BRITISH COLUMBIA UTILITIES COMMISSION

IN THE MATTER OF THE UTILITIES COMMISSION ACT,
R.S.B.C. 1996, CHAPTER 473

and

FORTISBC ENERGY INC.

2016 RATE DESIGN APPLICATION

TRANSPORTATION SERVICE REVIEW

FINAL SUBMISSION OF
FORTISBC ENERGY INC.

November 27, 2017

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PART ONE: INTRODUCTION

1. FortisBC Energy Inc. ("FEI") filed its 2016 Rate Design Application (the "Application")[1] on December 19, 2016. The Application reflects a comprehensive review of FEI's rate design. According to Commission Order G-109-17 issued on July 18, 2017, the review of the Application is proceeding in three components. This final argument addresses the Transportation Service Review, which is the subject of Section 10 of the Application.

2. As described in section 10 of the Application, FEI reviewed the transportation model and concluded that transportation service is generally working well. However, FEI concluded that the balancing rules need to be changed so that all transportation customers are required to manage their supply and demand daily and within more reasonable parameters.

3. In this component of FEI's rate design proceeding, FEI is proposing that the Commission approve item 10 in the list of approvals sought on page 2-4 of the Application:

- Amendments to Rate Schedules 22, 22A, 22B, 23, 25, 26, and 27 to implement daily balancing for all transportation customers, as discussed in Section 10.6.
- Amendments to Rate Schedules 22, 22A, 22B, 23, 25, 26, and 27 to reduce the daily balancing tolerance to a 10 percent threshold[2] and to introduce a balancing charge of $0.25/GJ for gas supply shortfalls within a 10% to 20% tolerance level, as discussed in Section 10.7.

4. The proposed amendments to the transportation Rate Schedules (22, 22A, 22B, 23, 25, 26, and 27) are included in the blacklined rate schedules in Appendix 11-3 of the Application.[3] With these amendments, all transportation service customers will be subject to

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[1] Exhibits B-1, B-1-1, B-1-1-1, B-1-2, and B-1-3.

[2] More precisely, the ten percent tolerance is the greater of 10 to 20 percent or 100 GJ.

[3] Exhibit B-1-1, FEI's Supplemental Filing.

the same balancing rules, which will impose charges for daily under deliveries of 10 percent or greater.

5. Part Two of this submission will address the proposal to move to daily balancing.

6. Part Three of this submission will address the proposal to introduce a balancing charge of $0.25/GJ for gas supply shortfalls within a 10% to 20% tolerance level.

7. Part Four will address other topics raised at the SRP related to FEI's proposals.

PART TWO: DAILY BALANCING

8. FEI's current transportation rate schedules are a mix of daily and monthly balancing. A summary of the key balancing rules is provided below:

CURRENT BALANCING RULES		
Monthly or Daily	**Rate Schedule**	**Balancing Charges**
Daily	22 (Large Industrial) 22A (Inland Large Industrial))	• Balancing Gas at Sumas Daily Price • Balancing Charge at 100 GJ or 20% under delivery • No charge for over deliveries and free access to Imbalance Return • A 5 percent tolerance can be imposed during supply constraints
Nil	22B (Columbia Large Industrial)	• No balancing charges • A 5 percent tolerance can be imposed during supply constraint
Monthly	23 (Large Commercial) 25 (General Firm) 26 (Natural Gas Vehicles) 27 (General Interruptible)	• Balancing Gas at Sumas Daily Price Average for the Month • No imbalance tolerance • Daily Balancing rules apply if pooled with RS 22, 22A or 22B • A 5 percent tolerance can be imposed during supply constraints

9. The monthly balancing rules are significantly more relaxed than the daily balancing rules. Daily balanced customers pay for any balancing gas for under deliveries and a daily balancing charge if they under deliver by 20 percent or more. Monthly balanced customers do not pay any balancing charges, other than the cost of monthly balancing gas at the Sumas Daily Price average for the month.

10. FEI proposes to require all transportation customers to balance daily. The reasons supporting this proposal can be grouped into the following five points:

(a) FEI's proposed daily balancing will bring the transportation rate schedules into alignment with the intent of the rate schedules that the customer or Shipper Agent provide daily supply based on a best estimate of daily demand

(b) FEI's proposed daily balancing will more closely align FEI's transportation model with industry standard practice

(c) FEI proposed daily balancing is appropriate as all transportation customers are now able to manage under daily balancing provisions and should therefore be treated equally

(d) FEI's proposed daily balancing will reduce opportunities for arbitrage

(e) FEI's proposed daily balancing will improve efficiency and fairness

11. Each of these points are discussed below.

A. The Transportation Rate Schedules Require Daily Supply Based on a Best Estimate of Daily Demand

12. FEI's proposal for daily balancing is consistent with the spirit and intent of the transportation rate schedules. The terms and conditions of the transportation rate schedules already require the customer or their Shipper Agent to provide daily supply based on their best estimate of consumption each day. This is true even for the monthly balancing rate schedules.

