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British Columbia Utilities Commission Suite 410, 900 Howe Street Vancouver, BC V6Z 2N3

### Attention: Mr. Patrick Wruck, Commission Secretary

Dear Sirs/Mesdames:

### Re: FortisBC Energy Inc. 2019 and 2020 Revenue Requirements Application for the Fort Nelson Service Area ~ Project No. 1598970

We enclose for filing in the above proceeding the Final Argument of FortisBC Energy Inc., dated January 11, 2019.

Yours truly,

### FASKEN MARTINEAU DUMOULIN LLP

[Original signed by]

Christopher Bystrom

Encl.

# BRITISH COLUMBIA UTILITIES COMMISSION IN THE MATTER OF THE UTILITIES COMMISSION ACT,

# R.S.B.C. 1996, CHAPTER 473

and

FORTISBC ENERGY INC.

# APPLICATION FOR 2019 AND 2020

# **REVENUE REQUIREMENTS AND RATES FOR THE**

# FORT NELSON SERVICE AREA

FINAL SUBMISSION OF FORTISBC ENERGY INC.

JANUARY 11, 2019

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#### PART ONE: INTRODUCTION

1. FortisBC Energy Inc. ("FEI") filed its Application for 2019 and 2020 Revenue Requirements and Rates for the Fort Nelson Service Area (the "Application") on September 4, 2018.<sup>1</sup> FEI filed an Evidentiary Update on November 19, 2018.<sup>2</sup> As described in the Application and as updated, FEI respectfully requests approval of the following, subject to updates in FEI's compliance filing for impacts of the BCUC's decision on FEI's 2019-2022 Demand Side Management (DSM) Expenditures Application:

- (a) A permanent delivery rate increase of 4.41% effective January 1, 2019 to recover the forecast revenue deficiency of \$102 thousand in 2019;
- (b) An additional permanent delivery rate increase of 8.25% in 2020 to recover the incremental forecast revenue deficiency of \$180 thousand in 2020;
- (c) The RSAM rider to be set to \$0.199 per GJ (a decrease of \$0.192 per GJ compared to 2018) effective January 1, 2019;
- (d) The following deferral account requests:
  - The creation of a rate base deferral account for the 2019-2020 Revenue Requirement Application costs with an amortization period of two years beginning 2019;
  - To begin amortizing the 2017 Rate Design Application deferral account, as approved in BCUC Order G-162-16, in 2019 over a five-year period; and
  - To continue to delay disposition of the non-rate base Fort Nelson First Nations Right-of-Way Agreement deferral account to the next revenue requirement proceeding.

<sup>&</sup>lt;sup>1</sup> Exhibit B-1, Application.

<sup>&</sup>lt;sup>2</sup> Exhibit B-1-1.

(e) A CPCN for an extension of FEI's distribution system in FEFN resulting from its purchase of the gas distribution assets from Prophet River First Nation ("PRFN"), with 53 residential and six commercial properties currently attached to the system.

2. FEI provided an updated Draft Order in Appendix C of Exhibit B-1-1. FEI hereby requests that the BCUC maintain the existing interim rates for FEFN, which were approved by BCUC Order G-171-18, until such time as it has issued its decisions in this Application and the FEI 2019-2022 DSM Application. Shortly after both decisions are issued, FEI will submit a compliance filing to the BCUC reflecting the impacts of the decisions and apply for permanent rates including a proposal for handling any difference between interim and permanent rates.

3. The requested rates are required to recover the costs of service to customers in the Fort Nelson Service Area ("FEFN"). Based on the forecast energy demand for FEFN, FEFN's forecast revenue at 2018 Approved rates is not sufficient to recover FEFN's required revenue requirement over 2019-2020 (the "Test Period"). Specifically, there is a revenue deficiency of \$102 thousand in 2019, and \$180 thousand in 2020, for a cumulative 2020 revenue deficiency of \$282 thousand compared to the forecasted 2020 revenue at the 2018 Rate Design Application ("RDA") Rates.<sup>3</sup>

4. Pursuant to Order G-171-18 issued on September 13, 2018 establishing the regulatory timetable for the proceeding, the BCUC approved an interim, refundable delivery rate increase for FEFN of 4.37% effective January 1, 2019.<sup>4</sup> According to the regulatory timetable, one round of information requests ("IRs") was ordered for the proceeding.<sup>5</sup> IRs were received from the BCUC, as well as the Commercial Energy Consumers Association Of British Columbia ("CEC"). FEI responded to these IRs on November 19, 2018. On December 10, 2018,

<sup>&</sup>lt;sup>3</sup> Exhibit B-1-1.

<sup>&</sup>lt;sup>4</sup> Exhibit A-2.

<sup>&</sup>lt;sup>5</sup> Exhibit A-2.

the BCUC directed FEI to respond to a number of Panel IRs.<sup>6</sup> FEI responded to the Panel IRs on December 21, 2018. FEI submits that the evidence provided in this proceeding demonstrates that the approvals sought are just and reasonable and in the public interest.

5. The remainder of this submission will address the areas of the Application that were the focus of information requests during the proceeding.

#### PART TWO: 2016 RATE DESIGN APPLICATION FOR FORT NELSON SERVICE AREA

6. This is the first revenue requirements for FEFN since the conclusion of FEI's rate design proceeding, which included the first comprehensive review of FEFN's rate design.<sup>7</sup> In its RDA, FEI proposed a number of changes to FEFN's rate design, which the BCUC approved in its RDA Decision.<sup>8</sup> These changes were implemented on January 1, 2019.<sup>9</sup>

7. The impacts of the rate design changes for FEFN are incorporated into the proposed rates for FEFN. As shown in Table 2-3 at p. 12 of the Application, the total bill impact due to the RDA Decision and the revenue requirement changes for 2019 and 2020, to be experienced by each Rate Schedule, including Residential, is less than 10% in each year. Accordingly, FEI is not proposing any mitigation mechanism to address the total rate impact.<sup>10</sup>

8. Given that FEFN's residential customers would still experience a rate impact from moving to FEI's rates, and that FEI has not yet filed for approval of 2020 rates, FEI is not proposing to postage stamp FEFN rates in this Application.<sup>11</sup> There are a number of factors and circumstances, some beyond FEI's control, that could lead to the rate impact being reduced or increased in the near future.<sup>12</sup> FEI therefore cannot predict future rate impacts experienced by

<sup>&</sup>lt;sup>6</sup> Exhibit A-4.

