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September 26, 2017

B.C. Sustainable Energy Association  
c/o William J. Andrews, Barrister & Solicitor  
1958 Parkside Lane  
North Vancouver, B.C.  
V7G 1X5

Attention: Mr. William J. Andrews

Dear Mr. Andrews:

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

**Project No. 1598919**

**Multi-Year Performance Based Ratemaking Plan for 2014 through 2019  
approved by the British Columbia Utilities Commission (Commission) Order G-  
138-14 – Annual Review for 2018 Rates (the Application)**

**Response to the B.C. Sustainable Energy Association and Sierra Club of British  
Columbia (BCSEA) Information Request (IR) No. 1**

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On August 4, 2017, FEI filed the Application referenced above. In accordance with the Commission Order G-115-17 setting out the Regulatory Timetable for the review of the Application, FEI respectfully submits the attached response to BCSEA IR No. 1.

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

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1   **1.0   Topic:        Staffing levels**

2       **Reference:   Exhibit B-1, p.6, pdf p.16**

3       “The projected increase of 57 headcount or 69 FTEs from 2016 to 2017 is comprised  
4       primarily of higher staffing for the following areas:...”

5       1.1     Please briefly provide the definitions of headcount and FTE and explain how they  
6       differ in addition to the distinction between full-time and part-time employees.

7  
8       **Response:**

9       Headcount represents the total number of employees at a certain time. It includes all active and  
10       inactive (except inactive employees on long term disability) full-time regular (FTR), full-time  
11       temporary (FTT), part-time regular (PTR) and part-time temporary (PTT) employees. Each  
12       employee is counted as 1 headcount. Typically, the headcount information provided in the  
13       different tables and responses by FEI represents the Headcount as at the end of a year.

14       Full Time Equivalent (FTE) represents the average FTE count and is calculated using the  
15       average of monthly FTEs of the 12-month calendar (January to December). Monthly FTEs  
16       include all current (active) full-time regular (FTR), full-time temporary (PTT), part-time regular  
17       (PTR), and part-time temporary (PTT) employees at the end of the month. Monthly FTEs are  
18       calculated as follows:

- 19       • Each full-time employee is counted as 1 FTE if the employee meets the criterion of being  
20       an active employee at the end of the month.
- 21       • Total part-time hours for the month are calculated and converted into FTEs by dividing  
22       the total annual full-time hours, and then multiplying by 12 x working days including  
23       statutory holidays and divided by total days for the pay periods in the month.
- 24       • Part-time FTEs are added to the full-time employees counted to obtain the final FTE

25       The Headcount may vary significantly depending on the timing of the hire or termination date. If  
26       an employee meets the Headcount criteria and is employed at the end of the year, then that  
27       employee is counted as Headcount. FTEs reported are the average FTEs and this definition  
28       factors in the hiring and termination activities as well as the number of hours of work of part time  
29       employees throughout the year.

30       A full time regular employee is defined as working a minimum of 37.5 hours per week, whereas  
31       a part time regular employee is defined as working 37.5 hours bi-weekly.



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1  
2           1.2    Please explain how an increase of 69 FTEs corresponds to an increased  
3                    headcount of only 57. Is this due to part-time employees getting more hours?  
4

5    **Response:**

6    Contributing to the higher difference in FTEs (2017 forecast versus 2016 actuals) compared to  
7    the headcount (2017 forecast versus 2016 actuals) is the timing of employee hires. As  
8    mentioned in the response to BCSEA IR 1.1.1, the timing of the hiring/termination of the  
9    employees will impact the reported change in FTEs/headcount year over year.

10   For example, employees added closer to the end of 2016 will have less of an impact on the  
11   reported FTEs in 2016 (i.e. less than full FTEs) due to their late hiring in the year. However, the  
12   added employees are reported as part of the headcount (i.e. full headcount) at the end of 2016.  
13   When the same employees carryover into 2017 (i.e. the same employees that were added in  
14   late 2016), they are reported as full FTEs for 2017 and included in the headcount (i.e. full  
15   headcount) for 2017. In this example, FTEs will increase in 2017 compared 2016, reflecting  
16   their full year impact with headcount remaining the same.

