

Diane Roy Vice President, Regulatory Affairs

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

Electric Regulatory Affairs Correspondence Email: <u>electricity.regulatory.affairs@fortisbc.com</u> FortisBC 16705 Fraser Highway Surrey, B.C. V4N 0E8 Tel: (604) 576-7349 Cell: (604) 908-2790 Fax: (604) 576-7074 www.fortisbc.com

November 3, 2022

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

Attention: Ms. Sara Hardgrave, Acting Commission Secretary

Dear Ms. Hardgrave:

Re: FortisBC Energy Inc. (FEI)

Revised Renewable Gas Program Application – Stage 2 (Application)

Response to the City of Richmond, the City of Surrey, the District of North Vancouver, the District of Saanich, the City of Victoria and Lulu Island Energy Company Ltd. (CoR) In Scope Information Request (IR) No. 2 – Questions 19.1, 19.3, 19.5, 19.7 and 19.8

In accordance with the British Columbia Utilities Commission (BCUC) Order G-293-22, FEI respectfully submits the attached responses to CoR IR2 19.1, 19,3, 19.5, 19.7 and 19.8 determined to be in scope.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC ENERGY INC.

Original signed:

Diane Roy

cc (email only): Registered Interveners



119.0Reference:ACCOUNTING TREATMENT, PROGRAM MECHANICS, RATE22SETTING AND CUSTOMER BILL IMPACTS

3Exhibit B-17, Section G, BCUC IR1 42.3 and 42.4, pp. 210-2114Customer Bill Impacts – Customer Bill Impacts under the CleanBC5Roadmap's Emissions Cap

In response to BCUC IR1 12.3.2, FEI provided estimated customer bills assuming the
Renewable Gas Connections program is not approved, and renewable gas purchases
grow to 30 PJ by 2030.

In response to BCUC IR1 41.5, FEI provided estimated customer bills assuming the
 Renewable Gas Connections program is approved, and renewable gas purchases grow
 to 30 PJ by 2030.

In response to BCUC IR1 42.2, FEI provided estimated customer bills assuming the
 Renewable Gas Connections program is approved, and renewable gas purchases grow
 to 55 PJ by 2030.

15 19.1 Assuming that the Renewable Gas Connections portion of the Application is not approved, but the other elements of FEI's proposal are approved, please fill out the following table, showing how FEI would meet its 2030 GHG emissions cap.
18 Please convert and adjust units as needed.

Line		Amount	Note
1	2020 Throughput (PJ)	235	
2	Load Loss by 2030 due to Building Energy		
	Efficiency (PJ)		
3	Load Loss by 2030 due to Industrial Energy		
	Efficiency (PJ)		
4	Load Loss by 2030 due to Building		
	Electrification (PJ)		
5	Load Loss by 2030 due to Industrial		
	Electrification (PJ)		
6	Other Load Changes by 2030 (PJ)		
7	7 2030 Throughput (PJ)		
8	2030 FEI GHG Emissions Cap (MT)		
9	Customer-side emissions reductions (e.g.		
	CCS) (MT)		
10 2030 FEI Allowable Emissions (MT)			
11	FEI Allowable GHG Intensity (MT / PJ)		Line 10 / Line 7
12	FEI Conventional Gas Purchases (PJ)		
13	Conventional Gas GHG Intensity (MT / PJ)		
14	Conventional Gas GHG Emissions (MT)		



FortisBC Energy Inc. (FEI or the Company)	Submission Date:
Revised Renewable Gas Program Application – Stage 2 (Application)	Novemer 3, 2022
Response to the City of Richmond, the City of Surrey, the District of North Vancouver, the District of Saanich, the City of Victoria and Lulu Island Energy Company Ltd. Information Request (IR) No. 2 – Questions 19.1, 19.3, 19.5, 19.7 and 19.8	Page 2

15	FEI Renewable Gas Purchases (PJ)	
16	FEI Renewable Gas GHG Intensity (MT / PJ)	
17	FEI Renewable Gas GHG Emissions (MT)	
18	Total GHG Emissions (MT)	Equal to Line 10

2 Response:

As the CleanBC Roapmap to 2030 does not indicate an interim GHG cap for 2028, FEI has provided the following analysis out to 2030, assuming that the Renewable Gas Connections service is not approved.

