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November 1, 2019

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

Attention: Ms. Leigha Worth, Executive Director

Dear Ms. Worth:

**Re: FortisBC Energy Inc. (FEI)**

**Filling of Biomethane Purchase Agreements between FEI and Tidal Energy Marketing Inc. (Tidal Energy) (the Application)**

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

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On June 3, 2019, FEI filed the Application referenced above. In accordance with the British Columbia Utilities Commission Order G-213-19 setting out the Regulatory Timetable for the review of the Application, FEI respectfully submits the attached response to BCOAPO IR No. 1.

If further information is required, please contact Scott Gramm, Manager, Renewable Natural Gas, at (604) 576-7242.

Sincerely,

**FORTISBC ENERGY INC.**

***Original signed:***

Doug Slater

Attachments

cc (email only): Commission Secretary  
Registered Parties



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1    **1.0    Reference:    Exhibit B-1, Application Cover Letter, Draft Order**

2            The Cover Letter reads (in part):

3            *With respect to the application letter, commercial information regarding the*  
4            *upstream parties not directly contracting with FEI, the exact address, acquisition*  
5            *price, termination payments, volumes and carbon intensity have been redacted.*  
6            *Each of these items is described below.*

7            *Commercial relationships and address: FEI has redacted any reference to Tidal*  
8            *Energy's existing relationship with its counterparties and the project addresses*  
9            *because FEI does not have explicit permission from Tidal Energy to disclose the*  
10            *locations and relationships publicly. [Emphasis added.]*

11            *Price: Given that FEI enters into commercial negotiations regarding supply*  
12            *projects in order to obtain the lowest possible price for RNG supply, public*  
13            *disclosure of this commercially sensitive information will hamper FEI's ability to*  
14            *negotiate favourable pricing for future RNG supply. As such, public disclosure of*  
15            *this sensitive financial information has the potential to increase the overall costs*  
16            *of the Biomethane Program to the detriment of all FEI non-bypass customers.*

17            ...

18            *Volumes: The production volume is not necessary in any public disclosure. When*  
19            *combined with price, the volume can be used to estimate total annual purchase*  
20            *costs. [Emphasis added.]*

21            1.1    Did FEI request, at any time, explicit permission from Tidal Energy to disclose the  
22            owners/operators and locations of the London and Niagara projects publicly?

23  
24    **Response:**

25    Please refer to the response to CEC IR 1.1.1.

26  
27

28  
29            1.2    In FEI's view, is it unusual to not reveal the owners/operators and locations of the  
30            subject projects publicly in an application such as this?  
31

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1 **Response:**

2 FEI does not consider its request for confidentiality over Tidal's counterparties to be unusual.  
3 The BCUC's Rules of Practice and Procedure permit a party such as FEI to request  
4 confidentiality of information where disclosure of the information may result in harm to a  
5 person's competitive or negotiating position. Tidal and its counterparties consider investment in  
6 RNG facilities as a potential commercial and strategic advantage and did not want to disclose  
7 their plans to the broader industry.

8  
9

10

11 1.3 Is it, in FEI's view, in the public interest to not reveal (i) the owners/operators and  
12 (ii) locations of the subject projects publicly in an application such as this? If so,  
13 please explain.

14

15 **Response:**

16 As reflected in the BCUC's Rules of Practice and Procedure, the question is whether Tidal's  
17 interest in confidentiality outweighs the public interest in the disclosure of the information or  
18 documents in the hearing. In this case, the interest in confidentiality does outweigh the public  
19 interest in disclosure:

20 • As part of FEI and Tidal's commercial discussions, FEI and Tidal entered into a non-  
21 disclosure agreement in which each party agreed not to disclose the confidential  
22 information of the other. FEI has requested, but Tidal has not granted, permission to  
23 disclose the information.

24 • Tidal considers information about its counterparties, including the location of their  
25 projects, to be confidential and commercially sensitive, and that disclosure of the  
26 information could harm their competitive advantage or negotiating position with other  
27 parties.

28 • The BCUC has access to the necessary confidential information and interveners who  
29 execute the BCUC's Confidential Declaration and Undertaking may also review the  
30 information.

