

**BRITISH COLUMBIA UTILITIES COMMISSION**

**Revelstoke Propane Portfolio Cost Amalgamation  
Application**

**BCUC Project No. 1599033**

**Final Argument  
of  
Canadian Biomass Energy Research Ltd.**

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Matthew J. Jackson  
Barrister & Solicitor  
1116-207 West Hastings Street  
Vancouver, BC, V6B 1H7  
Phone: 604-842-5221  
Email: [matthew.john.jackson@gmail.com](mailto:matthew.john.jackson@gmail.com)

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## I. INTRODUCTION

### A. CBER Final Argument

1. This is the final argument of the intervener Canadian Biomass Energy Research Ltd. (CBER) in the Commission's proceeding regarding the FortisBC Energy Inc. (FEI) Revelstoke Propane Portfolio Cost Amalgamation Application (the "FEI Application"). This final argument responds to FEI's June 16, 2020 Final Argument.<sup>1</sup>

### B. CBER Background

2. Mr. Cornelius Suchy is CBER's CEO. Mr. Suchy is an engineer and physicist who specializes in wood-to-gas technology, and has resided in Revelstoke since 2002. CBER's interest in intervening in these proceedings arises from a) Mr. Suchy residing in Revelstoke and his concern for the sustainable development of the community; b) Mr. Suchy's professional opinion that Revelstoke is an ideal location for a wood-to-gas energy plant; and, c) Mr. Suchy's support for British Columbia's energy objectives and greenhouse gas emission reduction policies.

### C. The Application

3. On July 18, 2019, FEI submitted the present FEI Application seeking the Commission's approval of its proposal to amend FEI's Rate Schedules for the purpose of implementing a reduction of propane rates for FEI's approximately 1,700 Revelstoke piped propane residential and commercial customers and to increase natural gas rates for FEI's approximated 1,030,000 natural gas customers in the rest of British Columbia.<sup>2</sup> FEI relies on sections 58 to 61 of the *Utilities Commission Act* (UCA) for its request. By Order G-201-19 the Commission established a written public hearing process.<sup>3</sup>

### D. Summary of Argument

4. CBER opposes the FEI Application.

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<sup>1</sup> [https://www.bcuc.com/Documents/Arguments/2020/DOC\\_58373\\_2020-06-16-FEI-Final-Argument.pdf](https://www.bcuc.com/Documents/Arguments/2020/DOC_58373_2020-06-16-FEI-Final-Argument.pdf)

<sup>2</sup> B-1

<sup>3</sup> A-2

5. The FEI Application seeks approval of a fossil fuel cross-subsidy, i.e., a rate increase for all of FEI's natural gas customers to pay for a rate reduction for FEI's propane customers in Revelstoke. FEI argues that its application should be approved on the basis that it is unfair for Revelstoke customers to pay more for what FEI argues is the same service – i.e., burning “gas” for heat or other energy purposes.
6. The practical effect of approval of the application will be an ongoing transfer of an average of \$1.8 million<sup>4</sup> annually from FEI's natural gas customers to FEI's Revelstoke propane customers.
7. Another practical effect of the propane subsidy will be to potentially negatively impact competing low carbon energy providers, electric and wood appliance retailers, and installation tradespeople doing business in Revelstoke.
8. Over the coming decades, FEI's proposed propane subsidy would likely result in conversion of many of the 1,036 residential households within 30 metres of a FEI propane line that currently use energy other than propane into FEI propane customers.<sup>5</sup> It would also likely secure or increase FEI's 90% market share as the energy supplier for new buildings in Revelstoke, a rapidly growing ski resort community.<sup>6</sup>
9. Subsidized propane would also strengthen FEI's market position in the face of increased government climate change incentives that encourage the use of heat pumps and other low carbon fuels and technologies.
10. The proposed propane subsidy would likely result in significant increases of greenhouse gas (GHG) emissions that would not occur without the subsidy.
11. CBER submits that a better option would be for FEI to support the development of a wood-to-gas renewable natural gas (RNG) plant in Revelstoke. Construction of the plant would create well-paying jobs for the City of Revelstoke. Such a project would also support the achievement of British Columbia's energy objectives and GHG reduction

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<sup>4</sup> C1-4, CBER Evidence of Cornelius Suchy, Figure 6, Table 6, pdf p. 22.