6 The provincial government has set out in the CleanBC Roadmap to 2030 a cap of 6.11 Mt of 7 CO2e requiring utilities delivering natural gas in BC to reduce their GHG emissions by 5.5 Mt of 8 CO2e. While this policy has not yet been legislated, and FEI does not know the timeline for 9 legislative changes, for the purposes of this response FEI has assumed that FEI will reduce its 10 emissions to meet its portion of the cap by 2030. FEI's proportion of the provincial cap is 11 approximately 5.8 Mt CO2e. FEI has used the latest GHG reduction pathways information from 12 its 2022 Long Term Gas Resource Plan (LTGRP) to generate the table below to illustrate the 13 pathway that FEI generally expects to use to reach the GHG reductions required to meet the cap 14 set out in CleanBC.

15 However, it is important to note that the volumes of energy delivered by FEI and the reductions 16 to meet the reduction in GHGs are expected to vary greatly from what is assumed in this IR 17 response, as the emission cap has not been set out by legislation, and final targets, mechanisms 18 for meeting the target, and actual customer groups (such as sales service, transportation service 19 and bypass and special rates customers) that will be affected by the legislation have not been 20 determined. Once legislation is enacted, and there are clear rules that FEI must adhere to, FEI 21 would undertake studies and actions to meet the cap. This will be an iterative process that 22 changes regularly as FEI has success or failure in reducing emissions by various actions.

Line 1 in Table 1 below showing 232.4 PJ is reflective of FEI's 2020 normalized throughput for all customers, including Sales Service, Transport Service and Bypass Special Rates customers, but does not include the throughput for natural gas used in the transportation market (vehicles and marine) as that throughput is not included within the CleanBC Cap for buildings and industry. Alongside the 232.4 PJ is the associated GHG emissions of 11.6 mega-tonnes (MT), assuming that FEI's throughput of 232.4 PJ has a carbon intensity of 0.05 MT/PJ.

For the purpose of this response, FEI assumes that, if the Renewable Gas Connections is not approved, its customer base will shrink in line with provincial building stock turnover of approximately 2 percent per year. In short, as building stock turns over, FEI has assumed that the new building will not have a gas connection. The final PJ throughput on line 10 of Table 1 reflects this assumption.

Lines 2 through 9 of Table 1 reflect the GHG reduction pathways from the 2022 LTGRP. FEI assumes that 86.2 PJ of conventional natural gas will be shed reducing GHG emissions by 4.3

	FortisBC Energy Inc. (FEI or the Company) Revised Renewable Gas Program Application – Stage 2 (Application)	Submission Date: Novemer 3, 2022
FORTIS BC ^{**}	Response to the City of Richmond, the City of Surrey, the District of North Vancouver, the District of Saanich, the City of Victoria and Lulu Island Energy Company Ltd. Information Request (IR) No. 2 – Questions 19.1, 19.3, 19.5, 19.7 and 19.8	Page 3

1 MT. The analysis assumes that some of the shed demand will be replaced by 32.2 PJ of 2 Renewable Natural Gas with zero GHG emissions, 20 PJ of hydrogen with zero GHG emissions, 3 6.7 PJ of syngas and lignin with zero GHG emissions, and carbon capture and storage (CCS) will 4 be applied to 1.3 PJ of conventional natural gas reducing its emissions to below 0.0 MT (rounded). 5 In addition to the shed demand, and replacement with renewable energies and CCS, FEI also 6 assumes that demand side management (DSM) will reduce demand by 18.2 PJ, reducing GHG 7 emissions by 0.9 MT, and that natural efficiencies gains due to appliance technology and fuel 8 switching to electrification further reduce demand by 7.3 PJ and reduce GHG emissions by 0.4 9 MT. Lastly, FEI will need to undertake other measures to reduce GHG emissions by 10 approximately 0.3 MT to arrive at the CleanBC cap. The other measures are not yet defined and, 11 as described in the response to BCH IR2 2.6, FEI expects to take the steps necessary so that its 12 total GHG emissions from the use of natural gas by residential, commercial and industrial 13 customers will meet the 2030 GHG emissions cap expected to be implemented by the Province.