<sup>&</sup>lt;sup>7</sup> Exhibit B-1, Application, p. 9.

<sup>&</sup>lt;sup>8</sup> Exhibit B-1, Application, p. 9.

<sup>&</sup>lt;sup>9</sup> Exhibit B-1, Application, p. 9.

<sup>&</sup>lt;sup>10</sup> Exhibit B-1, Application, p. 9.

<sup>&</sup>lt;sup>11</sup> Exhibit B-1, Application, p. 13.

<sup>&</sup>lt;sup>12</sup> Exhibit B-2, BCUC IR 1.1.2.

FEFN's residential customers from moving to FEI's rates, or when FEI would apply for postage stamp rates for FEFN.

#### PART THREE: DEMAND FORECAST

9. FEI's demand forecast for FEFN is reasonable and derived using the same method used in past applications and previously approved by the BCUC. The forecast of demand for FEFN in 2019 and 2020 is set out in section 3 of the Application. FEI is forecasting low customer growth and a declining use per customer, for both residential and commercial customers. As a result, total energy demand is forecast to decline over the Test Period.<sup>13</sup> The main components of the demand forecast are reviewed below.

10. The energy demand forecast for each residential and commercial rate schedule is derived by multiplying the total forecast customers by the average use per customer ("UPC") forecast for each rate schedule.<sup>14</sup> FEI provided explanations showing how the residential and commercial UPC and customer additions are calculated in Appendix A3 of the Application.

11. The method used to forecast residential customers is consistent with past practice. The residential customer count is calculated by using the customer count from the previous year and forecasting customer additions. The Conference Board of Canada ("CBOC") housing starts forecast provides a proxy for Fort Nelson's residential customer additions.<sup>15</sup> The year-over-year growth rate is calculated for 2019 to 2020 based on the CBOC Provincial Medium Term forecast as of January 19, 2018.<sup>16</sup>

<sup>&</sup>lt;sup>13</sup> Exhibit B-1, Application, p. 1.

<sup>&</sup>lt;sup>14</sup> Exhibit B-1, Application, pp. 21 to 37 and Appendix A3.

<sup>&</sup>lt;sup>15</sup> Exhibit B-1, Application, p. 24.

<sup>&</sup>lt;sup>16</sup> Exhibit B-1, Application, p. 24 and Appendix A3.

12. The commercial customer count is also calculated using the customer count from the previous year and forecasting the customer additions. The commercial additions forecast is based on the average of the actual additions recorded between 2014 and 2017.<sup>17</sup>

13. The Rate Schedule 1 UPC is forecast to continue to decline throughout the Test Period.<sup>18</sup> FEI is also forecasting that the Rate Schedule 2 UPC will continue to decline throughout the Test Period.<sup>19</sup> The Rate Design decision will result in 16 customers migrating from Rate Schedule 2 into Rate Schedule 3. As the UPC for these customers is less than the customers currently in Rate Schedule 3 this move will result in a reduction in the average UPC for Rate Schedule 3.<sup>20</sup>

14. FEI has one remaining Industrial customer served under FEFN's Rate Schedule 25. The industrial demand forecast is based on this industrial customer's own forecast, as established during an interview with a key account manager.<sup>21</sup>

15. As noted above, FEI's demand forecast is based on a method consistent with past practice that has been previously approved by the BCUC. FEI has also been evaluating the alternative Exponential Smoothing ("ETS") load forecasting method, including for FEFN.<sup>22</sup> The ETS method is not producing better results than the existing method in either residential or commercial demand forecasts.<sup>23</sup> FEI intends to file a full report summarizing FEI's comparison of the forecast methods over the PBR period, including a recommendation regarding which forecasting method to use going forward, in 2019 as part of FEI's multi-year rate plan application.<sup>24</sup> That report will include an implementation plan for FEFN in the event that FEI

<sup>&</sup>lt;sup>17</sup> Exhibit B-1, Application, p. 24 and Appendix A3.

<sup>&</sup>lt;sup>18</sup> Exhibit B-1, Application, pp. 27 and 28; Exhibit B-2, BCUC IR 1.3.1.

<sup>&</sup>lt;sup>19</sup> Exhibit B-1, Application, pp. 28 and 29; Exhibit B-2, BCUC IR 1.3.1.

<sup>&</sup>lt;sup>20</sup> Exhibit B-1, Application, pp. 29 and 30.

<sup>&</sup>lt;sup>21</sup> Exhibit B-1, Application, pp. 30 and 34.

<sup>&</sup>lt;sup>22</sup> Exhibit B-2, BCUC IR 1.2.1; Exhibit B-3, CEC IR 1.4.1.

<sup>&</sup>lt;sup>23</sup> Exhibit B-2, BCUC IR 1.2.1; Exhibit B-3, CEC IR 1.4.1.

<sup>&</sup>lt;sup>24</sup> Exhibit B-2, BCUC IR 1.2.2.

proposes to change to the ETS method.<sup>25</sup> However, the current forecasting methods as used in this Application continue to result in a long term forecast performance that is reasonable for a utility of FEFN's size.<sup>26</sup> FEI submits that the demand forecast is reasonable and should be approved as filed.

#### PART FOUR: OPERATING AND MAINTENANCE EXPENSES

16. FEFN's operating and maintenance ("O&M") expenses are required to continue to operate the FEFN natural gas distribution system and meet the needs of customers in a safe and efficient manner. FEI's forecast O&M costs for FEFN are described in section 6 of the Application and related responses to IRs. As described on page 40 of the Application, FEFN's O&M costs consist of allocated costs from FEI departments that provide functional support to FEFN and direct costs.

