOLIO				Annual	
No.	Particular Particular		FORECAST JAI	NUARY 1, 2020 R	ATES		FORE	CAST JANUAR	RY 1, 2020 RATES - R	RATIO 1.000			Increase/Decrease	
1	MAINLAND AND VANCOUVER ISLAND SERVICE AREA	Quan	tity	Rate	Ai	nnual \$	Quant	ity	Rate	Annual \$		Rate	Annual \$	Annual Bill
2	Delivery Margin Related Charges													
3	Basic Charge per Day	365.25	days x \$	0.4085	= \$	149.20	365.25	days x \$	0.4085 = \$	149.20	\$	-	\$0.00	-
4														
5	Delivery Charge per GJ	90.0	GJ x	4.376	=	393.84	90.0	GJ x	4.376 =	393.84		-	\$0.00	-
6	Rider 3 BVA Rate Rider per GJ	90.0	GJ x	0.018	=	1.62	90.0	GJ x	0.018 =	1.62		-	\$0.00	-
7	Rider 5 RSAM per GJ	90.0	GJ x	(0.045)	=	(4.05)	90.0	GJ x	(0.045) =	(4.05)		-	\$0.00	-
8	Subtotal Delivery Margin Related Charges		\$	4.349	\$	540.61		\$	4.349 \$	540.61			\$0.00	-
9										<u> </u>				
10	Commodity Related Charges													
11	Storage and Transport Charge per GJ	90.0	GJ x	1.118	= \$	100.63	90.0	GJ x	1.130 = \$	101.70	\$	0.012	\$1.07	0.14%
12	Rider 6 MCRA per GJ	90.0	GJ x	0.104	=	9.36	90.0	GJ x	0.103 =	9.27		(0.001)	(\$0.09)	(0.01%)
13	Storage and Transport Related Charges Subtotal		\$	1.222	\$	109.99		\$	1.233 \$	110.97			\$0.98	0.12%
14														
15	Cost of Gas (Commodity Cost Recovery Charge) per GJ	90.0	GJ x	1.549	= \$	139.41	90.0	GJ x	1.549 = \$	139.41		-	\$0.00	-
16	Subtotal Commodity Related Charges		\$	2.771	\$	249.40		\$	2.782 \$	250.38			\$0.98	0.12%
17														
18	Total (with effective \$/GJ rate)	90.0	\$	8.778	\$	790.01	90.0	\$	8.789 \$	790.99	\$	0.011	\$0.98	0.12%
10											•			

Notes: Tariff rate schedule per GJ charges are set at 3 decimals. Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight Slight differences in totals due to rounding

COMMODITY RELATED CHARGES CHANGES

RATE SCHEDULE 2 - SMALL COMMERCIAL SERVICE

Line SEPARATE PORTFOLIO (CURRENT MECHANISM) AMALGAMATED PORTFOLIO Annual FORECAST JANUARY 1, 2020 RATES - RATIO 1.000 No. PARTICULARS FORECAST JANUARY 1, 2020 RATES Increase/Decrease % of Previous 1 MAINLAND AND VANCOUVER ISLAND SERVICE AREA Quantity Rate Quantity Rate Annual \$ Rate Annual Bill Annual \$ Annual \$ (Revelstoke Customers) 2 3 RATE SCHEDULE 2 - SMALL COMMERCIAL SERVICE Delivery Margin Related Charges 5 Basic Charge per Day 365.25 0.9485 = \$346.4396 365.25 days x \$ 0.9485 = \$346.4396 days x \$ 7 8 Delivery Charge per GJ 300.0 GJ x 3.384 = 1,015.2000 300.0 GJ x 3.384 = 1,015.2000 Rider 3 BVA Rate Rider per GJ GJ x 0.018 = 0.018 = 9 300.0 5.4000 300.0 GJ x 5.4000 (0.045) =10 Rider 5 RSAM per GJ 300.0 GJ x (0.045) =(13.5000)300.0 GJ x (13.5000)11 Subtotal Delivery Margin Related Charges 3.357 1,353.54 3.357 1,353.54 12 13 Commodity Related Charges 1.122 = \$ 0.012 \$ 14 Storage and Transport Charge per GJ 300.0 GJ x 336.5634 300.0 GJ x 1.134 = \$340 2000 \$ 3 6366 0.08% 15 Rider 6 MCRA per GJ 300.0 GJ x 300.0 GJ x 0.104 = 31.2000 0.104 31.2000 0.72% 1.549 = 16 Cost of Gas 300.0 GJ x 1.549 = 464,7000 300.0 GJ x 464,7000 (2,150.4366) 2,150.4366 (49.95%) 17 Rider 1 Propane Surcharge / Index-Based Premium 300.0 GJ x 7.168 300.0 GJ x (7.168)18 Subtotal Commodity Related Charges (49.14%) 9.839 2,951.70 2.787 836.10 (2,115.60) 19 20 Total (with effective \$/GJ rate) 300.0 4,305.24 2,189.64 (2,115.60) (49.14%) 14.351 300.0 7.299 (7.052) \$ \$ \$ \$

Notes: Tariff rate schedule per GJ charges are set at 3 decimals, Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight differences in totals due to rounding

FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA

COMMODITY RELATED CHARGES CHANGES
RATE SCHEDULE 2 - SMALL COMMERCIAL SERVICE

Line	e	SEPA	ARATE PORTFO	IO (CURRENT ME	CHANIS	SM)		AMALGA	MATED PORTFOL	10			Annual	
No	. Particular		FORECAST JA	NUARY 1, 2020 RA	ATES		FORE	CAST JANUAR	RY 1, 2020 RATES	RATIO 1.000			Increase/Decrease	
1	MAINLAND AND VANCOUVER ISLAND SERVICE AREA	Quan	tity	Rate	Aı	nnual \$	Quant	ity	Rate	Annual \$		Rate	Annual \$	Annual Bill
2	Delivery Margin Related Charges													
3	Basic Charge per Day	365.25	days x \$	0.9485 =	= \$	346.44	365.25	days x \$	0.9485 = \$	346.44	\$	-	\$0.00	-
4														
5	Delivery Charge per GJ	340.0	GJ x	3.384 =	=	1,150.56	340.0	GJ x	3.384 =	1,150.56		-	\$0.00	-
6	Rider 3 BVA Rate Rider per GJ	340.0	GJ x	0.018 =	=	6.12	340.0	GJ x	0.018 =	6.12		-	\$0.00	-
7	Rider 5 RSAM per GJ	340.0	GJ x	(0.045) =	=	(15.30)	340.0	GJ x	(0.045) =	(15.30)		-	\$0.00	-
8	Subtotal Delivery Margin Related Charges		\$	3.357	\$	1,487.82		\$	3.357 \$	1,487.82			\$0.00	-
9														
10	Commodity Related Charges													
11	Storage and Transport Charge per GJ	340.0	GJ x	1.122 =	= \$	381.44	340.0	GJ x	1.134 = \$	385.56	\$	0.012	\$4.12	0.17%
12	Rider 6 MCRA per GJ	340.0	GJ x	0.104 =	=	35.48	340.0	GJ x	0.104 =	35.36		(0.000)	(\$0.12)	-
13	Storage and Transport Related Charges Subtotal		\$	1.226	\$	416.92		\$	1.238 \$	420.92			\$4.00	0.16%
14	l													
15	Cost of Gas (Commodity Cost Recovery Charge) per GJ	340.0	GJ x	1.549 =	= \$	526.66	340.0	GJ x	1.549 = \$	526.66		-	\$0.00	-
16	Subtotal Commodity Related Charges		\$	2.775	\$	943.58		\$	2.787 \$	947.58			\$4.00	0.16%
17	,													
18	Total (with effective \$/GJ rate)	340.0	\$	7.151	\$	2,431.40	340.0	\$	7.163 \$	2,435.40	\$	0.012	\$4.00	0.16%
10										•	•			

Notes: Tariff rate schedule per GJ charges are set at 3 decimals. Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight Slight differences in totals due to rounding

COMMODITY RELATED CHARGES CHANGES

RATE SCHEDULE 3 - LARGE COMMERCIAL SERVICE

Line SEPARATE PORTFOLIO (CURRENT MECHANISM) AMALGAMATED PORTFOLIO Annual FORECAST JANUARY 1, 2020 RATES - RATIO 1.000 No. PARTICULARS FORECAST JANUARY 1, 2020 RATES Increase/Decrease % of Previous 1 MAINLAND AND VANCOUVER ISLAND SERVICE AREA Quantity Rate Quantity Rate Annual \$ Rate Annual Bill Annual \$ Annual \$ (Revelstoke Customers) 2 3 RATE SCHEDULE 3 - LARGE COMMERCIAL SERVICE Delivery Margin Related Charges 5 Basic Charge per Day 365.25 4.7895 = \$ 1,749.3649 365.25 days x \$ 4.7895 = \$1,749.3649 7 8 Delivery Charge per GJ 6,650.0 GJ x 2.977 = 19,797.0500 6,650.0 GJ x 2.977 = 19,797.0500 Rider 3 BVA Rate Rider per GJ GJ x 0.018 = 0.018 = 9 6,650.0 119.7000 6,650.0 GJ x 119,7000 (0.045) =10 Rider 5 RSAM per GJ 6,650.0 GJ x (0.045) =(299.2500) 6,650.0 GJ x (299.2500) 11 Subtotal Delivery Margin Related Charges 2.950 21,366.86 2.950 21,366.86 12 13 Commodity Related Charges 0.937 = \$ 0.947 = \$14 Storage and Transport Charge per GJ 6.650.0 GJ x 6,230.4763 6.650.0 GJ x 6,297.5500 \$ 0.010 \$ 67 0737 0.08% 15 Rider 6 MCRA per GJ 6,650.0 GJ x 6,650.0 GJ x 0.086 = 571.9000 0.086 571.9000 0.66% 1.549 = 16 Cost of Gas 6.650.0 GJ x 1.549 = 10.300.8500 6.650.0 GJ x 10.300.8500 (48.898.0237) (56.34%) 17 Rider 1 Propane Surcharge / Index-Based Premium 6.650.0 GJ x 7.353 48.898.0237 6.650.0 GJ x (7.353)18 Subtotal Commodity Related Charges 9.839 65,429.35 2.582 17,170.30 (48,259.05) (55.60%) 19 20 Total (with effective \$/GJ rate) 6,650.0 6,650.0 38,537.16 (48,259.05) (55.60%) 13.052 86,796.21 5.795 (7.257) \$ \$ \$

Notes: Tariff rate schedule per GJ charges are set at 3 decimals. Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight differences in totals due to rounding

FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA

COMMODITY RELATED CHARGES CHANGES
RATE SCHEDULE 3 - LARGE COMMERCIAL SERVICE

Line		SEPA	ARATE PORTFOL	IO (CURRENT MECH	ANISM)		AMALGA	MATED PORTFOLI	כ			Annual	
No.	Particular	į	FORECAST JAN	IUARY 1, 2020 RATE	S	FORE	CAST JANUAR	Y 1, 2020 RATES -	RATIO 1.000	.—	lı	ncrease/Decrease	
1	MAINLAND AND VANCOUVER ISLAND SERVICE AREA	Quan	ntity	Rate	Annual \$	Quan	tity	Rate	Annual \$		Rate	Annual \$	Annual Bill
2	Delivery Margin Related Charges												
3	Basic Charge per Day	365.25	days x \$	4.7895 = \$	1,749.36	365.25	days x \$	4.7895 = \$	1,749.36	\$	-	\$0.00	-
4													
5	Delivery Charge per GJ	3,770.0	GJ x	2.977 =	11,223.29	3,770.0	GJ x	2.977 =	11,223.29		-	\$0.00	-
6	Rider 3 BVA Rate Rider per GJ	3,770.0	GJ x	0.018 =	67.86	3,770.0	GJ x	0.018 =	67.86		-	\$0.00	-
7	Rider 5 RSAM per GJ	3,770.0	GJ x	(0.045) =	(169.65)	3,770.0	GJ x	(0.045) =	(169.65)			\$0.00	-
8	Subtotal Delivery Margin Related Charges		\$	2.950 \$	12,870.86		\$	2.950 \$	12,870.86		_	\$0.00	-
9											_		
10	Commodity Related Charges												
11	Storage and Transport Charge per GJ	3,770.0	GJ x	0.937 = \$	3,532.16	3,770.0	GJ x	0.947 = \$	3,570.19	\$	0.010	\$38.03	0.17%
12	Rider 6 MCRA per GJ	3,770.0	GJ x	0.087 =	328.52	3,770.0	GJ x	0.086 =	324.22		(0.001)	(\$4.30)	(0.02%)
13	Storage and Transport Related Charges Subtotal		\$	1.024 \$	3,860.69		\$	1.033 \$	3,894.41		_	\$33.72	0.15%
14													
15	Cost of Gas (Commodity Cost Recovery Charge) per GJ	3,770.0	GJ x	1.549 = \$	5,839.73	3,770.0	GJ x	1.549 = \$	5,839.73		-	\$0.00	-
16	Subtotal Commodity Related Charges		\$	2.573 \$	9,700.42		\$	2.582 \$	9,734.14		_	\$33.72	0.15%
17					,						_		
18	Total (with effective \$/GJ rate)	3,770.0	\$	5.987 \$	22,571.28	3,770.0	\$	5.996 \$	22,605.00	\$	0.009	\$33.72	0.15%
10											=		

Notes: Tariff rate schedule per GJ charges are set at 3 decimals. Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight differences in totals due to rounding

FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA COMMODITY RELATED CHARGES CHANGES RATE SCHEDULE 4 - SEASONAL FIRM GAS SERVICE

Line SEPARATE PORTFOLIO (CURRENT MECHANISM) AMALGAMATED PORTFOLIO Annual

No. Particular FORECAST IANII ARY 1 2020 RATES PATIO 1 000 Increase/Decrea

No.	Particular	FOI	RECAST JAN	IUARY 1, 2020	RATES	FORECAST	JANUARY	1, 2020 RATES - R	RATIO 1.000		Inc	crease/Decrease	
_		Quantity		Rate	Annual \$	Quantity		Rate	Annual \$	Rate		Annual \$	% of Previous Annual Bill
1	MAINLAND AND VANCOUVER ISLAND SERVICE AREA			,								<u>.</u>	
2	Delivery Margin Related Charges												
3	Basic Charge per Day	214	days \$	14.4230 =	\$ 3,086.5200	214	days \$	14.4230 = \$	3,086.5200	\$ -	\$	-	-
4													
5	Delivery Charge per GJ												
6	(a) Off-Peak Period	8,500	GJ x \$	1.353 =	\$ 11,500.500	8,500	GJ x \$	1.353 = \$	11,500.500	\$ -	\$	-	-
7	(b) Extension Period	-	GJ x	1.998 =	-	-	GJ x	1.998 =	-	-		-	-
8	Rider 3 BVA Rate Rider per GJ	8,500	GJ x	0.018 =	153.0000	8,500	GJ x	0.018 =	153.0000	-		-	-
9	Subtotal Delivery Margin Related Charges				\$ 14,740.02			\$	14,740.02		\$	-	-
10				_									
11	Commodity Related Charges												
12	Storage and Transport Charge per GJ												
13	(a) Off-Peak Period	8,500	GJ x \$	0.775 =	\$ 6,587.5000	8,500	GJ x \$	0.783 = \$	6,655.5000	\$ 0.008	\$	68.0000	0.19%
14	(b) Extension Period	-	GJ x	0.775 =	-	-	GJ x	0.783 =	-	0.008		-	-
15	Rider 6 MCRA per GJ	8,500	GJ x	0.072 =	612.0000	8,500	GJ x	0.072 =	612.0000	-		-	-
16	Commodity Cost Recovery Charge per GJ												
17	(a) Off-Peak Period	8,500	GJ x	1.549 =	13,166.5000	8,500	GJ x	1.549 =	13,166.5000	-		-	-
18	(b) Extension Period	-	GJ x	1.549 =	-	-	GJ x	1.549 =	-	-		-	-
19				_									
20	Subtotal Cost of Gas (Commodity Related Charges) Off-Peak				\$ 20,366.00			\$	20,434.00		\$	68.00	0.19%
21													
22	Unauthorized Gas Charge During Peak Period (not forecast)												
23													
24	Total during Off-Peak Period	8,500	\$	4.130	\$ 35,106.02	8,500.0	\$	4.138 \$	35,174.02	\$ 0.008	\$	68.00	0.19%
		· 		-		· ——		_					

Notes: Tariff rate schedule per GJ charges are set at 3 decimals. Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight differences in totals due to rounding

FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA COMMODITY RELATED CHARGES CHANGES RATE SCHEDULE 5 - GENERAL FIRM SERVICE

Line SEPARATE PORTFOLIO (CURRENT MECHANISM) AMALGAMATED PORTFOLIO Annual FORECAST JANUARY 1, 2020 RATES - RATIO 1.000 No. Particular FORECAST JANUARY 1, 2020 RATES Increase/Decrease % of Previous Rate Quantity Rate Annual \$ Quantity Rate Annual \$ Annual \$ Annual Bill 1 MAINLAND AND VANCOUVER ISLAND SERVICE AREA 2 Delivery Margin Related Charges 3 Basic Charge per Month months x \$ 469.00 = \$ 5,628.0000 months x \$ 469.00 = \$ 5,628.0000 5 Demand Charge 55.2 GJ x \$ 23.358 = \$ 15,472.3400 55.2 GJ x \$ 23.358 = \$ 15,472.3400 \$ 6 Delivery Charge per GJ 9,948.4000 11,900 GJ x \$ 0.836 = \$ 11,900.0 GJ x \$ 0.836 = \$ 9,948.4000 \$ 8 Rider 3 BVA Rate Rider per GJ 11,900 0.018 214.2000 11,900.0 0.018 GJ x GJ x 214.2000 9 Subtotal Delivery Margin Related Charges 31,262.94 31,262.94 \$ 10 11 Commodity Related Charges 0.775 = \$ 9,219.2914 0.783 = \$ 12 Storage and Transport Charge per GJ 11,900 GJ x \$ 11,900.0 GJ x \$ 9,317.7000 0.008 98.4086 0.16% 13 Rider 6 MCRA per GJ GJ x 0.072 = 857.4813 0.072 = (0.000)11,900 11,900.0 GJ x 856.8000 (0.6813)18,433.1000 Commodity Cost Recovery Charge per GJ 18,433.1000 14 11,900 GJ x 1.549 11,900.0 GJ x 1.549 15 Subtotal Gas Commodity Cost (Commodity Related Charge) 28,509.87 28,607.60 97.73 0.16% \$ 16 17 Total (with effective \$/GJ rate) 11,900 59,772.81 11,900.0 59,870.54 97.73 0.16% 5.023 \$ 5.031 \$ 0.008

Notes: Tariff rate schedule per GJ charges are set at 3 decimals. Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight differences in totals due to rounding

FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA COMMODITY RELATED CHARGES CHANGES RATE SCHEDULE 6 - NATURAL GAS VEHICLE SERVICE

Line SEPARATE PORTFOLIO (CURRENT MECHANISM) AMALGAMATED PORTFOLIO Annual

Line		SEPARA	TE PORTFOL	IO (CURREN	IT MECI	HANISM)		AMALGAMA	TED PORT	FOLIO					Annual	
No.	Particular	FC	RECAST JAN	NUARY 1, 202	20 RATE	ES	FORECAST	JANUARY 1	1, 2020 RA	TES - RA	ATIO 1.000			Ir	crease/Decrease	
1		Quantity		Rate		Annual \$	Quantity		Rate		Annual \$		Rate		Annual \$	% of Previous Annual Bill
2	MAINLAND AND VANCOUVER ISLAND SERVICE AREA															
3	Delivery Margin Related Charges															
4	Basic Charge per Day	365.25	days \$	2.0041	= \$	732.0000	365.25	days \$	2.0041	= \$	732.0000	\$	-	\$	-	-
5																
6	Delivery Charge per GJ	5,020	GJ x \$	2.923	= \$	14,673.4600	5,020	GJ x \$	2.923	= \$	14,673.4600	\$	-	\$	-	-
7	Rider 3 BVA Rate Rider per GJ	5,020	GJ x	0.018	=	90.3600	5,020	GJ x	0.018	=	90.3600		-		-	-
8	Subtotal Delivery Margin Related Charges				\$	15,495.82				\$	15,495.82			\$	-	-
9																
10	Commodity Related Charges															
11	Storage and Transport Charge per GJ	5,020	GJ x \$	0.353	= \$	1,772.8363	5,020	GJ x \$	0.357	= \$	1,792.1400	\$	0.004	\$	19.3037	0.08%
12	Rider 6 MCRA per GJ	5,020	GJ x	0.033	=	164.8905	5,020	GJ x	0.033	=	165.6600		0.000		0.7695	-
13	Commodity Cost Recovery Charge per GJ	5,020	GJ x	1.549	=	7,775.9800	5,020	GJ x	1.549	=	7,775.9800		-		-	-
14	Subtotal Cost of Gas (Commodity Related Charge)				\$	9,713.71				\$	9,733.78			\$	20.07	0.08%
15																
16	Total (with effective \$/GJ rate)	5,020	\$	5.022	\$	25,209.53	5,020	\$	5.026	\$	25,229.60	\$	0.004	\$	20.07	0.08%
		• ———										•				

Notes: Tariff rate schedule per GJ charges are set at 3 decimals. Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight differences in totals due to rounding

FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA COMMODITY RELATED CHARGES CHANGES RATE SCHEDULE 7 - GENERAL INTERUPTIBLE SERVICE

Line SEPARATE PORTFOLIO (CURRENT MECHANISM) AMALGAMATED PORTFOLIO Annual FORECAST JANUARY 1, 2020 RATES - RATIO 1.000 Increase/Decrease Particular FORECAST JANUARY 1, 2020 RATES No. % of Previous Annual Bill Quantity Rate Annual \$ Quantity Rate Annual \$ Rate Annual \$ 2 MAINLAND AND VANCOUVER ISLAND SERVICE AREA 3 Delivery Margin Related Charges 4 Basic Charge per Month months x \$ 880.00 = \$ 10,560.0000 12 months x \$ 880.00 = \$ 10,560.0000 5 6 Delivery Charge per GJ 52.670 GJ x \$ 1.358 = \$ 71.525.8600 52.670 GJ x \$ 1.358 = \$ 71.525.8600 \$ Rider 3 BVA Rate Rider per GJ 52,670 GJ x 0.018 948.0600 52,670 GJ x 0.018 948.0600 8 Subtotal Delivery Margin Related Charges 83,033.92 83,033.92 9 10 Commodity Related Charges 11 Storage and Transport Charge per GJ 52,670 GJ x \$ 0.775 = \$ 40,819.2500 52,670 GJ x \$ 0.783 = \$ 41,240.6100 0.008 421.3600 0.20% 12 Rider 6 MCRA per GJ 52,670 GJ x 0.072 = 3,792.2400 52,670 GJ x 0.072 = 3,792.2400 13 Commodity Cost Recovery Charge per GJ 52,670 GJ x 1.549 81,585.8300 52,670 GJ x 1.549 81,585.8300 14 Subtotal Cost of Gas (Commodity Related Charge) \$ 126,197.32 126,618.68 421.36 0.20% 15 16 Total (with effective \$/GJ rate) 52,670 3.972 \$ 209,231.24 52,670 3.980 209,652.60 0.008 421.36 0.20%