16

Table 1: FEI's Presumed Pathway to Meet CleanBC GHG Cap Assuming Renewable GasConnections is not Approved

Line					
No.	Particulars	GHG	PJ	CI (MT/PJ)	Reference
1	FEI's share of Provincial GHG Inventory	11.6	232.4	0.050	
2	Reduction in Conventional Natural Gas	(4.3)	(86.2)	0.049	
3	Renewable Natural Gas	0.0	32.2	0.000	
4	Hydrogen	-	20.0	-	
5	Syngas & Lignin	-	6.7	-	
6	Carbon Capture and Storage	0.0	1.3	0.015	
7	Demand Side Measures	(0.9)	(18.2)	0.050	
8	Natural Efficiency Gains & Electrification	(0.4)	(7.3)	0.050	
9	Other Measures	(0.3)			
10	Estimated 2030	5.8	180.9		Sum of Lines 1 through 9
11					
12	Change in throughput applied to bill impact	model	(51.5)		Line 10 - Line 1

FEI's bill impact modeling has a different throughput as a starting point, as FEI excluded bypass and special rates customers from its analysis because these customers have tariff supplements or transportation contracts that include BCUC approved rates and volumes and FEI is not certain if and how the cap will affect these customers. Therefore, for consistency with the Application and prior IR responses, FEI has continued to exclude these customers from the bill impact analysis and has reduced the throughput in its analysis by 51.5 PJ as set out on line 12 of Table 1 above.

To align the bill impact analysis with Table 1 above, FEI has made the following adjustments andassumptions:

FEI aligned the acquisition of Renewable Natural Gas, Hydrogen, Syngas and Lignin supply to those in Table 1;



2

3

FortisBC Energy Inc. (FEI or the Company)	Submission Date:
Revised Renewable Gas Program Application – Stage 2 (Application)	Novemer 3, 2022
Response to the City of Richmond, the City of Surrey, the District of North Vancouver, the District of Saanich, the City of Victoria and Lulu Island Energy Company Ltd. Information Request (IR) No. 2 – Questions 19.1, 19.3, 19.5, 19.7 and 19.8	Page 4

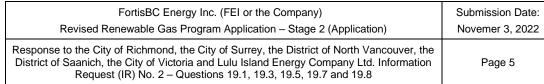
- FEI assumed that provincial building stock turnover is 2 percent per year, resulting in FEI losing 2 percent of its residential and commercial customers per year which decreases demand;
- As requested in this question, FEI has assumed that the Renewable Gas Connections proposals in this Application have not been approved so has eliminated the demand for Renewable Gas Connections customers, thereby increasing the Renewable Gas that would flow through the proposed Renewable Gas Blend service;
- FEI adjusted its customer UPC to reflect a reduction in throughput from DSM activities,
 natural efficiency gains and electrification;
- FEI's delivery margin required¹ from all customers in a rate schedule is held constant and is spread over less customers and less volume, resulting in delivery rate increases; and
- Carbon tax increases to \$170 per tonne by 2030 (\$8.40 per GJ) and remains at that level to 2050.

Please note that, in the Application, the Basic, Delivery, Storage & Transport and Cost of Gas charges do not include inflation so are in real dollars. The forecast of Renewable Gas supply costs is without consideration for inflation so is in real dollars. FEI has discounted carbon tax per GJ, which is included in the Application as nominal dollars, by 2 percent per year so that the nominal value is reflected to in real 2022 dollars.

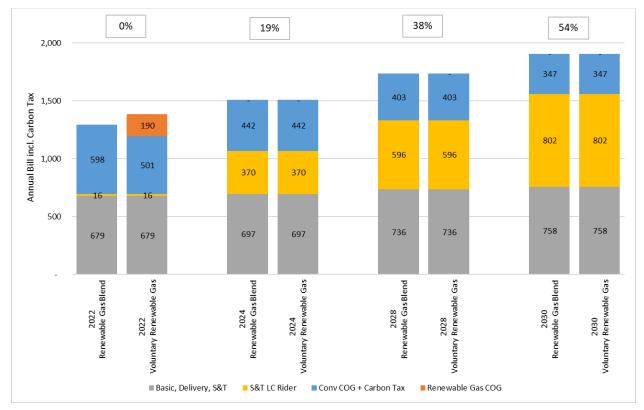
Below, FEI has included the requested analysis as revised Figures 8-4, 8-5 and 8-6 which align
to the assumptions and analysis discussed above.

