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September 12, 2022

Borden Ladner Gervais LLP
1200 Waterfront Centre
200 Burrard Street, P.O Box 48600
Vancouver, B.C.
V7X 1T2

Attention: Mr. Rick Williams

Dear Mr. Williams:

**Re: FortisBC Energy Inc. (FEI)
Revised Renewable Gas Program Application – Stage 2 (Application)
Response to the City of Vancouver (CoV) Information Request (IR) No. 2**

On December 17, 2021, FEI filed the Application referenced above. In accordance with the amended regulatory timetable established in British Columbia Utilities Commission Order G-165-22A for review of the Application, FEI respectfully submits the attached response to the CoV IR No. 2.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC ENERGY INC.

Original signed:

Diane Roy

Attachments

cc (email only): Commission Secretary
Registered Parties

FortisBC Energy Inc. (FEI or the Company) Revised Renewable Gas Program Application – Stage 2 (Application)	Submission Date: September 12, 2022
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1 **1.0 Reference: RENEWABLE GAS CONNECTIONS**

2 **Exhibit B-17, Section 13.2, p. 72**

3 **Alternative rate-setting mechanisms**

4 In response to BCUC IR 1 13.2 in Exhibit B-17, Concentric Energy Advisors, Inc
5 (Concentric) on behalf of FEI states the following on page 72:

6 FEI has proposed to set the rate for customers under both the new Renewable
7 Gas Blend service and the Renewable Gas Connections service to reflect the
8 rolled-in or average cost of providing those services. Rolled-in or average cost
9 ratemaking for these services: (1) is cost-based and consistent with longstanding
10 ratemaking principles and regulatory, including BCUC, practices; (2) will not result
11 in unjust discrimination and is distinguishable from the just discrimination created
12 by the Voluntary Renewable Gas service as discussed further below; and (3)
13 supports economic efficiency including the efficient use of existing infrastructure to
14 the benefit of all customers.

15 1.1 In proposing to set the rate for customers under both the new Renewable Gas
16 Blend service and the Renewable Gas Connections service to reflect the rolled-in
17 or average cost of providing those services, did FEI consider the rate difference
18 between rolled-in or average costs versus incremental costs?
19

20 **Response:**

21 FEI interprets “incremental cost” to mean the incremental cost of providing Renewable Gas
22 services to customers. In proposing to set the rate for customers under both the new Renewable
23 Gas Blend service and the Renewable Gas Connections service, FEI did not develop its proposal
24 based on the rate difference to existing customers between rolled-in or average costs versus
25 incremental costs. However, please refer to the response to BCUC IR2 58.1 for an estimate of
26 this impact.

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29
30 1.1.1 Please provide FEI’s estimate of the rate that would apply if the rate
31 reflected the incremental cost of providing Renewable Gas services to
32 new customers.
33

34 **Response:**

35 The incremental cost to provide Renewable Gas to a new customer is highly dependent on the
36 incremental capital, operating, storage and transport and energy costs, including the percent of
37 Renewable Gas, required for the new customer. Customer connection costs are highly variable
38 between customers depending on location (urban vs. rural setting), whether there is a distribution

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1 main nearby, where on FEI’s system they are located and their annual consumption. If only
 2 considering the difference in energy costs, then the incremental cost would be the difference
 3 between the price of Renewable Gas and the price of conventional natural gas plus carbon tax.
 4 The difference between these shrinks over time when considering the known escalation of carbon
 5 tax to \$170 per tonne by 2030.

6 The following table provided in response to BCUC IR2 58.1 sets out the incremental energy cost
 7 to serve a new customer Renewable Gas over conventional natural gas.

8 **Table 1: Incremental Energy Cost per GJ for a New Customer**

\$/GJ	2023	2024	2025	2026	2027	2028	2029	2030
Renewable Gas	23.52	24.27	24.84	25.33	25.76	23.85	24.06	24.31
Conventional Gas	5.91	5.91	5.91	5.91	5.91	5.91	5.91	5.91
Carbon Tax	3.29	4.02	4.75	5.48	6.21	6.94	7.67	8.40
Incremental Energy Cost	14.33	14.34	14.19	13.94	13.65	11.00	10.49	10.00

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11 Postage stamp or rolled in rate making is widely accepted across British Columbia. For example,
 12 if BC Hydro were to use incremental rate making for the procurement of clean energy for
 13 incremental new and existing customers (customers who add electric load because they have
 14 switched out a gas furnace for a heat pump, for example), that incremental energy would be the
 15 cost of BC Hydro’s Site C dam energy at roughly between \$44 and \$55 per GJ less the cost of
 16 existing energy at approximately \$14/GJ.