In 2019, O&M expenses are forecast to decrease by approximately 2.3% from
2018 Approved primarily due to lower labour costs, employee expenses and facilities costs.<sup>27</sup> In
2020, O&M expenses are forecast to remain relatively unchanged from the 2019 Forecast.<sup>28</sup>

18. FEI described the major changes in FEFN's gross O&M<sup>29</sup> on pages 40 to 43 of the Application, with further details provided in response to IRs. In the following subsections, the changes in FEFN's O&M requirements are described in more detail with a focus on those areas that were the subject of IRs.

<sup>&</sup>lt;sup>25</sup> Exhibit B-2, BCUC IR 1.2.2.

<sup>&</sup>lt;sup>26</sup> Exhibit B-3, CEC IR 1.4.1.

<sup>&</sup>lt;sup>27</sup> Exhibit B-1, Application, p. 40.

<sup>&</sup>lt;sup>28</sup> Exhibit B-1, Application, p. 40.

<sup>&</sup>lt;sup>29</sup> As described on pages 40 to 41 of the Application, FEFN's gross O&M costs consist of direct costs plus allocated costs from FEI business units that provide functional support to FEFN. From these costs, 12% overhead capitalized is subtracted to reach the net O&M.

#### A. Allocated Costs

19. Included in the 2019 and 2020 Forecast Fees and Administration Costs provided in Table 6-1 of the Application is the 2019 and 2020 forecast shared services fee of \$528 thousand and \$531 thousand, respectively.<sup>30</sup> These shared services costs include charges related to Information Systems, Energy Supply and Resource Development, Transmission, Customer Service, Energy Solutions and External Relations, Engineering Services, Finance and Regulatory, Operations Support, Governance, Human Resources, Environment, Health and Safety and Corporate.<sup>31</sup> As discussed below, FEI has appropriately calculated the Shared Service fee consistent with past practice and in accordance with the allocation factor previously approved by the BCUC.

20. The Shared Services allocation factor is based on FEFN's customers as a percentage of FEI's customers, as previously approved by the BCUC.<sup>32</sup> The combined customer total for FEI and FEFN is forecast to be 1,027,385 for 2019 and 1,039,093 for 2020, while the FEFN portion is 2,423 and 2,409. Therefore, the allocation factors are 0.236% and 0.232% respectively.<sup>33</sup>

21. FEI submits that the allocated costs to FEFN are based on the appropriate methodology and are reasonably forecast for the Test Period.

#### B. Direct Expenses

22. FEFN direct expenses include the labour for two employees, vehicle usage, and materials and services that are used in direct system operations. FEFN's direct expenses are set out in Table 6.1 of the Application, and were explored in BCUC IRs 1.5 to 1.7. FEI has explained variances between 2017 Approved and 2017 Actual, as well as the basis for its forecast over the

<sup>&</sup>lt;sup>30</sup> Exhibit B-1, Application, p. 42.

<sup>&</sup>lt;sup>31</sup> Exhibit B-1, Application, p. 40.

<sup>&</sup>lt;sup>32</sup> Exhibit B-1, Application, p. 40.

<sup>&</sup>lt;sup>33</sup> Exhibit B-1, Application, p. 40.

Test Period. The categories of direct O&M that were explored in IRs are discussed below. The evidence shows that FEFN's direct O&M costs have been reasonably forecast and should be approved.

#### Labour Costs

23. FEFN's 2019 and 2020 Forecast Labour Costs, consisting of M&E and IBEW costs, are forecast to be \$346 thousand and \$350 thousand, which is consistent with 2017 and 2018 Approved amounts.<sup>34</sup>

24. The forecast 2019 and 2020 M&E costs of \$19 thousand are reasonable, even though higher than the 2015 and 2017 approved amounts of \$15 thousand. The actual level of activities and costs experienced for M&E in recent years - 2017 Actual (\$25 thousand) and 2018 Projected (\$18 thousand) - provide a reasonable basis to the forecast costs in 2019 and 2020.<sup>35</sup> Similarly, the 2015 actual M&E costs were higher than approved, at \$18 thousand, which is consistent with FEI's forecast for the Test Period.<sup>36</sup> In short, FEI's forecast M&E costs are in line with recent years of actual costs.

25. The Operations staffing at FEFN includes two full-time IBEW employees.<sup>37</sup> The IBEW labour costs are forecast to be slightly lower in 2019 and 2020 compared to the 2018 Approved as staff turnover has been reduced and higher training costs incurred in prior years are anticipated to return to normal levels.<sup>38</sup> In addition, certain processes have been streamlined, resulting in less required support from Prince George IBEW staff in 2019 and 2020.<sup>39</sup>

<sup>&</sup>lt;sup>34</sup> Exhibit B-1, Application, p. 41.

<sup>&</sup>lt;sup>35</sup> Exhibit B-1, Application, p. 41, Exhibit B-2, BCUC IR 1.5.2.1.

<sup>&</sup>lt;sup>36</sup> Exhibit B-2, BCUC IR 1.5.2.

<sup>&</sup>lt;sup>37</sup> Exhibit B-1, Application, p. 41.

<sup>&</sup>lt;sup>38</sup> Exhibit B-1, Application, p. 41.

<sup>&</sup>lt;sup>39</sup> Exhibit B-1, Application, p. 41.

26. FEFN's 2017 Actual IBEW costs were lower compared to 2017 Approved.<sup>40</sup> This was due to an IBEW employee being on medical leave (\$40 thousand), an amount of approximately \$70 thousand for standby labour that was inadvertently excluded from the 2017 O&M, and the remaining variance of \$88 thousand due primarily to lower than anticipated maintenance activities.<sup>41</sup> The 2018 Projected IBEW costs include a true-up of the \$70 thousand for the standby labour that was inadvertently excluded from the 2017 Actual.<sup>42</sup>

27. FEI submits that the labour costs for FEFN have been reasonably forecast and should be approved.

#### **Employee Expenses**

28. FEFN's 2019 and 2020 employee expenses are forecast to be the same as 2018 Projected.<sup>43</sup> The 2018 Projected is lower than 2018 Approved due to lower than expected requirements for travel-related training for the two full-time IBEW employees and reduced Prince George Operations management team travel to FEFN.<sup>44</sup> The 2017 Actual employee expenses are lower than 2017 Approved primarily due to an IBEW employee being on medical leave and reduced management team travel to FEFN.<sup>45</sup> FEI submits that FEFN's forecast employee expenses are reasonable and should be approved.