31 • Access to the information on Tidal's counterparties is not relevant to the determination of  
32 whether or not the BPAs qualify as prescribed undertakings under the GGRR, including  
33 whether FEI is acquiring RNG, the acquisition price is below the maximum price in the  
34 GGRR, and the total combined volume is less than the maximum amount of RNG  
35 allowed to be purchased under the GGRR.

36



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1  
2           1.4     Can FEI confirm that none of the unnamed owners/operators or other unnamed  
3                    counterparties are related to FEI, Enbridge, and Tidal?  
4

5     **Response:**

6     FEI can confirm that the unnamed owners/operators or other counterparties are not related to  
7     FEI. All of the information has been provided to the BCUC on a confidential basis, and is  
8     available for interveners to review upon the signing of the BCUC's standard undertaking of  
9     confidentiality.

10  
11  
12           1.5     Given that FEI is not publicly disclosing the price of RNG supply, please confirm  
13                    that public disclosure of the subject volumes would not allow estimation of annual  
14                    purchase costs.  
15  
16

17     **Response:**

18     Confirmed.

19  
20  
21           1.6     Please explain how, In FEI's view, it is in the public interest to keep the subject  
22                    volumes confidential given that the unit prices are being kept confidential?  
23  
24

25     **Response:**

26     Tidal has indicated that the disclosure of volumes along with the general location of the projects  
27     may allow other parties to triangulate the projects. As such, Tidal has asked FEI not to publicly  
28     disclose the volumes and keep it confidential.

29  
30  
31           1.7     In FEI's view, does FEI's assertion that "the production volume is not necessary  
32                    in any public disclosure" mean that it is never in the public interest to disclose  
33                    production volume?  
34  
35



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1 **Response:**

2 No, it is not FEI's assertion that it is never in the public interest to disclose production volume.  
3 Depending on the circumstances, production volume could be considered commercially  
4 sensitive information and, in such circumstances a person's interest in keeping that information  
5 confidential may outweigh the public interest in disclosure.

6

7

8

9

10 1.8 Can FEI confirm that none of the parties whose names are redacted in the public  
11 version of this application are related to or affiliated with the named parties of FEI  
12 and Tidal Energy?

13

14 **Response:**

15 FEI can confirm that none of the parties whose names are redacted are related to or affiliated  
16 with FEI. FEI is unable to disclose any further information.

17

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1    **2.0    Reference:    Exhibit B-1, page 4, Table 1 and Exhibit A-3, BCUC IR 1.5.1.**

2            2.1    Can FEI confirm that RNG from the subject sources will be delivered to FEI at  
3                    Huntingdon?  
4

5    **Response:**

6    Confirmed. Please also refer to the response to BCUC IR 1.1.1.  
7  
8

9  
10           2.2    If FEI is unable to confirm delivery of the subject-sourced RNG at Huntingdon,  
11                    can FEI confirm that it will receive delivery of RNG from the subject sources  
12                    elsewhere on its system? If so, please indicate where the subject sourced RNG  
13                    will be physically received by FEI.  
14

15   **Response:**

16    Please refer to the response to BCOAPO IR 1.2.1.  
17  
18

19  
20           2.3    If unable to confirm as per the IRs 2.1 or 2.2, please specify where and to whom  
21                    the subject volumes of RNG sourced from Niagara Falls and London will be  
22                    physically delivered.  
23

24   **Response:**

25    Please refer to the response to BCOAPO IR 1.2.1.  
26  
27

28  
29           2.4    If unable to confirm as per the IRs 2.1 or 2.2, please specify the source(s) of the  
30                    RNG physically delivered to FEI at Huntingdon pursuant to the proposed BPAs.  
31

32   **Response:**

33    Please refer to the response to BCOAPO IR 1.2.1.

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1    **3.0    Reference:    Exhibit B-1, pages 11-12, Exhibit A-3, BCUC IR 1.1.0 Preamble**

