Diane Roy
Vice President, Regulatory Affairs

Gas Regulatory Affairs Correspondence
Email: gas.regulatory.affairs@fortisbc.com

Electric Regulatory Affairs Correspondence
Email: electricity.regulatory.affairs@fortisbc.com

FortisBC
16705 Fraser Highway
Surrey, B.C. V4N 0E8
Tel: (604) 576-7349
Cell: (604) 908-2790
Fax: (604) 576-7074
Email: diane.roy@fortisbc.com
www.fortisbc.com

October 17, 2018

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

Attention: Mr. Patrick Wruck, Commission Secretary and Manager, Regulatory Support

Dear Mr. Wruck:

Re: FortisBC Inc. (FBC)
Project No. 1598939
2017 Cost of Service Analysis and Rate Design Application (the Application)
FBC Final Submission

In accordance with British Columbia Utilities Commission Order G-180-18 establishing the remainder of the Regulatory Timetable for the review of the Application, please find attached the FBC's Final Submission.

If further information is required, please contact Corey Sinclair at (250) 469-8038.

Sincerely,

FORTISBC INC.

Original signed:

Diane Roy

Attachments

cc (email only): Registered Parties

BRITISH COLUMBIA UTILITIES COMMISSION

IN THE MATTER OF the *Utilities Commission Act,*
R.S.B.C. 1996, Chapter 473 (the "*Act*")

and

FortisBC Inc.

2017 Cost of Service Analysis and Rate Design Application

FINAL SUBMISSIONS OF

FORTISBC INC.

October 17, 2018

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PART ONE: CONTEXT AND CONSIDERATIONS

1. In the 2017 Rate Design Application (2017 RDA or the Application), FortisBC Inc. (FBC) applies for the approval of the British Columbia Utilities Commission (BCUC) of the proposals listed on pages 11 through 13 of Exhibit B-1 (as amended by the errata in Exhibit B-1-4).

2. With respect to customer rates, FBC has applied for changes to its fully bundled rates guided by the underlying cost of providing service, supported by the Cost of Service Analysis (COSA) that has been filed with the 2017 RDA. The changes include:

   - Adjustments to the fixed charges contained in the Commercial, Wholesale, Industrial and Irrigation rates where, as noted in the Application, consideration of COSA allocations on a unit cost basis indicates that adjustments to the fixed charges contained in those rate schedules will improve consistency among rate classes;

   - Adjustments to the energy rates contained in the Commercial, Wholesale, Industrial and Irrigation rates that are driven by the fixed charge changes noted above;

   - For Residential rates, a return to a flat rate accomplished through five annual reductions in the ratio of the Tier 2 to Tier 1 rate, an increase in the RS01 Customer Charge so that it matches the RS03 Customer Charge, and the re-introduction of an optional Time-of-Use (TOU) rate; and

   - Changes to the existing optional TOU rates to reflect the current and projected load and cost circumstances of FBC.

3. With regard to these rate proposals, the record to date is substantial and includes evidentiary and procedural submissions from which can be gleaned the preferences of interveners with respect to those aspects of the Application that have garnered the most attention, namely, the Residential rate proposals. However, explicit summary positions are not as of yet on the record in the form of interveners' written final arguments. To the extent they can be discerned from the current record, the clearest of the positions to date, with respect to the Residential proposals, are those of the BC Sustainable Energy Association-Sierra Club of BC (BCSEA-SCBC), the Kaslo Senior Citizens Association Branch 81 (KSCA81) and the Anarchist Mountain Community Society-Regional District of Okanagan-Similkameen (AMCS RDOS): it is evident that

both the BCSEA-SCBC and KSCA81 do not support the transition away from the Residential Conservation Rate (RCR), while the AMCS RDOS intervention most certainly does, though on a different time frame than FBC has proposed.

4. The decisions that FBC has made (and are reflected in the Application) to either propose changes to rates or maintain existing structures are supported by the COSA. FBC considers the COSA to be a valuable tool that serves as a barometer of the extent to which cost responsibility may have shifted between rate classes during the periods between a given study and its predecessor, and to test the appropriateness of prevailing rate structures. The need for cost shifting is best seen in the revenue to cost (R/C) ratios, and where these indicate that a certain class may be under- or over-contributing revenues given its allocated costs, rates may be adjusted accordingly (rebalancing). Making changes to the individual components of a rate, such as energy, demand and customer charges, is somewhat more nuanced. The structure of a rate may be influenced by historical developments, policy considerations and/or convention. Rates are seldom, if ever, set to mirror the unit costs that result from the COSA; however, in the view of FBC, and as reflected in the proposals contained in the Application, directional shifts to better reflect fixed cost recovery, and also to reflect changes in customer use or other environmental factors, can be appropriate.

