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British Columbia Utilities Commission  
Sixth Floor, 900 Howe Street  
Vancouver, BC, V6Z 2N3  
Attn: Patrick Wruck, Commission Secretary

By Web Posting

Dear Sir:

Re: FortisBC Energy Inc. Annual Review for 2019 Delivery Rates ~ Project No.1598966,  
BCSEA-SCBC Final Submission

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This is the final submission of the interveners B.C. Sustainable Energy Association and Sierra Club B.C. pursuant to the regulatory timetable established by Order G-143-18 [Exhibit A2].

### 1. Background

The present proceeding concerns FEI's application<sup>1</sup> for approval of 2019 delivery rates and rate riders based on the Commission-approved PBR formula and review of FEI's 2017 performance under the PBR plan.

BCSEA-SCBC's interests in this proceeding are as non-profit public interest environmental and energy policy organizations, and as representatives of their members' interests as ratepayers of FEI. BCSEA-SCBC have participated fully in this proceeding. They made information requests to FEI and reviewed FEI's responses.<sup>2</sup> They reviewed FEI's responses to information requests by Commission staff and by other interveners.<sup>3</sup> BCSEA-SCBC reviewed FEI's evidentiary updates<sup>4</sup> participated in the October 2, 2018 workshop,<sup>5</sup> and reviewed FEI's responses to undertakings.<sup>6</sup>

### 2. Annual Review of 2017 PBR

One of the purposes of the annual review is to evaluate the implementation of the 2014-2019 PBR Plan. This is the second-last annual review under the current 2014-2019 Performance Based Ratemaking (PBR) Plan. FEI says that in the coming months it will apply to the Commission for approval of a new PBR Plan for 2020 and subsequent years. No doubt the experience with the 2014-2019 PBR Plan will be examined closely by all parties in the context of the forthcoming

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<sup>1</sup> Exhibit B-2.

<sup>2</sup> Exhibit B-4.

<sup>3</sup> Exhibits B-3, B-5, B-6.

<sup>4</sup> Exhibits B-2-1, B-2-2.

<sup>5</sup> Exhibit B-8; Transcript Vol.1, October 2, 2018.

<sup>6</sup> Exhibit B-9.

application for a successor PBR plan. BCSEA-SCBC intend to focus on the future PBR proposal as the point of reference for analyzing the pros and cons of 2014-2019 PBR Plan.

### **3. Delivery Rates for 2019**

For the reasons that follow, BCSEA-SCBC support FEI's current proposal for a delivery rate increase of 1.1 percent effective January 1, 2019 on an interim basis, and on a permanent basis.

In the application filed on August 3, 2018, FEI sought approval to maintain 2019 delivery rates at approved 2018 levels, holding the delivery charge and basic charge at existing levels. The proposal was to offset a 2019 revenue deficiency by amortizing a portion of the existing 2017 and 2018 Revenue Surplus deferral account. The 2018 delivery rates were at the same levels as the 2017 delivery rates. FEI's expectation when the Application was filed was that 2019 delivery rates would increase by 0.5% from 2018 delivery rates if the Revenue Surplus deferral account was not drawn down.

On September 26, 2018, FEI filed an evidentiary update indicating that the 2019 revenue deficiency had risen and that the 2019 delivery rate increase would be 1.1 percent if the Revenue Surplus deferral account was not drawn down. To avoid this rate increase, FEI again proposed to hold 2019 delivery rates at existing levels (before considering riders) by drawing down the Revenue Surplus deferral account.

This remained FEI's position during the workshop on October 2, 2018.<sup>7</sup> Slide 11 of FEI's presentation shows the estimated rates profiles<sup>8</sup> of "Option 1 – 0% increase" and "Option 2 – 1.1% increase." Option 1 was FEI's proposed option.<sup>9</sup> For reference, slide 11 is reproduced here:

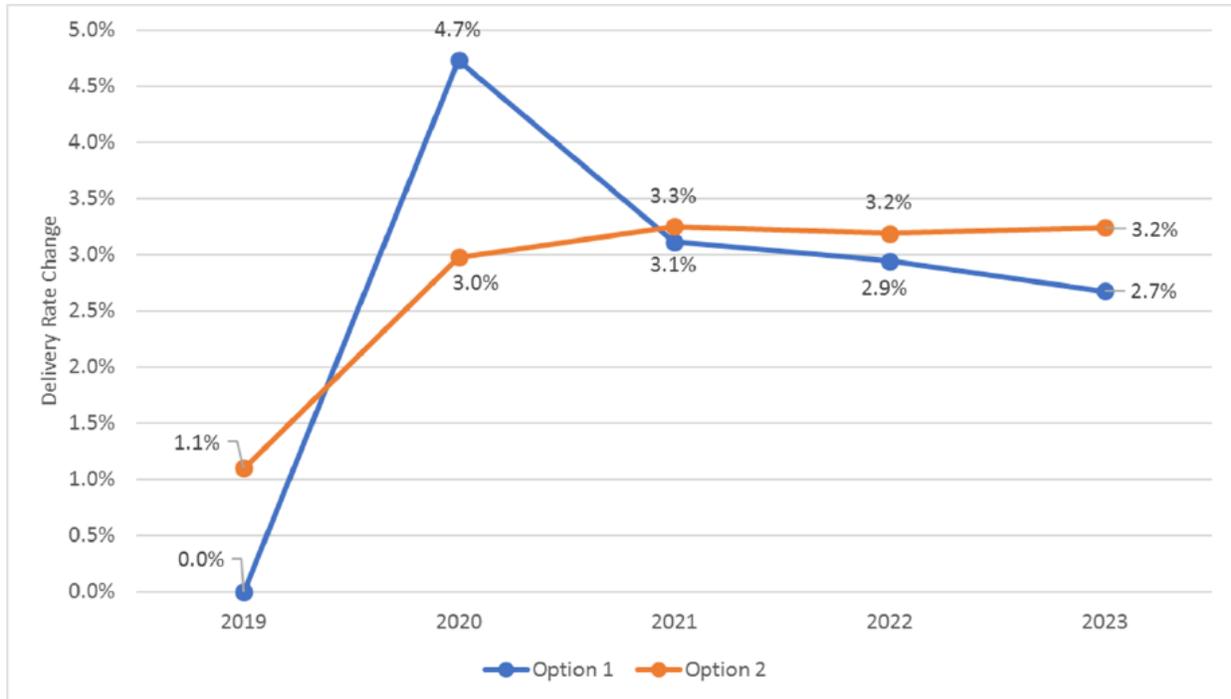
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<sup>7</sup> Transcript Vol. 1, page 36, lines 9-23.

<sup>8</sup> It is understood that Options 1 and 2 on Slide 11 are for illustrative purposes. Transcript Vol.1, page 117 line 20 to page 118 line 3.

<sup>9</sup> Transcript Vol. 1, page 46 line 25 to page 47 line 6.

## 2017/2018 Surplus Amortization Options



Option 1 – 0% increase, uneven amortization over 3 yrs

Option 2 – 1.1% increase, uneven amortization over 3 yrs



On October 19, 2018, FEI filed a request for approval of delivery rates and delivery rate riders on an interim and refundable basis for 2019.<sup>10</sup> The reason for the request for approval of interim and refundable rates for 2019 is the possibility that a Commission decision on FEI’s 2019-2022 DSM expenditure schedule, currently under review, will not be made in time for the Commission to approve 2019 rates on a final basis with enough lead time for implementation of new delivery rates on January 1, 2019. Notably, the request for interim rates approval was for an increase of 1.1 percent in delivery rates, corresponding to the projected 2019 revenue deficiency without drawing down the Revenue Surplus deferral account. The rationale for the requested interim and refundable 1.1 percent increase, without resort to the deferral account, was that “it would be preferable to have an interim rate increase and a potential refund to customers if the BCUC instead approves a rate freeze, rather than an interim rate freeze and then flowing through an increase if the BCUC approves one.”<sup>11</sup> BCSEA-SCBC agree with this rationale for the interim refundable rates being a 1.1% increase rather than a freeze.

<sup>10</sup> Exhibit B-10.

<sup>11</sup> Exhibit B-10, p.2.