2    FEI states on pages 11–12 of FEI’s Application for Acceptance of the Biomethane  
3    Purchase Agreements (BPAs) between FortisBC Energy Inc. (FEI) and Tidal Energy  
4    Marketing Inc. (Tidal Energy) (Application):

5    *On March 22, 2017, the Province of BC deposited LGIC OIC 161/2017 under BC*  
6    *Reg.114/2017 (OIC 161) approving an amendment to the GGRR, a copy of which is*  
7    *provided in Appendix D. Section 2 (3.7) and (3.8) of the GGRR as amended by OIC 161-*  
8    *2017 state:*

9                    (3.7) *A public utility's undertaking that in the class defined in subsection (3.8) is a*  
10                   *prescribed undertaking for the purposes of section 18 of the Act.*

11                   (3.8) *The public utility acquires renewable natural gas*

12                                *(a) for which the public utility pays no more than \$30 per GJ, and*

13                                *(b) that, subject to subsection (3.9), in a calendar year, does not exceed*  
14                                *5% of the total volume of natural gas provided by the public utility to its*  
15                                *non-bypass customers in 2015.*

16    3.1    BCOAPO seeks to determine or get an approximation of the commodity rate  
17           impacts on two “typical residential customers,” - one electing the RNG option and  
18           the other not electing the RNG option - in a “worst case hypothetical” situation.  
19           Since 2019 is still in progress and actuals are not yet available for the whole  
20           year, please use a blend of 2019’s most recently available actuals and forecasts  
21           for prices and volumes in responding to this IR.

22  
23           Please use the assumptions that (i) FEI paid the maximum allowed \$30 per GJ  
24           for the RNG, (ii) RNG constituted the maximum allowed proportion of FEI’s gas  
25           supply portfolio, and (iii) the typical customers from each class took volumes and  
26           blends that reflected 2019 volumes and blends that the average customer of  
27           each type for 2019 has actually taken in 2019 or is forecast to take for the  
28           remainder of 2019.

29  
30           Explicitly stating any other assumptions that FEI needs to make to respond,  
31           please provide the impacts for the RNG and the non-RNG residential customers  
32           in terms of annual commodity charges in this hypothetical case.

33



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1 **Response:**

2 To answer this question, FEI created two scenarios and then compared them. The first uses  
3 current forecast costs and volumes and rates; the second provides the “worst case hypothetical  
4 scenario” described in the question. While FEI has provided the requested analysis, the second  
5 scenario is not valid because:

- 6 1. The commodity cost of natural gas is at or near all time lows and is forecast to rise.  
7 Therefore, it is incorrect to compare the commodity cost today with the future forecast  
8 biomethane cost.
- 9 2. Before the 5 percent target is reached, the total volume of gas supplied will also have  
10 changed.
- 11 3. The demand for RNG will continue to increase above 2019 levels and the hypothetical  
12 scenario seeks the impact of max allowable supply purchase compared to today's  
13 demand which results in surplus inventory; if supply matched demand (as it is forecast  
14 to do) then there would not be surplus inventory.
- 15 4. The question ignores the GHG reduction benefits by asking for a comparison of the  
16 costs of a clean energy source, RNG, to natural gas. The comparative basis for RNG  
17 should be against other alternatives like electricity.
- 18 5. The question ignores the cost of not taking action to respond to greenhouse gas  
19 reduction policies. In the absence of a cleaner solution for customers in FEI's system,  
20 customers will exit the system, volumes will decline, and costs will go up for all  
21 customers that remain and are not able to transition, whether that be due to cost or  
22 circumstances.

23 The forecast scenario has been calculated using preliminary internal forecasts that are to be  
24 included in the Q4 Gas Cost reports. These forecasts have been prepared on the basis of using  
25 January – September actuals and October – December forecasts. Therefore, the numbers  
26 reported in this response may differ from the final numbers reported in the Q4 Gas Cost reports.