5. For unbundled Transmission service rates, FBC is seeking changes to certain language in the Point-to-Point (PTP) rate schedule related to the anti-pancaking provisions, and changes to the charges under the PTP rates and related ancillary services.

6. In addition, FBC seeks approval of the specified housekeeping and other amendments to FBC's General Terms and Conditions and the removal from the Electric Tariff of Schedules 74 (Extensions), 80 (Charges for Connection or Reconnection of Service Transfer of Account, Testing of Meters and Various Custom Work), 81 (Radio-Off Advanced Meter Option), and 82 (Charges for Installation of New/Upgraded Services) as the charges contained in these schedules have been moved to the General Terms and Conditions section of the Tariff.

7. These final submissions generally follow the sequence of topic areas provided by the BCUC in its information requests.

A. LEGAL AND REGULATORY FRAMEWORK

8. FBC files the 2017 RDA for approval by the BCUC under sections 58, 59, 60 and 61 of the *Utilities Commission Act*, RSBC 1996, Chapter 473 (the UCA). A description of these UCA provisions is found at Section 3.1 of the Application.

9. While there is no requirement in the UCA that a public utility must file a COSA or rate design application (RDA) with the BCUC at any specific time interval, proposed changes to rates must be approved through a hearing process. Reflective of its importance, a COSA is as a matter of practice filed in support of such structural rate changes.

10. FBC stated in a number of regulatory processes since the last RDA was approved in 2010 that it planned to file a COSA and RDA in 2017, as it proceeded to do.

11. A number of other government policies, laws and regulations, as well as previous BCUC rate design-related decisions have been considered in drafting the Application and have informed the proposals it contains. These considerations are discussed in Section 3 of the RDA, and include the *Clean Energy Act*, SBC 2010, Chapter 22 (the CEA) and the B.C. government's 2016 Climate Leadership Plan (CLP). The relationship between the residential rate proposals and existing legislation was discussed in the response to BCUC IR 1.4.3, which specifically queried whether any rate design proposals included in the Application are in conflict with existing government policies, legislation and/or regulations. In FBC's view, no such conflicts exist.

12. No intervener took issue with the fact that these pieces of legislation or policy were relevant to the Application, though FBC was required to provide some clarification as to the applicability of certain sections of the legislation as part of the responses to KSCA81 IRs 2.3.2.v. and 2.8.1.i.

13. The 2017 RDA has also been influenced by the 2009 COSA and RDA and BCUC decisions, particularly Orders G-156-10 and G-196-10. The determinations that have influenced the COSA and rate proposals before the BCUC in this process are summarized in Table 3-1 of the Application and include:

    - The establishment of a range of reasonableness for FBC's R/C ratios at 95 percent to 105 percent;

- For Large Commercial Service – Transmission (RS 31), and Wholesale rates (with exception of TOU rates), the demand component was separated into a power supply charge and a wires charge and the demand ratchets for these were both set at 80 percent;

- The demand ratchet used to calculate billing demand under the wires charges for both RS 31 and Wholesale customers should be consistent and was set at 80 percent; and

- The energy rates for the small commercial and commercial service were reduced in the number of steps in their respective declining block rate structures.

14. Nothing in the current Application purports to undo or runs counter to the outcomes of the 2009 COSA and RDA, and specifically with respect to the current COSA, the methodologies employed are largely consistent with those previously accepted by the BCUC.

15. As part of Order G-156-10, FBC was directed to file a residential inclining block (RIB) rate application. FBC filed the requisite application on March 31, 2011. The FBC RIB rate (the Residential Conservation Rate or RCR) was approved by Order G-3-12 and was implemented on July 1, 2012. Therefore, the requirement to file a RIB rate application has been fulfilled.

16. Having had five years of experience administering the RCR, FBC has applied to return to the flat rate structure for its default residential rate. This proposal is based primarily on considerations related to the COSA, with support from other factors as described in Section 6.1 of the Application. FBC discusses this further in Part III of this document.

B. RATE DESIGN PRINCIPLES

17. In section 3.2 of the Application, FBC lists and describes the principles of rate design, including the Bonbright principles that feature prominently in most rate applications before the BCUC. As noted, FBC has applied its experience and judgment to consider and balance the most relevant principles in a given context when identifying rate design issues and proposing rate design solutions.

18. A detailed discussion of the trade-offs that necessarily occur with the design of utility rates can be found in the response to BCUC IR 1.3.3, which begins with a discussion of the Company's residential rate proposal summarized by noting that, "…inclining block rate structures may

provide better price signals for energy conservation for some segments of residential customers, but provide less desirable results in terms of other rate design considerations such as customer awareness and understanding, cost causation or rate and revenue stability."