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20 1.1.2 What differences would an incremental-cost rate for Renewable Gas
 21 services to new customers have from the rates currently charged to
 22 existing customers for Renewable Gas? Please explain.
 23

24 **Response:**

25 FEI’s current Renewable Gas charge (BERC¹) is set by adding the cost of gas per GJ, carbon tax
 26 per GJ plus \$7. FEI provides the table below setting out the difference between the cost of
 27 Renewable Gas, using the forecast of Renewable Gas cost from this Application, and an
 28 estimated BERC charge, based on the current approved² cost of gas and carbon tax escalating
 29 to \$170 per tonne by 2030.

¹ Currently named the Biomethane Energy Recovery Charge (BERC).

² Approved as at July 1, 2022.

1 **Table 1: Difference between Renewable Gas Cost and an estimate BERC per GJ**

\$/GJ	2023	2024	2025	2026	2027	2028	2029	2030
Renewable Gas	23.52	24.27	24.84	25.33	25.76	23.85	24.06	24.31
Conventional Gas	5.91	5.91	5.91	5.91	5.91	5.91	5.91	5.91
Carbon Tax	3.29	4.02	4.75	5.48	6.21	6.94	7.67	8.40
Premium	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Estimated BERC	16.20	16.93	17.66	18.39	19.12	19.85	20.58	21.31
Difference	7.33	7.34	7.19	6.94	6.65	4.00	3.49	3.00

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7 1.1.3 Please provide a comparison of the rate that FEI projects will apply under
8 its proposed rolled-in or average cost methodology versus the rate that
9 FEI estimates would apply using an incremental costing approach.

10
11 **Response:**

12 Please refer to the responses to CoV IR2 1.1.1 and 1.1.2.

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16 1.1.4 Is there a point at which the quantified rate difference between using
17 rolled-in or average costs and incremental costs would make it
18 appropriate to adopt the latter? If so, at what point?

19
20 **Response:**

21 **The following response has been provided by Concentric.**

22 It is difficult and not productive to engage in the degree of speculation needed to answer this
23 question. For example, the CER has ruled that there is a point beyond which it would no longer
24 be appropriate to use cost-based rates. However, this scenario begins with an understanding that
25 existing customers have no acquired rights which would exempt them from cost increases
26 associated with future expansions and growth. With that broad understanding, yes, there are
27 conceivable circumstances when it may make sense to use incremental costs as the basis for
28 rates, but that shift may be appropriate for both service to existing customers and to new
29 connections customers.

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1 **2.0 Reference: RENEWABLE GAS CONNECTIONS**

2 **Exhibit B-17, Section 13.2, p. 73**

3 **Alternative rate-setting mechanisms**

4 In response to BCUC IR 1 13.2 in Exhibit B-17, Concentric on behalf of FEI states the
5 following on page 73:

6 [...] Regulators, including the BCUC and other Canadian regulators, have applied
7 this principle in a manner that seeks to have cost responsibility follow cost
8 causation. This leads to the critical question as to whether new customers on a
9 system are responsible for new costs, or whether it is the aggregate level of service
10 that causes the aggregate level of costs. In addressing this question, regulators
11 across North America make much greater use of rolled-in or average costs than
12 stand-alone or incremental costs in utility service ratemaking where the “new” and
13 “old” customers are being provided with a service that is the same or nearly the
14 same. [...]

15 [...] Under the incremental cost theory, a customer who built a house and initiated
16 service last year would pay much less for gas supply than a customer who built a
17 house next year even where the two customers had identical usage
18 characteristics. This, despite the fact that both houses are served by the same gas
19 system, use the same amount of gas, and physically receive the same blend of
20 natural gas containing Renewable Gas. In this situation the “newer” customer did
21 nothing to impose a different level of costs on the system. Thus, it makes no sense
22 to establish different rates for that customer; rather, that customer’s cost of gas
23 should be averaged with existing customers, just as would be true for new and
24 existing transmission and distribution costs of serving the two customers. [...]

25 2.1 Please confirm that the above-noted example has no applicability to a situation
26 where new customers are required to receive a “blend” that is 100 percent
27 Renewable Gas.