Section 7.2 of Rate Schedule 23 (Large Commercial), Rate Schedule 25 (General Firm), Rate Schedule 26 (NGV), and Rate Schedule 27 (Interruptible) states:

> The Shipper's Requested Quantity for each Day will equal the Shipper's best estimate, at the time of notification to FortisBC Energy of the Requested Quantity, of the quantity of Gas the Shipper will actually consume on such Day. [Emphasis added.]

13. Section 5.2 of Rate Schedule 22B similarly states: "The Shipper's Requested Quantity each Day will equal the Shipper's best estimate of the quantity of Gas the Shipper will actually consume on such day."

14. Consistent with the above requirements for a best estimate, Section 3.1 of the Shipper Agent Agreement also specifies that: "The Shipper Agent is responsible for the management of all Balancing Gas for The Group and its members." This makes it clear that it is the responsibility of the Shipper Agent, not FEI, to balance supply and demand of transportation customers.

15. The interpretation of the transportation rate schedules was considered previously by the Commission in FEI's 2014 Application to Amend the Balancing Charges for Rate Schedules 23, 25, 26 and 27. On page 13 of the Decision on that Application, the Commission agreed with FEI's assessment of the intent of the rate schedules, stating:

> The Panel agrees with FEI that Shippers/Shipper Agents should make their best efforts to balance deliveries to customer load requirements on a daily basis.[4] [Emphasis added.]

16. While all Shipper/Shipper Agents should supply their best estimate of daily consumption, they are not all behaving the same way. In response to BCUC IR 1.55.1.1,[5] FEI presented the days of inventory for monthly and daily balancing groups in 2015 and 2016. An updated version was also presented in the SRP presentation. As shown there, FEI sees a

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[4] In the Matter of FortisBC Energy Inc. Application to Amend the Balancing Charges for Rate Schedules 23, 25, 26 and 27, Decision dated December 1, 2014.

[5] Exhibit B-5.

consistent pattern of monthly balanced groups undersupplying each month, whereas daily groups tend to oversupply each month. It is therefore clear that although the obligation to provide a best estimate each day is common across transportation rate schedules, the price signals from balancing rules are influencing the behaviour.

17. Therefore, requiring all transportation customers to abide by daily balancing rules should bring customer behaviour closer in line with the spirit and intent of the transportation rate schedules.

B. Daily Balancing is the Industry Standard

18. FEI's proposed move to daily balancing will also bring FEI's transportation model closer in line with standard industry practice. In this proceeding, the Commission has the benefit of two jurisdictional reviews, one from Black & Veatch, and second from Elenchus. Both conclude that daily balancing is the industry standard practice.

19. FEI retained Black & Veatch to conduct a study of industry practices in North America for comparable utilities within Canada and the U.S. Black & Veatch's study is in Appendix 10-1 of the Application. Black & Veatch conclude that FEI's balancing provisions are significantly more accommodating than its North American peers,[6] and that daily balancing is the general industry practice today.[7]

20. Elenchus also conducted a review of the range of balancing tolerances used within the industry. Consistent with Black & Veatch, Elenchus concludes at page 37 of its Rate Design Report:[8]

> The jurisdictional review indicates that daily balancing provision for transportation service is the standard industry practice.

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[6] Exhibit B-1, Appendix 10-1, p. 2.

[7] Exhibit B-1, p. 10-23; Appendix 10-1, pages 16-35.

[8] Exhibit A2-10.

> Daily balancing is consistent with the normal operating parameters of natural gas distribution systems.

21. Consistent with the jurisdictional analysis, FEI itself is held to daily balancing by the upstream pipelines to which it connects.[9]

22. FEI's proposal to move all transportation rate schedules to daily balancing would bring the balancing rules into closer alignment with standard industry practice.

C. All Transportation Customers Can Daily Balance and Should be Treated Equally

23. All transportation customers or their Shipper Agents are able to balance daily, and should therefore be treated equally.

24. As Ms. Salbach described at the SRP, the gas industry has evolved since the inception of the Transportation model in 1985. When the model first began, fax machines were used to transmit gas nominations and supply to and from pipelines. Supply and customer demand were manually updated on a T record, and made available to marketers on a bi-weekly basis. There were just two gas cycles to make supply adjustments within the day.[10]

25. In contrast, today all transportation customers have the tools to daily balance:

- The information provided to Transportation Customers has evolved to accommodate daily balancing. Today, 99 percent of all transportation customer sites have Automatic Meter Reading ("AMR"), which reports metered consumption daily.[11] All transportation customers have access to FEI's Web Information and Nomination System ("WINS"). WINS is a self-serve web-based application to view individual customer and group demand by day, historical

[9] Exhibit B-5, BCUC-FEI IR 1.59.1.1.

[10] Transcript Vol. 6, p. 566.