¹ In response to BCUC IR2 55.1.1 FEI acknowledged that if Renewable Gas Connections was not approved that it may be possible, all else equal, to reduce O&M costs 2.5 percent to 3.5 percent by 2030 thereby reducing delivery margin by the same amount. However, FEI has not made this adjustment to the bill impacts model for consistency with the Application and responses to prior IRs.









2

3 Without the Renewable Gas Connections service and the consequent loss of the new construction

4 sector, and assuming FEI takes the measures to meet the Province's GHG cap as set out in Table

5 1 to this response, the annual bill for an RS 1 customer in 2030 will equal \$1,907 in real 2022

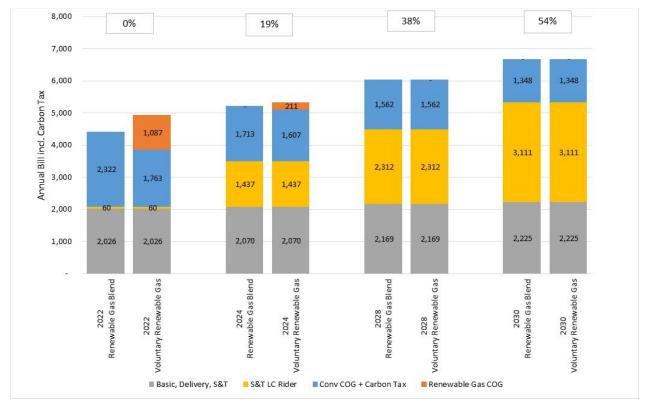
6 dollars which is 14 percent higher than the 2030 annual bill as calculated in response to CoR IR2

7 19.5, which assumes FEI's Renewable Gas Connections proposal is approved as filed.



FortisBC Energy Inc. (FEI or the Company)	Submission Date:
Revised Renewable Gas Program Application – Stage 2 (Application)	Novemer 3, 2022
Response to the City of Richmond, the City of Surrey, the District of North Vancouver, the District of Saanich, the City of Victoria and Lulu Island Energy Company Ltd. Information Request (IR) No. 2 – Questions 19.1, 19.3, 19.5, 19.7 and 19.8	Page 6

Revised Figure 8-5: Annual Bill for Rate Schedule 2 in Real 2022 Dollars



2

3 Without the Renewable Gas Connections service and consequent the loss of the new construction

4 sector, and assuming FEI takes the measures to meet the Province's GHG cap as set out in Table

5 1 to this response, the annual bill for an RS 2 customer in 2030 will equal \$6,683 in real 2022

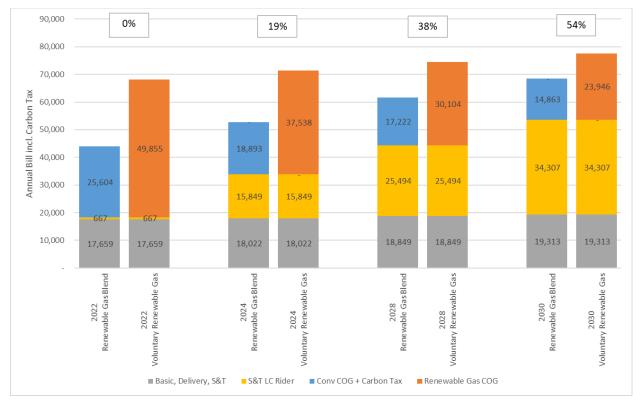
6 dollars which is 13 percent higher than the 2030 annual bill as calculated in response to CoR IR2

7 19.5, which assumes FEI's Renewable Gas Connections proposal is approved as filed.



FortisBC Energy Inc. (FEI or the Company) Revised Renewable Gas Program Application – Stage 2 (Application)	Submission Date: Novemer 3, 2022
Response to the City of Richmond, the City of Surrey, the District of North Vancouver, the District of Saanich, the City of Victoria and Lulu Island Energy Company Ltd. Information Request (IR) No. 2 – Questions 19.1, 19.3, 19.5, 19.7 and 19.8	Page 7

Revised Figure 8-6: Annual Bill for Rate Schedule 3 in Real 2022 Dollars



Without the Renewable Gas Connections service and consequent loss of the new construction
sector, and assuming FEI takes the measures to meet the Province's GHG cap as set out in Table
to this response, the annual bill for an RS 3 customer in 2030 will equal \$68,483 in real 2022
dollars which is 12 percent higher than the 2030 annual bill as calculated in response to CoR IR2
19.5, which assumes FEI's Renewable Gas Connections proposal is approved as filed.