See also: B-4, FEI response to BCSEA IR 1.11.5, pdf pp. 49-50, wherein the expected subsidy ranges from \$1.5 million in 2020 to \$2.0 million in 2029.

<sup>5</sup> B-1, FEI Application, pdf p. 19.

<sup>6</sup> B-16, FEI Response to BCUC IR 3.24.3, pdf. p. 14.

targets, and make British Columbia (B.C.) a potential world leader in wood-to-gas technology.<sup>7</sup>

12. CBER would support the five year cost averaging "Option B", as described in the FEI Application, as a reasonable means to achieve rate stability for Revelstoke propane customers without the negative effects of the proposed fossil fuel subsidy, should FEI choose to bring an application for Option B in the future.

## II. LEGISLATIVE FRAMEWORK

13. FEI relies on sections 58 to 61 of the UCA as the legal basis for its rate amendment application. CBER submits the following provisions set out the legal standard the Commission must apply in its consideration of the FEI Application:

Discrimination in rates

59. (1) A public utility must not make, demand or receive

(a) an unjust, unreasonable, unduly discriminatory or unduly preferential rate for a service provided by it in British Columbia, or

(b) a rate that otherwise contravenes this Act, the regulations, orders of the commission or any other law.

- (2) A public utility must not

(a) as to rate or service, subject any person or locality, or a particular description of traffic, to an undue prejudice or disadvantage, or

(b) extend to any person a form of agreement, a rule or a facility or privilege, unless the agreement, rule, facility or privilege is regularly and uniformly extended to all persons under substantially similar circumstances and conditions for service of the same description.

[...]

- (5) In this section, a rate is "unjust" or "unreasonable" if the rate is

(a) more than a fair and reasonable charge for service of the nature and quality provided by the utility,

(b) insufficient to yield a fair and reasonable compensation for the service provided by the utility, or a fair and reasonable return on the appraised value of its property, or

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<sup>7</sup> CBER acknowledges that CBER and other wood-to-gas organizations and professionals could benefit from a wood-to-gas facility being developed in Revelstoke. However, CBER's primary motivation as an intervener in this proceeding is not its own potential enrichment, but rather to oppose what it considers a fossil fuel subsidy and to support policies that will sustainably develop the community of Revelstoke and help to achieve B.C.'s energy and GHG reduction goals.

(c) unjust and unreasonable for any other reason.

#### Setting of rates

60. (1) In setting a rate under this Act

(a) the commission must consider all matters that it considers proper and relevant affecting the rate,

(b) the commission must have due regard to the setting of a rate that

(i) is not unjust or unreasonable within the meaning of section 59,

(ii) provides to the public utility for which the rate is set a fair and reasonable return on any expenditure made by it to reduce energy demands, and

(iii) encourages public utilities to increase efficiency, reduce costs and enhance performance,

[Underlining added for Emphasis]

14. CBER submits the Commission's analysis must focus on whether FEI's proposed rate amendments are unjust or unreasonable, including whether the rate amendments would result in undue prejudice or disadvantage to any person or locality, such as unfair economic prejudice or disadvantage, decreased energy efficiency, and whether the rate would serve to contravene applicable laws and regulatory principles.

15. CBER submits that a critical factor in the just and reasonableness analysis the Commission must undertake is whether the amended rates will serve to contravene or to support the achievement of B.C. GHG reduction targets mandated by the *Climate Change Accountability Act* and the applicable energy objectives prescribed in section 2 of the *Clean Energy Act*, which are as follows:

2 The following comprise British Columbia's energy objectives:

[...]

(d) to use and foster the development in British Columbia of innovative technologies that support energy conservation and efficiency and the use of clean or renewable resources;

[...]