[11] Exhibit B-5, BCUC IR 1.56.1.2.

customer consumption, authorized supply from the interconnects, system inventory and imbalances.[12]

- Nominating practices have also evolved to accommodate daily balancing. Shipper Agents can make changes to their nominated or requested supply up to five times for each gas day to best match their forecast demand.[13] In addition to the two nomination cycles prior to the day, there are three intraday nomination cycles, which enable Shipper Agents to reflect changes in demand caused by weather or customer behaviour.[14]

- As also noted by Ms. Salbach at the SRP, gas marketers have become more sophisticated over time as well.[15]

26. The evidence is also clear that daily balancing is in fact being accomplished today.

- FEI's largest and most volatile industrial customers under Rate Schedule 22 and 22A are currently required to daily balance. In addition, if monthly balanced customers are grouped with daily balanced customers, then the daily balancing rules apply to the whole group.[16] As a result, many transportation customer groups already balance daily. As shown in the Application and presentation at the SRP, the current daily balanced groups have both large and small daily load profiles, and include customers in the Lower Mainland and the Interior.[17]

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[12] Exhibit B-5, BCUC IR 1.56.1.

[13] Exhibit B-5, BCUC IR 1.56.1.1

[14] Exhibit B-5, BCUC IR 1.56.1. Transcript Vol. 6, p. 567.

[15] Transcript, p. 567.

[16] Exhibit B-1, p. 10-21.

[17] Exhibit B-1, p. 10-23.

- As seen from the jurisdictional reviews of Black & Veatch and Elenchus, transportation customers in other jurisdictions are subject to daily balancing, with much lower balancing tolerance levels than proposed by FEI.[18]

27. In summary, the combination of improved technology and increased nomination cycles provides the ability for all market participants to manage within daily balancing provisions.[19] This is proven out by the fact many customer groups of different sizes are in fact daily balancing today. Consistent with rate design principle No. 8 - avoidance of undue discrimination - it is therefore appropriate that all transportation rate schedules be treated equally and be required to daily balance.

D. Daily Balancing Reduces Opportunities for Arbitrage

28. A benefit of FEI's proposal is that it will reduce opportunities for arbitrage created by the monthly balancing provisions.

29. While FEI has not sought to prove that price arbitrage is happening, there is no doubt that there are opportunities for it to occur. Elenchus concluded in its Rate Design Report that such gaming is inevitable:

> More flexible load balancing requirement will inevitably facilitate gaming of the system by sophisticated customers so as to maximize their access to "free" storage and minimize their total commodity costs.[20] [Emphasis added.]

30. The monthly balancing rules facilitate arbitrage or gaming because there are no charges for drafting the system and monthly balancing gas is charged at the Sumas daily price average for the month. Shipper agents are therefore able to draft the system to take

[18] Exhibit B-1, Appendix 10-1; Exhibit A2-10, Rate Design Report, p. 37.

[19] Exhibit B-1, p. 10-24.

[20] Exhibit A2-10, Rate Design Report, p. 37.

advantage of differences in the price for balancing gas from FEI and the price for gas supply available in the marketplace.[21]

31. An example of this type of arbitrage opportunity is provided by the scenario from Commission staff, as follows:[22]

> Scenario 4 - The Shipper Agent generally makes an effort to balance to the group's load requirements on a daily basis with the exception of four days where the Shipper Agent significantly reduces its supply during a high price period, makes up part of this shortfall later in the month and incurs a Balancing Gas quantity of 2,281 GJ.

32. Given that Shipper Agents have the ability to draft under the current monthly balancing provisions without incurring any charges, under this scenario a Shipper Agent could game the system.[23] Instead of supplying gas based on their best estimate of daily demand, they can instead deliberately undersupply to reduce their total commodity costs. This is achieved at the expense of sales customers, since midstream resources must be used to balance the system when a mismatch between supply and demand occurs.

33. In addition, the coexistence of monthly and daily balancing creates opportunities for arbitrage as Shipper Agents can over-supply the daily groups and under-supply the monthly groups. The Shipper Agents can then net the difference to avoid balancing charges.[24]

34. FEI's proposal to move all customers to daily balancing will reduce these opportunities for arbitrage.

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[21] Exhibit B-1, Application, p. 10-23.

[22] Exhibit B-5, BCUC-FEI IR 1.59.2.

[23] Exhibit B-5, BCUC-FEI IR 1.59.2.

[24] Exhibit B-1, Application, p. 10-22.

E. Daily Balancing will Improve Efficiency and Fairness Between Sales and Transportation Customers

35. FEI's proposal to move all transportation customers to daily balancing aligns with rate design principles. Specifically, it will improve fairness, consistent with rate design principle 2 (fair apportionment of costs amongst customers), and efficiency of the system, consistent with rate design principle 3 (price signals that encourage efficient use).[25]

36. The move to daily balancing will require all transportation customers to pay for balancing gas at the daily Sumas price and also pay balancing charges for undersupplying gas above the tolerance levels. In this way, the daily balancing provisions provide better price signals to limit the reliance of transportation customers on FEI's midstream resources for balancing. Reducing the extent to which midstream resources are relied upon by transportation customers will improve the efficient use of FEI's resources, and increase fairness from a cost-causation perspective. In short, daily balancing will cause transportation customers to bear more of the cost of their own balancing requirements, instead of leaning on the midstream resources contracted by FEI, and paid for by sales customers alone.