- 1119.3Please provide an updated version of the charts shown in response to BCUC IR11212.3.2, as well as the supporting spreadsheet, corresponding to the scenario13depicted in the response to CoR IR2 19.1 above. Please provide the response in14real 2022\$ to align with other information provided by FEI in IR2 (such as the15response to BCUC IR2 46.1).
- **Response:**
- 18 Please refer to the response to CoR IR2 19.1.

FORTIS BC

FortisBC Energy Inc. (FEI or the Company)	Submission Date:
Revised Renewable Gas Program Application – Stage 2 (Application)	Novemer 3, 2022
Response to the City of Richmond, the City of Surrey, the District of North Vancouver, the District of Saanich, the City of Victoria and Lulu Island Energy Company Ltd. Information Request (IR) No. 2 – Questions 19.1, 19.3, 19.5, 19.7 and 19.8	Page 8

1 2 3

4 5 19.5 Assuming all portions of the current application (including the Renewable Gas Connections service) are approved, please fill out the following table, showing how FEI would meet its 2030 GHG emissions cap. Please convert and adjust units as needed.

Line		Amount	Note
1	2020 Throughput (PJ)	235	
2	Load Loss by 2030 due to Building Energy Efficiency		
	(PJ)		
3	Load Loss by 2030 due to Industrial Energy Efficiency (PJ)		
4	Load Loss by 2030 due to Building Electrification (PJ)		
5	Load Loss by 2030 due to Industrial Electrification (PJ)		
6	Other Load Changes by 2030 (PJ)		
7	2030 Throughput (PJ)		
8	2030 FEI GHG Emissions Cap (MT)		
9	Customer-side emissions reductions (e.g. CCS) (MT)		
10	2030 FEI Allowable Emissions (MT)		
11	FEI Allowable GHG Intensity (MT / PJ)		Line 10 / Line 7
12	FEI Conventional Gas Purchases (PJ)		
13	Conventional Gas GHG Intensity (MT / PJ)		
14	Conventional Gas GHG Emissions (MT)		
15	FEI Renewable Gas Purchases (PJ)		
16	FEI Renewable Gas GHG Intensity (MT / PJ)		
17	FEI Renewable Gas GHG Emissions (MT)		
18	Total GHG Emissions (MT)		Equal to Line 10

6

7 Response:

8 As there is no 2028 interim GHG cap in the CleanBC Roadmap to 2030, FEI has provided the 9 following analysis out to 2030 assuming at FEI's Application is approved, including the Renewable 10 Gas Connections service. Also, as noted in the response to CoR IR2 19.1, the volumes of energy 11 delivered by FEI and the reductions to meet the reduction in GHGs are expected to vary greatly 12 from what is assumed in this IR response, as the emission cap has not been set out by legislation, 13 and final targets, mechanisms for meeting the target, and actual customer groups (such as sales 14 service, transportation service and bypass and special rates customers) that will be affected by 15 the legislation have not been determined.

As with the response to CoR IR2 19.1, FEI has used the latest GHG reduction pathways information from its 2022 LTGRP to generate the table below to illustrate the pathway that FEI



FortisBC Energy Inc. (FEI or the Company)	Submission Date:	1
Revised Renewable Gas Program Application – Stage 2 (Application)	Novemer 3, 2022	1
Response to the City of Richmond, the City of Surrey, the District of North Vancouver, the District of Saanich, the City of Victoria and Lulu Island Energy Company Ltd. Information Request (IR) No. 2 – Questions 19.1, 19.3, 19.5, 19.7 and 19.8	Page 9	1

generally expects to use to reach the GHG reductions required to meet the cap set out in
 CleanBC.

As discussed in the response to CoR IR2 19.1, line 1 in Table 1 below shows 232.4 PJ which is
 reflective of FEI's 2020 normalized throughput for all customers, including Sales Service,
 Transport Service and Bypass Special Rates customers, but excludes the throughput for natural

6 gas used in the transportation market.