19. FBC has further noted that in line with the fact that cost of service allocations in the COSA study are the starting point for the design of the majority of rates, the principle of cost causation represents a foundation upon which the rate design is built.[1] Further, FBC has described its general approach to the application of the Bonbright principles as one where they are best viewed, as described in the writing of Dr. Bonbright, as "attributes of a sound rate structure".[2] FBC also does not have a preconceived notion of what the proper form of prioritization of the Bonbright principles should take, and uses the principles as a means of assessing whether rate changes it may propose would tip the balance between the competing objectives contained in the principles without sufficient justification.[3]

20. The principles that have been relied upon by FBC, both those articulated by Bonbright and the additional constructs upon which particular rate proposals rest, are appropriately considered in the Application and in the view of FBC are supportive of the rate changes incorporated therein.

21. As part of the consideration of rate design principles, efficient consumption and conservation are relevant factors, and the impact of the FBC rate proposals on conservation is under discussion. In this regard, the BCSEA-SCBC, in its evidence has misinterpreted an IR response related to FBC's forecast of total 5-year rate-related conservation impact, claiming that this assumption for the duration of expected conservation was merely a convenience adopted to respond to a BCUC IR in the 2011 FBC RIB proceeding.[4]

22. For clarity, the FBC assumptions referred to in the IR response were not related to the overall conservation impact, but to the division of that impact into individual years as requested in the question at the time. Given this error, it is not the case that the FBC assumptions "should be given no weight" as asserted by the BCSEA-SCBC.

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1 Response to BCUC IR 1.2.1.
2 Principles of Public Utility Rates: James C. Bonbright et al, 1988 Edition, page 382.
3 See the response to BCUC IR 1.49.4.
4 Exhibit C2-6, page 15.

23. In addition to its submissions regarding FBC's reliance on the period of time during which conservation impacts would be realized, BCSEA-SCBC has disputed FBC's claim that there would be offsetting conservation impacts from increasing the Tier 1 rates:

> Unfortunately, to the best of our knowledge, the percent of bills with no Tier 2 consumption at all has not been provided. Insofar as there are more bills with at least some Tier 2 consumption than without any, increased usage in Tier 2 would likely not be offset by decreased usage in Tier 1.[5] [underlining added]

24. FBC can confirm that of the total number of bills included in the bill impact analysis, 57 percent had no Tier 2 consumption. Given this, and the BCSEA-SCBC comment above, the conclusion must be that offsetting consumption impacts is a reasonably likely outcome, and certainly, there is no basis for concluding that the implementation of a flat rate would lead to an overall increase in consumption.

25. The matter of conservation impact was also discussed at length in FBC's response to BCUC IR 2.111.6. Here, FBC noted that, since the proposed rate changes are being phased in over time, the price change each year would be small. To the extent that some amount of conservation impact, however uncertain, were to occur, this fact would serve to soften any bill impact.

26. In its response to BCUC IR 1.2.1[6] on the BCSEA-SCBC intervener evidence, BCSEA-SCBC has also derived erroneous conclusions in its assessment of FBC's response to BCUC IR 1.4.3[7]. In particular, BCSEA-SCBC disputes FBC's characterization of a Faruqui et al. 2015 paper as providing support for the flattening of the RCR as possibly giving rise to more electricity conservation due to the stronger price signal for consumption below the Tier 2 threshold. BCSEA-SCBC's consultant, Mr. Raphals describes the three methods employed in the Faruqui paper to assess the conservation impact of flattening an inclining block rate, namely the Tier-specific methodology, the Average Price methodology and the Marginal Price methodology, and then notes "Faruqui et al. took no position as to which of these methodologies best simulates consumer behavior". After making this statement the remainder of the response assumes that the Marginal Price methodology is most reflective of consumer behaviour and therefore that the conservation increase (i.e. benefit) found in the Faruqui et al. study by using the other two

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5 Exhibit C2-6, page 18.
6 Exhibit C2-10, pages 12 and 13 of 28.
7 Exhibit B-8, pages 12-13.

methods would not occur. The BCSEA-SCBC response to BCUC IR 1.1.4[8] quotes a California Public Utilities 2015 Decision in which the Faruqui et al. study, as well as the evidence of other experts, were considered, which found the following:

> Based on the analyses provided, we cannot find that one methodology alone accurately approximates how customers respond to tiered rate changes. Of the methodologies proposed, we believe the average price methodology is the closest approximation of how most customers will respond.[9]

27. In the Faruqui et al. study, as noted in the BCSEA-SCBC response to BCUC IR 1.2.1, the assessment of the Average Price methodology of the conservation impact of flattening an inclining block rate structure in the cases examined was that it produced slightly more conservation.

28. FBC's purpose in making the foregoing comments is not to draw a definitive conclusion that the flattening of its RCR will generate more conservation than remaining with an inclining block rate structure but rather to draw attention to the fact that the potential for losing conservation benefits is not a significant concern in transitioning from the RCR to a flat rate.