F. Conclusion on Daily Balancing

37. FEI submits that the record establishes that a move to daily balancing is warranted at this time. Daily balancing will bring FEI's transportation model more in line with the intent of the transportation rate schedules, industry standards, and rate design principles. As all transportation customers now have the ability to daily balance, they should all be treated equally and rely less on the midstream resources FEI acquires for sales customers. FEI requests that the Commission approve FEI's daily balancing proposal as filed.

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[25] Exhibit B-1, Application, p. 10-26.

PART THREE: NEW BALANCING CHARGE AT 10% TOLERANCE

38. Based on these existing rules, gas supply frequently deviates from demand by as much as 50,000 GJ in a day.[26] In 2015, the imbalances in supply and demand from transportation customers in a single day ranged from negative 10 to positive 14 percent of total demand.[27] In short, the daily imbalances between supply and demand represent significant volumes relative to total demand. The fundamental issue with the imbalances caused by transportation customers is that FEI must manage them using the resources procured on behalf of sales customers.[28]

39. To encourage transportation customer to match supply and demand more closely, FEI proposes to introduce a new balancing charge that would apply to under deliveries from 10 percent up to 20 percent. FEI's existing balancing charge on undersupplies of 20 percent or more would remain in place, so that there would be a tiered balancing charge.

40. As discussed above with respect to daily balancing, the intent of the rate schedules is that transportation customers supply based on their best estimate of daily demand, and the tools available to transportation customers or their Shipper Agents are improved compared to when the balancing rules were first in place. Those two points apply equally to FEI's proposal for a 10 percent tolerance. In short, the tools are available for customers or their shipper agents to balance supply and demand more closely than when the balancing rules were first approved.

41. In addition, there are five points in support of the new 10 percent tolerance balancing charge:

(a) The current 20 percent balancing tolerance is substantially more accommodating than the industry standard

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[26] Exhibit B-1, Application, p. 10-14.

[27] Exhibit B-5, BCUC-FEI IR 1.54.2.2.

[28] Exhibit B-1, Application, p. 10-14; Transcript Vo. 6, pp. 639-640.

(b) The addition of a 10 percent tolerance level brings FEI within industry norms and is a reasonable addition to FEI's current balancing tolerance level

(c) The proposed 10 percent tolerance balancing charge of $0.25/GJ is based on FEI's costs of balancing gas on the system, and would reasonably compensate sales customers for the cost of managing imbalances.

(d) The alternative of a balancing fee on all throughput is not necessary or effective at reducing imbalances

(e) The resulting tiered balancing charge sends appropriate price signals to increase efficiency and fairness

42. Each of these points is discussed below.

A. Current 20 Percent Balancing Threshold is Generous Compared to Industry Standards

43. The jurisdictional reviews conducted by Black & Veatch and Elenchus indicate that FEI's existing balancing charge on under deliveries of 20 percent or more is lenient compared to industry standards.

44. Black & Veatch summarize their finding on the balancing thresholds as follows: "many LDCs across the U.S. and Canada set balancing thresholds at approximately 5%, a level that applies to both monthly and daily balanced transportation service customers. <u>Thresholds rarely exceed 10%, and sometimes are as low as 0%</u>."[29] [Emphasis added.] The most similar utilities in the Pacific Northwest have balancing tolerances between 3 percent and 5 percent.[30] Black & Veatch also note that 5 percent is a fairly common median balancing tolerance level.[31]

[29] Exhibit B-1, Appendix 10-1, p. 3.

[30] Exhibit B-5, BCUC-FEI IR 1.59.1.

[31] Exhibit B-1, Appendix 10-1, p. 6.

45. The jurisdictional review conducted by Elenchus similarly shows balancing thresholds of 5 percent and lower.[32]

46. Consistent with these findings, FEI is being held to much tighter tolerances from its upstream pipelines than ever before.[33]

47. In short, the jurisdictional survey results show that FEI's 20 percent threshold is substantially out of step with industry practice.

B. A 10 Percent Tolerance Level is a Reasonable Addition to the Transportation Model

48. In light of the results of the jurisdictional review, FEI's proposal to add a 10 percent tolerance level is a reasonable tightening of the balancing requirements:

- Black & Veatch observe that imbalance tolerance levels in the industry rarely exceed 10 percent. This suggests that 10 percent is the highest tolerance level that FEI could introduce that would be within industry standards. A 15 percent tolerance, for instance, would not bring FEI in line with industry practice.

- Under the transportation rate schedules, FEI already reserves the right to impose a 5 percent tolerance under supply constraints.[34] This makes the addition of a 5 percent threshold somewhat redundant.

- A 10 percent tolerance is realistic and achievable as many Shipper Agents balance to within a 10 percent tolerance today.[35] Table 10-8 of the Application indicates that 10 of 23 Shipper Agents groups are managing with less than 20 occurrences of imbalances at or above 10 percent.[36] The Shipper Agent groups who operate within the 10 percent tolerance level today have both large and

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[32] Exhibit A2-10, p. 36.