#### **Contractor Costs**

29. FEFN's contractor costs are forecast to remain similar in 2019 and 2020 to the 2017 and 2018 approved amounts.<sup>46</sup> The work forecasted to be performed by contractors, primarily for anticipated repairs to leaks on the Distribution plant system, is consistent with

<sup>&</sup>lt;sup>40</sup> Exhibit B-1, Application, p. 41; Exhibit B-2. BCUC IR 1.5.3.

<sup>&</sup>lt;sup>41</sup> Exhibit B-1, Application, p. 41; Exhibit B-2. BCUC IR 1.5.3.

<sup>&</sup>lt;sup>42</sup> Exhibit B-1, Application, p. 42. Exhibit B-2. BCUC IR 1.5.4.

<sup>&</sup>lt;sup>43</sup> Exhibit B-1, Application, p. 42.

<sup>&</sup>lt;sup>44</sup> Exhibit B-1, Application, p. 42.

<sup>&</sup>lt;sup>45</sup> Exhibit B-1, Application, p. 42.

<sup>&</sup>lt;sup>46</sup> Exhibit B-1, Application, p. 41.

previous years.<sup>47</sup> FEI submits that FEFN's O&M expenses forecast for the Test Period are reasonable and should be approved.

#### PART FIVE: RATE BASE AND CAPITAL ADDITIONS

30. The forecast rate base and capital additions for FEFN are required to continue to provide safe and reliable service to customers. The forecast rate base and capital additions for FEFN are described in section 8 of the Application with information provided in response to IRs.

31. The topics related to rate base and capital expenditures that were the focus of IRs in the proceeding are addressed below.

#### A. Intangible Plant

32. As approved in FEI's Annual Review for 2016 Rates,<sup>48</sup> FEI has appropriately allocated Intangible Plant costs to FEFN beginning in 2017 and removed the costs from FEI's 2017 Base Capital in the FEI Annual Review of 2017 Rates. As corrected in the Evidentiary Update, the amount of the addition to FEFN's Intangible Plant in 2019 and 2020 is \$44 thousand and \$46 thousand, respectively and is related to the purchase and sustainment of System Computer Software.<sup>49</sup> In its Evidentiary Update, FEI corrected the allocation of 2017 Intangible Plant to FEFN using customer count as the allocator.<sup>50</sup> The 2019 and 2020 forecasted amounts have been appropriately allocated based on customer count.<sup>51</sup>

33. FEI submits that its intangible plant additions are reasonably forecast and should be approved as filed.

<sup>&</sup>lt;sup>47</sup> Exhibit B-2, BCUC IR 1.7.2.

<sup>&</sup>lt;sup>48</sup> As discussed in the FEI Annual Review for 2016 Rates and as approved by Commission Order G-162-16 on November 9, 2016.

<sup>&</sup>lt;sup>49</sup> Exhibit B-3, CEC IR 1.11.1; Exhibit B-1-1, pp. 1-2.

<sup>&</sup>lt;sup>50</sup> Exhibit B-1-1, p. 2; Exhibit B-2, BCUC IR 1.9.1.

<sup>&</sup>lt;sup>51</sup> Exhibit B-2, BCUC IR 1.9.1.

#### B. Distribution Plant

34. FEFN's 2019 and 2020 forecast Distribution Plant additions are \$575 thousand and \$463 thousand, respectively.<sup>52</sup> Capital additions for Distribution are higher for 2019 and 2020 than past years due to the station upgrade at the Muskwa Gate Station, FEFN's proactive replacement of portions of the Steel Distribution Mains and Services and the PRFN project.<sup>53</sup> The forecast additions in 2019 and 2020 can be divided into the following categories:<sup>54</sup>

- (a) Growth: Growth capital investments are incurred to install gas mains, services and meters to attach new customers. Growth related distribution capital (new mains, new services, and new meters) is forecasted to be \$23 thousand in 2019 and \$28 thousand in 2020.<sup>55</sup>
- (b) Muskwa Gate Station Telemetry Project: Upgrades consisting of telemetry to remotely monitor the operation of the station, a new line heater burner management system with industry standard safety features to achieve regulatory compliance, improve reliability, and improve combustion efficiency, and a new station grounding to meet updated industry standards (\$163 thousand in 2019).
- (c) **Recreation Centre District Station Valve Replacement Project:** The replacement of an under-rated valve at the Recreation Centre District Station to ensure an adequate safety factor (\$74 thousand in 2020).
- (d) Replacement of Steel Distribution Mains and Services: The replacement of steel distribution mains and services to address those that are prone to leaks, and due to their location in Fort Nelson, of greater risk to public safety due to longer

<sup>&</sup>lt;sup>52</sup> Exhibit B-1, Application, p. 48.

<sup>&</sup>lt;sup>53</sup> Exhibit B-3, CEC IR 1.13.1.

<sup>&</sup>lt;sup>54</sup> Exhibit B-1, Application, p. 48.

<sup>&</sup>lt;sup>55</sup> Exhibit B-1, Application, p. 48.

periods of frozen ground and remoteness from emergency repair personnel (\$243 thousand in 2019 and \$319 thousand in 2020).<sup>56</sup>

- (e) Prophet River Extension: The installation of individual gas meters to approximately 59 homes and businesses in PRFN. The capital cost for this work, which is included as part of 2019 capital additions, is approximately \$104 thousand. This work is dependent on FEI receiving a CPCN approval for the Prophet River Extension, which is discussed below in Part Six.
- (f) **Other:** Miscellaneous sustainment related distribution capital (\$42 thousand in both 2019 and 2020). A breakdown of the miscellaneous sustainment related capital forecast is provided in BCUC IR 1.10.6.

35. The IRs focussed on FEI's growth related additions, the Muskwa Gate Station and Recreation Centre District Station projects, and the replacement of steel distribution mains and services. Each of these topics is discussed below.