29. The BCSEA-SCBC have contended that the proposals to implement a flat rate and allow the Customer Charge to catch up to the level it would be at without the freeze instituted by Order G-3-11 may negatively impact conservation to a degree not justified by a better alignment of rates and underlying costs. FBC does not believe that there exists a sufficient basis to assume that any increase in consumption that may occur within the minority of customers that would have consumption billed at the flat rate rather than at the Tier 2 rate will be greater than the additional conservation that may result for the majority of customers that will effectively see an increase in bills due the difference between the current Tier 1 rate and the proposed flat rate.

PART TWO: COST OF SERVICE AND RATE REBALANCING

30. FBC engaged EES Consulting (EES) to conduct a COSA with respect to the services provided by FBC to its customers. The development of a COSA, and the reliance upon COSA results as a

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[8] Exhibit C2-10, page 4 of 28.
[9] CPUC Decision 15-07-001, page 60.

foundation for rates, are unremarkable and have not been contested in the 2017 COSA and RDA process to date nor in previous proceedings of which FBC is aware.

31. However, the specific assumptions, methodologies and data included in a COSA can be the subject of debate and differing positions.

32. The 2017 COSA is consistent with past FBC practice as previously accepted by the BCUC, as well as with industry standards. The COSA developed by EES is also appropriate in the particular circumstances of FBC. The COSA methodology is described in the Application, Section 5 and select related aspects are discussed further below.

C. MINIMUM SYSTEM STUDY

33. In the 2017 COSA, Distribution plant has been classified based on a "minimum system study" (MSS) approach. A peak load carrying capability (PLCC) credit was applied to correct for the inherent double counting of demand that has been a criticism of a standard minimum system study in the past.

34. The MSS methodology was also used by FBC in the 2009, 1997 and 1982 RDA processes. In the BCUC's most recent decision on FBC rate design, in this regard the Panel accepted the classification of distribution system costs related to poles, conductors and transformers based on the minimum system method.[10]

35. The MSS is also an accepted methodology for the classification of distribution assets described in the *NARUC Electric Utility Cost Allocation Manual* as follows:

> When the utility installs distribution plant to provide service to a customer and to meet the individual customer's peak demand requirements, the utility must classify distribution plant data separately into demand- and customer-related costs.
>
> Classifying distribution plant as a demand cost assigns investment of that plant to a customer or group of customers based upon its contribution to some total peak load. The reason is that costs are incurred to serve area load, rather than a specific number of customers.

[10] G-156-10 Decision, page 44.

36. The manual goes on to state:

> Two methods are used to determine the demand and customer components of distribution facilities. They are, the minimum-size-of-facilities method, and the minimum-intercept cost (zero-intercept or positive-intercept cost, as applicable) of facilities. [underlining added]

37. The standard set by NARUC does not preclude the use of other methods where the individual circumstances of the utility or regulatory regime indicate that another approach may be valid. However, the individual circumstances of the utility ought not to include the preferred outcome of a subsection of customers as an input.

38. The use of the MSS is not unusual in BC. FortisBC Energy Inc. (FEI) utilized the MSS in its 2016 COSA and RDA, and the Panel in that process found as recently as July of 2018 that the, "…approach of using the MSS to split the costs of distribution mains between demand and customer related costs is reasonable for use in the COSA studies."[11]

39. Interveners and the BCUC have asked questions of FBC to clarify the assumptions included in the MSS and the impact of those various assumptions on the resulting classification.

40. KSCA81 is alone in objecting to the use of the MSS in its entirety. However, this objection seems to be based at least in part on the perception it does not produce the end result that KSCA81 would prefer, a fundamental misunderstanding of the methodology itself, and the reliance on the determination made by a regulatory authority in another jurisdiction without consideration of how the MSS done for FBC differs from iterations of an MSS historically used elsewhere.

41. First, it is clear that KSCA81 desires an outcome that produces the lowest bills possible for customers with low consumption and views the use of a MSS as not conducive to that outcome. KSCA81 therefore focusses much attention on the single jurisdiction regulated by the Washington Utilities and Transportation Commission (WUTC), certain determinations made by WUTC, and correspondence with Mr. Jason Ball, WUTC staff.