[33] Transcript Vol. 6, p. 629; Exhibit B-5, BCUC-FEI IR 1.59.1.1.

[34] Exhibit B-11, CEC IR 1.53.4.

[35] Exhibit B-1, p. 10-34.

[36] Exhibit B-1, p. 10-35.

small portfolios and are in both the Lower Mainland and Interior.[37] As noted by Ms. Salbach, the Shipper Agents that are managing daily balanced groups within tighter tolerances today in the Lower Mainland and Interior, also manage the customers in the Columbia region.[38]

49. In summary, a 10 percent tolerance level is at the high end of industry norms, but fits nicely within FEI's existing 20 percent tolerance and ability to impose a 5 percent tolerance when needed. A 10 percent tolerance is not overly onerous as Shipper Agents are already managing within this level today, and transportation customers still receive the benefit of no charges on imbalances of up to 10 percent, unless there is a supply restriction. A 10 percent tolerance is therefore a reasonable step towards a more industry standard balancing charge.

C. The Proposed Balancing Charge is Cost-Based and would Compensate Sales Customers for Cost of Balancing

50. FEI derived its proposed $0.25/GJ balancing charge using a cost-based approach based on the variable costs required to balance the system. Customers with undersupplies of 10 percent to 20 percent would pay this charge, which would reasonably cover FEI's variable costs of balancing. The charge is not onerous, as transportation customers are given access to FEI's midstream resources only at the variable cost FEI incurs (i.e. not fixed costs). The balancing charge revenue would be a credit to the midstream portfolio, and would therefore compensate sales customers who pay for the midstream resources used to balance the system.[39]

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[37] Exhibit B-1, p. 10-36.

[38] Transcript Vol. 6, pp. 674-675.

[39] Exhibit B-1, p. 10-37.

D. A Balancing Fee on Throughput is Not Necessary or Effective at Reducing Imbalances

51. FEI's proposal to introduce a tighter balancing tolerance represents a targeted approach to remedying the issues with the transportation model compared to a balancing fee on all throughput, which is also commonly seen in the industry.

52. As indicated in Black & Veatch's Transportation Service Model Review, the two most common balancing charges in the gas utility industry are a volumetric rate that each customer pays per GJ of annual transportation throughput, and a tiered charge that assesses higher charges as the size of a customer's imbalance increases.[40]

53. Black & Veatch explained in their presentation at the SRP and in their report that they initially set out to derive a potential volumetric charge.[41] To do this, Black & Veatch conducted a replacement cost analysis to determine the value of the pipeline and storage capacity resources that were being used to balance the transportation customers' deliveries. The analysis used historical balancing data for each of the groups of customers managed by Shipper Agents and published tariff rates from the relevant pipeline systems and storage facilities. Black & Veatch derived a per-gigajoule rate by dividing the total cost of the pipeline and storage capacity resources by the amount of annual transportation customer throughput on the system.[42]

54. Black & Veatch's conclusion was that FEI's balancing service for transportation customers has a significant market value. Black & Veatch state:

> Taken as a whole, the replacement cost of providing balancing resources analysis shows that the balancing resources FEI provides have significant value in the market. While there are several assumptions that could be adjusted to change the base case value, all results point toward a relatively constant range of values. For the 20% threshold case, which corresponds to FEI's current balancing

[40] Exhibit B-1, Appendix 10-1, p. 8.

[41] Exhibit B-1, Appendix 10-1.

[42] Exhibit B-11, CEC-FEI IR 1.52.1.

provisions, the calculated value ranges from \$0.119/GJ (Table 2) to \$0.167/GJ (Table 5).[43]

55. However, FEI consulted with its customers on a potential balancing fee on throughput and decided not to propose one for a number of reasons. First, a fee-based approach is not aligned with FEI's objective to reduce the volatility or large imbalances on the system. A fee-based approach applies to all throughput and therefore does not provide an incentive to balance more closely on the system. It essentially removes the Shipper Agents' responsibility to manage and match supply and demand.[44] Second, a volumetric rate would apply to all customers, and therefore apply even to those Shipper Agents who are already balancing their groups within a 10 percent threshold on a daily basis.[45] FEI's proposed threshold, on the other hand, achieves the objective of reducing volatility or imbalances, with less change to the transportation model and with minimal impact on the customer groups that are already balancing to a reasonable level.[46] The addition of a 10 percent tolerance level is therefore preferable fee on all throughput.

E. Tiered Balancing Charge Provides Appropriate Price Signals to Increase Efficiency and Fairness

56. FEI's proposal results in a tiered balancing charge, which would send the appropriate price signals to increase efficiency and fairness. The tiered balancing charge is presented below as shown on page 10-37 of the Application.

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[43] Exhibit B-1, Appendix 10-1, p. 8.

[44] Exhibit B-1, Appendix 10-1, p. 8.

[45] Exhibit B-1, pp. 33-34.