Notes: Tariff rate schedule per GJ charges are set at 3 decimals. Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight differences in totals due to rounding

COMMODITY RELATED CHARGES CHANGES

RATE SCHEDULE 1 - RESIDENTIAL SERVICE

Line <u>No.</u>	PARTICULARS	SEPA		IO (CURRENT MECHA	,	FORE		MATED PORT Y 1, 2020 RAT	FOLIO FES - RATIO 3.064				Annual ase/Decrease	
	MAINLAND AND VANCOUVER ISLAND SERVICE AREA (Revelstoke Customers)	Quan	tity	Rate	Annual \$	Quar	ntity	Rate	Annual \$		Rate		Annual \$	% of Previous Annual Bill
	RATE SCHEDULE 1 - RESIDENTIAL SERVICE													
5 6 7	<u>Delivery Margin Related Charges</u> Basic Charge per Day	365.25	days x \$	0.4085 = \$	149.2046	365.25	days x \$	0.4085	= \$ 149.2046	\$	-	\$	-	-
8	Delivery Charge per GJ	50.0	GJ x	4.376 =	218.8000	50.0	GJ x	4.376	= 218.8000		-		-	-
9	Rider 3 BVA Rate Rider per GJ	50.0	GJ x	0.018 =	0.9000	50.0	GJ x	0.018	= 0.9000		-		-	-
10	Rider 5 RSAM per GJ	50.0	GJ x	(0.045) =	(2.2500)	50.0	GJ x	(0.045)	= (2.2500)		-		-	-
	Subtotal Delivery Margin Related Charges		\$	4.349 \$	366.65		\$	4.349	\$ 366.65			\$	-	-
12 13	Commodity Related Charges													
14	Storage and Transport Charge per GJ	50.0	GJ x	1.118 = \$	55.9038	50.0	GJ x	1.124	= \$ 56.2000	s	0.006	Ś	0.2962	0.03%
15	Rider 6 MCRA per GJ	50.0	GJ x	- =	-	50.0	GJ x	0.103		Ť	0.103	,	5.1500	0.56%
16	Cost of Gas	50.0	GJ x	1.549 =	77.4500	50.0	GJ x	1.549			-		-	-
17	Rider 1 Propane Surcharge / Index-Based Premium	50.0	GJ x	8.263 =	413.1462	50.0	GJ x	5.730	= 286.5000		(2.533)		(126.6462)	(13.87%)
18	Subtotal Commodity Related Charges		\$	10.930 \$	546.50		\$	8.506	\$ 425.30			\$	(121.20)	(13.27%)
19														
20	Total (with effective \$/GJ rate)	50.0	\$	18.263 \$	913.15	50.0	\$	15.839	\$ 791.95	\$	(2.424)	\$	(121.20)	(13.27%)

Notes: Tariff rate schedule per GJ charges are set at 3 decimals. Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight differences in totals due to rounding

FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA

COMMODITY RELATED CHARGES CHANGES RATE SCHEDULE 1 - RESIDENTIAL SERVICE

Line		SEPA	ARATE PORTFOL	IO (CURRENT MECH	ANISM)		AMALGA	MATED PORTFOLIC)			Annual	
No.	Particular	į ————————————————————————————————————	FORECAST JAN	IUARY 1, 2020 RATE	S	FORE	CAST JANUAR	RY 1, 2020 RATES - F	RATIO 3.064		lr	ncrease/Decrease	
1	MAINLAND AND VANCOUVER ISLAND SERVICE AREA	Quan	ntity	Rate	Annual \$	Quan	ntity	Rate	Annual \$		Rate	Annual \$	Annual Bill
2	Delivery Margin Related Charges												
3	Basic Charge per Day	365.25	days x \$	0.4085 = \$	149.20	365.25	days x \$	0.4085 = \$	149.20	\$	-	\$0.00	-
4													
5	Delivery Charge per GJ	90.0	GJ x	4.376 =	393.84	90.0	GJ x	4.376 =	393.84		-	\$0.00	-
6	Rider 3 BVA Rate Rider per GJ	90.0	GJ x	0.018 =	1.62	90.0	GJ x	0.018 =	1.62		-	\$0.00	-
7	Rider 5 RSAM per GJ	90.0	GJ x	(0.045) =	(4.05)	90.0	GJ x	(0.045) =	(4.05)			\$0.00	-
8	Subtotal Delivery Margin Related Charges		\$	4.349 \$	540.61		\$	4.349 \$	540.61		_	\$0.00	-
9											_	<u> </u>	
10	Commodity Related Charges												
11	Storage and Transport Charge per GJ	90.0	GJ x	1.118 = \$	100.63	90.0	GJ x	1.124 = \$	101.16	\$	0.006	\$0.53	0.07%
12	Rider 6 MCRA per GJ	90.0	GJ x	0.104 =	9.36	90.0	GJ x	0.103 =	9.27		(0.001)	(\$0.09)	(0.01%)
13	Storage and Transport Related Charges Subtotal		\$	1.222 \$	109.99		\$	1.227 \$	110.43		_	\$0.44	0.06%
14													
15	Cost of Gas (Commodity Cost Recovery Charge) per GJ	90.0	GJ x	1.549 = \$	139.41	90.0	GJ x	1.549 = \$	139.41			\$0.00	-
16	Subtotal Commodity Related Charges		\$	2.771 \$	249.40		\$	2.776 \$	249.84		_	\$0.44	0.06%
17				<u> </u>							_	<u> </u>	
18	Total (with effective \$/GJ rate)	90.0	\$	8.778 \$	790.01	90.0	\$	8.783 \$	790.45	\$	0.005	\$0.44	0.06%
10										•	=		

Notes: Tariff rate schedule per GJ charges are set at 3 decimals. Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight Slight differences in totals due to rounding

COMMODITY RELATED CHARGES CHANGES

RATE SCHEDULE 2 - SMALL COMMERCIAL SERVICE

Line SEPARATE PORTFOLIO (CURRENT MECHANISM) AMALGAMATED PORTFOLIO Annual FORECAST JANUARY 1, 2020 RATES - RATIO 3.064 No. PARTICULARS FORECAST JANUARY 1, 2020 RATES Increase/Decrease % of Previous 1 MAINLAND AND VANCOUVER ISLAND SERVICE AREA Quantity Rate Quantity Rate Rate Annual Bill Annual \$ Annual \$ Annual \$ (Revelstoke Customers) 2 3 RATE SCHEDULE 2 - SMALL COMMERCIAL SERVICE Delivery Margin Related Charges 5 Basic Charge per Day 365.25 0.9485 = \$346.4396 365.25 days x \$ 0.9485 = \$346.4396 days x \$ 7 8 Delivery Charge per GJ 300.0 GJ x 3.384 = 1,015.2000 300.0 GJ x 3.384 = 1,015.2000 Rider 3 BVA Rate Rider per GJ GJ x 0.018 = 0.018 = 9 300.0 5.4000 300.0 GJ x 5.4000 (0.045) =10 Rider 5 RSAM per GJ 300.0 GJ x (0.045) =(13.5000)300.0 GJ x (13.5000)11 Subtotal Delivery Margin Related Charges 3.357 1,353.54 3.357 1,353.54 12 13 Commodity Related Charges 1.122 = \$ 14 Storage and Transport Charge per GJ 300.0 GJ x 336.5634 300.0 GJ x 1.128 = \$338 4000 \$ 0.006 \$ 1 8366 0.04% 15 Rider 6 MCRA per GJ 300.0 GJ x 300.0 GJ x 0.104 = 31.2000 0.104 31.2000 0.72% 1.549 = 16 Cost of Gas 300.0 GJ x 1.549 = 464,7000 300.0 GJ x 464,7000 2,150.4366 5.739 = (428,7366) (9.96%) 17 Rider 1 Propane Surcharge / Index-Based Premium 300.0 GJ x 7.168 300.0 GJ x 1.721.7000 (1.429)18 Subtotal Commodity Related Charges (395.70) 9.839 2,951.70 8.520 2,556.00 (9.19%) 19 20 Total (with effective \$/GJ rate) 300.0 4,305.24 3,909.54 (395.70) (9.19%) 14.351 300.0 13.032 (1.319) \$ \$ \$ Ś

Notes: Tariff rate schedule per GJ charges are set at 3 decimals, Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight differences in totals due to rounding

FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA

COMMODITY RELATED CHARGES CHANGES RATE SCHEDULE 2 - SMALL COMMERCIAL SERVICE

Line	e	SEPA	ARATE PORTFO	IO (CURRENT ME	CHANIS	SM)		AMALGA	MATED PORTFOLI	0			Annual	
No	Particular		FORECAST JA	NUARY 1, 2020 RA	ATES		FORE	CAST JANUAR	RY 1, 2020 RATES -	RATIO 3.064			Increase/Decrease	
1	MAINLAND AND VANCOUVER ISLAND SERVICE AREA	Quan	tity	Rate	A	nnual \$	Quant	ity	Rate	Annual \$		Rate	Annual \$	Annual Bill
2	Delivery Margin Related Charges													
3	Basic Charge per Day	365.25	days x \$	0.9485 =	= \$	346.44	365.25	days x \$	0.9485 = \$	346.44	\$	-	\$0.00	-
4														
5	Delivery Charge per GJ	340.0	GJ x	3.384 =	=	1,150.56	340.0	GJ x	3.384 =	1,150.56		-	\$0.00	-
6	Rider 3 BVA Rate Rider per GJ	340.0	GJ x	0.018 =	=	6.12	340.0	GJ x	0.018 =	6.12		-	\$0.00	-
7	Rider 5 RSAM per GJ	340.0	GJ x	(0.045) =	=	(15.30)	340.0	GJ x	(0.045) =	(15.30)		-	\$0.00	-
8	Subtotal Delivery Margin Related Charges		\$	3.357	\$	1,487.82		\$	3.357 \$	1,487.82			\$0.00	-
9														
10	Commodity Related Charges													
11	Storage and Transport Charge per GJ	340.0	GJ x	1.122 =	= \$	381.44	340.0	GJ x	1.128 = \$	383.52	\$	0.006	\$2.08	0.09%
12	Rider 6 MCRA per GJ	340.0	GJ x	0.104 =	=	35.48	340.0	GJ x	0.104 =	35.36		(0.000)	(\$0.12)	-
13	Storage and Transport Related Charges Subtotal		\$	1.226	\$	416.92		\$	1.232 \$	418.88			\$1.96	0.08%
14	l													
15	Cost of Gas (Commodity Cost Recovery Charge) per GJ	340.0	GJ x	1.549 =	= \$	526.66	340.0	GJ x	1.549 = \$	526.66		-	\$0.00	-
16	Subtotal Commodity Related Charges		\$	2.775	\$	943.58		\$	2.781 \$	945.54			\$1.96	0.08%
17	,													
18	Total (with effective \$/GJ rate)	340.0	\$	7.151	\$	2,431.40	340.0	\$	7.157 \$	2,433.36	\$	0.006	\$1.96	0.08%
10											•			