(h) to encourage the switching from one kind of energy source or use to another that decreases greenhouse gas emissions in British Columbia;

(i) to encourage communities to reduce greenhouse gas emissions and use energy efficiently;

- (j) to reduce waste by encouraging the use of waste heat, biogas and biomass;
- (k) to encourage economic development and the creation and retention of jobs;
- (l) to foster the development of first nation and rural communities through the use and development of clean or renewable resources;

### III. ARGUMENT

#### A. The Proposed Propane Cross-Subsidy Distorts Market Prices to the Prejudice of FEI's Natural Gas Customers

16. FEI says its existing Revelstoke propane customers are paying unjustly high rates for propane. FEI argues that the bill increase of approximately \$2 annually for FEI's natural gas customers is small and the effect is outweighed by the significant financial benefit that its Revelstoke propane customers will receive by paying natural gas prices for propane. FEI further argues that the proposed subsidy represents the least-cost solution for FEI to address the higher and more volatile rates of propane in Revelstoke, as compared to paying for a physical or virtual LNG pipeline.<sup>8</sup>
17. An analogy with gasoline and diesel demonstrates how FEI's argument that the same price should be paid regardless of product type is problematic. In Vancouver, diesel presently costs more than gasoline. Is it unfair that Vancouver customers of PetroCanada who purchased a diesel vehicle have to pay more than customers who purchased similar gasoline vehicles? Should PetroCanada therefore "amalgamate" the prices of gasoline and diesel by increasing the cost of gasoline and decreasing the price of diesel? CBER submits that the answer to these questions is no. This would be unfair to gasoline customers, and would distort the decision-making of car consumers to the detriment of different vehicle retailers. The problem is not the energy cost of the different fuels, it is the type of vehicle that was purchased. In a market with competing fuels, the rational consumer will tend to purchase the least cost option, all else being equal. Thus, the rational consumer will invest in a gasoline vehicle because it uses a lower-cost fuel. This will solve the "problem" of the higher fuel price of diesel. Similarly, Revelstoke energy consumers will make rational future purchasing decisions in response to market

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<sup>8</sup> B-2, Response to BCUC IR 1.3.1, pdf p. 21; FEI Final Argument, paras. 2, 39 to 45.

prices of propane and other fuel types, for example, by installing a heat pump rather than a propane furnace. Propane price is not a problem that needs to be fixed.

18. In addition to artificially changing price differentials in the Revelstoke energy market, FEI proposes to impose an artificially higher natural gas rate for its natural gas customers with no benefit to them. The fact that the proposed natural gas rate increase would be small on an individual basis because there are so many more natural gas customers than propane customers does not eliminate the prejudice to natural gas customers. They are still unduly prejudiced.

19. FEI also argues that that the rate subsidy proposal is the “least cost” option to provide natural gas (or natural gas prices) to Revelstoke customers. FEI argument relies on an implied assumption that all communities in B.C. should have natural gas service (or prices), and if they do not, then they are prejudiced. CBER submits that FEI’s Revelstoke propane customers do not have a right to natural gas service (or prices) such that FEI’s natural gas customers are required to provide propane at natural gas prices to Revelstoke customers.

**B. FEI’s Revelstoke Customers Do Not Pay More Than Natural Gas Customers on a Dollar Per Year Basis**

20. FEI asserts that the average Revelstoke propane customer pays more than its natural gas customers for the same service.<sup>9</sup> This is correct on a \$/GJ basis, but not correct on a \$/year basis

21. FEI’s Revelstoke propane customers use on average 50 GJ of propane per year, compared to FEI’s natural gas customers who use on average 90 GJ of natural gas per year. Consequently, FEI’s Revelstoke propane customers and its natural gas customers pay a similar amount on an annual \$/year basis, as the following figure illustrates.

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<sup>9</sup> B-1, FEI Application, pdf p. 8.

**Revised Figure 2-2 – Comparison of Total Residential Bills<sup>10</sup>**



22. The propane subsidy would result in an average annual bill reduction of \$407 (45% reduction) for Revelstoke customers.<sup>11</sup> This would mean that FEI’s Revelstoke customers would pay significantly less than the average natural gas customer on a \$/year basis, assuming use per customer remains constant.<sup>12</sup>
23. It is further submitted that the City of Revelstoke’s submission in support of the FEI Application, that the rate subsidy will make propane rates “more in tune with what the other residents of British Columbia are now paying”, and that its citizens struggle to “put food on their table at the same time as heating their homes” because of this unequal treatment,<sup>13</sup> does not accord with the fact that Revelstoke FEI customers pay approximately the same amount each year for the desired level of energy service as FEI customers in the rest of the province. In addition, there is no reasonable expectation, let alone legal requirement, that FEI customers in different communities with different levels of consumption should have similar annual bills.
24. CBER submits that the propane subsidy would unjustly benefit FEI’s Revelstoke propane customers.