28
29 **Response:**

30 **The following response is provided by Concentric.**

31 Not confirmed. As discussed in the response to BCUC IR1 13.2, rolled-in or average cost
32 ratemaking is applicable to the Company’s Renewable Gas Connections service. The “new”
33 customers here did nothing to impose a different level of costs on the system.

34

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1 **3.0 Reference: RENEWABLE GAS CONNECTIONS**

2 **Exhibit B-17, Section 13.2, p. 77**

3 **Alternative rate-setting mechanisms**

4 In response to BCUC IR 1 13.2 in Exhibit B-17, Concentric on behalf of FEI states the
5 following on page 77:

6 Instead, the difference between the two otherwise identical customers is a function
7 solely of how they are treated for purposes of FEIs supply mix, itself a function of
8 provincial and municipal policy.

9 3.1 Is it FEI's position that the Renewable Gas product provided to new customers is
10 the same product and thus has the same cost profile as the fossil-fuel natural gas
11 provided to existing customers under FEI's existing rates? Please explain.

12

13 **Response:**

14 **The following response is provided by Concentric.**

15 No, it is not FEI's position that the gas provided to the two sets of customers is the "same product"
16 since product differentiation is necessary as a means of complying with ordinances that restrict
17 new natural gas connections. However, it is FEI's position that the Renewable Gas Connections
18 service customers do not "cause" a different level of costs being incurred by FEI. The difference
19 is one of provincial and municipal policy, and the segregation of gas purchases that is necessary
20 to comply with those policies. Therefore, in terms of the "cost causation" principle of ratemaking,
21 the two customer groups do not have a different cost profile.

22

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1 **4.0 Reference: RENEWABLE GAS CONNECTIONS**

2 **Exhibit B-17, Section 13.2, p. 73**

3 **Alternative rate-setting mechanisms**

4 In response to BCUC IR 1 13.2 in Exhibit B-17, Concentric on behalf of FEI states the
5 following on page 73:

6 The National Energy Board (NEB) explicitly recognized the benefits of average
7 cost pricing:

8 In considering cost causation as an approach to making tolls just and
9 reasonable, the Board notes that in an integrated system as complex as
10 TransCanada's, it is not always practical to determine the precise costs
11 caused by the provision of a specific service. Accordingly, modifications to
12 a strict cost-causation approach to tollmaking are necessary. One such
13 example is the use of toll zones to deal with a multitude of delivery points
14 within a geographical region. If tolled on a strict cost-causation basis, for
15 example point-to-point, a multiplicity of price differences within each region
16 would result.

17 4.1 Please confirm whether it is the position of FEI that it is not practical to determine
18 the precise costs caused by the provision of Renewable Gas services to new
19 customers? If yes, please explain.

20
21 **Response:**

22 Confirmed. As the preamble to the question suggests, if FEI were to offer a multitude of delivery
23 points, with an RNG anaerobic digester within a geographical region for each cohort of customers
24 in proximity, it could reasonably determine the cost-of-service for providing RNG for that customer
25 group. It could then toll that cost based on a cost-causation basis, for example point-to-point, with
26 a multiplicity of price differences within each region. However, as described in the response to
27 BCOAPO IR1 10.1, this type of delivery model is not practical as it is cost prohibitive and not
28 technically feasible. Furthermore, such an approach goes against the principle of charging
29 postage stamp rates across FEI's service territory for all other components of the rate, which has
30 been widely accepted by the BCUC for both FEI and BC Hydro. In contrast, the rolled-in rate for
31 Renewable Gas Connections service represents a fair apportionment of costs, as discussed in
32 the response to BCUC IR1 13.2.

33

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1 **5.0 Reference: RENEWABLE GAS CONNECTIONS**

2 **Exhibit B-17, Section 13.2, p. 75**

3 **Alternative rate-setting mechanisms**

4 In response to BCUC IR 1 13.2 in Exhibit B-17, Concentric on behalf of FEI states the
5 following on page 75:

6 Establishing separate rates for customers based on the date service was initiated
7 represents a vintaging approach that other regulators have explicitly rejected.

8 5.1 Please explain whether a vintaging approach and pricing based on incremental
9 costs are the same.

10 5.1.1 If yes, please explain under what conditions vintaging and pricing based
11 on incremental costs are the same.

12 5.1.2 If no, please explain why they are not the same.