Notes: Tariff rate schedule per GJ charges are set at 3 decimals. Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight Slight differences in totals due to rounding

COMMODITY RELATED CHARGES CHANGES

RATE SCHEDULE 3 - LARGE COMMERCIAL SERVICE

Line SEPARATE PORTFOLIO (CURRENT MECHANISM) AMALGAMATED PORTFOLIO Annual FORECAST JANUARY 1, 2020 RATES - RATIO 3.064 No. PARTICULARS FORECAST JANUARY 1, 2020 RATES Increase/Decrease % of Previous 1 MAINLAND AND VANCOUVER ISLAND SERVICE AREA Quantity Rate Quantity Rate Annual \$ Rate Annual Bill Annual \$ Annual \$ (Revelstoke Customers) 2 3 RATE SCHEDULE 3 - LARGE COMMERCIAL SERVICE Delivery Margin Related Charges 5 Basic Charge per Day 365.25 4.7895 = \$ 1,749.3649 365.25 days x \$ 4.7895 = \$1,749.3649 7 8 Delivery Charge per GJ 6,650.0 GJ x 2.977 = 19,797.0500 6,650.0 GJ x 2.977 = 19,797.0500 Rider 3 BVA Rate Rider per GJ GJ x 0.018 = 0.018 = 9 6,650.0 119.7000 6,650.0 GJ x 119,7000 (0.045) =10 Rider 5 RSAM per GJ 6,650.0 GJ x (0.045) =(299.2500) 6,650.0 GJ x (299.2500) 11 Subtotal Delivery Margin Related Charges 2.950 21,366.86 2.950 21,366.86 12 13 Commodity Related Charges 0.937 = \$ 0.942 = \$14 Storage and Transport Charge per GJ 6.650.0 GJ x 6,230.4763 6.650.0 GJ x 6 264 3000 \$ 0.005 \$ 33 8237 0.04% 15 Rider 6 MCRA per GJ 6,650.0 GJ x 6,650.0 GJ x 0.086 = 571.9000 0.086 571.9000 0.66% 1.549 = 16 Cost of Gas 6.650.0 GJ x 1.549 = 10.300.8500 6.650.0 GJ x 10.300.8500 5.320 = (13.520.0237) (15.58%) 17 Rider 1 Propane Surcharge / Index-Based Premium 6.650.0 GJ x 7.353 48.898.0237 6.650.0 GJ x 35.378.0000 (2.033)18 Subtotal Commodity Related Charges 9.839 65,429.35 7.897 52,515.05 (12,914.30) (14.88%) 19 20 Total (with effective \$/GJ rate) 6,650.0 6,650.0 73,881.91 (12,914.30) (14.88%) 13.052 86,796.21 11.110 (1.942) \$ \$ \$ Ś

Notes: Tariff rate schedule per GJ charges are set at 3 decimals, Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight differences in totals due to rounding

FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA

COMMODITY RELATED CHARGES CHANGES
RATE SCHEDULE 3 - LARGE COMMERCIAL SERVICE

Lin	e	SEPA	ARATE PORTFO	LIO (CURRENT ME	CHANISM)			AMALGA	MATED PORTFO	LIO		Annual	
No	. Particular		FORECAST JA	NUARY 1, 2020 RA	TES		FOREC	AST JANUAR	Y 1, 2020 RATES	S - RATIO 3.064		Increase/Decrease	
1	MAINLAND AND VANCOUVER ISLAND SERVICE AREA	Quar	ntity	Rate	Annu	al\$	Quantit	ty	Rate	Annual \$	 Rate	Annual \$	Annual Bill
2	Delivery Margin Related Charges												
3	Basic Charge per Day	365.25	days x \$	4.7895 =	\$ 1	,749.36	365.25	days x \$	4.7895 =	\$ 1,749.36	\$ -	\$0.00	-
4													
5	Delivery Charge per GJ	3,770.0	GJ x	2.977 =	: 11	,223.29 3	3,770.0	GJ x	2.977 =	11,223.29	-	\$0.00	-
6	Rider 3 BVA Rate Rider per GJ	3,770.0	GJ x	0.018 =		67.86 3	3,770.0	GJ x	0.018 =	67.86	-	\$0.00	-
7	Rider 5 RSAM per GJ	3,770.0	GJ x	(0.045) =	:	(169.65) 3	3,770.0	GJ x	(0.045) =	(169.65)	-	\$0.00	-
8	Subtotal Delivery Margin Related Charges		\$	2.950	\$ 12	,870.86		\$	2.950	\$ 12,870.86		\$0.00	-
9													
10	Commodity Related Charges												
11	Storage and Transport Charge per GJ	3,770.0	GJ x	0.937 =	\$ 3	3,532.16	3,770.0	GJ x	0.942 =	\$ 3,551.34	\$ 0.005	\$19.18	0.08%
12	Rider 6 MCRA per GJ	3,770.0	GJ x	0.087 =	:	328.52	3,770.0	GJ x	0.086 =	324.22	(0.001)	(\$4.30)	(0.02%)
13	Storage and Transport Related Charges Subtotal		\$	1.024	\$ 3	3,860.69		\$	1.028	\$ 3,875.56		\$14.87	0.07%
14													
15	Cost of Gas (Commodity Cost Recovery Charge) per GJ	3,770.0	GJ x	1.549 =	\$ 5	,839.73	3,770.0	GJ x	1.549 =	\$ 5,839.73	-	\$0.00	-
16	Subtotal Commodity Related Charges		\$	2.573	\$ 9	,700.42		\$	2.577	\$ 9,715.29		\$14.87	0.07%
17	,												
18	Total (with effective \$/GJ rate)	3,770.0	\$	5.987	\$ 22	,571.28 3	3,770.0	\$	5.991	\$ 22,586.15	\$ 0.004	\$14.87	0.07%
10									_				

Notes: Tariff rate schedule per GJ charges are set at 3 decimals. Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight Slight differences in totals due to rounding

FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA COMMODITY RELATED CHARGES CHANGES RATE SCHEDULE 4 - SEASONAL FIRM GAS SERVICE

Line SEPARATE PORTEOLIO (CURRENT MECHANISM) AMALGAMATED PORTEOLIO

Line No.	Particular			O (CURRENT ME) UARY 1, 2020 RA				TED PORTFOLIO	ATIO 3.064			Incre	Annual ase/Decrease	
	-	Quantity		Rate	Annual \$	Quantity		Rate	Annual \$		Rate		nnual \$	% of Previous Annual Bill
1	MAINLAND AND VANCOUVER ISLAND SERVICE AREA													
2	Delivery Margin Related Charges													
3	Basic Charge per Day	214	days \$	14.4230 = \$	3,086.5200	214	days \$	14.4230 = \$	3,086.5200	\$	-	\$	-	-
4			•				-							
5	Delivery Charge per GJ													
6	(a) Off-Peak Period	8,500	GJ x \$	1.353 = \$	11,500.500	8,500	GJ x \$	1.353 = \$	11,500.500	\$	-	\$	-	-
7	(b) Extension Period	-	GJ x	1.998 =	-	-	GJ x	1.998 =	-		-		-	-
8	Rider 3 BVA Rate Rider per GJ	8,500	GJ x	0.018 =	153.0000	8,500	GJ x	0.018 =	153.0000		-		-	-
9	Subtotal Delivery Margin Related Charges			\$	14,740.02			\$	14,740.02			\$	-	-
10					•									
11	Commodity Related Charges													
12	Storage and Transport Charge per GJ													
13	(a) Off-Peak Period	8,500	GJ x \$	0.775 = \$	6,587.5000	8,500	GJ x \$	0.779 = \$	6,621.5000	\$	0.004	\$	34.0000	0.10%
14	(b) Extension Period	-	GJ x	0.775 =	-	-	GJ x	0.779 =	-		0.004		-	-
15	Rider 6 MCRA per GJ	8,500	GJ x	0.072 =	612.0000	8,500	GJ x	0.072 =	612.0000		-		-	-
16	Commodity Cost Recovery Charge per GJ													
17	(a) Off-Peak Period	8,500	GJ x	1.549 =	13,166.5000	8,500	GJ x	1.549 =	13,166.5000		-		-	-
18	(b) Extension Period	-	GJ x	1.549 =	-	-	GJ x	1.549 =	-		-		-	-
19														
20	Subtotal Cost of Gas (Commodity Related Charges) Off-Peak			\$	20,366.00			\$	20,400.00			\$	34.00	0.10%
21														
22	Unauthorized Gas Charge During Peak Period (not forecast)													
23														
24	Total during Off-Peak Period	8,500	\$	4.130 \$	35,106.02	8,500.0	\$	4.134 \$	35,140.02	\$	0.004	\$	34.00	0.10%
	·				, ,			_		•				

Notes: Tariff rate schedule per GJ charges are set at 3 decimals. Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight differences in totals due to rounding

FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA COMMODITY RELATED CHARGES CHANGES RATE SCHEDULE 5 - GENERAL FIRM SERVICE

Line SEPARATE PORTFOLIO (CURRENT MECHANISM) AMALGAMATED PORTFOLIO Annual FORECAST JANUARY 1, 2020 RATES - RATIO 3.064 No. Particular FORECAST JANUARY 1, 2020 RATES Increase/Decrease % of Previous Quantity Rate Annual \$ Quantity Rate Annual \$ Rate Annual \$ Annual Bill 1 MAINLAND AND VANCOUVER ISLAND SERVICE AREA 2 Delivery Margin Related Charges 3 Basic Charge per Month months x \$ 469.00 = \$ 5,628.0000 months x \$ 469.00 = \$ 5,628.0000 5 Demand Charge 55.2 GJ x \$ 23.358 = \$ 15,472.3400 55.2 GJ x \$ 23.358 = \$ 15,472.3400 \$ 6 Delivery Charge per GJ 9,948.4000 11,900 GJ x \$ 0.836 = \$ 11,900.0 GJ x \$ 0.836 = \$ 9,948.4000 \$ 8 Rider 3 BVA Rate Rider per GJ 11,900 0.018 214.2000 11,900.0 0.018 GJ x GJ x 214.2000 9 Subtotal Delivery Margin Related Charges 31,262.94 31,262.94 \$ 10 11 Commodity Related Charges 0.775 = \$ GJ x \$ 9,219.2914 0.779 = \$ 12 Storage and Transport Charge per GJ 11,900 11,900.0 GJ x \$ 9,270.1000 0.004 \$ 50.8086 0.09% 13 Rider 6 MCRA per GJ GJ x 0.072 = 857.4813 0.072 = (0.000)11,900 11,900.0 GJ x 856.8000 (0.6813)Commodity Cost Recovery Charge per GJ 18,433.1000 18,433.1000 14 11,900 GJ x 1.549 11,900.0 GJ x 1.549 15 Subtotal Gas Commodity Cost (Commodity Related Charge) 28,509.87 28,560.00 50.13 0.08% \$ 16 17 Total (with effective \$/GJ rate) 11,900 59,772.81 11,900.0 59,822.94 50.13 0.08% 5.023 \$ 5.027 \$ 0.004

Notes: Tariff rate schedule per GJ charges are set at 3 decimals. Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight differences in totals due to rounding

FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA COMMODITY RELATED CHARGES CHANGES RATE SCHEDULE 6 - NATURAL GAS VEHICLE SERVICE