42. While FBC is hesitant to take issue with the findings of the regulatory authority in another jurisdiction, and notes that the relevance of such findings to the FBC context is in any case questionable, the Company does note that the hesitancy of the WUTC to adopt the MSS

[11] Appendix A to Order G-4-18, page 18.

methodology is not based primarily on considerations related to cost. In his testimony in a WUTC docket referred to in the KSCA81 evidence, Mr. Ball noted:

> The Commission has been hesitant to depart from the Basic Customer Method because it "does not promote, and may be antithetical to, the realization of conservation goals."[12]

43. Mr. Ball also makes the following points in his testimony in the same proceeding:

> Both the current natural gas and electric residential basic charge and the Company's (Puget Sound Energy) proposed increases are below the Company's COS study results, even though these costs are fixed customer-related expenses. When fixed customer-related expenses are not included in the basic charge they will be recovered through the volumetric delivery charge. Customers with higher volumetric usage are thus paying for the fixed costs of serving customers with low volumetric usage. A basic charge set below the cost of service results is a form of cross-customer subsidization that is inconsistent with the principle of cost causation. Ultimately, an inadequate basic charge establishes inappropriate price signals to customers because their rates reflect the costs of serving a different customer.[13]

44. Mr. Ball is also of the opinion that line transformers should be included in the Customer Charge determination, stating:

> Line transformers are a customer dedicated facility that are required to provide service for each customer and they have more in common with meters than overall distribution plant. Line transformers step down the intensity of power on the distribution conductors from the distribution level (approximately, 5 kV) to the household level (120 or 240 volts). Like the meter and service drop, line transformers are essentially customer dedicated facilitates. This is true even though one line transformer can serve up to five or six residential or small commercial customers.[14]

45. The testimony by Mr. Ball acknowledges that some distribution infrastructure is required to serve customers, and that the PSE Customer Charge is set below the COSA amount and that this results in a cross-subsidization of certain customers. As is the case with current FBC rates, which also set the Customer Charge below the COSA allocated cost amount, the WUTC has determined that this is acceptable for policy reasons. However, this does not make the case that an increase in the cross-subsidization should be pursued. The nature of service to customers is evolving,

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[12] Testimony of Jason L. Ball Exh. JLB-1T Dockets UE-170033/UG-170034, page 25.
[13] Ibid., pages 24-25.
[14] Ibid., page 26.

and emerging challenges related to the recovery of fixed costs were not recognized to the extent that they are today at the time these statements were made.

46. Finally, through emphasis in information requests, KSCA81 indicates a concern on the part of the WUTC that the MSS leads to a double counting of some costs. For example, the preamble to KSCA81 IR1.1.2.1 includes the following:

> In this case, the only directive the Commission will give regarding future cost of service studies is to repeat its rejection of the inclusion of the costs of a minimum-sized distribution system among customer-related costs. As the Commission stated in previous orders, the minimum system method is likely to lead to the double allocation of costs to residential customers and over-allocation of costs to low-use customers. [emphasis in original]

47. This ignores the fact that FBC has included a PLCC credit as part of its MSS to account for the fact a minimum system would have some ability to meet load and avoid double counting of some costs, and this inclusion specifically benefits low consumption customers. The rationale for the PLCC is explained in the response to KSCA81 IR 1.1.2.4. A PLCC has not been proposed in the WUTC context.

48. The point of this discussion is not that variations in approaches in different jurisdictions are not appropriate. Quite the opposite. The point is that in an era of readily available information it is a simple matter to seek out examples that support a particular position. It is equally easy to find other instances where a different, or even opposite position is taken.

49. For example, in June of 2017 Elenchus recommended that SaskPower [15]utilize the MSS with PLCC adjustment methodology to classify distribution lines and transformers between customers and demand related. Elenchus also noted that 6 of the 10 utilities it surveyed in its jurisdictional review utilized the Minimum System method to classify some portion of distribution expenses as Customer related.

50. In the G-156-10 Decision, the BCUC made the following determinations:

> The Commission Panel accepts FortisBC's proposed classification of distribution system costs related to poles, conductors and transformers based on the minimum system method.

[15] The link to the Elenchus report is provided in BCOAPO IR 1.23.1.

> The Commission Panel also accepts that the PLCC adjustment compensates for changes in the minimum size and shifts the costs associated with the increased capacity of the minimum system to those customers having a higher than the average 1kW demand on the system.

51. The Company recognizes that there are alternatives to the MSS. The pros and cons of these alternative methods for classifying distribution plant are discussed in the response to BCUC IR 1.26.2.1, and it is evident that the MSS continues to be appropriate for FBC. The Company submits that there have been no changes in circumstance since 2010 that would lead to a change in the MSS methodology as previously employed. Further, FBC believes that it would not be appropriate to dispense with a methodology that has been accepted as appropriate in the previous three COSAs simply because it may produce a less desirable outcome for a particular subset of customers within a class, with the express acknowledgement (as contained in the quote from Mr. Ball in paragraph 43 above) that the preferred outcome is accomplished through cross-subsidization by other customers.

52. FBC submits that the MSS approach is appropriate in the FBC circumstance. The MSS remains consistent with the standard approach outlined in the *NARUC Electric Utility Cost Allocation Manual* and the evidence in this proceeding does not establish that an alternative approach is warranted.