FEI assumes that, if the Renewable Gas Connections service is approved, that its customer count
will increase over time. Accordingly, FEI has used the residential and commercial customer count
data from the Diversified Energy Future (Planning) scenario from its 2022 LTGRPwhich assumes
that FEI will continue to be able to add customers in the (new) buildings sector..

11 Lines 2 through 9 of Table 1 reflect the GHG reduction pathways from its LTGRP. FEI assumes 12 that 60.2 PJ of conventional natural gas will be shed reducing GHG emissions by 3.0 MT. The 13 analysis assumes that all of the shed demand will be replaced by 32.2 PJ of Renewable Natural 14 Gas with zero GHG emissions, 20 PJ of hydrogen with zero GHG emissions, 6.7 PJ of syngas 15 and lignin with zero GHG emissions, carbon capture and storage (CCS) will be applied to 1.3 PJ 16 of conventional natural gas reducing its GHG emissions to below 0.0 MT. In addition to the shed 17 demand, replacement with renewable energies and CCS, FEI also assumes that DSM will reduce 18 demand by 18.2 PJ, reducing GHG emissions by 0.9 MT, and that natural efficiencies gains due 19 to appliance technology and fuel switching to electrification will further reduce demand by 7.3 PJ 20 and reduce GHG emissions by 0.4 MT. Lastly, FEI will need to undertake other measures to 21 reduce GHG emissions by approximately 1.5 MT to arrive at the CleanBC cap. The other 22 measures are not yet defined. As described in response to BCH IR2 2.6, FEI expects to take the 23 steps necessary so that its total GHG emissions from the use of natural gas by residential, 24 commercial and industrial customers will meet the 2030 GHG emissions cap expected to be 25 implemented by the Province.

26 27

Table 1: FEI's Presumed Pathway to Meet CleanBC GHG Cap Assuming Renewable Gas Connections is Approved

Line					
No.	Particulars	GHG	PJ	CI (MT/PJ)	Reference
1	FEI's share of Provincial GHG Inventory	11.6	232.4	0.050	
2	Reduction in Conventional Natural Gas	(3.0)	(60.2)	0.049	
3	Renewable Natural Gas	0.0	32.2	0.000	
4	Hydrogen	-	20.0	-	
5	Syngas & Lignin	-	6.7	-	
6	Carbon Capture and Storage	0.0	1.3	0.015	
7	Demand Side Measures	(0.9)	(18.2)	0.050	
8	Natural Efficiency Gains & Electrification	(0.4)	(7.3)	0.050	
9	Other Measures	(1.5)			
10	Estimated 2030	5.8	206.9		Sum of Lines 1 through 9
11					
12	Change in throughput applied to bill impact n	nodel	(25.5)		Line 10 - Line 1

	FortisBC Energy Inc. (FEI or the Company) Revised Renewable Gas Program Application – Stage 2 (Application)	Submission Date: Novemer 3, 2022
FORTIS BC [*]	Response to the City of Richmond, the City of Surrey, the District of North Vancouver, the District of Saanich, the City of Victoria and Lulu Island Energy Company Ltd. Information Request (IR) No. 2 – Questions 19.1, 19.3, 19.5, 19.7 and 19.8	Page 10

As discussed in FEI's response to CoR IR2 19.1, the bill impact modeling has a different throughput as a starting point, so FEI has reduced the throughput in its analysis by 25.5 PJ as set out on line 12 of Table 1 above.

- 4 To align the bill impact analysis with Table 1 above, FEI has made the following adjustments and 5 assumptions:
- FEI aligned the acquisition of Renewable Natural Gas, Hydrogen, Syngas and Lignin
 supply to those in Table 1;
- FEI assumed that customer count increases over time in line with forecasts included in
 the 2022 LTGRP;
- FEI adjusted its customer UPC to reflect a reduction in throughput from DSM activities,
 natural efficiency gains and electrification;
- FEI's delivery margin required² from all customers in a rate schedule is held constant and is spread over more customers but less total volume³, resulting in delivery rate increases; and
- Carbon tax increases to \$170 per tonne by 2030 (\$8.40 per GJ) and remains at that level to 2050.