#### Growth

36. FEFN's forecast growth capital additions are calculated based on historic actual activity. Using the 2013-2017 average service line additions, and considering the potential for additional service lines in the expanded Prophet River franchise area, in 2019 and 2020 FEI is forecasting to add 10 and 12 services lines respectively.<sup>57</sup> An average service line allowance is then applied to these service line additions to arrive at the forecast growth capital. As demonstrated in the summary calculation provided in BCUC IR 1.11.1, this yields forecast growth capital of \$23 thousand for 2019 and \$28 thousand for 2020.

37. As noted above, growth capital investments are incurred to install gas mains, services and meters to attach new customers. While a decline in net customer additions could

<sup>&</sup>lt;sup>56</sup> Exhibit B-1, Application, p. 48; breakdown and description of the costs forecast provided in Exhibit B-2, BCUC IR 1.10.2.

<sup>&</sup>lt;sup>57</sup> Exhibit B-2, BCUC IR 1.11.1.

indicate a lower growth environment where attaching new customers to the system will become less likely, there is no direct link between net customer additions and growth related capital.<sup>58</sup> In a given year, FEI could see negative net customer additions but still see growth related capital expenditures for new service line additions.<sup>59</sup>

38. FEI submits that its growth-related capital is reasonable, consistent with its demand forecast, and should be approved as filed.

#### **Muskwa Gate Station and Recreation Centre District Station Projects**

39. For cost effectiveness, improvements at stations are generally not undertaken in a piecemeal fashion. If improvements can be combined, the cost of addressing all at the same time will be lower than if mitigated one at a time. As a result, significant upgrades to stations will occur on an infrequent basis, but when they become necessary the cost of the work creates peaks in the expenditures. The Muskwa Gate Station and Recreation Centre District Station projects are representative of this type of infrequent expenditure.<sup>60</sup>

40. FEI provided a breakdown of the cost estimates to complete the Muskwa Gate Station and the Recreation Centre District Station projects, in response to BCUC IR 1.10.5.

41. The forecast for the Muskwa Gate Station Telemetry Project is \$183 thousand, which will be incurred in 2018 (\$20 thousand) and 2019 (\$163 thousand).<sup>61</sup> Telemetry will allow remote monitoring of the operation of the station. A new line heater burner management system will improve reliability and combustion efficiency. A new station grounding is required to meet updated industry standards.

<sup>&</sup>lt;sup>58</sup> Exhibit B-2, BCUC IR 1.11.1.1.

<sup>&</sup>lt;sup>59</sup> Exhibit B-2, BCUC IR 1.11.1.1.

<sup>&</sup>lt;sup>60</sup> Exhibit B-3, CEC IR 1.13.1.

<sup>&</sup>lt;sup>61</sup> Exhibit B-2, BCUC IR 1.10.5.

42. The forecast for the Recreation Centre District Station Valve Replacement Project is \$288 thousand, the majority of which will be incurred outside of the 2019-2020 period.<sup>62</sup> However, \$74 thousand is forecast to be incurred in 2020 to replace an under-rated valve to ensure an adequate safety factor.

43. FEI has prudently and cost effectively planned for these station upgrades and its forecast costs should be approved.

#### **Replacement of Steel Distribution Mains and Services**

44. FEI's forecast expenditures to replace steel distribution mains and services are necessary to address those that are prone to leaks and of greater risk to public safety due to longer periods of frozen ground and remoteness from emergency repair personnel.<sup>63</sup> The forecasted expenditures are \$243 thousand in 2019 and \$319 thousand in 2020, which are similar to those incurred and forecasted for 2017 and 2018.<sup>64</sup> There has been no change of scope in the replacement of steel distribution mains and services since the FEFN 2017-2018 RRA proceeding.<sup>65</sup>

45. BCUC IRs 1.10.1-1.10.4 focussed on the replacement of steel distribution mains. Recent projects to replace steel distribution mains and services have confirmed FEI's previous understanding of the causes of the leaks on the FEFN distribution system.<sup>66</sup> Past leaks were a result of corrosion of the steel mains and services due to insufficient levels of cathodic protection at specific locations.<sup>67</sup> Removing portions of the distribution system suspected of having these conditions reduces the likelihood of a leak and the need for emergency

<sup>&</sup>lt;sup>62</sup> Exhibit B-2, BCUC IR 1.10.5.

<sup>&</sup>lt;sup>63</sup> Exhibit B-1, Application, p. 48; breakdown and description of the costs forecast provided in Exhibit B-2, BCUC IR 1.10.2.

<sup>&</sup>lt;sup>64</sup> Exhibit B-1, Application, p. 48.

<sup>&</sup>lt;sup>65</sup> Exhibit B-2, BCUC IR 1.10.4.

<sup>&</sup>lt;sup>66</sup> Exhibit B-2, BCUC IR 1.10.1.

<sup>&</sup>lt;sup>67</sup> Exhibit B-2, BCUC IR 1.10.1.

response.<sup>68</sup> FEI is focusing its replacement efforts on specific sections of main based on age, known fittings prone to leakage and probability of unusual or unknown construction methods, as well as locations of perceived higher risk to public safety.<sup>69</sup>

46. FEI estimates that at the current expenditure levels and main replacement rate, a further eight years should be sufficient to complete the proactive replacement of the mains that contain the conditions that are of concern.<sup>70</sup>

47. The evidence shows that FEI has prudently and cost-effectively planned for the replacement of steel distribution mains and services, and that its forecast costs should be approved.

#### C. Deferral Accounts

48. Each of the deferral accounts used for FEFN are described in section 8.4 of the Application. FEI is requesting approval of the creation of one new deferral account, namely, the 2019-2020 Revenue Requirement Application Deferral Account, to capture the costs related to this application and regulatory proceeding.<sup>71</sup> FEI will incur costs related to the 2019 and 2020 Revenue Requirements and Rates Application for FEFN estimated at approximately \$70 thousand (on a pre-tax basis).<sup>72</sup> Consistent with past practice, FEI requests approval to capture the full costs of this Application for FEFN in this rate base deferral account and to amortize these costs over two years.<sup>73</sup>

- <sup>69</sup> Exhibit B-2, BCUC IRs 1.10.1 and 1.10.4.
- <sup>70</sup> Exhibit B-2, BCUC IR 1.10.3.
- <sup>71</sup> Exhibit B-1, Application, pp. 51-53.
- <sup>72</sup> Exhibit B-1, Application, p. 53.
- <sup>73</sup> Exhibit B-1, Application, p. 53.