<sup>10</sup> B-4, FEI response to BCSEA IR 1.5.5, pdf p. 28.

<sup>11</sup> B-1, FEI Application, pdf p. 24.

<sup>12</sup> In CBER’s view the lower propane price will increase propane UPC over time, thus the \$/year differential would slowly narrow. However, FEI argues that propane use will not meaningfully increase due to price inelasticity of demand: B-2, FEI Response to BCUC IR 1.6.1, pdf p. 32.

<sup>13</sup> C3-2, City of Revelstoke Letter of Support.

### **C. The Proposed Propane Subsidy Will Create Unjust Economic Effects**

25. FEI frames its application as being beneficial not only for its Revelstoke customers but for the Revelstoke community at large. The City of Revelstoke asserts the propane subsidy will relieve poverty, and local business Downie Timber asserts it will positively impact its business and thereby benefit the local economy.
26. CBER respectfully submits that the evidence indicates that: a) the evidence does not support the conclusion that propane cost savings for FEI's commercial customers will benefit the local economy; b) the propane subsidy will likely harm local businesses that sell products that compete with propane and propane appliances; and c), the subsidy from natural gas customers will likely disproportionately benefit Revelstoke's wealthier community members, not its residents living in poverty.

### **D. No Evidence that the Propane Subsidy will Benefit the Local Economy**

27. Only 39% of the \$1.8 million annual subsidy will benefit FEI's residential customers.<sup>14</sup> Approximately \$1.2 million of the proposed subsidy will go to FEI's commercial customers, with approximately \$0.3 million to one customer, Downie Timber.<sup>15</sup> FEI argues that increased profitability of local businesses will benefit Revelstoke's economy.
28. CBER submits that FEI and the local business intervener Downie Timber have not provided any probative evidence that the cost savings to commercial businesses will in fact benefit the Revelstoke economy directly through increased jobs or profits to locally owned business.
29. Downie Timber is the only FEI commercial propane customer who provided substantive evidence on the propane subsidy's impact on a Revelstoke commercial business, stating it would receive over \$300,000 from the propane subsidy. Downie Timber's states that it has a "market disadvantage" due to the high cost of propane that impacts on its "continued success".<sup>16</sup> The Commission has been provided with no evidence regarding Downie Timber's annual gross revenues or whether it is profitable, or whether any increased profits from the propane subsidy would be invested into local jobs in Revelstoke rather than into dividends for its shareholders. CBER therefore submits that

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<sup>14</sup> C1-4, CBER Evidence of Cornelius Suchy, Figure 6, Table 6, pdf p. 22.

<sup>15</sup> Ibid. See also: C4-2, Downie Timber Evidence, p. 1.

<sup>16</sup> C4-2, Downie Timber Evidence, p. 2.

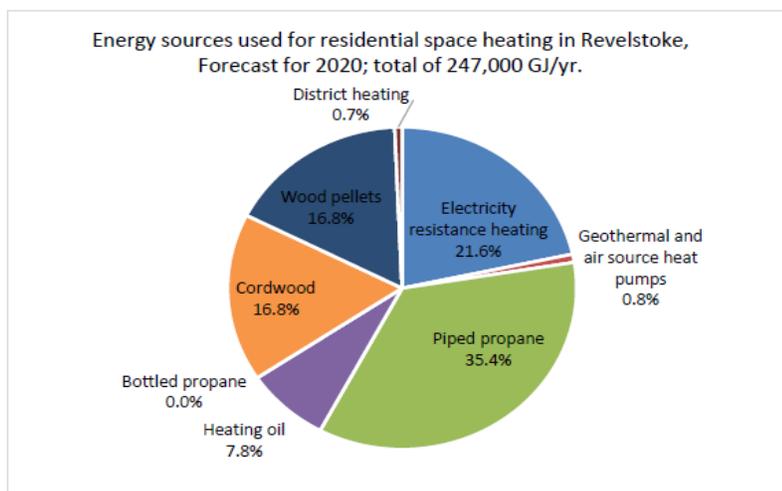
Downie Timber's vague comments on the impact of the propane subsidy on its business are of no probative value on the issue of whether the propane subsidy will result in positive impacts on Revelstoke's economy.