27 The following table summarizes the 2019 forecast view of the non-bypass supply portfolio:



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2019 Forecast Scenario	Traditional Natural Gas	RNG	Total Gas Supply
2019 Forecast Non-Bypass Demand Tjs	196,492	334	196,826
2019 Forecast Gas Cost \$/GJ	\$ 1.549	\$ 18.500	\$ 1.578
2019 Forecast Cost (\$000's)	304,365	6,187	310,552
2019 Forecast RNG Sales TJs		334	
2019 Forecast BERC \$/GJ		\$ 10.287	
2019 Forecast BERC recoveries (\$000's)		3,440	
Remaining Inventory TJs		-	
Remaining Costs (\$000's)		2,747	
Inventory costs to remain in BVA(\$000's)		-	
Costs to be recovered via Rate Rider (\$000's)		2,747	
Required rate rider \$/GJ		\$ 0.014	

1  
2 The table above shows that the forecasted non-bypass supply to be purchased is 196,826 TJs  
3 including 196,492 TJs of traditional gas and 334 TJs of RNG. The average purchase price of  
4 the natural gas supply is shown at the current commodity rate which is \$1.549 and the purchase  
5 price for renewable natural gas is shown at \$18.500 per GJ which is the estimated forecast  
6 RNG portfolio cost per GJ for 2019 to be reported in the Q4 2019 gas cost report.

7 The 2019 forecast of RNG sales is 334 TJs. The current approved BERC rate is \$10.287 per  
8 GJ, which results in collecting \$3.440 million in RNG revenues. After accounting for BERC  
9 recoveries this leaves \$2.747 million to be collected from all non-bypass ratepayers via the  
10 delivery rate rider. The required delivery rate rider would be \$2.747 million divided by total non-  
11 bypass volume (196,826 TJs), which results in \$0.014 per GJ.

12 The following table has been prepared assuming the maximum volume at the maximum price  
13 has been purchased. The maximum values are set in the current GRR and are \$30 per GJ  
14 and 5 percent of 2015 non-bypass volumes, which equals 8,416 TJs for FEI.

15



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Hypothetical Scenario Purchase Max RNG	Traditional Natural Gas	RNG	Total Gas Supply
Hypothetical Scenario Purchase Max RNG TJs	188,410	8,416	196,826
Hypothetical Cost of Gas \$/GJ	\$ 1.549	\$ 30.000	\$ 2.766
Hypothetical Gas Cost (\$000's)	291,847	252,480	544,327
2019 Forecast RNG Sales TJs		303	
2019 Forecast BERC \$/GJ		\$ 10.287	
2019 Forecast BERC recoveries (\$000's)		3,120	
Remaining Inventory TJs		8,113	
Remaining Costs (\$000's)		244,367	
Inventory costs to remain in BVA(\$000's)		83,456	
Costs to be recovered via Rate Rider (\$000's)		160,912	
Required rate rider \$/GJ		\$ 0.818	

1

Hypothetical Scenario Purchase Max RNG	Traditional Natural Gas	RNG	Total Gas Supply
Hypothetical Scenario Purchase Max RNG TJs	188,410	8,416	196,826
Hypothetical Cost of Gas \$/GJ	\$ 1.549	\$ 30.000	\$ 2.766
Hypothetical Gas Cost (\$000's)	291,847	252,480	544,327
2019 Forecast RNG Sales TJs		334	
2019 Forecast BERC \$/GJ		\$ 10.287	
2019 Forecast BERC recoveries (\$000's)		3,440	
Remaining Inventory TJs		8,082	
Remaining Costs (\$000's)		244,398	
Inventory costs to remain in BVA(\$000's)		83,135	
Costs to be recovered via Rate Rider (\$000's)		161,263	
Required rate rider \$/GJ		\$ 0.819	

2

3 In the second scenario total gas supply stays the same, but the mix of traditional gas and RNG  
 4 changes to more RNG and less traditional gas being purchased. The traditional gas cost would  
 5 stay the same and the assumption is that the RNG purchase cost is set to the maximum allowed  
 6 under the GGRR. The 2019 forecast of RNG sales are assumed to stay the same. This results  
 7 in more RNG and costs that would remain and inventory and more costs to be recovered from



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1 the delivery rate rider. In reality this scenario is unrealistic because this significant  
 2 supply/demand imbalance would not occur when considering the forecast trajectory of supply  
 3 and demand .