[46] Exhibit B-1, pp. 33-34.

Tolerance Range	Winter Charge/GJ	Summer Charge/GJ
Tier 1: 0-10%	**No fee**	**No fee**
Tier 2: 10-20%	**$0.25**	**$0.25**
Tier 3: 20+%	**$1.10**	**$0.30**

57. According to Black & Veatch, it is common in the industry to have a tiered charge that assesses higher charges as the size of a customer's imbalance increases. Black & Veatch indicates that the tiered charge approach is appropriate for FEI:

> …an alternative method of assessing balancing charges is to incentivize the reduction of large imbalances on the system by charging progressively higher amounts for larger imbalances. This type of charge focuses on addressing an important goal for FEI, that is, to reduce the high daily imbalance levels on the system, rather than attempting to collect an amount based on the cost of the underlying resources or the benefit transportation customers receive from those balancing resources. In fact, charging customers based on the level of imbalance is an appropriate method that will allow FEI to reduce the level of imbalances on its system while also recovering the costs of providing balancing resources.[47]

58. Consistent with Black & Veatch's statements above, FEI sees two main benefits of a tiered charge approach from a rate design perspective.

59. First, FEI's proposed tiered balancing charge sends the appropriate price signals to transportation customers and their Shipper Agents. The proposed tiered approach provides an incentive to balance within 10 percent and a greater incentive to balance within 20 percent. Generally, the more the tolerance is exceeded, the greater the charge.[48] This should result in transportation customers or their Shipper Agents balancing their daily supply and demand more tightly than today. Reducing the extent to which Transportation Customers rely on FEI for balancing, will increase the efficient use of FEI's midstream resources. This will bring FEI's

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[47] Exhibit B-1, Appendix 10-1, p. 8.

[48] Exhibit B-11, CEC IR 1.55.1 and 1.55.2.

transportation model in closer alignment with Rate Design Principle No. 3 (price signals that encourage efficient use).

60. Second, balancing charge revenue would be a credit to the midstream portfolio, so that sales customers would be compensated for the use of midstream resources used to balance the system. This would increase fairness, as it would improve the fair apportionment of costs according to cost causation. In short, transportation customers would bear more of the costs related to balancing their own supply and compensate sales customers for the use of mid-stream resources when large imbalances occur. This will bring FEI's transportation model in closer alignment with Rate Design Principle No. 2 (fair apportionment of costs among customers).

F. Conclusion on Proposed Balancing Charge

61. Despite the reasons for adding a 10 percent tolerance level, the tenor of some questions at the SRP was that FEI should focus its efforts on the worst offenders, rather than putting in place a new rule that should apply to all.[49] This is in effect an argument for the status quo, suggesting that FEI should use the tools under the rate schedules to get transportation customers or their Shippers to balance more closely. To sum up the points I have already made, there are a number of reasons why this is not a reasonable option:

- First, placing the responsibility on FEI to manage transportation customer imbalances would be unfair to sales customers and an inefficient use of system resources. It would require FEI to expend more midstream resources to manage the supply and demand of transportation customers each day, which is actually the responsibility of the Shipper Agents. As the record in this proceeding shows, Shipper Agents respond to the price signals sent by the balancing rules.[50] Improving the price signals sent by the balancing rules as FEI has proposed will incent improved behaviour, and is a more fair and efficient way to ensure tighter

[49] Transcript Vol. 6, p. 632.

[50] Exhibit B-5, BCUC-FEI IR 1.55.1.1.

balancing, compared to FEI using midstream resources to monitor and correct Shipper Agent behaviour each day.

- Second, it would not be effective, as Shipper Agents may not be responsive to FEI's requests to bring supply and demand in balance. The evidence shows that Shipper Agents may ignore or be slow to respond to FEI's requests.[51] Even if FEI adjusts a Shipper Agent's nominations, the Shipper Agent can actively work against FEI by readjusting its nominations later in the day.[52] FEI has been holding transportation customers more accountable for their inventories since 2014,[53] but it is not surprising that Shipper Agents naturally respond to the price signals of the balancing rules rather than requests from FEI. Improving the price signals of the balancing rules as FEI proposes would appeal to the economic interest of the Shipper Agents and would therefore be more effective.

- If the status quo is maintained, FEI's transportation model would continue to remain out of step with industry practice. Tolerance levels of 10 percent are rarely seen in the industry, let alone 20 percent.[54] FEI's balancing rules should be more in line with its peers throughout North America and in the Pacific Northwest.

62. In sum, it is neither fair nor efficient for FEI to be put in the position of having to balance the supply and demand of transportation customers through repeated warnings, resetting of nominations or other tools. Transportation customers should be subject to reasonable rules consistent with the intent of the rate schedules and industry standard practice, as FEI has proposed.

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[51] Exhibit B-21, BCUC-FEI IR 2.85.1; Transcript, Vol. 6, p. 680.

[52] Transcript Vol. 6, p. 681.

[53] Exhibit B-21, BCUC-FEI IR 2.85.1.1; Transcript. Vol 6, pp. 680-681.