13

14 **Response:**

15 **The following response is provided by Concentric.**

16 Vintaging and incremental cost pricing may be the same if rates based on the date of service
17 reflect the incremental cost of serving that customer.

18

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1 **6.0 Reference: RENEWABLE GAS CONNECTIONS**

2 **Exhibit B-17, Section 13.2, p. 79**

3 **Alternative rate-setting mechanisms**

4 In response to BCUC IR 1 13.2 in Exhibit B-17, Concentric on behalf of FEI states the
5 following on page 79:

6 As stated by Bonbright and many other ratemaking authorities, just and reasonable
7 rates should send the proper price signals so that consumers can respond and
8 make the most efficient use of the utility system and the resources provided by that
9 utility. This includes making efficient use of existing infrastructure and other
10 resources and avoiding wasteful or inappropriate use of the utility’s product.
11 However, as noted by Dr. Alfred Kahn, economically efficient price signals must
12 be provided to all customers in order for the allocation of resources to be optimized.

13 6.1 Is it the position of FEI that rolled-in pricing promotes economic efficiency? If yes,
14 please explain.

15

16 **Response:**

17 **The following response is provided by Concentric.**

18 Yes, as a “second best” approach to pricing under these circumstances. In general, economic
19 efficiency is best achieved when all customers are charged rates which reflect long-run marginal
20 costs. However, under traditional cost-based ratemaking, this would lead to rates that produce
21 excessive returns. As discussed in the response to BCUC IR1 13.2, under these circumstances,
22 rolled-in or average cost pricing promotes the efficient use of FEI’s existing infrastructure, thus
23 promoting economic efficiency, and avoids unjust discrimination.

24

25

26

27 6.2 Does FEI agree that rolled-in pricing blunts economic price signals as compared
28 to incremental pricing? Please explain.

29

30 **Response:**

31 **The following response is provided by Concentric.**

32 Under some circumstances that could be true, however, here, while rolled-in pricing softens price
33 signals, it best-balances the totality of the ratemaking objectives as discussed in the response to
34 BCUC IR1 13.2.

35

36

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1
2 6.2.1 Is FEI familiar with any regulatory decisions that include a finding that
3 rolled-in pricing blunts economic price signals? If so, please provide
4 examples.

5
6 **Response:**

7 **The following response is provided by Concentric.**

8 Neither FEI nor Concentric is aware of such decisions, nor have they conducted the research
9 necessary to identify such decisions.

10

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1 **7.0 Reference: RENEWABLE GAS CONNECTIONS**

2 **Exhibit B-17, Section 25.0, p. 145**

3 **Alternative rate-setting mechanisms**

4 In response to BCUC IR 1 13.2 in Exhibit B-17, Concentric on behalf of FEI states the
5 following on page 145:

6 FEI will recover the costs of the Renewable Gas Blend through an S&T LC rider
7 designed to recover the costs of the Renewable Gas Program not otherwise
8 recovered from other components of the program. Customers will also receive an
9 offsetting carbon tax credit for any volume of Renewable Gas they receive.
10 [Emphasis Added]

11 FEI provides customers with the carbon tax credit on their current bill in recognition
12 of the Renewable Gas embedded in the gas delivered for the current period.

13 7.1 Please explain in more detail how the carbon tax credit is calculated for inclusion
14 on customer bills.

15
16 **Response:**

17 Carbon tax must be collected as per the *Carbon Tax Act*. Customers subject to the carbon tax
18 are charged based on the total volume of gas (conventional natural gas and RNG) consumed
19 during each billing period. Customers receiving RNG will see a secondary line item, a Biomethane
20 Credit, for the portion of RNG consumed in that billing period.

21 The example below shows the sample bill for a residential customer consuming a total of 10 GJs
22 in a month who has voluntarily elected to purchase 10 percent RNG. The customer is charged
23 carbon tax on the total 10 GJs (Line 25) and then receives a Biomethane Credit (Line 27) for the
24 1 GJ (10 percent) of RNG contracted in that billing period.