D. THE NON-COINCIDENT PEAK (NCP) ALLOCATION METHOD

53. Related to the discussion of the MSS in the previous section is the use of NCP as the allocator for demand-related distribution costs. FBC provided a detailed discussion of the appropriateness of this approach in response to the BCUC 1.18.2 series of information requests. FBC noted that use of the NCP as the standard allocator for demand-related distribution costs is included in Chapter 6 of the *NARUC Electric Utility Cost Allocation Manual*, and is a long-standing generally accepted practice used by most utilities. NCP is firmly based on cost-causation principles and reflects how utilities plan for distribution facilities. FBC does not believe that any deviation from past practice is warranted in this regard.

E. FIXED COST RECOVERY

54. As part of the Application, FBC is seeking a more consistent recovery of fixed costs across the rate classes. The current levels of fixed cost recovery are located in Table 3-2 (as updated by

Errata B-1-4). While these changes will alter the percentage of the individual class revenue requirements that are recovered by the various components of the rate, there is no impact to the amount of revenue collected by FBC.

55. The Company is recommending a minimum fixed cost recovery of 55 percent of customer related unit costs and 65 percent of fixed infrastructure related unit costs. The process that was undertaken and the factors that were considered in arriving at this recommendation is described in the Company's response to BCUC IR 1.9.2.

56. In terms of the rates, this will result in changes to the fixed charges for a selection of rates as follows:

Table 1: Summary of Fixed Charge Changes

Rate Class	Code	Current Customer Charge ($/mo)	Proposed Customer Charge ($/mo)	Change ($/mo)	Current Demand Charge ($/kVA/mo)		Proposed Demand Charge ($/kVA/mo)		Change ($/mo)	
Small Commercial	RS 20	19.40	23.00	3.60	N/A		N/A		N/A	
Commercial	RS 21	16.48	54.00	37.52	7.72		10.22		2.50	
Large Commercial Primary	RS 30	945.04	945.04	n/c	9.19		9.19		n/c	
Large Commercial Transmission	RS 31	3116.03	3195.00	78.97	Wires	PS	Wires	PS	Wires	PS
					4.93	2.77	4.93	3.45	n/c	0.68
Wholesale Primary	RS 40	2645.03/POD	4522.46/POD	1877.43	Wires	PS	Wires	PS	Wires	PS
					8.98	4.82	8.98	4.82	n/c	n/c
Wholesale Transmission	RS 41	5974.48	5978.48	4.00	Wires	PS	Wires	PS	Wires	PS
					6.34	4.77	6.34	4.77	n/c	n/c
Irrigation	RS 60	20.06	22.09	2.03	N/A		N/A		N/A	

57. Where the proposed rate for a given customer class includes an increase in the Customer or Demand Charge there is a corresponding reduction in the energy charge rate that ensures class revenue neutrality. This does not imply revenue neutrality on an individual customer basis. However, the expected annual bill impacts are shown in the Application for each class and are expected to be moderate overall and result in a better reflection of customer use of FBC's system. For example, the responses to BCOAPO IRs 2.79.2 and 2.79.3 show that load factors range from 4 percent to 86 percent for RS 21 customers. Although this class has the most marked increase in fixed charges, as discussed in the response to BCOAPO IR 2.79.5, there is a relatively small number of customers with an adverse bill impact above what would be considered a rate shock level and these customers have an average load factor of less than 6

percent, which indicates a very inefficient use of the system. Even with this increase, as shown in the Application Table 6-16, annual bill impact for RS 21 customers remain relatively minor.

58. The situation is similar for the other rate classes as well. FBC believes that given the improved equity amongst the customer classes, and better reflection of cost causation both on an inter-class and intra-class basis, the standardization of fixed charge recovery is justified and should be approved.

59. In addition to the fixed charge changes summarized in Table 1 above, FBC is also recommending that the Residential Customer Charge specific to the RCR (RS 01) be increased to match the Customer Charge that is current for the Exempt Flat Rate (RS 03). This would return this charge to the level it would presently be at without the temporary freeze instituted by BCUC Order G-3-12. This recommendation is discussed in greater detail in the section on Residential rates below.

F. RATE REBALANCING

60. Rate rebalancing may be required when the R/C ratios for a Customer Class (or classes) falls outside the Range of Reasonableness (ROR) previously accepted by the BCUC as appropriate for a given utility. The ROR the BCUC accepted for FBC during the 2009 COSA process is 95 percent to 105 percent. In the current COSA, R/C ratios are as follows:

Application Table 5-11: COSA Revenue to Cost Ratios

Customer Class	Default Rate Schedule	Revenue to Cost Ratio
Residential	RS 01	98.4%
Small Commercial	RS 20	102.2%
Commercial	RS 21	104.7%
Large Commercial Primary	RS 30	104.0%
Large Commercial Transmission	RS 31	107.0%
Lighting	RS 50	92.2%
Irrigation	RS 60	97.2%
Wholesale Primary	RS 40	96.7%
Wholesale Transmission	RS 41	103.9%

61. In the Application, FBC has proposed to move the two rate classes that are currently outside of the ROR (RS 31 and RS 50) to within the ROR by adjusting the final rates approved by the BCUC in this process by a percentage sufficient to accomplish this end.