Line SEPARATE PORTFOLIO (CURRENT MECHANISM) AMALGAMATED PORTFOLIO Annual

Line			FORECAST JANUARY 1, 2			,		AWALGAWA						Annuai	
No.	Particular	FC	RECAST JAN	NUARY 1, 20	20 RATE	ES	FORECAST	JANUARY 1	I, 2020 RAT	ES - RA	TIO 3.064		In	crease/Decrease	
1		Quantity		Rate		Annual \$	Quantity		Rate		Annual \$	 Rate		Annual \$	% of Previous Annual Bill
2	MAINLAND AND VANCOUVER ISLAND SERVICE AREA														
3	Delivery Margin Related Charges														
4	Basic Charge per Day	365.25	days \$	2.0041	= \$	732.0000	365.25	days \$	2.0041	= \$	732.0000	\$ -	\$	-	-
5															
6	Delivery Charge per GJ	5,020	GJ x \$	2.923	= \$	14,673.4600	5,020	GJ x \$	2.923	= \$	14,673.4600	\$ -	\$	-	-
7	Rider 3 BVA Rate Rider per GJ	5,020	GJ x	0.018	=	90.3600	5,020	GJ x	0.018	=	90.3600	-			-
8	Subtotal Delivery Margin Related Charges				\$	15,495.82				\$	15,495.82		\$	-	-
9															
10	Commodity Related Charges														
11	Storage and Transport Charge per GJ	5,020	GJ x \$	0.353	= \$	1,772.8363	5,020	GJ x \$	0.355	= \$	1,782.1000	\$ 0.002	\$	9.2637	0.04%
12	Rider 6 MCRA per GJ	5,020	GJ x	0.033	=	164.8905	5,020	GJ x	0.033	=	165.6600	0.000		0.7695	-
13	Commodity Cost Recovery Charge per GJ	5,020	GJ x	1.549	=	7,775.9800	5,020	GJ x	1.549	=	7,775.9800	-			-
14	Subtotal Cost of Gas (Commodity Related Charge)				\$	9,713.71				\$	9,723.74		\$	10.03	0.04%
15															
16	Total (with effective \$/GJ rate)	5,020	\$	5.022	\$	25,209.53	5,020	\$	5.024	\$	25,219.56	\$ 0.002	\$	10.03	0.04%

Notes: Tariff rate schedule per GJ charges are set at 3 decimals. Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight differences in totals due to rounding

FORTISBC ENERGY INC. - MAINLAND AND VANCOUVER ISLAND SERVICE AREA COMMODITY RELATED CHARGES CHANGES RATE SCHEDULE 7 - GENERAL INTERUPTIBLE SERVICE

Line SEPARATE PORTFOLIO (CURRENT MECHANISM) AMALGAMATED PORTFOLIO Annual FORECAST JANUARY 1, 2020 RATES - RATIO 3.064 Increase/Decrease Particular FORECAST JANUARY 1, 2020 RATES No. % of Previous Annual Bill Quantity Rate Annual \$ Quantity Rate Annual \$ Rate Annual \$ 2 MAINLAND AND VANCOUVER ISLAND SERVICE AREA 3 Delivery Margin Related Charges 4 Basic Charge per Month months x \$ 880.00 = \$ 10,560.0000 12 months x \$ 880.00 = \$ 10,560.0000 5 6 Delivery Charge per GJ 52.670 GJ x \$ 1.358 = \$ 71.525.8600 52.670 GJ x \$ 1.358 = \$ 71.525.8600 \$ Rider 3 BVA Rate Rider per GJ 52,670 GJ x 0.018 948.0600 52,670 GJ x 0.018 948.0600 8 Subtotal Delivery Margin Related Charges 83,033.92 83,033.92 9 10 Commodity Related Charges 11 Storage and Transport Charge per GJ 52,670 GJ x \$ 0.775 = \$ 40,819.2500 52,670 GJ x \$ 0.779 = \$ 41,029.9300 0.004 210.6800 0.10% 12 Rider 6 MCRA per GJ 52,670 GJ x 0.072 = 3,792.2400 52,670 GJ x 0.072 = 3,792.2400 13 Commodity Cost Recovery Charge per GJ 52,670 GJ x 1.549 81,585.8300 52,670 GJ x 1.549 81,585.8300 14 Subtotal Cost of Gas (Commodity Related Charge) \$ 126,197.32 126,408.00 210.68 0.10% 15 16 Total (with effective \$/GJ rate) 52,670 3.972 \$ 209,231.24 52,670 3.976 \$ 209,441.92 0.004 210.68 0.10%

Notes: Tariff rate schedule per GJ charges are set at 3 decimals. Individual tariff components are calculated and shown to 4 decimals; subtotal amounts, equivalent to the line items on customer bills, are rounded and shown to 2 decimals, consistent with actual invoice calculations. Slight differences in totals due to rounding



PROPOSED FEI RATE SCHEDULES 1 TO 27, EFFECTIVE JANUARY 1, 2020 BLACKLINED

FORTISBC ENERGY INC. RATE SCHEDULE 1

		Va	Aainland and ncouver Island <u>Service Area</u>			
Commodity R	Related Charges					
Storage ar per Gigajo	nd Transport Charge	\$	<u>X</u> ,XXX	_	Deleted: 1	
per Orgajo	aic	Ψ	<u> </u>		Deleted: 485	
6. Rider 6 pe	r Gigajoule	\$	(X,XXX)		Deleted: 0	
					Deleted: 023	
Subtotal of no	r Cigniaula Staraga				(20,4404) 323	
	r Gigajoule Storage r t Related Charges	\$	<u>xxxx</u>	_	Deleted: 1	
and manspor	t Related Charges	Ψ	V	$\overline{}$	Deleted: 462	
	as (Commodity Cost Charge) per	\$	<u>xxx</u> x		Deleted: 1	
· 3-7				=	Deleted: 549	
▼				R	Deleted: <#>Rider 1 per Gigajoule	
Delivery Març	gin Related Riders				Deleted: Subtotal of per Gigajoule Cost of Gas Recover Related Charges for Customers located in the City of Revelstoke and surrounding areas	ery
Rider 2 Rider 3		Accou	nt - Applicable to Mainland and Vancouver Island			
	Service Area Customers	s for th	ne Year ending December 31, 20 <mark>20</mark> .		Deleted: 19	
Rider 4	(Reserved for future use	e.)				
Rider 5	Vancouver Island Service		stment Charge - Applicable to Mainland and a Customers for the Year ending December 31,			
	20 <mark>20</mark> .				Deleted: 19	
				/	Deleted: G-129-19	
					Deleted: July 1, 2019	
				_ ///	Deleted: Fourth	
Order No.:	▼		Issued By: Doug Slater, Director, Regulatory Affair	s_////		
Effective Date:	January 1, 2020		Accepted for Filing:	_//		
BCUC Secretar	y:		Fifth Revision of Page R-1.	2		

Con	nmor	vtil	Related	Ridars
CUI	HHHOU	aitv	Relateu	Riueis

Rider 1 (Reserved for future use.)

Storage and Transport Related Riders

Rider 6 Midstream Cost Reconciliation Account - Applicable to Mainland and

Vancouver Island Service Area Customers for the Year ending December 31,

2020.

Rider 8 (Reserved for future use.)

Rider 9 (Reserved for future use.)

Municipal Operating Fee Charge

A Municipal Operating Fee charge is payable (in addition to the above charges), if the Premises to which Gas is delivered under this Rate Schedule is located within the boundaries of a municipality or First Nations lands (formerly, reserves within the *Indian Act*) where FortisBC Energy is required to remit such Municipal Operating Fee to the municipality and excluding any Customer from whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. The Municipal Operating Fee charge will be calculated in accordance with the approved methodology.

Minimum Charge per Month

The minimum charge per Month will be the aggregate of the Basic Charge and the Municipal Operating Fee charge (where applicable and calculated in accordance with the approved methodology).

C/N

C/N/O

0

ted: G-18-19

_ __**ted:** July 1, 2019

Deleted: Third

Order No.: Issued By: Doug Slater, Director, Regulatory Affairs

Effective Date: January 1, 2020 Accepted for Filing:

BCUC Secretary:

Fourth Revision of Page R-1.3

Deleted: Propane Surcharge - Applicable to Mainland and Vancouver Island Service Area Customers located in the City of Revelstoke and surrounding areas.

Deleted: , excluding Revelstoke,

Deleted: 19

FORTISBC ENERGY INC. RATE SCHEDULE 1B

	and the state of t		
Delivery Ma	argin Related Riders		
Rider 2	(Reserved for future use.)		
Rider 3	Biomethane Variance Account - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020.	D	eleted: 19
Rider 4	(Reserved for future use.)		
Rider 5	Revenue Stabilization Adjustment Charge - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020.	D	eleted: 19
Storage and	d Transport Related Riders		
Rider 6	Midstream Cost Reconciliation Account - Applicable to Mainland and Vancouver Island Service Area Customers, for the Year ending December 31, 2020.		eleted: , excluding Revelstoke,
Rider 8	(Reserved for future use.)		occar ()
Municipal C	Operating Fee Charge	1	
to which Gas	Operating Fee charge is payable (in addition to the above charges), if the Premises s is delivered under this Rate Schedule is located within the boundaries of a or First Nations lands (formerly, reserves within the <i>Indian Act</i>) where FortisBC.	C/N/O	
to which Gas municipality Energy is re- Customer fro The Municip methodology Minimum C The minimur	s is delivered under this Rate Schedule is located within the boundaries of a or First Nations lands (formerly, reserves within the <i>Indian Act</i>) where FortisBC equired to remit such Municipal Operating Fee to the municipality and excluding any om whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. Deal Operating Fee charge will be calculated in accordance with the approved by. Charge per Month In charge per Month will be the aggregate of the Basic Charge and the Municipal	C/N/O	
to which Gas municipality Energy is re- Customer fro The Municip methodology Minimum C The minimur	is is delivered under this Rate Schedule is located within the boundaries of a or First Nations lands (formerly, reserves within the <i>Indian Act</i>) where FortisBC equired to remit such Municipal Operating Fee to the municipality and excluding any om whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. and Operating Fee charge will be calculated in accordance with the approved by. Charge per Month In charge per Month will be the aggregate of the Basic Charge and the Municipal fee charge (where applicable and calculated in accordance with the approved	C/N	
to which Gas municipality Energy is re- Customer from The Municipal methodology Minimum C The minimus Operating Fo	is is delivered under this Rate Schedule is located within the boundaries of a or First Nations lands (formerly, reserves within the <i>Indian Act</i>) where FortisBC equired to remit such Municipal Operating Fee to the municipality and excluding any om whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. and Operating Fee charge will be calculated in accordance with the approved by. Charge per Month In charge per Month will be the aggregate of the Basic Charge and the Municipal fee charge (where applicable and calculated in accordance with the approved		l: G-18-19 l: July 1, 2019
to which Gas municipality Energy is re- Customer from The Municipal methodology Minimum C The minimus Operating Fo	is is delivered under this Rate Schedule is located within the boundaries of a or First Nations lands (formerly, reserves within the <i>Indian Act</i>) where FortisBC equired to remit such Municipal Operating Fee to the municipality and excluding any om whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. and Operating Fee charge will be calculated in accordance with the approved by. Charge per Month In charge per Month will be the aggregate of the Basic Charge and the Municipal fee charge (where applicable and calculated in accordance with the approved	C/N	l: July 1, 2019 l: <u>June 4, 2019</u> l: <u>Original signed by Patrick Wruck</u>
to which Gas municipality Energy is re- Customer fro The Municip methodology Minimum C The minimur Operating Fo	is is delivered under this Rate Schedule is located within the boundaries of a or First Nations lands (formerly, reserves within the <i>Indian Act</i>) where FortisBC equired to remit such Municipal Operating Fee to the municipality and excluding any om whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. and Operating Fee charge will be calculated in accordance with the approved by. Charge per Month In charge per Month will be the aggregate of the Basic Charge and the Municipal fee charge (where applicable and calculated in accordance with the approved	C/N	l: July 1, 2019 l: <u>June 4, 2019</u>
to which Gas municipality Energy is re- Customer fro The Municip methodology Minimum C The minimur Operating Fo methodology	is is delivered under this Rate Schedule is located within the boundaries of a or First Nations lands (formerly, reserves within the <i>Indian Act</i>) where FortisBC equired to remit such Municipal Operating Fee to the municipality and excluding any om whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. and Operating Fee charge will be calculated in accordance with the approved by. Charge per Month In charge per Month will be the aggregate of the Basic Charge and the Municipal fee charge (where applicable and calculated in accordance with the approved	C/N	l: July 1, 2019 l: <u>June 4, 2019</u> l: <u>Original signed by Patrick Wruck</u>
to which Gas municipality Energy is re- Customer from The Municipal methodology Minimum C The minimus Operating Fo	is is delivered under this Rate Schedule is located within the boundaries of a or First Nations lands (formerly, reserves within the <i>Indian Act</i>) where FortisBC equired to remit such Municipal Operating Fee to the municipality and excluding any som whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. Deal Operating Fee charge will be calculated in accordance with the approved by. Charge per Month In charge per Month will be the aggregate of the Basic Charge and the Municipal fee charge (where applicable and calculated in accordance with the approved by). Issued By: Doug Slater, Director, Regulatory Affairs	C/N	l: July 1, 2019 l: <u>June 4, 2019</u> l: <u>Original signed by Patrick Wruck</u>