On October 23, 2018, FEI filed an amendment to the application, seeking permanent approval of a delivery rate increase of 1.1 percent effective January 1, 2019.<sup>12</sup> In effect, FEI now proposed Option 2 instead of Option 1. FEI's rationale for its new position is as follows:

“As set out in the Application as amended, FEI is forecasting a \$8.679 million [\$6.319 million after tax] revenue deficiency at existing rates. FEI's original proposal was to draw down a portion of the 2017-2018 Revenue Surplus account to keep rates at 2018 levels. However, FEI is now proposing to recover the forecast 2019 revenue deficiency by increasing delivery rates by 1.1 percent. Flowing through a 1.1 percent delivery rate increase is preferable due to the rate smoothing benefits, which are shown on slide 11 of FEI's workshop presentation (Exhibit B-8). FEI is expecting an increase in rates in 2020 due to the Lower Mainland Intermediate Pressure System Upgrade (LMIPSU) project coming into service. [Exhibit B-1, p. 61; Transcript, p. 46, lines 15-24.] The combination of flowing through a 1.1 percent delivery rate increase in 2019 and preserving the 2017-2018 Revenue Surplus account balance for rate smoothing should result in overall smoother rates for customers over the next few years.”

This is a persuasive rationale. Looking at slide 11, Option 2 has a smoother profile than Option 1.<sup>13</sup>

BCSEA-SCBC agree that as a general principle, rate volatility is undesirable. Whether the long term trend is up, down or flat, it is preferred that the profile be smooth, not spiky.

BCSEA-SCBC concur that the 1.1% delivery rate increase in 2019 causes less rate volatility than does a rate freeze in 2019, recognizing the increased revenue requirement in 2020 due to LMIPSU coming into service.

The Revenue Surplus deferral account attracts a weighted average cost of capital return.<sup>14</sup> BCSEA-SCBC understand that the issue here is purely to do with the timing of increases in the delivery rate, i.e., that the issue does not involve the amount of revenue that ratepayers will provide to the utility. On that understanding, support approval of FEI's requested 1.1% delivery rate increase for 2019 on both an interim and refundable basis<sup>15</sup> and a permanent basis.

#### **4. Deferral Accounts**

FEI seeks approval of two new deferral accounts: 2019-2022 DSM Expenditures regulatory proceeding, and Transmission Integrity Management Capabilities (TIMC) CPCN development. BCSEA-SCBC support the creation both these deferral accounts.

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<sup>12</sup> Exhibit B-11.

<sup>13</sup> In retrospect, it's odd that the discussion at the workshop did not address which of Option 1 and Option 2 is the smoother rate profile. In any event, it now seems clear that Option 2 (1.1% increase) has a smoother rate profile than Option 1 (0% rate increase).

<sup>14</sup> Exhibit B-2, p.132.

<sup>15</sup> Presumably, approval of an interim and refundable rate effective January 1, 2019 is still required, as precaution in the event that a permanent rate decision is postponed due to the timing of a decision regarding the FEI 2019-2022 DSM expenditure schedule.

FEI also seeks approval of: a three-year amortization period for 2017 LTRP regulatory proceeding deferral account; and a five-year amortization period for the 2017 Rate Design Application deferral account. BCSEA-SCBC support these requests.

### **5. Biomethane Variance Account Rate Rider**

Among the specific approvals FEI seeks in this application is approval of Biomethane Variance Account (BVA) Rate Rider for 2019 in the amount of \$0.018 per gigajoule (GJ).<sup>16</sup>

BCSEA-SCBC support this request. BCSEA-SCBC have a strong interest in the Biomethane program because it reduces GHG emissions, one of the B.C. energy objectives. This is due primarily to displacement of natural gas that would otherwise be consumed by participants in the program. In addition, the program fosters the reduction of GHG emissions by the collection and destruction of biomethane that might otherwise be released directly to the atmosphere or flared. The Biomethane (Renewable Natural Gas) program allows FEI customers to ‘green their energy use’ and to support a valuable renewable energy resource.

### **6. Demand Forecast Methodology**

FEI’s forecast of demand for natural gas is based upon methods that are consistent with those used in prior years.<sup>17</sup>

Noting that FEI proposes increased levels of DSM spending in its 2019-2022 DSM expenditure schedule (currently under review by the Commission), BCSEA-SCBC asked FEI whether the increased DSM expenditures have already been factored into FEI’s energy and demand forecasts for the 2019 rates application. The answer was No. FEI explains:

“FEI forecasts use rates using a regression if a significant trend exists, or a 3-year average if a trend does not exist. The trend of decreased use rates due to DSM is already embedded in the forecast, and the only advantage of considering it separately would be if FEI expected a significant shift in the impact on use rates that was different than the annual impacts experienced in the past. Given the increase in spending over the 2019-2022 period that has been included in the DSM application there may be some impact that is incremental to the annual decreases we have observed in the past. FEI will review the final approved DSM plan for the potential for a step change impact once a decision is released, and in future years consider whether any adjustments need to be made.”<sup>18</sup>

BCSEA-SCBC accept this explanation.