<sup>&</sup>lt;sup>68</sup> Exhibit B-2, BCUC IR 1.10.1.

#### **Existing Deferral Accounts**

#### **Energy Efficiency & Conservation Deferral Account**

49. As shown in Table 8-4, FEI's is forecasting an increase in the balance in the Energy Efficiency & Conservation ("EEC") deferral account over the Test Period. FEI will update the forecast balances in its compliance filing after receiving a decision on FEI's 2019-2022 DSM Application and this Application.<sup>74</sup>

50. The increase in the EEC deferral account balance is due to a change in the allocation base used to allocate costs from FEI to FEFN.<sup>75</sup> Prior to 2019, forecasted costs were allocated to FEFN based on the allowed FEI Rate Base expenditure limit of \$15 million multiplied by the allocation factor (percentage of customers in FEFN over total customers). For the 2019 and 2020 forecasted additions, costs have been allocated to FEFN based on a total estimated FEI Rate Base and Non-Rate Base expenditure limit of \$36 million (based on the 2018 approved expenditure limit of \$35.874 million), multiplied by the same allocation factor. Given FEI's recent experience to spend up to or near the funding cap, an allocation of a percentage of the total approved expenditure limit is more appropriate. The forecasts only have an impact over the Test Period as the opening balance in the account will be trued-up to the actual balance in the next test period.<sup>76</sup>

51. FEI provided further information on its EEC deferral account in its response to Panel IRs.<sup>77</sup> FEI's responses provide a history of the approvals related to the FEFN EEC deferral account, as well as the forecast and actual amounts in the account since its inception. In contrast to FEFN which has a single EEC deferral account, FEI has a rate base deferral account and non-rate base EEC deferral account which are designed to protect ratepayers from underspending of forecast EEC amounts. Unlike the rest of FEI, the use of a single EEC deferral account for FEFN means that customers in FEFN are subject to risk of variance between

<sup>&</sup>lt;sup>74</sup> Exhibit B-1, p. 6; Exhibit B-2, BCUC IR 1.12.1.2.

<sup>&</sup>lt;sup>75</sup> Exhibit B-2, BCUC IR 1.12.1.2; Exhibit B-6, BCUC Panel IR 1.1.3.

<sup>&</sup>lt;sup>76</sup> Exhibit B-2, BCUC IR 1.12.1.2.

<sup>&</sup>lt;sup>77</sup> Exhibit B-6.

Approved and Actual EEC amounts over the Test Period. As FEI has indicated in its response to the Panel IRs, the use of the two deferral account method for FEFN would be appropriate and would create administrative efficiencies.<sup>78</sup> The two deferral account method would also eliminate the need for debate in rate proceedings, such as this one, regarding the appropriate base amount to include in the allocation of EEC spending to FEFN. FEI is amendable to adoption of this method for FEFN.

52. Regardless of the EEC deferral account approach, FEI will need to update in its compliance filing the forecast EEC deferral account balances after receiving a decision on FEI's 2019-2022 DSM Application and this Application.

#### Fort Nelson First Nations Right-of-Way Agreement Deferral Account

53. With respect to the existing Fort Nelson First Nations Right-of-Way Agreement deferral account, FEI explained in BCUC IR 1.13.1 that completing the agreement with the Fort Nelson First Nation had been stalled due to staffing changes at the Fort Nelson First Nation. However, recently the Fort Nelson First Nation indicated a desire to resume negotiations and FEI anticipates that the agreement will be completed in 2019.<sup>79</sup> FEI has not incurred costs to date beyond \$111 thousand related to this agreement.<sup>80</sup> However, negotiations in finalizing this agreement are still continuing and there remains uncertainty about the ultimate dollar value to be spent.<sup>81</sup>

#### PART SIX: CPCN FOR PROPHET RIVER FIRST NATION EXTENSION

54. FEI is requesting a CPCN for an extension of FEI's distribution system in FEFN resulting from FEI acquiring the gas distribution system within PRFN (the "Prophet River Extension").<sup>82</sup> The Prophet River Extension was initiated after PRFN approached and requested

<sup>&</sup>lt;sup>78</sup> Exhibit B-6, BCUC Panel IR 1.1.4 and 1.1.8.

<sup>&</sup>lt;sup>79</sup> Exhibit B-2, BCUC IR 1.13.2.

<sup>&</sup>lt;sup>80</sup> Exhibit B-1, Application, p. 53; Exhibit B-2, BCUC IR 1.13.2.

<sup>&</sup>lt;sup>81</sup> Exhibit B-2, BCUC IR 1.13.2; Exhibit B-2-1, Confidential Response to BCUC IR 1.13.2.

<sup>&</sup>lt;sup>82</sup> Exhibit B-1, Application, p. 58.

that FEI assume ownership and operation of the gas distribution system currently owned by PRFN.<sup>83</sup> The FEFN have executed the Asset Purchase Agreement, which is currently awaiting execution by Canada, after which it will be executed by FEI.<sup>84</sup> FEI submits that the Prophet River Extension is in the public interest and should be granted a CPCN as requested.

55. If the CPCN is granted, FEI will proceed to install individual gas meters to the 53 residential and six commercial properties on PRFN.<sup>85</sup> A detailed project timeline is provided in BCUC IR 1.15.7. The estimated capital expenditure for the associated work is \$104 thousand.<sup>86</sup> A detailed cost breakdown of this estimate is provided in BCUC IR 1.14.1. This amount includes a contingency of \$8 thousand (or 16%).

56. The IRs focussed on the timing of the leak survey, the risks and costs of the project, and the impacts of the acquisition on PRFN. Each of these topics is discussed below.