30. CBER submits the evidence before the Commission does not support FEI's assertion that the proposed propane subsidy will benefit the Revelstoke economy, and should therefore be given no weight in the Commission's factual determinations.

**E. The Propane Subsidy will likely Harm Local Businesses that Sell Products that Compete with Propane and Propane Appliances**

31. FEI currently provides propane to a little less than half of Revelstoke households.<sup>17</sup> Overall, FEI propane currently accounts for 35% of energy use for residential heating purposes, whereas wood and electricity account for 55%, as demonstrated in the Figure below.<sup>18</sup>

**Updated Figure 3: Energy use for residential heating purposes in Revelstoke, in GJ per year**



32. FEI's Revelstoke customers currently use on average less propane than FEI's natural gas customers (50 GJ v. 90 GJ, annually). CBER submits that the reason for the lower average use of propane as compared to natural gas customers, despite Revelstoke's

<sup>17</sup> B-1, FEI Application, pdf p. 5. FEI has approximately 1,500 propane customers, residential and commercial, in Revelstoke. C1-4, CBER evidence of Cornelius Suchy, pdf p. 22, para. 19. In 2016 there were 3,252 private dwellings total in Revelstoke according to Statistics Canada 2016 census.

<sup>18</sup> C1-9, CBER Response to FEI IR 1.4.1, pdf. p. 14

comparatively cold climate, is likely due to the use of wood and/or electric heating as a secondary heat source.<sup>19</sup>

33. The propane subsidy will make propane cost-competitive with wood and electricity for heat pumps, and less expensive than wood pellets, than in the status quo, as the following chart demonstrates:

**Price of Different Energy Sources in Revelstoke<sup>20</sup>**

Energy Source/Appliance Type	\$ per GJ of Heat (Mr. Suchy's Evidence, Table 1)
Electric Heat Pump	14.7
Cordwood	16.2
Propane (PPCA)	18.3
Pellets	24.8
Propane (Current)	28.3
Electric Baseboard	37.8
Heating Oil	41.5

34. CBER submit that the subsidized propane price would induce increased use of propane or full conversion to propane for heating, because of the new price differentials with competing fuels. This would harm wood and wood pellet retailers, such as Revelstoke Equipment Rental and Rough Country Marine.<sup>21</sup>

35. CBER submits that Downie Timber's evidence indicates the propane subsidy may negatively impact local utility RCEC. Downie Timber currently pays more for propane (\$14.45/GJ<sup>22</sup>) than for RCEC steam (\$10.44/GJ<sup>23</sup>), and that with the proposed subsidy it would pay less for propane (\$7.34/GJ<sup>24</sup>) than for RCEC steam. Accordingly, CBER submits that approval of the propane subsidy would encourage Downie Timber to stop using RCEC steam once its contract expires. This would result in a transfer of the monies currently paid to RCEC, a public owned utility that employs people in Revelstoke, to FEI.

<sup>19</sup> C1-4, Evidence of Cornelius Suchy, paras. 6-11, pdf pp. 4-5.

<sup>20</sup> B1-9, FEI Response to BCUC IR 3.24.7, pdf p. 18.

<sup>21</sup> CBER Response to BCOAPA IR 1.1.7, pdf p. 3.

<sup>22</sup> C4-2, Downie Timber Evidence, p. 1.

<sup>23</sup> Ibid., p. 3.

<sup>24</sup> Ibid., p. 1.

36. Residential customers would also be more likely to purchase other propane appliances, such as jacuzzies and stovetops, rather than electric appliances, than with the current propane price. This would harm local retailers of these appliances.

37. For reasons stated above, CBER submits that the proposed propane subsidy will likely harm the businesses of competing energy suppliers and retailers of electric and wood appliances.

**F. The FEI Subsidy will likely Disproportionately Benefit Revelstoke's Middle and High Income Community Members**

38. As noted above, the Mayor of Revelstoke asserts that FEI's propane rates should be "more in tune" with what residents in the rest of B.C. pay because the citizens cannot afford to both pay for food and for heating their homes. This suggests that Revelstoke FEI customers pay more than FEI customers in the rest of the province, and that Revelstoke's FEI customers are suffering from unaffordable energy expenses that the subsidy would alleviate. CBER respectfully submits that the evidence does not support the Mayor's assertions.