62. Additional context for the rebalancing proposal is discussed in the responses to BCUC IRs 1.19.1 and 1.19.1.1.

63. As noted in the response to BCUC IR 1.20.1, the 2009 COSA/RDA Decision determined that future rebalancing need not take place unless the R/C ratios again fall outside of the accepted ROR, but was silent on what the target of the rebalancing should be in the case where such an excursion outside the ROR takes place in the future. FBC is not proposing to move all classes to unity, nor is it proposing to move only RS 50 and RS 31 to unity while leaving the other classes unaffected. FBC is proposing only to rebalance those two rate classes (RS 50 and RS 31) that are outside of the ROR. FBC does not view it as an equitable or logical outcome to move only two classes to unity while leaving other classes untouched.

64. FBC stated specifically that it would not be equitable to move rate classes to unity in isolation since this would require a different standard of cost recovery than imposed on the other classes of customers.[16]

65. The rebalancing proposal would result in a percentage increase in rates for RS 50 of 8.4 percent and a percentage decrease in rates for RS 31 of 3.4 percent.

PART THREE: RESIDENTIAL RATES

G. SUMMARY OF RESIDENTIAL DEFAULT RATE PROPOSAL

66. In the Application, aside from the specific TOU proposals, FBC is applying to the BCUC for approval to:

    1. Implement a flat rate structure as the default rate for residential service[17];

[16] Response to CEC IR 2.56.2.

[17] "Flat Rate" means that each kWh of consumption is billed at the same unit price.

2. Phase in the change described in point 1 such that at the beginning of the fifth year the rate would be flat (as shown in Table 6-10 of the Application);

3. Incrementally, over the phase-in period, allow an adjustment in the RS01 Customer Charge such that it equals the RS 03 Customer Charge (which was not frozen as part of Order G-3-12); and

4. Close the RS 03 rate (which was specific to customers in the RCR Control Group).

67. Of the proposals contained in the Application, those affecting residential customers have the greatest impact on the largest number of customers. Accordingly, they have also dominated the discussion leading up to the filing of the Application and the regulatory filings since. The submissions of KSCA81 and AMCS RDOS have paid particular attention to customer impact. The BCSEA-SCBC have provided evidence of a more technical nature. However, FBC submits that its rationale for returning to a flat rate has not been undermined by the submissions, evidence or information requests of any intervener and in its view that remains the appropriate course to follow.

H. RETURNING TO A FLAT RESIDENTIAL RATE

68. FBC has applied to remove its existing residential inclining block rate through a number of incremental changes such that it will ultimately become a flat rate. The reasons for this proposal are laid out in the Application.

69. In the view of FBC, the continuation of the RCR can only be supported if doing so will lead to additional conservation and that such conservation will result in a benefit to FBC customers. In addition, the pursuit of any remaining conservation and benefit needs to be considered in light of the burden that may be placed on some customers.

70. The Company has demonstrated in the past that the RCR has resulted in conservation, but is of the view that additional conservation is subject to diminishing returns. FBC has acknowledged that simply because conservation measures characterized as “low hanging fruit” have been taken, that not all conservation opportunities have been exhausted. However, and in particular in light of the current indeterminate status of an FBC LRMC measure, a LRMC-based valuation

of the benefit of pursuing additional conservation driven by a rate is uncertain.[18] It should also be noted that the phasing out of the RCR will keep some further conservation incentive in place in the near term, and as noted in the response to KSCA81 IR 2.8.3.iii, it remains the case that once a rate is approved by the BCUC, regardless of what it is, a customer will save money, and therefore have a financial incentive to conserve, by taking conservation measures. It remains the case that an inclining block structure results in low-usage customers having less incentive to conserve while high-use customers who do not, or cannot, reasonably alter their consumption habits or invest in alternate technologies will see the average price of energy continue to rise.

71. Policy goals, not the cost of electricity, were the primary driver of the RCR. FBC does not believe that this impetus exists to the same degree today, particularly in light of the Province's increased focus on electrification. For example, electric vehicle adoption is an electrification area of significant policy interest today that, as FBC noted in its response to BCUC IR 1.4.2, is supported by the proposal to transition away from a RIB structure to a flat residential rate.

I. THE PHASE-IN PERIOD

72. FBC is proposing to phase-in the flat rate solely for the purpose of mitigating against the potential annual bill increases for a large majority of customers that are likely if the flat rate is implemented over a shorter period of time. Each set of rates shown in Table 6-10 of the Application is designed to be equivalent to one another and to collect only the residential cost of service. The choice of phase-in period has no impact on the total amount of residential revenue.