[54] Exhibit B-1, Appendix 10-1; Exhibit A2-10, p. 37.

63. Overall, FEI's approach is reasonable and appropriate. FEI's proposed 10 percent tolerance balancing charge will increase the alignment of the transportation model with industry practice and rate design principles, and would not unduly burden transportation customers.

PART FOUR: OTHER TOPICS RELATED TO THE BALANCING RULES

64. This part addresses other aspects of the balancing provisions that were the theme of questions at the SRP. In particular, in this Part FEI submits:

(a) Over deliveries from transportation customers are not a benefit.

(b) The introduction of balancing charges on over deliveries is not needed at this time.

(c) Imbalance return should remain a business practice to provide FEI with flexibility to adapt to changed circumstances and operations.

(d) There is no need to phase-in the proposed rules.

A. Over Deliveries are Not a Benefit

65. FEI was clear in its testimony at the SRP that positive imbalances are not a benefit to FEI or its sales customers.[55] FEI cannot rely on positive imbalances for planning purposes, and may have to incur variable costs to manage them.[56]

66. FEI's sales customers pay for midstream resources that can be reliably called upon to meet system needs, such as contracted capacity at the Mist storage facility, the Jackson Prairie storage facility and Northwest Pipeline (NWP).[57] FEI cannot rely on positive imbalances

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[55] Transcript, Vol. 6, pp. 651-653, and 691-693.

[56] Transcript, Vol. 6, pp. 691-693.

[57] Exhibit B-1, Application, p. 10-32.

from transportation customers as a midstream resource because they are uncertain in both timing and location:

- First, the positive imbalance attributable to transportation customers is volatile throughout the year.[58] FEI therefore cannot reasonably predict how much will be available at any one time.

- Second, the presence of a positive imbalance in one location, may not coincide with the location of a supply constraint. There is therefore no guarantee that having a positive imbalance will actually resolve a system constraint or a need for gas.[59]

67. As both the amount and location of positive imbalance is volatile and uncertain, FEI cannot reasonably rely on it as part of its Annual Contracting Plan.[60] It therefore cannot be used to reduce the fixed costs that sales customers pay for midstream resources.[61]

68. Positive imbalances may in fact require FEI to incur variable costs to respond to the imbalance.[62] The volatility due to imbalances is something that FEI must manage on a day-to-day basis. As explained by Ms. Salbach and Mr. Hill at the SRP, FEI may have to reduce planned resources or move gas into storage in response to a positive imbalance.[63] In addition, FEI may incur variable costs in the future to return the positive inventory through imbalance return.[64] Positive imbalances can therefore represent a cost to FEI, rather than a benefit.

69. FEI's view that positive imbalances represent a potential cost, rather than a benefit, is consistent with the fact that all of the local distribution companies surveyed by Black

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[58] Exhibit B-28, SRP Presentation, p. 13.

[59] Exhibit B-1, page 10-8.

[60] Transcript, p. 691.

[61] Exhibit B-5, BCUC IR 1.55.5.1.

[62] Transcript, Vol. 6, p. 691-693.

[63] Transcript Vol. 6, p. 691-693.

[64] Transcript Vol. 6, pp. 602-603.

& Veatch have balancing charges on over deliveries.[65] Other transportation customers across North America are charged a fee for over deliveries, just as they are for under deliveries.

70. Finally, if there are any potential benefits from a positive balance on a given day, the balancing rules provide the quid pro quo.

- Transportation customers do not incur charges for positive imbalances, even though FEI may incur variable charges to manage it.
- Transportation customers can access imbalance return free of any charge, even though FEI may incur variable charges to return it.
- Transportation customers may under deliver by up to 10 percent without incurring balancing charges, other than the cost of gas. This is despite the fact that FEI may use its fixed resources and incur variable charges to address the shortfall.
- FEI's proposed balancing charge at the 10 percent tolerance only recovers FEI's variable charges, not the fixed costs of the assets used to manage the imbalance.[66]

71. In summary, FEI does not consider positive imbalances as a benefit and this view is consistent with the industry practice of charging for over supplies. If there is any potential benefit of positive balances, it is a moot issue because FEI does not charge for over supplies. Moreover, there is other leniency built into the balancing rules that more than compensates for any purported benefit of positive imbalances.

[65] Exhibit B-5, BCUC IR 1.59.3; Transcript Vol. 6, pp. 706-707.

[66] Transcript Vol. 6, p. 682.

B. Balancing Charges on Over Deliveries are Not Necessary at this Time

72. FEI currently does not impose balancing charges on over deliveries and does not propose to introduce such a charge.[67] There are a few reasons for this.

- FEI has been able to manage over-deliveries using its 2-3 day pack rule and imbalance return. This is shown today by the Shipper Agents who adhere to daily balancing within the 2-3 day pack rule.[68] FEI believes that it will continue to be able manage over deliveries in this manner.[69]

- FEI does not expect positive imbalances to increase dramatically. The economics of oversupply are different than undersupply. Customers/Shipper Agents have to pay for the gas and this provides a natural check on the amount of positive imbalance.[70]

- FEI has the ability under the rate schedules to return inventory to customers if needed.[71] It is understandably easier to return a positive imbalance, then to force a customer or Shipper Agent to bring on more supply.