39. Firstly, as noted above, FEI's Revelstoke customers in fact pay about the same on an annual basis as FEI's natural gas customers, due to lower UPC for Revelstoke propane customers.

40. Secondly, Revelstoke residents have a somewhat higher average income and lower average rent and utility costs than the average community in B.C., indicating Revelstoke is not more unaffordable than other communities in B.C.<sup>25</sup> There is a significant proportion of the Revelstoke community living in poverty, but the evidence does not suggest the poverty rate is different from other communities in B.C.<sup>26</sup>

41. CBER submits that it is unlikely that a large number of low-income residents of Revelstoke are FEI propane customers. This is because low-income residents tend to live in low cost housing, which in Revelstoke primarily consists of one bedroom rental units in apartment buildings, which are heated primarily by electricity.<sup>27</sup>

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<sup>25</sup> Evidence of Cornelius Suchy, paras. 19-21, Appendix A, B, C.

<sup>26</sup> Ibid.

<sup>27</sup> Ibid., paras. 19-26.

42. CBER submits that FEI residential propane customers are most likely to be middle- and high-income residents who live in single family homes. CBER therefore submits that it is likely that the propane subsidy the Mayor supports for the purpose of helping Revelstoke's residents living in poverty will instead provide the greatest benefit to Revelstoke's middle- and high-income residents.
43. The propane subsidy will also benefit the 90% of future residents or seasonal residents of Revelstoke who purchase new residences heated by propane and have pre-installed propane appliances. These future purchasers and residents will likely be high income persons coming from outside of Revelstoke, in light of Revelstoke's expensive real estate.
44. CBER respectfully submits that the City of Revelstoke's assertion that the propane subsidy will help residents facing an unaffordability crisis is not supported by any of the evidence, and should be rejected by the Commission.

**G. The Proposed Rate Subsidy Will Result in Greater Increases in GHG Emissions than Would Otherwise Occur**

45. CBER submits that the proposed propane subsidy will likely result in substantial increases in GHG emissions the City of Revelstoke as compared to what would likely occur without the propane subsidy.
46. The GHG emissions increases will likely result from: i) Revelstoke residents who currently use electricity and wood to heat their households converting to propane for heating as well as for other appliances, and ii) from the connection of new residential and commercial buildings to FEI's propane service and installation of propane heating systems and other appliances at the time of construction. These installations will be more likely to occur over the coming decades due to lower costs to the users of these heating systems and appliances, created by the subsidy.
47. CBER submits that without the propane subsidy it would be much more likely that current households and future buildings would use electric or wood heating technologies and other appliances.
48. FEI argues that conversion of Revelstoke heating oil users to propane will result in GHG emission reductions. CBER agrees this is correct. However, the emission reductions, at

100 metric tonnes of CO<sub>2</sub>e per year, is very small, since heating oil only covers 5% to 8% of Revelstoke's heat energy demand, and greatly outweighed by the potential for CO<sub>2</sub>e increases that will likely result from the proposed propane subsidy.<sup>28</sup>

49. CBER submits that FEI's argument regarding the price signal of subsidized propane creating no or very little impact on Revelstoke residents' decisions to convert to propane, should be given little weight by the Commission.
50. CBER submits that, over the long term, basic economic principles dictate that the price signal of subsidized propane being less expensive considering fuel and capital costs than wood and electric alternatives, will result in substantially more market dominance of subsidized propane than would otherwise occur.
51. In addition, FEI's application focusses on the conversions of existing buildings to propane, and ignores new builds. While conversions are important, new builds are more important in the long term considering Revelstoke's growth potential as a ski resort community, as FEI states that 90% of new builds are currently being connected to propane at current prices.<sup>29</sup> CBER submits the subsidized propane rate would further entrench propane as the preferred energy choice for new builds, and potentially result in an even greater percentage of new builds using propane as the primary energy source, rather than installing low GHG electricity or wood heating systems, and other appliances like jacuzzies, stovetops, barbeques and water heaters.
52. The consequences of Revelstoke residents converting from low GHG energy sources to propane are significant increases in GHG emissions. For example, FEI's evidence is that the potential GHG emission consequences of all Revelstoke residents converting from wood to propane would result in increased emissions of 4,206 metric tonnes of CO<sub>2</sub>e per year in 2020.<sup>30</sup> CBER does not submit that all wood users in Revelstoke will convert to propane in 2020 as a result of the subsidy, or even in the next 20 years – the rate of conversion will likely be lower. However, even a 50% conversion rate from wood to propane between now and 2040 would result in an increase of over 2,000 metric tonnes CO<sub>2</sub>e per year, which is 1,900 metric tonnes CO<sub>2</sub>e per year more than the maximum possible from conversions of households using heating oil to propane.