### **6. Service Quality Indicators**

For SQI’s with benchmarks, FEI’s SQI results for 2017 are at or better than the benchmarks. For informational SQIs, performance is satisfactory and consistent with previous years.

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<sup>16</sup> Exhibit B-2, p.2.

<sup>17</sup> Exhibit B-2, p.24.

<sup>18</sup> Exhibit B-4, BCSEA IR 1.1.

Regarding Transmission Reportable Incidents,<sup>19</sup> two minor incidents involving a mud slide and erosion were reported for 2018. Asked whether it expects there to be more incidents relating to erosion or slides in the future, as a result of climate change induced extreme weather events, FEI states:

“It is reasonable to expect the potential for more incidents relating to erosion or land slides in the future, whether due to climate change or other factors. FEI has a robust Natural Hazards Reduction Program to monitor and mitigate potential areas of concern that could impact FEI assets.”<sup>20</sup>

BCSEA-SCBC acknowledge this response.

## 7. GHG Emissions from Operational Activities

In its Decision and Order G-138-15 regarding FEI’s annual review for 2015 rates, the Commission directed FEI to provide estimated annual GHG emissions (in tCO<sub>2</sub>e) reported to the Ministry of Environment.

FEI provided the following two tables and associated Notes showing FEI’s reported annual GHG emissions from 2009 to 2013 and from 2014 to 2017. The tables are separated because the assumed Global Warming Potential changed between the 2013 and 2014 results, as explained in the Notes. The difference can be seen in the jump from 2013 to 2014.

Estimated GHG Emission (tCO <sub>2</sub> e)	
2009	161,793
2010	153,993
2011	137,059
2012	134,355
2013	127,940

Estimated GHG Emission (tCO <sub>2</sub> e)	
2014	140,507 <sup>a</sup>
2015	120,997 <sup>a</sup>
2016	124,077 <sup>a</sup>
2017	137,903 <sup>b</sup>

Notes:

<sup>19</sup> Exhibit B-2, section 13.2.3, pdf p. 157.

<sup>20</sup> Exhibit B-4, BCSEA IR 6.2, pdf p.14.

\* GHG Emissions for 2014-2017 adopted IPCC 4th Assessment Report for global warming potential

\*a Value reported to BC Ministry of Environment. GHG emission reported to Environment Canada and Climate Change was 126,613 tCO<sub>2</sub>e. The difference is attributed to differing reporting requirements.

\*b Value reported to BC Ministry of Environment. GHG emission reported to Environment Canada and Climate Change was 142,534 tCO<sub>2</sub>e. The difference is attributed to differing reporting requirements.<sup>21</sup>

In order to compare the 2014-2017 figures to the 2009-2013 figures, FEI provided figures for 2009-2013 adjusted to the newer Global Warming Potential. The explanation followed by the table of adjusted figures is reproduced here:

“The Environment Canada and Climate Change website provides GHG emission values for the organization based on the revised Global Warming Potential adopted in 2014 (as noted by the asterisk in the table provided above). Reporting using the Environment Canada Global Warming Potential standard provides a more comparable year to year comparison of GHG emissions. The revised GHG Emission values for FEI using the Environment Canada Global 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

Two observations can be made. First, there is a steady downward trend in FEI’s adjusted reported annual GHG emissions from 2009 to 2016. Second, there is an uptick between 2016 and 2017. Asked to explain the reasons for the increase in its reported annual GHG emissions between 2016 and 2017, FEI states:

“In 2017, a combination of an increase in customer demand for natural gas, and maintenance related to the transmission pipeline contributed to the higher GHG emissions. The largest increase in GHG emissions was related to an increase in natural gas usage for compression and maintenance along the Coastal Transmission System. Natural gas usage in compression is related to customer demand while maintenance related activities along the transmission pipeline are based on a biannual schedule. Smaller increases were noted for natural gas

<sup>21</sup> Exhibit B-4, BCSEA IR 7.1.