1 **Figure 1: Sample Bill Calculation for Voluntary Renewable Gas Residential Customer with 10%**
 2 **Blend to Demonstrate the Carbon Tax Credit Calculation**

Line No.	Input Values	
1	Total days ¹	30
2	Total NG GJ ¹	9
3	Total RNG voluntary GJ ¹	1
4	Total GJ	10
		Line 2 + Line 3
5		
6	Basic charge ²	0.4126
7	Delivery ²	5.526
8	Storage and transport ²	1.351
9	Cost of gas ²	5.907
10	Carbon Tax ²	2.559
11	Clean Energy Levy ²	0.40%
12	GST ²	5%
13	RNG voluntary rate ²	15.466
		Line 9 + Line 10 + \$7
14	Mock up of 2022 Residential with 10% voluntary Blend	
15	Delivery Charges	
16	Basic Charge (30 days at 0.4126 per day)	12.38
17	Delivery (10.0 GJ at 5.526 per GJ)	55.26
18		67.64 ^{^*}
		Line 16 + Line 17
19	Commodity Charges	
20	Storage and Transportation (10.0 GJ at 1.351 per GJ)	13.51
21	Cost of Gas (9.0 GJ at 5.907 per GJ)	53.16
22	Renewable Natural Gas Voluntary (1.0 GJ at 15.466 per GJ)	15.47
23		82.14 ^{^*}
		Line 20 + Line 21 + Line 22
24	Taxes and fees	
25	Carbon Tax (10.0 GJ at 2.559 per GJ)	25.59 *
26	Clean Energy Levy (0.4% of ^ amounts)	0.60
27	Biomethane Credit (1.0 GJ at 2.559 per GJ)	(2.56) *
28	GST (5% of * amounts)	8.64
29	Total Charges	182.05
		Line 18 + Line 23 + Line 25 + Line 26 + Line 27 + Line 28

¹ Total days and estimated volume are not based on actual average residential amounts. Amounts selected to just show relationship between Carbon Tax and volume of Renewable Gas

² As of January 2022

3

4 A similar carbon tax and Biomethane Credit calculation would apply for customers participating in
 5 the Renewable Gas Connections service and Renewable Gas Blend where carbon tax and the
 6 Biomethane Credit are applied to each billing period based on the natural gas and RNG
 7 contracted amounts respectively.

8 As requested CoV IR2 7.2, FEI provides an excel worksheet that shows this calculation in
 9 Attachment 7.1.

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4 7.2 Please provide a worked example showing the determination of the tax credit and
5 the reduction amount on a customer's bill in Excel with formulas intact.

6

7 **Response:**

8 Please refer to the response to CoV IR2 7.1.

9

1 **8.0 Reference: RENEWABLE GAS CONNECTIONS**

2 **Exhibit B-17, Section 31.0, p. 170**

3 **Alternative rate-setting mechanisms**

4 In response to BCUC IR 1 31.0 in Exhibit B-17, Concentric on behalf of FEI states the
 5 following on page 170:

6 Carbon offset gas is less costly on a \$/GJ basis than Renewable Gas. Based on
 7 historical purchases of carbon offsets made by FEI the price range per GJ for the
 8 carbon offset component is approximately \$0.50 to \$1.50. [...] The cost of carbon
 9 tax must also be factor in, and contributes to increase the cost of carbon offsets
 10 gas.

11 Please see the updated Table 1 below which now includes the actual data for 2021
 12 and the forecast for 2022.

Updated Table 1: RNG Shortfall and Carbon Offset Purchase

Item	2017 (Actual)	2018 (Actual)	2019 (Actual)	2020 (Actual)	2021 (Actual)	2022 (Forecast)
A Total RNG Supply (TJ)	153.8	176.2	224.5	250.4	715.2	1,963.4
B Total RNG Sales (Demand TJ)	233.1	276.2	315.0	306.2	581.4	1738.0
C RNG Shortfall (TJ)	-46.9	-100.0	-90.5	-55.8	-74.8	0.0
D Average Price of Carbon Offsets (\$/GJ)	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00

13
 14 8.1 Please provide details of all carbon offset transactions including prices, quantities,
 15 and transaction date and (if different) delivery period for 2017 to 2021 used to
 16 make up the RNG Shortfall from row C of above table. Please also provide any
 17 forecasts of such transactions for 2022.
 18

19 **Response:**

20 FEI purchased offsets four times over the past five years. The most recent purchase in March
 21 2022 covered the RNG shortfall for both 2020 and 2021. At this time, FEI has not forecasted
 22 making any further purchases of offsets.