73. FEI is not averse to a symmetrical charge, but believes that it is not necessary and that now is not the time to introduce more change than what is proposed.[72] The proposed move to daily balancing and the introduction of a 10 percent balancing tolerance charge represents a reasonable step towards balancing rules that are more in line with industry standard practice. Rather than introducing more change to which Shipper Agents must adjust, it would be prudent to monitor the changes in behaviour brought on by FEI's current proposals and determine if any further changes, such as balancing charges for oversupplies, are required.

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67 Exhibit B-1, Application, p. 10-36

68 Transcript Vol. 6., p. 575 and 606 and 613-614.

69 Exhibit B-1, Application, p. 10-3;6 Exhibit B-21, BCUC IR 2.86.1.

70 Exhibit B-21, BCUC IR 2.86.1.

71 Exhibit B-21, BCUC-FEI IR 1.86.1.

72 Transcript Vol. 6, p. 702.

As indicated at the SRP in response to a question from Commission staff, after sufficient time and experiences is gained with the new balancing rules, FEI is open to reporting back to the Commission on the implications of implementing balancing charges on over-supplies.[73]

C. Imbalance Return Should Remain a Business Practice

74. The topic of imbalance return was discussed at the SRP and, in particular, the potential to move the detailed rules related to imbalance return into the terms and conditions of the rate schedules. In FEI's view, keeping the details in the business practices is appropriate and provides flexibility to respond to changing circumstances.

75. Imbalance return allows Shipper Agents with daily balanced groups to use their stored inventory as a source of supply. Historically, FEI limits the amount of imbalance return to 40,000 GJ/Day in the Interior and 40,000 GJ/Day in the Lower Mainland (including Vancouver Island). The limit of 40,000 GJ/Day per region is the maximum FEI has found to be operationally manageable during the year under normal weather conditions.[74] The rate schedules allow for imbalance return,[75] but the amount of imbalance return and the allocation process by which it is returned to customers is a part of FEI's business practices.[76]

76. The details of imbalance return should remain as business practices to provide FEI with the flexibility to change in response to changing markets and system conditions. As business practices, FEI can respond to customer concerns, consult and make changes relatively quickly. For instance, if FEI's proposed rules result in more demand for imbalance return, FEI has the ability to look into the existing processes and change them in consultation with customers.

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[73] Transcript Vol. 6, p. 708

[74] Exhibit B-2, Application, p. 10-13.

[75] Transcript Vol. 6, p. 685.

[76] Transcript Vol. 6, p. 684-686.

77. If customers believe that FEI is not carrying out its business practices fairly, customers have the option of filing a complaint to the Commission, in which case the Commission can commence a process if necessary.

78. In summary, FEI believes that the existing process for managing imbalance return is working and that it should remain as a business practice to maintain flexibility in the future.

D. There is no Need to Phase-In the Proposed Changes

79. The topic of a potential phasing in of the proposed changes was also raised at the SRP. FEI does not see a need to phase in the proposed changes to the balancing rules.

80. First, there is no reasonable way to phase in the move to daily balancing. The evidence is clear that all groups can be held to daily balancing today, and there should be no consideration of phasing in this change.

81. Second, FEI does not believe that a phasing in of the 10 percent tolerance level is necessary for three reasons.

- Many Shipper Agents are already balancing daily within the 10 percent tolerance FEI has proposed.[77] The Shipper Agents balancing today manage small and large groups in the Lower Mainland and the Inland regions. This demonstrates that the tools are in place for all customers to similarly balance.

- Second, FEI's proposals already represent a reasonable step in the right direction, rather than a drastic change to the much tighter standards throughout North America.[78] The jurisdictional analysis shows that FEI's proposed 10 percent balancing tolerance is at the high end of industry norms. Based on the

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[77] Exhibit B-28, SRP Presentation.

[78] Transcript Vol. 6, pp. 702, 711-713.

proposed changes as filed in the Application, Transportation customer still receive the benefit of no charges on under deliveries of up to 10 percent, no charges on over deliveries and free access to imbalance return.

- Third, it will have been two years from the time when FEI first consulted on its proposals prior to filing its application, and when the proposed rules would be put in place in 2018.

82. Given these considerations, FEI proposals represent a reasonable and achievable change in the balancing rules, and there is no need to phase-in the proposals.

PART FIVE: CONCLUSION

83. FEI submits that the evidence demonstrates that FEI's proposed changes to the transportation service model are just and reasonable. FEI's proposals represent a reasonable tightening of the balancing rules that will bring FEI more in line with the intent of the rate schedules, industry practice and rate design principles. FEI submits that its proposed changes should be approved as filed.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

Dated: November 27, 2017

[original signed by Christopher Bystrom]

Christopher Bystrom
Counsel for FortisBC Energy Inc.