4 In this scenario, \$244.3 million of RNG purchase costs would remain after accounting for sales  
 5 in the year. Of this amount \$83.1 million would remain in the BVA with the 8,082 TJs of  
 6 inventory. \$161.263 million would need to be collected via delivery rate rider. This would  
 7 require a rate rider of \$0.819 per GJ (\$161.263 million / 196,826).

8 The following table summarizes the impact for an average Non-RNG and RNG customer.

	Forecast Scenario		Hypothetical Scenario	
	Non RNG Customer	RNG Customer	Non RNG Customer	RNG Customer
Average GJs	90	90	90	90
% RNG		16%		16%
GJs of Traditional Gas	90	76	90	76
Gjs of RNG	-	14	-	14
Cost of Traditional Gas <sup>1</sup>	\$ 3.473	\$ 3.473	\$ 3.473	\$ 3.473
Cost of RNG		\$ 10.287		\$ 10.287
<b>Required Delivery Rate Rider</b>	<b>\$ 0.014</b>	<b>\$ 0.014</b>	<b>\$ 0.819</b>	<b>\$ 0.819</b>
<b>Annual Bill impact</b>			<b>\$ 72</b>	<b>\$ 72</b>
<sup>1</sup> Includes the Cost of Gas, \$1.549, plus 2019 average carbon tax, \$1.924				

9  
 10 In the comparison between the forecast and hypothetical scenario, the only thing that changes  
 11 is the calculated delivery rate rider. The commodity cost for traditional gas and RNG remain the  
 12 same as they are set independently of the volume or price paid for RNG. In the hypothetical  
 13 scenario, the required delivery rate rider would increase by \$0.805 per GJ to \$0.819 from  
 14 \$0.014. This would result in an annual bill impact of \$72 for both the Non-RNG and RNG  
 15 customer who consumes the average of 90 GJs per year.

16  
 17

18  
 19 3.2 For each year that FEI has been providing the RNG option to residential  
 20 customers, please provide (i) the total number of its residential customers, (ii) the  
 21 number of residential customers choosing the RNG option, (iii) the volume of  
 22 traditional natural gas supplied to residential customers, (iv) the volume of RNG

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1                   supplied to residential customers, (v) the annual commodity charges for a typical  
2                   residential non-RNG customer, and (vi) the annual commodity charges for a  
3                   typical residential RNG customer.

4  
5                   **Response:**

6                   The requested information is provided in the table below.

Year	(i) Average Residential Customers	(ii) Average RNG Residential Customers	(iii) Volume of Residential Traditional Gas	(iv) Volume of Residential RNG TJs	(v) Traditional Gas Commodity Charge \$/GJ	(vi) RNG Commodity Charge \$/GJ
2010	847,803		55,192.57	-	\$ 5.953	\$ 9.904
2011	855,942	594	63,415.10	3.70	\$ 5.461	\$ 9.904
2012	850,537	2,865	60,826.30	20.50	\$ 4.740	\$ 11.736
2013	857,115	5,407	66,016.00	44.20	\$ 4.656	\$ 11.696
2014	868,334	6,482	64,462.40	53.10	\$ 4.567	\$ 13.088
2015	876,844	6,664	64,037.40	52.80	\$ 4.456	\$ 14.413
2016	890,418	7,089	68,036.80	60.50	\$ 3.202	\$ 12.663
2017	902,898	8,254	79,657.90	88.40	\$ 3.540	\$ 10.539
2018	920,431	9,535	74,381.20	96.90	\$ 3.225	\$ 10.430
2019 <sup>(1)</sup>	940,516	10,433	79,281.00	103.14	\$ 3.473	\$ 10.287

(i) as reported in BCUC annual reports, with exception of 2019

(ii) Internal FEI tracking of RNG customers

(iii) as reported in annual Status Reports

(iv) as reported in annual BVA status reports

(v) average recovery charge as reported in annual status report plus annual average carbon tax per GJ

(vi) average recovery charge as reported in annual BVA status report

7                   <sup>(1)</sup> 2019 internal forecasts

8                   FEI notes the values in table have been provided as per the IR and not for the purpose of  
9                   comparing and evaluating the cost of RNG to the cost of traditional gas. FEI reiterates the cost  
10                  of RNG should be compared and evaluated to the cost of electricity. Please also refer to the  
11                  response to BCUC IR 1.3.1.