consumption for line heaters and compression in the interior System which are attributed to an increase in demand in the region.”<sup>22</sup>

Asked to outline the measures it took in 2017 and 2018 year-to-date to control and reduce its GHG emissions, FEI states:

“FEI’s 2017 and 2018 year-to-date programs designed for the direct reduction of GHG emissions or the improvement in GHG reporting estimates included leak detection and repair (LDAR), as well as a jointly sponsored fugitive emission best management plan for distribution facilities, an industry study on residential meter set leak emission factor estimates, and an industry study on industrial meter set leak emission factor estimates. The cost of the LDAR program is estimated to be approximately \$50 to \$100 thousand per year while the contribution by FEI to the industry studies was approximately \$50 thousand.

In addition, there were both capital and O&M programs carried out that result in the potential reduction in GHG emissions. The programs included a continuation of the residential meter set replacement program, call before you dig (i.e. BC One Call), and leak detection surveys along distribution lines. These programs are driven by reasons other than GHG emissions reduction (i.e., public safety) with the potential reduction in GHGs as a co-benefit that cannot be quantified. As a result, the costs of these programs are not attributable to GHG emissions reduction measures.”<sup>23</sup>

Asked how the 2017 and 2018 YTD measures and their cost compare with measures taken in 2016, FEI states:

“FEI’s 2017 programs designed for the direct reduction of GHG emissions or the improvement in GHG reporting estimates included leak detection and repair surveys, similar to that completed in 2016. Expenditures for the leak detection and repair surveys increased slightly for FEI LNG operations as third party vendors using thermal imaging were used at the Mt. Hayes LNG plant. This resulted in an increase of approximately \$15 thousand to O&M cost. The estimated GHG emissions accounted for through LDAR programs in 2017 were approximately equal to 2016.

Industry studies conducted in 2017 were approximately equal in expenditures for industry studies in 2016. Emission factors developed in these 2017 studies have not been adopted in FEI annual GHG emissions reporting and will be implemented in the subsequent calendar year.

FEI’s 2016 capital and O&M programs carried out that resulted in the potential reduction in GHG emissions were similar to 2017 programs and included a residential meter set replacement program, call before you dig (i.e. BC One Call) and leak detection surveys along transmission and distribution lines.”<sup>24</sup>

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<sup>22</sup> Exhibit B-9, Undertaking 4, pdf.5.

<sup>23</sup> Exhibit B-4, BCSEA IR 7.2.

<sup>24</sup> Exhibit B-4, BCSEA IR 7.3.

Asked how the 2017 and 2018 YTD measures and their cost compare with measures expected in 2019 and into the future, FEI states:

“For existing programs, it is anticipated the cost of GHG emissions reduction programs will be similar to past years. These include residential meter set replacement program, call before you dig (i.e., BC One Call) and leak detection surveys along transmission and distribution lines.

Forecasting for industry studies is not available as projects for the next calendar year are proposed and selected annually in Q4.

The cost of Leak Detection and Repair Surveys at compressor and liquefied natural gas stations is expected to increase relative to 2017 levels. Use of thermal imaging devices by external third party accounts for this increase, as previous manual surveys were conducted using internal personnel time and resources. Cost is approximately \$15 to \$25 thousand per station; however, the rate of adoption by different assets may differ.

Lastly, other compliance measures associated with GHG emissions reporting and compliance requirements face uncertainty. Specifically, Environment and Climate Change Canada (ECCC) *Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compounds* are subject to equivalency agreements between ECCC with BC Ministry of Environment. Should ECCC requirements be adopted, additional O&M and capital compliance costs are expected. The timeframe associated with adopting these changes is not expected until 2020.<sup>25</sup>

BCSEA-SCBC see the information FEI has provided yearly through the PRR period as an important baseline regarding FEI’s efforts to reduce its own GHG emissions (as distinct from FEI’s customers’ GHG emissions, which is a different and considerably larger issue).

## 8. Conclusion

BCSEA-SCBC support approval of FEI’s proposed interim and permanent delivery rate increase of 1.1 percent effective January 1, 2019. BCSEA-SCBC support FEI’s requested remedies regarding deferral accounts and the BVA Rate Rider, and have no objection to approval of FEI’s other requested remedies.

Yours truly,

William J. Andrews



Barrister & Solicitor

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<sup>25</sup> Exhibit B-4, BCSEA IR 7.4.