FORTISBC ENERGY INC. RATE SCHEDULE 1U

	RATE SCHEDULE TO		
Delivery Ma	argin Related Riders		
Rider 2	(Reserved for future use.)		
Rider 3	Biomethane Variance Account - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020.	Deleted: 19	
Rider 4	(Reserved for future use.)		
Rider 5	Revenue Stabilization Adjustment Charge - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020.	Deleted: 19	
Storage an	d Transport Related Riders		
Rider 6	Midstream Cost Reconciliation Account - Applicable to Mainland and Vancouver Island Service Area Customers, for the Year ending December 31, 2020.	Deleted: , excluding Revelstoke, Deleted: 19	
Rider 8	(Reserved for future use.)		
Rider 9	(Reserved for future use.)		
Municipal (Operating Fee Charge		
to which Ga municipality Energy is re Customer fr	Operating Fee charge is payable (in addition to the above charges), if the Premises is is delivered under this Rate Schedule is located within the boundaries of a or First Nations lands (formerly, reserves within the <i>Indian Act</i>) where FortisBC equired to remit such Municipal Operating Fee to the municipality and excluding any from whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. oal Operating Fee charge will be calculated in accordance with the approved by.	C/N/O	
Minimum C	charge per Month		
Operating F	m charge per Month will be the aggregate of the Basic Charge and the Municipal ee charge (where applicable and calculated in accordance with the approved	C/N	
methodolog	у).	O i-18-19 uly 1, 2019 une 4, 2019 priginal signed by Patrick Wruck hird	
Order No.:	Issued By: Doug Slater, Director, Regulatory Affairs		
Effective Dat	e: January 1, 2020 Accepted for Filing:	<i>J</i> /	
	tary: Fourth_Revision of Page R-1U.3		

Delivery Mai	police Deleted Didens		
	rgin Related Riders		
Rider 2	(Reserved for future use.)		
Rider 3	Biomethane Variance Account - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020.	Do	eleted: 19
Rider 4	(Reserved for future use.)		
Rider 5	Revenue Stabilization Adjustment Charge - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020.	Do	eleted: 19
Storage and	d Transport Related Riders		
Rider 6	Midstream Cost Reconciliation Account - Applicable to Mainland and Vancouver Island Service Area Customers, for the Year ending December 31,	De	eleted: , excluding Revelstoke,
	20 <mark>20</mark> .	De	eleted: 19
Rider 8	(Reserved for future use.)		
Rider 9	(Reserved for future use.)		
Municipal O	perating Fee Charge		
A Municipal C	Operating Fee charge is payable (in addition to the above charges), if the Premises		
to which Gas municipality of Energy is red Customer fro The Municipa	is is delivered under this Rate Schedule is located within the boundaries of a or First Nations lands (formerly, reserves within the <i>Indian Act</i>) where FortisBC quired to remit such Municipal Operating Fee to the municipality and excluding any orm whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. al Operating Fee charge will be calculated in accordance with the approved	C/N/O	
to which Gas municipality of Energy is red Customer fro The Municipal methodology	is is delivered under this Rate Schedule is located within the boundaries of a or First Nations lands (formerly, reserves within the <i>Indian Act</i>) where FortisBC quired to remit such Municipal Operating Fee to the municipality and excluding any orm whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. al Operating Fee charge will be calculated in accordance with the approved	C/N/O	
to which Gas municipality of Energy is red Customer fro The Municipal methodology Minimum Ch The minimum Operating Fe	is is delivered under this Rate Schedule is located within the boundaries of a cor First Nations lands (formerly, reserves within the <i>Indian Act</i>) where FortisBC quired to remit such Municipal Operating Fee to the municipality and excluding any om whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. al Operating Fee charge will be calculated in accordance with the approved //. The per Month The charge per Month will be the aggregate of the Basic Charge and the Municipal ee charge (where applicable and calculated in accordance with the approved	C/N/O	
to which Gas municipality of Energy is red Customer from The Municipal methodology Minimum Chamber The minimum Operating Fe	is is delivered under this Rate Schedule is located within the boundaries of a cor First Nations lands (formerly, reserves within the <i>Indian Act</i>) where FortisBC quired to remit such Municipal Operating Fee to the municipality and excluding any om whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. al Operating Fee charge will be calculated in accordance with the approved //. The per Month The charge per Month will be the aggregate of the Basic Charge and the Municipal ee charge (where applicable and calculated in accordance with the approved		· G.18.19
to which Gas municipality of Energy is red Customer from The Municipal methodology Minimum Chamber The minimum Operating Fe	is is delivered under this Rate Schedule is located within the boundaries of a cor First Nations lands (formerly, reserves within the <i>Indian Act</i>) where FortisBC quired to remit such Municipal Operating Fee to the municipality and excluding any om whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. al Operating Fee charge will be calculated in accordance with the approved //. The per Month The charge per Month will be the aggregate of the Basic Charge and the Municipal ee charge (where applicable and calculated in accordance with the approved		: G-18-19 : July 1, 2019 : June 4, 2019 : Original signed by Patrick Wruck : Third
to which Gas municipality of Energy is red Customer from The Municipal methodology Minimum Chamber The minimum Operating Fe	is is delivered under this Rate Schedule is located within the boundaries of a cor First Nations lands (formerly, reserves within the <i>Indian Act</i>) where FortisBC quired to remit such Municipal Operating Fee to the municipality and excluding any om whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. all Operating Fee charge will be calculated in accordance with the approved //. The per Month The charge per Month will be the aggregate of the Basic Charge and the Municipal ee charge (where applicable and calculated in accordance with the approved //).	C/N	: July 1, 2019 : June 4, 2019 : Original signed by Patrick Wruck
to which Gas municipality of Energy is red Customer from The Municipal methodology Minimum Character The minimum Operating Femethodology	is is delivered under this Rate Schedule is located within the boundaries of a cor First Nations lands (formerly, reserves within the <i>Indian Act</i>) where FortisBC quired to remit such Municipal Operating Fee to the municipality and excluding any om whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. al Operating Fee charge will be calculated in accordance with the approved //. The per Month The charge per Month will be the aggregate of the Basic Charge and the Municipal ee charge (where applicable and calculated in accordance with the approved	C/N	: July 1, 2019 : June 4, 2019 : Original signed by Patrick Wruck
to which Gas municipality of Energy is red Customer fro The Municipal methodology Minimum Ch The minimum	is is delivered under this Rate Schedule is located within the boundaries of a or First Nations lands (formerly, reserves within the <i>Indian Act</i>) where FortisBC quired to remit such Municipal Operating Fee to the municipality and excluding any om whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. al Operating Fee charge will be calculated in accordance with the approved of the description of the descr	C/N	: July 1, 2019 : June 4, 2019 : Original signed by Patrick Wruck

FORTISBC ENERGY INC.

		RATE SCHEDULE 2	
	Mainland and Vancouver Island <u>Service Area</u>		
Commodity Related Charges			
5. Storage and Transport Charge per Gigajoule	\$ <u>X</u> XXX		Deleted: 1
			Deleted: 490
6. Rider 6 per Gigajoule	\$ (<u>X.XXX)</u>		Deleted: 0
			Deleted: 023
Subtotal of per Gigajoule Storage		1	
and Transport Related Charges	\$ <u>X.XXX</u>	l e	Deleted: 1
and Transport Related Charges	Ψ <u>Λ.Λ.Λ.</u>		Deleted: 467
7. 0. 1. 1. 0. 1. (0. 11. 0. 1.			
7. Cost of Gas (Commodity Cost Recovery Charge) per Gigajoule	\$ <u>x.xxx</u>		Deleted: 1
			Deleted: 549
,			Polotodu eth Pider 1 per Cigniquie
			Deleted: Subtotal of per Gigajoule Cost of Gas Recovery Related Charges for Customers located in the City of
			Revelstoke and surrounding areas
			Deleted: G-129-19
		/	Deleted: July 1, 2019
		//	Deleted: Fourth
Order No.:	Issued By: Doug Slater, Directo	r, Regulatory Affairs	
Effective Date: January 1, 2020	Accepted for Filing:		
BCUC Secretary:		vision of Page R-2.2	

Delivery Ma	argin Related Riders			
Rider 2	(Reserved for future use.)			
Rider 3	Biomethane Variance Account - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020.		Dele	ited: 19
Rider 4	(Reserved for future use.)			
Rider 5	Revenue Stabilization Adjustment Charge - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020.		Dele	rted: 19
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Rider 1	(Reserved for future use.),			sted: Propane Surcharge - Applicable to Mainl
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Rider 6	Midstream Cost Reconciliation Account - Applicable to Mainland and Vancouver Island Service Area Customers, for the Year ending December 31, 2020.			eted: , excluding Revelstoke,
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Order No.:	Issued By: Doug Slater, Director, Regulatory Affairs			
Effective Dat	e: January 1, 2020 Accepted for Filing:			

Delivery Margin Related Riders Rider 2 (Reserved for future use.) Rider 3 Biomethane Variance Account - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020. Deleted: 19 Rider 4 (Reserved for future use.) Rider 5 Revenue Stabilization Adjustment Charge - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020. Deleted: 19 Storage and Transport Related Riders Rider 6 Midstream Cost Reconciliation Account - Applicable to Mainland and Vancouver Island Service Area Customers, for the Year ending December 31, Deleted: , excluding Revelstoke, Deleted: 19 Rider 8 (Reserved for future use.) **Municipal Operating Fee Charge** A Municipal Operating Fee charge is payable (in addition to the above charges), if the Premises to which Gas is delivered under this Rate Schedule is located within the boundaries of a C/N/O municipality or First Nations lands (formerly, reserves within the Indian Act) where FortisBC Energy is required to remit such Municipal Operating Fee to the municipality and excluding any Customer from whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. The Municipal Operating Fee charge will be calculated in accordance with the approved methodology. Minimum Charge per Month The minimum charge per Month will be the aggregate of the Basic Charge and the Municipal C/N Operating Fee charge (where applicable and calculated in accordance with the approved methodology). 0 d: July 1, 2019 d: June 4, 2019 d: Third G-18-19 Issued By: Doug Slater, Director, Regulatory Affairs Order No.: Effective Date: January 1, 2020 Accepted for Filing:

Fourth Revision of Page R-2B.3

BCUC Secretary: Original signed by Patrick Wruck

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Rider 3	Biomethane Variance Account - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020.		Deleted: 19
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Rider 3			- Applicable to Mainland and Vancouver Island ear ending December 31, 2020.		Deleted: 19
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Fourth Revision of Page R-3.3

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Rider 4	(Reserved for future use.)		
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Storage and	Transport Related Riders		
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	rgin Related Riders			
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Rider 3	Biomethane Variance Account - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020.		Del	eted: 19
Rider 4	(Reserved for future use.)			
Rider 5	Revenue Stabilization Adjustment Charge - Not applicable.			
Commodity	Cost Recovery Related Riders			
Rider 1	(Reserved for future use.),		Del	eted: Propane Surcharge - Not applicable.
Storage and	d Transport Related Riders			
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municipality Energy is re Customer fro The Municip methodology		C/N	N/O	
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Delivery Margin Related Riders Rider 2 (Reserved for future use.) Rider 3 Biomethane Variance Account - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020. Deleted: 19 Rider 4 (Reserved for future use.) Rider 5 Revenue Stabilization Adjustment Charge - Not applicable. **Commodity Cost Recovery Related Riders** Rider 1 (Reserved for future use.) Deleted: Propane Surcharge - Not applicable. Storage and Transport Related Riders Rider 6 Midstream Cost Reconciliation Account - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, Deleted: , excluding Revelstoke, 2020. Deleted: 19 **Municipal Operating Fee Charge** A Municipal Operating Fee charge is payable (in addition to the above charges), if the facilities to which Gas is delivered under this Rate Schedule are located within the boundaries of a municipality or First Nations lands (formerly, reserves within the Indian Act) where FortisBC C/N/O Energy is required to remit such Municipal Operating Fee to the municipality and excluding any Customer from whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. The Municipal Operating Fee charge will be calculated in accordance with the approved methodology. Minimum Charge per Month The minimum charge per Month will be the aggregate of the Basic Charge, Demand Charges C/N and the Municipal Operating Fee charge (where applicable and calculated in accordance with the approved methodology). 3-18-19 0 uly 1, 2019 une 4, 2019 Driginal signed by Patrick Wruck hird Issued By: Doug Slater, Director, Regulatory Affairs Order No.:

Fourth Revision of Page R-5.20

Accepted for Filing:

Effective Date:

BCUC Secretary:

January 1, 2020

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Order No.: Issued By: Doug Slater, Director, Regulatory Affairs

Effective Date: January 1, 2020 Accepted for Filing:

BCUC Secretary: Fourth Revision of Page R-5B.20

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Rider 3	Biomethane Variance Account - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020.	Deleted: 19
Rider 4	(Reserved for future use.)	
Rider 5	Revenue Stabilization Adjustment Charge - Not applicable.	
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Rider 2 (Reserved for future use.)

Rider 3 Biomethane Variance Account - Applicable to Mainland and Vancouver Island

Service Area Customers for the Year ending December 31, 2020.

Rider 4 (Reserved for future use.)

Rider 7 (Reserved for future use.)

Storage and Transport Related Riders

Rider 6 Midstream Cost Reconciliation Account - Applicable to Mainland and

Vancouver Island Service Area Customers for the Year ending December 31,

20<mark>20</mark>.

Permanent Delivery Rate Establishment

Pursuant to British Columbia Utilities Commission Order G-208-18, delivery rates and delivery rate riders were set on an interim basis for consumption on and after January 1, 2019. Pursuant to British Columbia Utilities Commission Order G-30-19, the interim delivery rates and delivery rate riders are now made permanent and implemented for consumption on and after January 1, 2019.

Permanent Storage and Transport Charge Establishment

Pursuant to British Columbia Utilities Commission Order G-230-18, Storage and Transport Charges were set on an interim basis for consumption on and after January 1, 2019. Pursuant to British Columbia Utilities Commission Order G-9-19, the interim Storage and Transport Charges are now made permanent and implemented for consumption on and after January 1, 2019.

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Order No.: Issued By: Doug Slater, Director, Regulatory Affairs

Effective Date: January 1, 2020 Accepted for Filing:

BCUC Secretary: _____

Third Revision of Page R-6P.9

Delivery Margin Related Riders Rider 2 (Reserved for future use.) Rider 3 Biomethane Variance Account - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020. Deleted: 19 Rider 4 (Reserved for future use.) Rider 5 Revenue Stabilization Adjustment Charge - Not applicable. **Commodity Cost Recovery Related Riders** Rider 1 (Reserved for future use.) Deleted: Propane Surcharge - Not applicable. Storage and Transport Related Riders Rider 6 Midstream Cost Reconciliation Account - Applicable to Mainland and Vancouver Island Service Area Customers, for the Year ending December 31, Deleted: , excluding Revelstoke, 2020. Deleted: 19 **Municipal Operating Fee Charge** A Municipal Operating Fee charge is payable (in addition to the above charges), if the facilities to which Gas is delivered under this Rate Schedule are located within the boundaries of a municipality or First Nations lands (formerly, reserves within the Indian Act) where FortisBC C/N/O Energy is required to remit such Municipal Operating Fee to the municipality and excluding any Customer from whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. The Municipal Operating Fee charge will be calculated in accordance with the approved methodology. Minimum Charge per Month The minimum charge per Month will be the aggregate of the Basic Charge and the Municipal C/N Operating Fee charge (where applicable and calculated in accordance with the approved methodology). 0 i-18-19 uly 1, 2019 une 4, 2019 riginal signed by Patrick Wruck hird Order No.: Issued By: Doug Slater, Director, Regulatory Affairs

Fourth Revision of Page R-7.21

Accepted for Filing:

Effective Date:

BCUC Secretary:

January 1, 2020

Rider 1 (Reserved for future use.)

Deleted: Propane Surcharge - Not applicable.

Rider 2 (Reserved for future use.)

Rider 3 Biomethane Variance Account - Applicable to Mainland and Vancouver Island

Service Area Customers for the Year ending December 31, 2020.

Rider 4 (Reserved for future use.)

Rider 5 Revenue Stabilization Adjustment Charge - Not applicable.

Municipal Operating Fee Charge

A Municipal Operating Fee charge is payable (in addition to the above charges), if the facilities to which Gas is delivered under this Rate Schedule are located within the boundaries of a municipality or First Nations lands (formerly, reserves within the *Indian Act*) where FortisBC Energy is required to remit such Municipal Operating Fee to the municipality and excluding any Customer from whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. The Municipal Operating Fee charge will be calculated in accordance with the approved methodology.

Notes:

- As defined under Section 1.1, the Sumas Daily Price quoted each Day will apply to Gas consumed on that gas day.
- The Sumas Daily Price for the sixth Business Day following the Day for which the Peaking Gas was authorized plus 20 percent.

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Order No.: Issued By: Doug Slater, Director, Regulatory Affairs

Effective Date: January 1, 2020

Accepted for Filing:

BCUC Secretary: _______ Fourth Revision of Page R-22.37

Rider 1 (Reserved for future use.)

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Rider 3 Biomethane Variance Account - Applicable to Mainland and Vancouver Island

Service Area Customers for the Year ending December 31, 2020.

Rider 4 (Reserved for future use.)

Rider 5 Revenue Stabilization Adjustment Charge - Not applicable.

Municipal Operating Fee Charge

A Municipal Operating Fee charge is payable (in addition to the above charges), if the facilities to which Gas is delivered under Rate Schedule 22A are located within the boundaries of a municipality or First Nations lands (formerly, reserves within the *Indian Act*) where FortisBC Energy is required to remit such Municipal Operating Fee to the municipality and excluding any Customer from whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. The Municipal Operating Fee charge will be calculated in accordance with the approved methodology.

Notes:

- Sumas Daily Price means the "NW Sumas" Daily Midpoint Price as set out in Gas Daily's Daily Price Survey for Gas delivered to Northwest Pipeline Corporation at Sumas, converted to Canadian dollars using the noon exchange rate as quoted by the Bank of Canada one Business Day prior to Gas flow date, for each Day. Energy units are converted from MMBtu to Gigajoule by application of a conversion factor equal to 1.055056 Gigajoule per MMBtu.
- 2. The demand surcharge is calculated in accordance with Section 7.3 (Demand Surcharge) of Rate Schedule 22.
- The Sumas Daily Price for the sixth Business Day following the Day for which the Peaking Gas was authorized plus 20 percent.

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Rider 1 (Reserved for future use.)

Rider 2 (Reserved for future use.)

Rider 3 Biomethane Variance Account - Applicable to Mainland and Vancouver Island

Service Area Customers for the Year ending December 31, 2020.

Rider 4 (Reserved for future use.)

Rider 5 Revenue Stabilization Adjustment Charge - Not applicable.

Municipal Operating Fee Charge

A Municipal Operating Fee charge is payable (in addition to the above charges), if the facilities to which Gas is delivered under Rate Schedule 22B are located within the boundaries of a municipality or First Nations lands (formerly, reserves within the *Indian Act*) where FortisBC Energy is required to remit such Municipal Operating Fee to the municipality and excluding any Customer from whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. The Municipal Operating Fee charge will be calculated in accordance with the approved methodology.

Notes:

- 1. Sumas Daily Price means the "NW Sumas" Daily Midpoint Price as set out in Gas Daily's Daily Price Survey for Gas delivered to Northwest Pipeline Corporation at Sumas, converted to Canadian dollars using the noon exchange rate as quoted by the Bank of Canada one Business Day prior to Gas flow date, for each Day. Energy units are converted from MMBtu to Gigajoule by application of a conversion factor equal to 1.055056 Gigajoule per MMBtu.
- 2. The demand surcharge is calculated in accordance with Section 7.3 (Demand Surcharge) of Rate Schedule 22.

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Order No.:

Issued By: Doug Slater, Director, Regulatory Affairs

Effective Date:

January 1, 2020

Accepted for Filing:

June 4, 2019

Fourth Revision of Page R-22B.7

Rider 1 Reserved for future use.) Deleted: Propane Surcharge - Not applicable. Rider 2 Reserved for future use.) Rider 3 Biomethane Variance Account - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020. Deleted: 19 Rider 4 (Reserved for future use.) Rider 5 Revenue Stabilization Adjustment Charge - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020. Deleted: 19

Municipal Operating Fee Charge

A Municipal Operating Fee charge is payable (in addition to the above charges), if the facilities to which Gas is delivered under this Rate Schedule are located within the boundaries of a municipality or First Nations lands (formerly, reserves within the Indian Act) where FortisBC Energy is required to remit such Municipal Operating Fee to the municipality and excluding any Customer from whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. The Municipal Operating Fee charge will be calculated in accordance with the approved methodology.