#### A. Timing of Leak Survey

57. The purchase of PRFN's gas distribution system is consistent with FEI's due diligence practice, as listed in BCUC IR 1.14.3, with the exception of the timing of the leak survey. FEI did not conduct a leak survey immediately prior to the purchase of the pipeline system, as usually would be the case, for a number of reasons:

(a) Since BC Gas (FEI's predecessor) installed the system in 1989, FEI has been directly involved in the ongoing operation and maintenance of this system.<sup>87</sup> In 2016, FEI completed a leak survey for the community and no issues were found.<sup>88</sup> FEI therefore has extensive knowledge of the condition of the below-

<sup>&</sup>lt;sup>83</sup> Exhibit B-1, Application, p. 58.

<sup>&</sup>lt;sup>84</sup> Exhibit B-6, BCUC Panel IR 1.2.1.

<sup>&</sup>lt;sup>85</sup> Exhibit B-1, Application, p. 58.

<sup>&</sup>lt;sup>86</sup> Exhibit B-1, Application, p. 58.

<sup>&</sup>lt;sup>87</sup> Exhibit B-2, BCUC IR 1.14.4.

<sup>&</sup>lt;sup>88</sup> Exhibit B-2, BCUC IR 1.14.4.

grade system and does not anticipate any findings from an additional leak survey that would impact the proposed purchase.<sup>89</sup>

- (b) Leak surveys are usually conducted every five years and so another is not considered needed at this time.<sup>90</sup> However, even if a leak survey were to result in discovering the need for repairs, the costs of such repairs would be immaterial.<sup>91</sup>
- (c) In addition to the leak survey in 2016, an experienced FEFN technician recently completed an above-grade inspection of the PRFN system.<sup>92</sup> As there is no pavement in the PRFN, the likelihood of a leak being present and undetected by an above-ground inspection is small.<sup>93</sup>
- (d) It is not practical nor efficient to conduct a leak survey during the winter months<sup>94</sup> as frozen ground prevents gas from escaping, which makes leak surveying during frost conditions inaccurate.<sup>95</sup> As such, the next opportunity to do a leak survey would be in late spring, and the requirement to carry out a leak survey prior to the purchase would result in a delay to the project which would be unreasonable given FEI's already high confidence in the integrity of the system. FEI does not expect that completing a new leak survey will reveal findings that are not already anticipated or that would materially impact the proposed purchase.<sup>96</sup>

58. Due to its knowledge of the system and the historical data available, including from the leak survey conducted in 2016 and more recent above-ground inspection, FEI has

- <sup>92</sup> Exhibit B-2, BCUC IR 1.14.4.
- <sup>93</sup> Exhibit B-2, BCUC IR 1.14.5.
- <sup>94</sup> Exhibit B-2, BCUC IR 1.14.5.
- <sup>95</sup> Exhibit B-2, BCUC IR 1.14.5.
- <sup>96</sup> Exhibit B-2, BCUC IR 1.14.5.

<sup>&</sup>lt;sup>89</sup> Exhibit B-2, BCUC IR 1.14.5.

<sup>&</sup>lt;sup>90</sup> Exhibit B-2, BCUC IR 1.14.6.

<sup>&</sup>lt;sup>91</sup> Exhibit B-2, BCUC IR 1.14.6.

confidence in the integrity of the Prophet River system and the timing of the leak survey should not be a concern in the circumstances.<sup>97</sup>

#### B. Risks and Costs

59. The construction work of the Prophet River Extension is the type of work that FEI has extensive experience with through daily operations. Further, as discussed above, FEI is familiar with the PRFN system, and has extensive historical information and high confidence in the integrity of the system. Therefore, FEI does not believe the cost estimate of \$104 thousand will change materially.<sup>98</sup>

60. For an average residential customer in FEFN with annual consumption of 125 GJ, the bill impact due to the project will be an increase of \$1.40 in 2019 and a decrease of \$1.44 in 2020, or a net decrease of \$0.05 over two years.<sup>99</sup> As explained in BCUC IRs 1.17.1 and 1.17.2, even in unlikely scenarios, such as a 20% increase in the estimated capital cost combined with a reduction in annual energy consumption by 20%, the impact to existing FEFN customers remains minimal (ranges from a decrease of \$0.04 to an increase of \$1.94 over two years). The expected bill impact to FEFN's commercial and industrial customers, based on the average UPC of each rate class is provided in Section 4.5 of the Application and in CEC IR 1.16.1.

61. FEI has inspected the 53 residential and six commercial properties and does not expect any significant issues with respect to installing individual gas meters, which is routine work for FEI.<sup>100</sup> A total of 18 services/meter locations have been identified as requiring alteration and the associated costs have been included in the planned expenditures.<sup>101</sup>

<sup>&</sup>lt;sup>97</sup> Exhibit B-2, BCUC IRs 1.14.4.1 and 1.14.5.

<sup>&</sup>lt;sup>98</sup> Exhibit B-2, BCUC IR 1.17.2.

<sup>&</sup>lt;sup>99</sup> Exhibit B-1, Application, p. 62.

<sup>&</sup>lt;sup>100</sup> Exhibit B-2, BCUC IR 1.14.8.

<sup>&</sup>lt;sup>101</sup> Exhibit B-2, BCUC IR 1.14.8.1.

62. The purchase of the PRFN system is conditional on receiving a right of way permit pursuant to Section 28(2) of the *Indian Act.*<sup>102</sup> FEI expects the costs associated with acquiring this permit to be immaterial.<sup>103</sup> As the PRFN system is an existing system, FEI anticipates the costs associated with archeology or environmental assessments will be minimal or not required.<sup>104</sup> To date, PRFN has not required compensation or rent in exchange for the Section 28(2) permit rights.<sup>105</sup> Additionally, the Asset Purchase Agreement (a draft of which is provided as Attachment 1.15.1.1 to Exhibit B-2 BCUC IR) includes a subject condition in favour of FEI that the right of way permit granted by PRFN and Canada to FEI shall be on "terms satisfactory to" FEI.<sup>106</sup>

63. FEI therefore submits that the cost and risk related to the Prophet River Extension are minimal and have been appropriately managed by FEI.