Please note that, in the Application, the Basic, Delivery, Storage & Transport and Cost of Gas charges do not include inflation so are in real dollars. The forecast of Renewable Gas supply costs is without consideration for inflation so is in real dollars. FEI has discounted carbon tax per GJ, which is included in the Application as nominal dollars, by 2 percent per year so that the nominal value is reflected to in real 2022 dollars.

Below, FEI has included the requested analysis as revised Figures 8-4, 8-5 and 8-6 which align
to the assumptions and analysis discussed above.

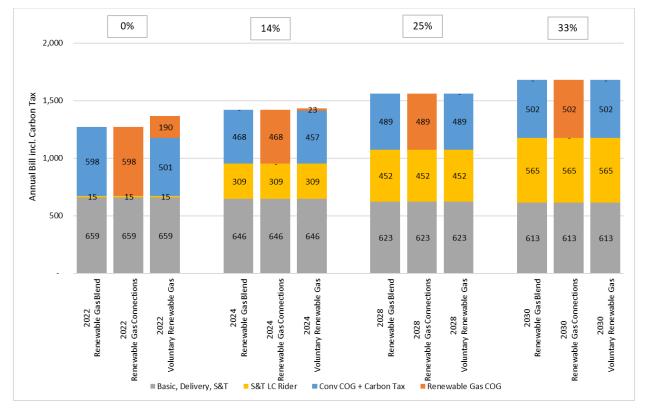
² In response to BCUC IR2 55.1.1 FEI acknowledged that if Renewable Gas Connections was not approved that it may be possible, all else equal, to reduce O&M costs 2.5 percent to 3.5 percent by 2030 thereby reducing delivery margin by the same amount. However, FEI has not made this adjustment to the bill impacts model for consistency with the Application and responses to prior IRs.

³ Even with customer counts increasing total throughput decreases over time as use per customer drops to account for DSM, natural efficiency and electrification outcomes.



FortisBC Energy Inc. (FEI or the Company)Submission Date:
Novemer 3, 2022Revised Renewable Gas Program Application – Stage 2 (Application)Novemer 3, 2022Response to the City of Richmond, the City of Surrey, the District of North Vancouver, the
District of Saanich, the City of Victoria and Lulu Island Energy Company Ltd. Information
Request (IR) No. 2 – Questions 19.1, 19.3, 19.5, 19.7 and 19.8Page 11

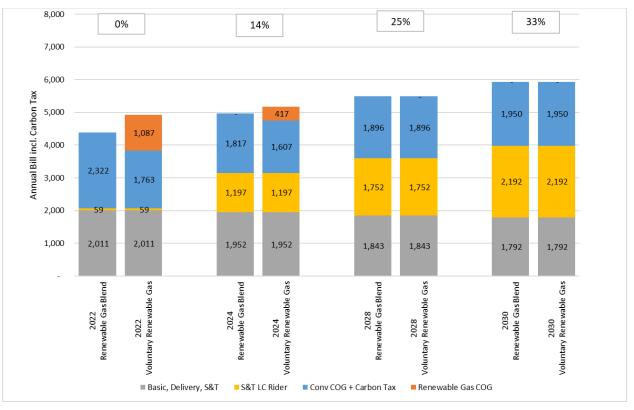
Requested Figure 8-4: Annual Bill for Rate Schedule 1 in Real 2022 Dollars





FortisBC Energy Inc. (FEI or the Company)Submission Date:
Novemer 3, 2022Revised Renewable Gas Program Application – Stage 2 (Application)Novemer 3, 2022Response to the City of Richmond, the City of Surrey, the District of North Vancouver, the
District of Saanich, the City of Victoria and Lulu Island Energy Company Ltd. Information
Request (IR) No. 2 – Questions 19.1, 19.3, 19.5, 19.7 and 19.8Page 12

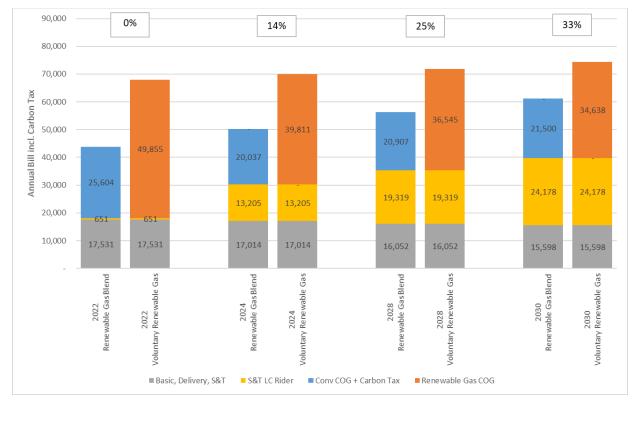
Requested Figure 8-5: Annual Bill for Rate Schedule 2 in Real 2022 Dollars