12



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1    **4.0    Reference:    Exhibit A-3, BCUC IR 1.6.1, 1.6.2, and 1.6.3**

2    The referenced IRs consider situations where RNG demand exceeds or may exceed  
 3    RNG supply.

4    4.1    In the case of a situation in which contracted RNG supply materially exceeds  
 5    RNG demand, please discuss fully the potential commodity rate impacts on (i)  
 6    residential customers who choose traditional gas supply and on (ii) residential  
 7    customers who choose a typical RNG blend. Please use and explicitly state any  
 8    assumptions required to respond to this IR.

9  
 10    **Response:**

11    In situations where RNG supply exceeds RNG demand (whether materially or otherwise), the  
 12    excess RNG inventory is held in the BVA account at the current year's BERC rate and held for  
 13    future RNG sales.

14    The difference between the RNG supply purchase cost and BERC rate (selling price) on a per  
 15    GJ basis in excess of the RNG recovery rate is collected from all non-bypass customers via a  
 16    delivery rate rider.

17    The following table compares two hypothetical scenarios - one where supply and demand are  
 18    equal and one where supply is greater than demand.

RNG Supply Equal to Demand				RNG Supply Greater than Demand			
	Volume TJs	Price \$/GJ	Total (\$000's)		Volume TJs	Price \$/GJ	Total (\$000's)
Annual Supply	300	\$ 30	\$ (9,000)	Annual Supply	300	\$ 30	\$ (9,000)
Annual Demand	300	\$ 10	\$ 3,000	Annual Demand	200	\$ 10	\$ 2,000
<b>Ending Balance</b>	-		<b>\$ (6,000)</b>	<b>Ending Balance</b>	<b>100</b>		<b>\$ (7,000)</b>
Inventory	-		\$ -	Inventory	100	\$ 10	\$ 1,000
Rider			\$ 6,000	Rider			\$ 6,000

19  
 20    In the RNG Supply Equal to Demand table, 300 TJs are assumed to be purchased at \$30/GJ  
 21    (the maximum price) and those 300 TJs are assumed to be sold at \$10/GJ (assumed  
 22    Biomethane Energy Recovery Charge - BERC). In this scenario where supply and demand  
 23    equal, \$6 million is the amount of purchase costs exceeding the recovery amount that would be  
 24    collected from all non-bypass customers via a delivery rate rider.

25    In the RNG Supply Greater than Demand table, 300 TJs are assumed to be purchased at  
 26    \$30/GJ and 200 of those TJs are assumed to be sold at \$10/GJ. In this scenario 100 TJs would  
 27    remain in inventory. The cost of this inventory (\$1 million) remains in the BVA account at the  
 28    current BERC Rate and the costs exceeding the recovery amount of \$6 million is recovered  
 29    from all non-bypass customers via a delivery rate rider.



FortisBC Energy Inc. (FEI or the Company) Filing of Biomethane Purchase Agreements between FEI and Tiday Energy (the Application)	Submission Date: November 1, 2019
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Council of Senior Citizens' Organizations of BC, Disability Alliance BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 13

1 The end result is that in a situation where RNG supply exceeds RNG demand, the RNG  
2 remains in inventory and neither traditional gas supply customers nor customers who choose a  
3 typical blend of RNG supply would experience a rate impact.

4 FEI's Biomethane program includes a provision whereby aged biomethane is assumed to lose  
5 its environmental properties and is transferred from the BVA in part to FEI's midstream cost  
6 (MCRA) and in part to delivery costs. While FEI actively manages supply and demand so that  
7 inventories do not stale, in the case where biomethane inventory reaches 18 months or exceeds  
8 a certain threshold, the transfer would take place with approval from the BCUC. Given current  
9 and projected demand, FEI sees this as an unlikely scenario.

10