Year	Invoice Date	Purchase Amount (Pre-tax \$)	Offset Type	Offset Volume (tCO ₂ e)	Avg Price per tCO ₂ e
2017	18-May-18	\$38,800	BC	2,400	\$16.17
2018	17-Dec-18	\$91,840	BC	5,600	\$16.40
2019	31-Jan-20	\$64,400	BC	4,600	\$14.00
2020	11-Mar-22	\$58,000	BC	2,900	\$20.00
2021	11-Mar-22	\$76,000	BC	3,800	\$20.00

1 8.1.1 Please also provide an Excel spreadsheet with formulas intact that shows
 2 the calculation of the \$1.00 carbon offset for each year from 2017 to 2022
 3 inclusive (see row D from the table above).
 4

5 **Response:**

6 FEI assumed a carbon reduction of 50kgCO₂e per GJ (or 0.05 tonneCO₂e/GJ). The
 7 corresponding cost per GJ is therefore calculated as the purchase price in \$ per tonne CO₂e
 8 multiplied by 0.05 tonne CO₂e per GJ.

9 In the table referenced in the preamble to this question, FEI calculated an average price of \$1.00
 10 per GJ as follows: average price of \$20 per tonneCO₂e (rounded up to provide conservative
 11 estimate), multiplied by 0.05 tonneCO₂e per GJ equals \$1.00 per GJ. FEI provides an expanded
 12 and re-stated version of Table 1 below to better reflect the actual annual variation in the cost of
 13 Carbon Offsets.

	Item	2017 (Actual)	2018 (Actual)	2019 (Actual)	2020 (Actual)	2021 (Actual)	2022 (Forecast)
A	Total RNG Supply (TJ)	153.8	176.2	224.5	250.4	715.2	1,963.4
B	Total RNG Sales (Demand TJ)	233.1	276.2	315.0	306.2	581.4	1,738.0
C	RNG Shortfall (A-B) (TJ)	-79.3	-100.0	-90.5	-55.8	-74.8	0.0
D	Average Cost of Carbon Offsets (\$/tonneCO ₂ e)	\$ 16.17	\$ 16.40	\$ 14.00	\$ 20.00	\$ 20.00	\$ 20.00
E	tonneCO ₂ e/GJ	0.05	0.05	0.05	0.05	0.05	0.05
F	Average Price of Carbon Offsets (D x E) (\$/GJ)	\$ 0.81	\$ 0.82	\$ 0.70	\$ 1.00	\$ 1.00	\$ 1.00

14
 15 The calculation for the price per GJ for carbon offsets is simple and set out in the table above. As
 16 such, FEI has not included an excel spreadsheet as an attachment to this response.

17
 18
 19

20 8.2 Please explain how the use of carbon offsets affects FEI’s pricing of RNG gas to
 21 new customers and existing customers.
 22

23 **Response:**

24 The cost of carbon offsets acquired is accounted for in FEI’s Biomethane Variance Account
 25 (BVA). Along with the cost of a carbon offset, FEI moves an equivalent volume of conventional
 26 natural gas (in tonnes CO₂e) and the cost of that conventional natural gas into the BVA. Both of
 27 these costs together affect FEI’s average cost of RNG.

28 Currently, the price of RNG that is sold to customers is set independently from the actual cost of
 29 RNG. For clarity, the price of RNG sold to customers is set once per year (at the beginning of the
 30 year) and is equal to the cost of gas per GJ plus the current carbon tax per GJ plus \$7.

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8.2.1 Please provide the methodology and assumptions underlying how carbon offsets costs affect RNG pricing.

Response:

Please refer to the response to CoV IR2 8.2.

8.2.2 Please provide an Excel spreadsheet with formulas intact that demonstrates the use of this methodology in practice to determine RNG pricing for new and existing customers.

Response:

Please refer to Attachment 8.2.2 for an Excel spreadsheet that shows an example calculation of how the purchase of carbon offsets affects the cost of the RNG. As noted in the response to CoV IR2 8.2, the price FEI charges for Renewable Gas is unaffected by variations in the cost.

8.2.3 Please provide all working papers and calculations relied upon by FEI for the purpose of the above-noted responses.

Response:

Please refer to the response to CoV IR2 8.2.2.