FortisBC Energy Inc. (FEI or the Company)	Submission Date:	
Revised Renewable Gas Program Application – Stage 2 (Application)	Novemer 3, 2022	
Response to the City of Richmond, the City of Surrey, the District of North Vancouver, the District of Saanich, the City of Victoria and Lulu Island Energy Company Ltd. Information Request (IR) No. 2 – Questions 19.1, 19.3, 19.5, 19.7 and 19.8	Page 13	

Requested Figure 8-6: Annual Bill for Rate Schedule 3 in Real 2022 Dollars



- 2
- 3
- 4
- 5

6

7

8

9

- 19.7 Please provide an updated version of the charts shown in response to BCUC IR1 12.3.2, as well as the supporting spreadsheet, corresponding to the scenario depicted in the response to CoR IR2 19.5 above. Please provide the response in real 2022\$ to align with other information provided in IR2 (such as the response to BCUC IR2 46.1).
- 11
- 12 **Response:**
- 13 Please refer to the response to CoR IR2 19.5.
- 14 15 16 17 19.8 CoR IR1 1.3 asked FEI to provide a series of tables for 2024, 2028 and 2032. 18 Please provide a single updated version of the table requested in CoR IR1 1.3, for 2030, based on the 2030 renewable gas volume identified in the response to CoR 19



FortisBC Energy Inc. (FEI or the Company)	Submission Date:
Revised Renewable Gas Program Application – Stage 2 (Application)	Novemer 3, 2022
Response to the City of Richmond, the City of Surrey, the District of North Vancouver, the District of Saanich, the City of Victoria and Lulu Island Energy Company Ltd. Information Request (IR) No. 2 – Questions 19.1, 19.3, 19.5, 19.7 and 19.8	

3

IR2 19.5 above. Please provide the response in real 2022\$ to align with other information provided in IR2 (such as the response to BCUC IR2 46.1).

4 <u>Response:</u>

- 5 As the CleanBC Roadmap to 2030 does not specify an interim 2028 GHG cap, FEI has provided
- 6 the following response out to 2030.
- FEI has provided the following table based on the analysis undertaken in response to CoR IR219.5 as requested.
- 9

Requested Table 1: Renewable Gas Demand and Cost Recovery Year 2030

	2030							
1		Renewable Gas Connections	Voluntary Renewable Gas (Ex NGV and T- Service)	Voluntary Renewable Gas (NGV)	Voluntary Renewable Gas (T-Service)	Renewable Gas Blend	Total	
	RG Volume (TJ)							
	Delivered via LCG Charges (TJ)	11,785	3,378	2,172	275	-	17,610	
	Delivered via S&T LC Rider (TJ)	3,928	1,126	-	-	37,536	42,590	
2	Total Volume (TJ)	15,713	4,504	2,172	275	37,536	60,200	
3	Weighted Average Supply Cost of Renewable Gas \$/GJ	22.42	22.42	22.42	22.42	22.42		
4	Renewable Gas Cost by Customer Group [Line 2 x Line 3] \$000s	352,223	100,964	48,678	6,164	841,398	1,349,428	
	Cost Recovery (\$000)							
	Cost Recovery via LCG Charges (\$000)	134,993	62,348	48,678	6,164	-	252,183	
	Cost recovery via S&T LC Rider (\$000)	101,205	29,010	-	-	967,030	1,097,244	
5	Total Cost Recovery (\$000)	236,198	91,358	48,678	6,164	967,030	1,349,428	
6	Over recovery under recovery) [Line 5 - Line 4] \$000s	(116,025)	(9,606)	-	-	125,632	-	
7	Customer Group Contribution per GJ Renewable Gas Allocated to Customer Group [Line 5 / Line 2] \$/GJ	15.03	20.28	22.42	22.42	25.76	22.42	

11