17

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1   **2.0   Topic:           Service Quality Indicators – Customer Satisfaction Index**

2   **Reference:   Exhibit B-1, p.151, pdf p.161**

3           “The 2016 result was 8.8, higher than the 8.6 score in 2015. The June 2017 year-to-date  
4           average index score is 8.3, lower than the 8.7 score for the same period last year. Of the  
5           five measures that make up the overall score, year-to-date results were lower in all  
6           categories. Year-to date decreases from June 2016 to June 2017 were observed. The  
7           score for overall satisfaction and accuracy of meter reading decreased from 8.5 to 8.3  
8           and 8.4 to 8.1, respectively. The energy conservation information, contact centre and  
9           field services metrics decreased from 7.7 to 7.5, 8.9 to 8.2 and 9.4 to 8.9 respectively  
10          from June 2016 year-to-date to June 2017 year-to-date. Although not conclusive,  
11          customer comments and statistical analysis suggest that the lower 2017 year-to-date  
12          result may be associated with lower customer satisfaction with the cost of natural gas  
13          following commodity cost increases in October 2016, followed by a colder, wetter  
14          winter.”

15          2.1       Does FEI consider the decline in the customer satisfaction index score from 2015  
16          to 2016 and from June 2016 to June 2017 to be significant as distinct from being  
17          within measure’s range of accuracy? If so, why? If not, why not?  
18

19    **Response:**

20    The customer satisfaction index score increased from 8.6 in 2015 to 8.8 2016.

21    FEI does not consider the decline in the June 2017 year-to-date average index score compared  
22    to the June 2016 year-to-date average index score to be significant. This is because the  
23    variance of 0.3 is within the overall margin of error of  $\pm 0.3$  (i.e. the difference in scores may be  
24    attributable to observing a sample of the population instead of the whole population) and  
25    because FEI does not have any other information to suggest or support that this may be a  
26    significant and sustained variance. Analysis of customer feedback suggests concerns about  
27    the overall price that is paid for natural gas service is contributing to the decline, rather than  
28    degradation in service quality.

29    FEI has maintained relatively high Customer Satisfaction Index scores throughout the PBR  
30    period, and will continue to monitor the satisfaction results to determine if any additional action  
31    is required.

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1           2.2     In addition to the October 2016 commodity price increase and the “colder, wetter  
2                     winter” of 2016-2017, to what additional factors does FEI attribute the decline in  
3                     the customer satisfaction index score?  
4

5     **Response:**

6     As noted above, FEI believes that the most likely and largest contributing factors were the rate  
7     change in October of 2016 as well as the winter conditions experienced.

8     FEI also saw a minor decline regarding customer satisfaction for customer efficiency offer  
9     information, but the impact of this decline did not materially affect the overall index score.<sup>1</sup>

10    The decline in customer satisfaction regarding energy conservation information, as well as  
11    customer feedback through other channels, has led FEI to consider that existing energy  
12    efficiency communications may have become stale. As a result, the Company has developed  
13    and launched a new communication campaign this fall to help improve customer awareness and  
14    engagement on FEI’s energy efficiency and conservation offerings. The Company will track its  
15    performance over the next few waves of customer satisfaction research to determine if the  
16    changes are working as desired.

17  
18

19

20           2.3     What does FEI plan to do to respond to the decline in the customer satisfaction  
21                     index score?  
22

23     **Response:**

24     Please refer to the responses to BCSEA IRs 1.2.1 and 1.2.2.

25

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<sup>1</sup> A decline from 7.7 to 7.4 from June 2016 to June 2017, exceeding the established margin of error of +/- 0.2 for this category. The weighting for this category is 10% and, as such, the overall impact on the index score is a decline of 0.03.

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1    **3.0    Topic:            Annual GHG Emissions**

2            **Reference:    Exhibit B-1, section 13.3, pdf pp.165-166**

3            BCSEA-SCBC has compiled the following table showing FEI's reported annual GHG  
 4            emissions from 2009 to 2016:

	Estimated GHG Emission (tCO <sub>2</sub> e)
2009	171,312
2010	156,467
2011	137,059
2012	134,303
2013	127,940
2014	140,507*
2015	120,997
2016	124,077
Source: FEU 2014 LTRP Proceeding, Exhibit B-4, BCSEA 1.18.4; FEI 2015 PBR Annual Review Proceeding, Exhibit B-4, BCSEA 7.1; Current Proceeding, Exhibit B-2, p.145	
*Note: Reporting parameters may have changed.	