#### C. Impacts on PRFN

64. The primary reason that PRFN is requesting that FEI assume ownership and operation of its existing gas distribution system is because PRFN expressed they have no ability or resources to maintain the existing distribution system while expanding with their planned growth.<sup>107</sup>

65. While the Prophet River Extension will result in PRFN's members being responsible for their own natural gas bill, PRFN does not wish its members to lose gas service and therefore has stated it will pay for their gas service if needed.<sup>108</sup> To facilitate this, PRFN will be added as a second point of contact in the event of a delinquent payment and would have the opportunity to address the situation through contact with the account holder or by making

<sup>&</sup>lt;sup>102</sup> Exhibit B-1, Application, p. 63.

<sup>&</sup>lt;sup>103</sup> Exhibit B-2, BCUC IR 1.15.2.

<sup>&</sup>lt;sup>104</sup> Exhibit B-2, BCUC IR 1.15.2.

<sup>&</sup>lt;sup>105</sup> Exhibit B-2, BCUC IR 1.15.2.

<sup>&</sup>lt;sup>106</sup> Exhibit B-2, BCUC IR 1.15.4.

<sup>&</sup>lt;sup>107</sup> Exhibit B-1, Application, p. 63.

<sup>&</sup>lt;sup>108</sup> Exhibit B-1, Application, p. 63. Exhibit B-2, BCUC IR 1.16.6.

payment on the account holder's behalf.<sup>109</sup> PRFN's current account with FEI has been in good standing since its activation.<sup>110</sup> Therefore, no additional risk is anticipated due to delinquent payments of PRFN members moving forward.<sup>111</sup>

66. FEI described the process that would be followed to establish individual accounts, as follows. Once the individual meters are installed, PRFN will be the initial account holder for each premise/account established.<sup>112</sup> FEI will be billing PRFN for the individual account until individual PRFN members establish their own gas account with FEI.<sup>113</sup> PRFN will, at its discretion, work with individual PRFN members to establish individual accounts with FEI.<sup>114</sup> Prior to PRFN members establishing individual gas accounts with FEI, FEI will respond to customer service matters individually, but will respond to billing matters with PRFN as the account holder.<sup>115</sup> Once individual gas accounts are established, FEI will have a relationship with each individually metered customer and will respond to billing and customer service related matters with each individual customer.<sup>116</sup> FEI does not anticipate any customer service issues resulting from PRFN members receiving individual energy bills.<sup>117</sup>

67.

68. PRFN has expressed that having individual members paying their own utility bills would be a benefit, as it would allow the individual members to establish credit ratings, which is seen as a driver of economic opportunity.<sup>118</sup> PRFN has also stated that low income

<sup>&</sup>lt;sup>109</sup> Exhibit B-2, BCUC IR 1.16.6.

<sup>&</sup>lt;sup>110</sup> Exhibit B-2, BCUC IR 1.16.7.

<sup>&</sup>lt;sup>111</sup> Exhibit B-2, BCUC IR 1.16.7.

<sup>&</sup>lt;sup>112</sup> Exhibit B-2, BCUC IR 1.16.1.

<sup>&</sup>lt;sup>113</sup> Exhibit B-2, BCUC IR 1.16.1.

<sup>&</sup>lt;sup>114</sup> Exhibit B-2, BCUC IR 1.16.1.

<sup>&</sup>lt;sup>115</sup> Exhibit B-2, BCUC IR 1.16.1.1.

<sup>&</sup>lt;sup>116</sup> Exhibit B-2, BCUC IR 1.16.1.1.

<sup>&</sup>lt;sup>117</sup> Exhibit B-2, BCUC IR 1.16.2.

<sup>&</sup>lt;sup>118</sup> Exhibit B-1, Application, p. 63.

households will receive energy subsidies from PRFN.<sup>119</sup> FEI is also providing education and material to PRFN members regarding ways customers can manage their energy costs including conservation tips, access to energy evaluations, energy efficient appliance rebates, funding for low income households and ways to manage energy costs through equal billing and automatic payments.<sup>120</sup>

69. FEI has addressed all known issues and concerns raised during the consultation process with PRFN. These issues were mainly related to the confirmation of responsibility for emergency response, system upgrades and future expansion of the system.<sup>121</sup> FEI will be responsible for the operation and maintenance of the PRFN distribution system as the owner.<sup>122</sup>

#### D. The Prophet River Extension is in the Public Interest

70. The proposed extension of FEFN's distribution system to include the PRFN gas distribution system is in the public interest and should be granted a CPCN. The transaction is requested by PRFN, will provide benefits to PRFN and its members, will have little to no impact to existing FEFN customers in the Test Period, and has the potential for future positive rate impacts as PRFN expands its community.<sup>123</sup> The assets are a natural fit into FEFN's existing assets, which are of similar type, and within FEFN's existing service area.<sup>124</sup> FEI therefore requests that a CPCN be granted for the Prophet River Extension.

#### PART SEVEN: CONCLUSION

71.Based on the evidence in this proceeding, the rates sought for FEFN for 2019 and2020 are supported by sound forecasting methods and are required to recover the costs of

<sup>&</sup>lt;sup>119</sup> Exhibit B-2, BCUC IR 1.16.2.

<sup>&</sup>lt;sup>120</sup> Exhibit B-2, BCUC IR 1.16.2.

<sup>&</sup>lt;sup>121</sup> Exhibit B-2, BCUC IR 1.16.3.1.

<sup>&</sup>lt;sup>122</sup> Exhibit B-2, BCUC IR 1.16.1.1.

<sup>&</sup>lt;sup>123</sup> Exhibit B-1, Application, p. 64.

<sup>&</sup>lt;sup>124</sup> Exhibit B-1, Application, p. 64.

serving FEFN customers, and FEI's CPCN for the Prophet River First Nation is in the public interest. It is therefore submitted that the approvals sought are just and reasonable and should be approved as filed.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

Dated:

January 11, 2019

**[original signed by Christopher Bystrom]** Christopher Bystrom Counsel for FortisBC Energy Inc.

Dated:

January 11, 2019

[original signed by Madison Grist] Madison Grist Counsel (Articled Student) for FortisBC Energy Inc.