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1 **10.0 Reference: RENEWABLE GAS CONNECTIONS**

2 **Exhibit B-17, Section 13.2, p. 78 Alternative rate-setting mechanisms**

3 In response to BCUC IR 1 13.2 in Exhibit B-17, Concentric on behalf of FEI states the
4 following on page 78:

5 Furthermore, customers who choose to participate in the Voluntary Renewable
6 Gas service have recourse to their otherwise applicable gas supply service
7 provided through FEI’s Renewable Gas Blend service. The ability of Voluntary
8 Renewable Gas participants to switch back to this traditional cost-based rate that
9 is just, reasonable, and non-discriminatory renders the different pricing of the
10 Voluntary Renewable Gas program itself just, reasonable, and non-discriminatory.
11 This is consistent with FERC’s ratemaking treatment of voluntary agreements for
12 gas capacity services in the United States. FERC has a well-established
13 Negotiated Rate Policy that governs the prices charged to interstate shippers by
14 gas pipelines for pipeline capacity and other services. Under this policy, a rate
15 voluntarily agreed to between a gas pipeline and a shipper can deviate from
16 traditional cost of service as long as the shipper has recourse to a rate based on
17 the traditional cost of service:

18 10.1 Please provide FEI’s understanding of FERC’s “higher of” pricing policy.

19

20 **Response:**

21 **The following response is provided by Concentric.**

22 Please refer to the Commission’s (FERC’s) policy statement regarding transmission pricing
23 (issued October 26, 1994 in Docket No. RM93-19-000) at page 5 (footnotes excluded):

24 In recent years, the Commission attempted to address the industry’s changing
25 needs by modifying its historical transmission pricing policy to allow a type of
26 incremental cost pricing. In order to provide new or expanded transmission service,
27 a utility may be required to add expensive transmission assets, which can result in
28 an increase in rolled-in embedded cost rates. To address this possibility, the
29 Commission has allowed a utility to charge transmission-only customers the higher
30 of embedded costs (for the system as expanded) or incremental expansion costs,
31 but not the sum of the two. When the transmission grid is constrained and the utility
32 chooses not to expand its system, the Commission has allowed a utility to charge
33 the higher of embedded costs or legitimate and verifiable opportunity costs, but not
34 the sum of the two. The opportunity costs, in turn, are capped by incremental
35 expansion costs. This type of pricing has been referred to as “or” pricing or
36 Northeast Utilities pricing.

37 Note further that, as a part of the policy statement quoted above, the Commission embraced
38 transmission pricing flexibility beyond that provided by the “higher of” (also known as “or” or
39 “Northeast Utilities”) pricing model. See page 8 (footnotes excluded):

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1 In response to the comments received, the Commission has decided to revise its
2 policies to permit utilities much greater flexibility. We are prepared to accept a
3 variety of pricing methods in addition to Northeast Utilities pricing.

4
5

6

7 10.1.1 Please explain whether FEI's proposed rolled-in rate treatment is
8 consistent with FERC's "higher-of" pricing policy.

9

10 **Response:**

11 **The following response is provided by Concentric.**

12 Please note that, as discussed above, the "higher of" pricing model is not the sole method by
13 which a transmission pricing proposal is evaluated by the FERC. Instead, pricing proposals,
14 including the "higher of" pricing model, are evaluated based on the following five principles.³

- 15 1. Transmission pricing must meet the traditional revenue requirement.
- 16 2. Transmission pricing must reflect comparability.
- 17 3. Transmission pricing should promote economic efficiency.
- 18 4. Transmission pricing should promote fairness.
- 19 5. Transmission pricing should be practical.

20 As discussed in the response to BCUC IR1 13.2, the Company's proposed rolled-in rate treatment
21 is consistent with these five principles:

- 22 1. It allows the Company to recover its total cost of service.
- 23 2. The service provided to all customers via the rolled-in rate is functionally the same.
- 24 3. The rolled-in rate treatment promotes economic efficiency.
- 25 4. The rolled-in rate treatment does not result in unjust discrimination.
- 26 5. Under the circumstances, the proposed rolled-in rate treatment allows for the
27 accomplishment of the first four principles in a practical manner.

28

³ Title 18 / Chapter I / Subchapter A / Part 2, Statements of General Policy and Interpretations Under the Federal Power Act / §2.22 Pricing policy for transmission services provided under the Federal Power Act.

Attachment 7.1

REFER TO LIVE SPREADSHEET MODEL

Provided in electronic format only

(accessible by opening the Attachments Tab in Adobe)

Attachment 8.2.2

REFER TO LIVE SPREADSHEET MODEL

Provided in electronic format only

(accessible by opening the Attachments Tab in Adobe)