5  
 6            3.1            Please confirm that this table is accurate, or provide a corrected version.

7  
 8            **Response:**

9            The following table shows the corrected FEI reported annual GHG emissions:

Estimated GHG Emission (tCO <sub>2</sub> e)	
2009	161,793 <sup>#</sup>
2010	153,993 <sup>#</sup>
2011	137,059
2012	134,355 <sup>#</sup>
2013	127,940
2014	140,507*
2015	120,997*
2016	124,077 <sup>*a</sup>

10            *Source: FEU 2014 LTRP Proceeding, Exhibit B-4, BCSEA 1.18.4; FEI 2015 PBR Annual Review*  
 11            *Proceeding, Exhibit B-4, BCSEA 7.1; Current Proceeding, Exhibit B-2, p.145*

12            **Notes:**

13            <sup>#</sup> Previous values reported for 2009 and 2010 included vehicular emissions. The 2012 value was  
 14            adjusted slightly from 134,303 to 134,355.

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- 1 \* GHG Emissions for 2014-2016 adopted IPCC 4<sup>th</sup> Assessment Report for global warming potential.  
2 <sup>a</sup> Value reported to BC Ministry of Environment. GHG emission reported to Environment Canada and  
3 Climate Change was 126,613 tCO<sub>2</sub>e. The difference is attributed to differing reporting requirements.
- 4 The Environment Canada and Climate Change website provides GHG emission values for the  
5 organization based on the revised Global Warming Potential adopted in 2014 (as noted by the  
6 asterisk in the table provided above). Reporting using the Environment Canada Global  
7 Warming Potential standard provides a more comparable year to year comparison of GHG  
8 emissions. The revised GHG Emission values for FEI using the Environment Canada Global  
9 Warming Potential standard are as follows:

Estimated GHG Emission (tCO <sub>2</sub> e)	
2009	177,827
2010	171,059
2011	153,611
2012	150,648
2013	141,947
2014	140,507
2015	120,997

10  
11 Source: <http://www.ec.gc.ca/ges-ghg/default.asp?lang=En&n=8044859A-1>

12 Note: GHG emission values are based upon Global Warming Potentials from the Intergovernmental  
13 Panel on Climate Change 4<sup>th</sup> Assessment Report.

14  
15

16  
17 3.2 What measures did FEI take in 2016 to control and reduce its GHG emissions?  
18 Please provide an estimate of the cost of carrying out these measures.  
19

20 **Response:**

21 The 2016 programs designed for the direct reduction of GHG emissions or the improvement in  
22 GHG reporting estimates included leak detection and repair (LDAR), as well as a jointly  
23 sponsored transmission / distribution industry study on buried pipe leak emission factor  
24 estimates. The cost of the LDAR program is estimated to be approximately \$50 to \$100  
25 thousand per year. The cost of the industry study was approximately \$150 thousand and was  
26 shared between all participating Canadian member companies.

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1 In addition, there were both capital and O&M programs carried out that can result in reduced  
2 GHG emissions. The programs included a residential meter set redesign and replacement  
3 program, call before you dig (i.e. BC One Call), leak detection surveys along distribution lines,  
4 as well as the replacement of the compressor engine at the V1 compressor station. These  
5 programs are driven by reasons other than GHG emissions reduction, with the potential  
6 reduction in GHGs being a co-benefit that cannot be quantified. As a result, the costs of these  
7 programs are not attributable to GHG emissions reduction measures.

8  
9

10

11 3.3 How do these measures and their cost compare with measures taken in 2015?

12

13 **Response:**

14 The 2015 programs designed for the direct reduction of GHG emissions or the improvement in  
15 GHG reporting estimates included leak detection and repair surveys, similar to 2016.  
16 Expenditures for the leak detection and repair surveys were approximately the same for both  
17 2015 and 2016. FEI did not participate in any industry related studies on GHG emission factors  
18 in 2015.

19 The 2015 capital and O&M programs carried out that can result in a reduction in GHG  
20 emissions were similar to 2016 programs and included a residential meter set replacement  
21 program, call before you dig (i.e. BC One Call) and leak detection surveys along transmission  
22 and distribution lines. Activities not performed in 2015 compared to 2016 were the replacement  
23 of the VI compressor unit and the residential meter set redesign.