Minimum Charge per Month

The minimum charge per Month will be the aggregate of the Basic Charge, the transportation Administration Charge and the Municipal Operating Fee charge (where applicable and calculated in accordance with the approved methodology).

Notes:

- As defined under Section 1.1, the Sumas Daily Price quoted each Day will apply to Gas 1. consumed on that gas day.
- 2. The Sumas Daily Price for the sixth Business Day following the Day for which the Peaking Gas was authorized plus 20 percent.

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Fourth Revision of Page R-23.34 BCUC Secretary: .

Rider 1 (Reserved for future use.) Deleted: Propane Surcharge - Not applicable Rider 2 (Reserved for future use.) Rider 3 Biomethane Variance Account - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020. Deleted: 19 Rider 4 (Reserved for future use.) Rider 5 Revenue Stabilization Adjustment Charge - Not applicable. **Municipal Operating Fee Charge** A Municipal Operating Fee charge is payable (in addition to the above charges), if the facilities to which Gas is delivered under this Rate Schedule are located within the boundaries of a municipality or First Nations lands (formerly, reserves within the Indian Act) where FortisBC C/N/O Energy is required to remit such Municipal Operating Fee to the municipality and excluding any Customer from whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. The Municipal Operating Fee charge will be calculated in accordance with the approved methodology. Minimum Charge per Month The minimum charge per Month will be the aggregate of the Basic Charge, Demand Charges, the transportation Administration Charge and the Municipal Operating Fee charge (where C/N applicable and calculated in accordance with the approved methodology). 0 Deleted: G-18-19 Deleted: July 1, 2019 Deleted: June 4, 2019 Deleted: Original signed by Patrick Wruck Deleted: Third Issued By: Doug Slater, Director, Regulatory Affairs Order No.: Effective Date: January 1, 2020 Accepted for Filing: BCUC Secretary: Fourth Revision of Page R-25.34

Rider 1 (Reserved for future use.)

Rider 2 (Reserved for future use.)

Rider 3 Biomethane Variance Account - Applicable to Mainland and Vancouver Island

Service Area Customers for the Year ending December 31, 2020.

Rider 4 (Reserved for future use.)

Minimum Charge per Month

The minimum charge per Month will be the aggregate of the Basic Charge and the transportation Administration Charge.

Special Conditions

FortisBC Energy may, in its sole discretion, reduce the Charge per Gigajoule to any Customer where such reduction is necessary to encourage expansion of the NGV market. Any reduction in the Charge will be specified in the Transportation Agreement.

FortisBC Energy may make a promotional grant towards the cost to purchase a factory-built NGV vehicle, or the cost to convert a vehicle to natural gas to meet requirements as set by the Government of Canada, provided that such vehicles will obtain Gas from refueling facilities in a FortisBC Energy Service Area. The amount of the grant would not exceed \$10 per GJ, based on estimated consumption over a one year period, up to a maximum total grant by vehicle type as listed in the table below:

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Order No.: Issued By: Doug Slater, Director, Regulatory Affairs

Effective Date: January 1, 2020

Accepted for Filing:

BCUC Secretary: _______ Fourth Revision of Page R-26.34

Rider 1 (Reserved for future use.) Deleted: Propane Surcharge - Not applicable. Rider 2 (Reserved for future use.) Rider 3 Biomethane Variance Account - Applicable to Mainland and Vancouver Island Service Area Customers for the Year ending December 31, 2020. Deleted: 19 Rider 4 (Reserved for future use.) Rider 5 Revenue Stabilization Adjustment Charge - Not applicable. **Municipal Operating Fee Charge** A Municipal Operating Fee charge is payable (in addition to the above charges), if the facilities to which Gas is delivered under this Rate Schedule are located within the boundaries of a municipality or First Nations lands (formerly, reserves within the Indian Act) where FortisBC C/N/O Energy is required to remit such Municipal Operating Fee to the municipality and excluding any Customer from whom FortisBC Energy is not allowed to collect such Municipal Operating Fee. The Municipal Operating Fee charge will be calculated in accordance with the approved methodology. Minimum Charge per Month The minimum charge per Month will be the aggregate of the Basic Charge, the transportation Administration Charge and the Municipal Operating Fee charge (where applicable and C/N calculated in accordance with the approved methodology). Notes: As defined under Section 1.1, the Sumas Daily Price quoted each Day will apply to Gas consumed on that gas day. 0 Deleted: G-18-19 Deleted: July 1, 2019 Deleted: June 4, 2019 Deleted: Original signed by Patrick Wruck Deleted: Third Issued By: Doug Slater, Director, Regulatory Affairs Order No.: Effective Date: January 1, 2020 Accepted for Filing: BCUC Secretary: . Fourth Revision of Page R-27.29





Suite 410, 900 Howe Street Vancouver, BC Canada V6Z 2N3 bcuc.com **P:** 604.660.4700 **TF:** 1.800.663.1385 **F:** 604.660.1102

ORDER NUMBER G-xx-xx

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

and

FortisBC Energy Inc.
Revelstoke Propane Portfolio Cost Amalgamation Application

BEFORE:

[Panel Chair] Commissioner Commissioner

on Date

ORDER

WHEREAS:

- A. On July 18, 2019, FortisBC Energy Inc. (FEI) applied to the British Columbia Utilities Commission (BCUC) for approval to amalgamate the Revelstoke propane supply costs with the FEI midstream natural gas supply resource costs in the Midstream Cost Reconciliation Account (MCRA) and to implement a revised propane gas cost rate setting mechanism, pursuant to sections 59 to 61 of the *Utilities Commission Act* (UCA) effective January 1, 2020 (Application);
- B. The Application also seeks approval of minor amendments to FEI's Rate Schedules (RS) 1 to 7 regarding references to Revelstoke in rate rider 1 and rate rider 6 6 where applicable; and
- C. The BCUC considers that establishing a written hearing process is warranted.

NOW THEREFORE the BCUC orders as follows:

- 1. A preliminary Regulatory Timetable as set out in Appendix A to this order is established.
- 2. By no later than the week of September 2, 2019, FEI is to publish the Public Notice, attached as Appendix B to this Order, in the Vancouver Sun, the Province, and other such appropriate news publications to provide adequate notice to those parties who may have an interest in or be affected by the Application. FEI will also post messages on appropriate social media platforms advising of the application and how to obtain more information.

File | file subject

- 3. The Application, together with any supporting materials, will be available for inspection at FEI Office, 16705 Fraser Highway, Surrey, BC, V4N 0E8. The Application and supporting materials also will be available on the FortisBC website at www.fortisbc.com and on the BCUC website at www.bcuc.com.
- 4. Interveners who wish to participate in the regulatory proceeding are to register with the BCUC by completing a Request to Intervene Form, available on the BCUC's website at http://www.bcuc.com/Registration-Intervener-1.aspx by the date established in the Regulatory Timetable attached as Appendix A to this order and in accordance with the BCUC's Rules of Practice and Procedure adopted by Order G-1-16.

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

BY ORDER

(X. X. last name)
Commissioner

Attachment

File | file subject 2 of 2

FortisBC Energy Inc.

Application for Approval to Combine the FortisBC Energy Inc. Revelstoke Propane Commodity and the FortisBC Energy Inc. Mainland and Vancouver Island Commodity Supply Portfolios

REGULATORY TIMETABLE

Action	Date (year)
FEI publishes Public Notice	Week of September 2
Intervener Registration	Thursday, September 12
BCUC and Intervener Information Request (IR) No. 1	Wednesday, September 18
FEI Responses to IR No. 1	Thursday, October 10
FEI Final Written Argument	Thursday, October 31
Intervener Final Written Argument	Thursday, November 14
FEI Written Reply Argument	Thursday, November 28



PUBLIC NOTICE

FORTISBC ENERGY INC. (FEI) APPLICATION TO AMALGAMATE FEI'S REVELSTOKE PROPANE SUPPLY COSTS

On July 18, 2019, FortisBC Energy Inc.(FEI) applied to the British Columbia Utilities Commission (BCUC) for approval to amalgamate FEI's Revelstoke propane supply costs with FEI's natural gas supply costs and to implement a revised propane gas cost rate setting mechanism which will provide Revelstoke customers with propane rate stability as well as propane gas cost rate relief. If approval is granted, the proposal results in an annual average gas cost reduction for a Revelstoke customer of \$407 based on the annual average usage of a typical residential propane customer and an annual average increase of less than one dollar for each natural gas customer based on the annual usage of a typical residential natural gas customer.

More information on the application can be found at **bcuc.com** on our "Current Proceedings" page, a hard copy of the application is also available for review at the BCUC's office and FEI's head office.

HOW TO PARTICIPATE

- Submit a letter of comment
- Register as an intervener

IMPORTANT DATES

1. **Thursday, September 12, 2019** – Deadline to register as an intervener with the BCUC.

For more information on how to participate, please visit our website (<u>www.bcuc.com/get-involved</u>) or contact us at the information below.

All submissions will be added to the public record and posted on the BCUC's website.

GET MORE INFORMATION

FortisBC Energy Inc. Regulatory Affairs



16705 Fraser Highway Surrey, BC Canada V4N 0E8



E: gas.regulatory.affairs@fortisbc.com



P: 604.592.7664

British Columbia Utilities Commission



Suite 410, 900 Howe Street Vancouver, BC Canada V6Z 2N3



E: Commission.Secretary@bcuc.com



P: 604.660.4700



Suite 410, 900 Howe Street Vancouver, BC Canada V6Z 2N3 bcuc.com P: 604.660.4700 TF: 1.800.663.1385 F: 604.660.1102

ORDER NUMBER G-xx-xx

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

and

FortisBC Energy Inc.
Revelstoke Propane Portfolio Cost Amalgamation Application

BEFORE:

[Panel Chair] Commissioner Commissioner

on Date

ORDER

WHEREAS:

- A. On July 18, 2019, FortisBC Energy Inc. (FEI) applied to the British Columbia Utilities Commission (BCUC) for approval to amalgamate the Revelstoke propane supply costs with the FEI midstream natural gas supply resource costs in the Midstream Cost Reconciliation Account (MCRA) and to implement a revised propane gas cost rate setting mechanism, pursuant to sections 59 to 61 of the *Utilities Commission Act* (UCA) effective January 1, 2020 (Application);
- B. The Application also seeks approval of minor amendments to applicable FEI's Rate Schedules regarding references to Revelstoke rate rider 1, rate rider 6, and housekeeping amendments where applicable; and
- C. The BCUC has completed its review of the Application and evidence and finds that approval is warranted.

NOW THEREFORE pursuant to section 59 to 61 of the *Utilities Commission Act*, the BCUC orders as follows:

- 1. FEI is approved to amalgamate FEI's Revelstoke propane supply portfolio costs with FEI's natural gas supply portfolio costs as described in the Application by transferring the closing balance of the Propane Cost Deferral Account (PCDA) as of December 31, 2019 to FEI's existing MCRA as an opening balance adjustment and thereafter to begin capturing all costs of the Revelstoke propane supply portfolio in the MCRA.
- 2. FEI is directed to close the PCDA after the balance transfer described in item 1 above.
- 3. To include Rate Rider 6 Midstream Cost Reconciliation Account (MCRA Rate Rider 6), in the calculation of cost of propane per GJ rate for Revelstoke propane customers because all propane costs will be recorded in the MCRA after the proposed changes are implemented.

File XXXXX | file subject 1 of 2

4. FEI is directed to file the amended Tariff pages as described in the Application at least 30 days prior to the January 1, 2020 implementation date.

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

BY ORDER

(X. X. last name) Commissioner