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<sup>28</sup> B-10, FEI Response to CEC IR 2.12.1, pdf pp. 2-3.

<sup>29</sup> B-18, FEI Response to BCSEA IR 3.24.3, pdf p. 14.

<sup>30</sup> B-7, FER Response to BCUC IR 2.17.2, pdf pp. 15-17.

53. In addition, FEI states in response to BCUC IR 3.24.3 that government policies in support of the installation of heat pumps present a “challenges” to FEI.<sup>31</sup> CBR submits that this statement means that one of the likely effects of the proposed propane subsidy is that it will reduce the number of heat pumps installed in existing residences and new buildings, despite government policies in support of heat pumps.
54. For the reasons stated above, CBER submits that the propane subsidy is likely to result in major GHG emission increases for the City of Revelstoke, contrary to the GHG emission reductions targets mandated by the *Climate Change Accountability Act*, and therefore renders this rate application contrary to applicable laws and unreasonable pursuant to s. 59 of the UCA.

#### **H. FEI’s Focus for Revelstoke Should Be On Acquiring Renewable Natural Gas from a Wood-to-Gas Plant**

55. CBER supports the idea of FEI purchasing Renewable Natural Gas (RNG) from a potential gas-to-wood energy plant in the Revelstoke area as an FEI initiative that should be pursued instead of a propane subsidy.<sup>32</sup>
56. The provincial government’s CleanBC plan sets a target of 15% renewable gas by 2030. FEI itself has publicly committed to that target. CBER applauds FEI’s commitment. Achieving this target will be a challenge. B.C. does not have enough arable land and enough agriculture to meet this target solely through anaerobic digestion, the most mature renewable gas technology. The province is realizing that it will have to use much more abundant forestry-based resources to meet this target.
57. As the Commission is aware, FEI has recently completed a 20-year purchase agreement with REN Energy for approximately 1 million GJ/year of RNG from a wood-to-gas plant to be built in Fruitvale, BC.
58. Like Fruitvale, Revelstoke has an abundance of waste wood. Indeed, local business Downie Timber alone produces enough wood waste to supply enough renewable gas to supply all of FEI’s current Revelstoke propane customers. Revelstoke also has FEI’s

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<sup>31</sup> B-16, FEI Response to BCUC IR 3.24.4, pdf p. 15.

<sup>32</sup> CBER acknowledges that an RNG contract and a wood-to-gas demonstration plant are not before the Commission for approval.

closed piped propane system, which could be used to deliver the RNG to FEI customers. The RNG could be mixed with propane to mitigate costs involved in equipment conversions necessary for pure RNG. While the RNG would be physically delivered to Revelstoke customers it would be notionally delivered to the FEI system and purchased on a notional basis by FEI customers across BC (including FEI customers in Revelstoke if they so choose). By displacing higher-carbon propane instead of natural gas, RNG delivered to FEI's Revelstoke system would produce more GHG reductions than RNG that displaces natural gas.

59. CBER submits that an FEI initiative to buy RNG from a wood-to-gas plant in Revelstoke would create direct positive economic impacts for the City of Revelstoke in the form of construction, maintenance and operations jobs. In addition, use of piped propane would be reduced, BC GHG emissions would be reduced, additional value would be added from the forestry sector, and FEI customers across BC would have an expanded opportunity to purchase RNG.

### **III. CONCLUSION**

60. For all the reasons stated above, CBER submits the FEI Application should not be approved.

All the above is respectfully submitted.

Yours truly,

Matthew J. Jackson



Barrister & Solicitor

Legal Counsel for CBER

cc. Distribution List by email