24

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26

27 3.4 How do these measures and their cost compare with measures taken in 2017,  
28 year-to-date and projected?

29

30 **Response:**

31 The 2017 programs designed for the direct reduction of GHG emissions or the improvement in  
32 GHG reporting estimates are similar to 2016 programs and include LDAR, as well as a jointly  
33 sponsored transmission / distribution industry study on buried pipe leak emission factor  
34 estimates. FEI is also continuing to participate in industry related studies to improve GHG  
35 estimates. The costs of these studies are expected to be slightly higher as year to date  
36 expenditures in industry related studies as well as forecast amounts have increased. Additional



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1 industry related study expenditures include \$13 thousand for improvements in the estimation of  
2 fugitive emissions from residential meter sets, and \$5 thousand for improvements on the vented  
3 emission related to gas analyzers.

4 The 2017 capital and O&M programs resulting in the potential reduction in GHG emissions are  
5 similar to past years and include a residential meter set replacement program, call before you  
6 dig (i.e. BC One Call) and leak detection surveys along transmission and distribution lines.

7

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1   **4.0   Topic:            Biomethane variance account rate rider**

2           **Reference:   Exhibit B-1, Appendix D, Draft Order, pdf p.288**

3           FEI seeks approval of a Biomethane Variance Account Rate Rider for 2018 in the  
4           amount of \$0.026 per gigajoule.

5           4.1    Is 2018 the first year for which FEI has sought approval of a Biomethane  
6           Variance Account Rate Rider?

7  
8    **Response:**

9    Confirmed. The Biomethane Variance Account (BVA) Rate Rider mechanism was approved in  
10   Order G-133-16 on August 12, 2016, which became effective October 1, 2016. As the Annual  
11   Review for 2017 Rates was already under way at that time, 2018 is the first year for which FEI  
12   has sought approval of the BVA Rate Rider.

13  
14

15  
16           4.2    Was there recovery of any portion of the Biomethane Variance Account in 2017?  
17           If so, what was the mechanism? Was it rolled into delivery rates or recovered  
18           through a rate rider?

19  
20   **Response:**

21   The BVA includes both accumulated costs, and recoveries through the BERC rate charged on  
22   sales of RNG to Biomethane customers. Consequently, in 2017, as in prior years of the  
23   program, the recoveries have been specifically from FEI's Biomethane customers and not from  
24   FEI's non-Biomethane customers.

25   This recovery mechanism remains the same cost recovery model approved in Decision G-210-  
26   13 and subsequent BERC rate Decision G-133-16. Accordingly, BERC rate recoveries go  
27   directly into the BVA to offset the biomethane costs and have not been rolled into delivery rates  
28   or recovered through a rate rider for any year prior to 2018.

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31  
32           4.3    Would it be a feasible option to recover through delivery rates the same amount  
33           that would be recovered through the proposed 2018 BVA rate rider? Please  
34           outline the pros and cons of each approach.

35

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1 **Response:**

2 Confirmed. It would be feasible to recover through delivery rates the same amount that would  
 3 be recovered through the proposed 2018 BVA rate rider. In the initial BERC Rate Methodology  
 4 Application FEI proposed to amortize unrecovered costs into delivery rates; however with  
 5 Decision G-133-16 the Commission directed FEI to set up a BVA Rate Rider to provide greater  
 6 transparency of the amount being recovered from all non-bypass customers.

7 As requested, the following table provides a simple comparison of recovery through  
 8 amortization into delivery rates versus as a BVA Rate Rider. In both scenarios the amount  
 9 recovered would be the same.

10 **Delivery Rate Amortization vs. BVA Rate Rider**

BVA Rate Rider	
Pros	Cons
<ul style="list-style-type: none"> <li>• Consistent with the 2013 Decision to use a rate rider</li> </ul>	<ul style="list-style-type: none"> <li>• Increased reporting requirements</li> </ul>
<ul style="list-style-type: none"> <li>• Recovers costs from non-bypass customers</li> </ul>	<ul style="list-style-type: none"> <li>• Actual recoveries will vary from forecast due to volumes varying from forecast</li> </ul>
Amortization Through Delivery Rates	
Pros	Cons
<ul style="list-style-type: none"> <li>• Simple and increased administrative efficiency</li> </ul>	<ul style="list-style-type: none"> <li>• May not be as transparent when considered against the current BVA reporting requirements of Decision G-133-16</li> </ul>
<ul style="list-style-type: none"> <li>• Recovers costs from non-bypass customers</li> </ul>	

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1   **5.0   Topic:            Biomethane revenue and volume**

2           **Reference:   Exhibit B-1, Table 10-9**

3           Table 10-9 indicates a long-term biomethane contract of 35.5 TJ and \$374,100 for  
4           Projected 2017. Note (a) states “The 2017 Projected assumes a Long Term contract  
5           with a start date of September 1, 2017.”

6           5.1       What are the consequences if the long-term biomethane contract referred to in  
7           Table 10-9 does not materialize in 2017, or at all?

8

9           **Response:**

10          The long-term biomethane contract referred to in Table 10-9 has been signed and filed with the  
11          Commission. FEI has asked for an effective start date of October 1, 2017. The contract is for a  
12          ten-year term with a minimum quantity of 71 TJ and a maximum quantity of 104 TJ during the  
13          contract term. Actual revenues received will be recorded in the BVA.

14

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17          5.2       Please provide an update on the biomethane (renewable natural gas) program,  
18          addressing whether the price reductions have impacted sales.

19

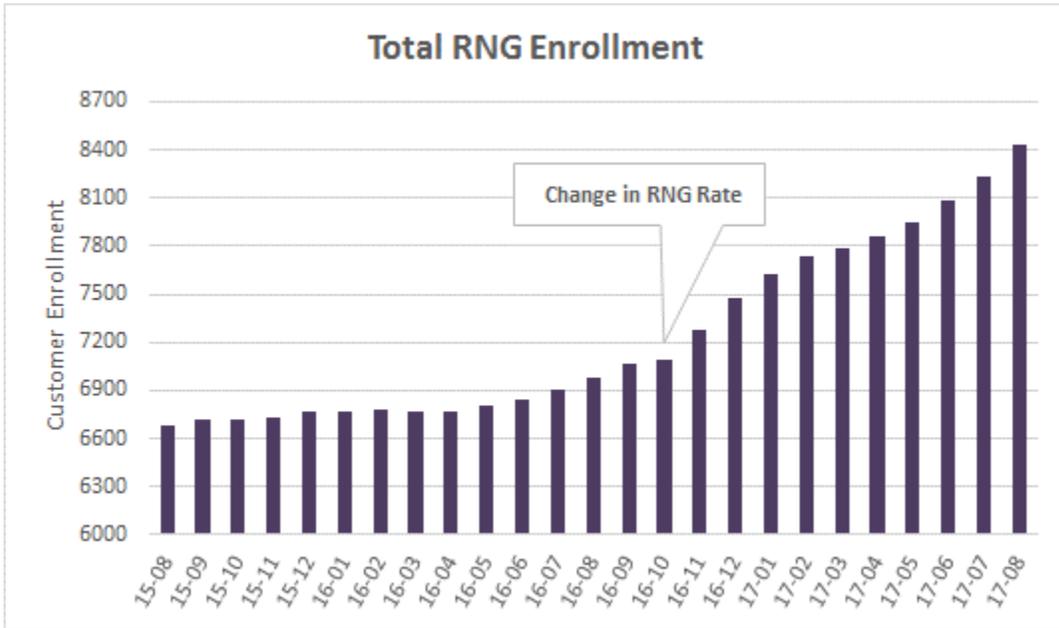
20          **Response:**

21          The enrollment and resulting sales of biomethane have increased since the change in rate  
22          structure that took effect on October 1, 2016.

23          FEI believes that one of the most significant indicators of the biomethane program’s success  
24          and acceptance by its customers is the participation rate. Based on the total enrolment in the  
25          program, there has been an increase in participation since the change in rate structure. As  
26          shown in the graph below, the total increase in enrolment for the period since the rate change  
27          (October 2016 through August 2017) was 1,343 customers. The same period for the prior year  
28          (October 2015 through August 2016) showed a total increase of 259 customers. This relative  
29          year over year increase in enrolment (approximately 5 times) is an indicator that the revised rate  
30          structure has stimulated enrolment in the RNG program.



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