73. The potential impact to residential customers from a single year implementation is shown in the response to BCUC IR 1.46.1. This shows that 55 percent of customers across the entire consumption spectrum would have bill increases greater than 10 percent in the single year, while lower consumption customers with usage between 0 to 5,000 kWh/annum, and 0 to 10,000 kWh/annum (totalling 58 percent of customers) would have average bill increases of 14 percent and 16 percent respectively.

[18] A discussion of the FBC LRMC can be found in the response to BCOAPO IR 2.76.1. The impact of the LTERP Decision on the Company's LRMC is discussed in the responses to AMCS-RDOS IR 2.1.4 and BCSEA 2.8.2.

74. Customer bill impact for a 2 and 3-year phase-in of the Company's proposal can be found in the response to BCUC IR 1.46.3. As explained in the response to BCUC IR 1.46.2, while the average annual bill impacts associated with shorter phase-in periods may be reduced to below 10 percent, consecutive increases slightly below 10 percent may still constitute rate shock and ought to be avoided.

75. Only the AMCS RDOS appears to object specifically to the FBC proposal to phase-in the flat rate. FBC is concerned the AMCS RDOS has only sought input from constituents that may be adversely impacted by the current RCR without providing a similar opportunity for other customers to comment, and has no means of confirming the information contained in the testimonials submitted.[19] The testimonials should carry little, if any, weight with the BCUC.

76. FBC does not agree with the AMCS RDOS assertion that, "… the rate increases experienced by customers that are a direct result of the elimination of the RCR are not "adverse" and do not constitute "rate shock."[20] Customer impact needs to be assessed based on current versus proposed rates, not rates that have not existed for 6 years. The customers that are the focus of the AMCS RDOS intervention, high-consumption customers, will receive an increasing benefit with each year of the phase-in period.

J. RESIDENTIAL CUSTOMER CHARGE

77. As noted above, FBC is seeking approval to adjust the Residential Customer Charge over the course of five years such that at the beginning of year five the Customer Charge under RS 01 will be equal to the Customer Charge under RS 03 (the RCR Control Group) and RS 03A (Residential Exempt Rate for Farm Customers).[21]

78. At the current time, RS 01 has a monthly Customer Charge of $16.05, while RS 03/A has a monthly Customer Charge of $18.70. The requested adjustment to the Customer Charge from $16.05 to $18.70 is an increase to the RS 01 Customer Charge rate. However, FBC seeks this increase primarily to align the two rates, and, as will be returned to later in this document, does

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[19] In response to FBC IR 1.1.5, AMCS RDOS stated that, "…Neither RDOS nor AMCS issued a press release on the subject of resident testimonials on or about June 19, 2018". That statement released by AMCS on June 19, 2018 can be found here: https://anarchistmountaincommunitysociety.com/fortis-intervention/

[20] Response to BCSEA IR 1.7.3.

[21] Application, page 22.

so through an increase in the RS 01 charge rather than a decrease in the RS03 charge. This adjustment is supported by the relationship to the COSA determined customer charges which, even at the $18.70 per month amount is still only 53% of the COSA amount. As FBC notes in the Application, there is no cost-based rationale for having the Customer Charges of the two residential rates differ.[22]

79. In its evidence, the BCSEA-SCBC conflates FBC's rationale for harmonizing the Customer Charges with the broader FBC proposal of collecting a certain percentage of the COSA costs when it summarizes FBC's request as, "FBC is seeking to increase the residential customer charge from $16.05 to $18.70 per month (phased in over 5 years), as part of a proposal whereby the various customer classes would have their respective fixed costs recovered by the same percentage of fixed charges."

80. While the fact that the Customer Charge of $16.05 per month collects only 45 percent of the COSA-derived customer related costs is supportive of the FBC request, it is not the primary basis of that request. The amount of discussion devoted by BCSEA-SCBC to this aspect of the Application is therefore disproportionate to the degree to which FBC relies on the COSA-cost relationship to the current charge.

81. The decision to seek congruence in the Residential Customer Charges predated receipt of the COSA, which illuminated the disparate customer and fixed cost recovery among the customer classes. The fact that the primary consideration in raising the RS01 Customer Charge is to have a result where all residential customers have the same Customer Charge is clear from the FBC responses to BCUC IRs 1.39.1 and 1.39.2.

82. For FBC, the proposed adjustment in the RS01 Customer Charge would result in the charge being set at the level where it would be today if not for the previous BCUC direction to freeze the Customer Charge for a 5-year period.

83. The freezing of the Customer Charge and the RCR are explicitly linked. As part of the BCUC decision in the 2009 COSA and RDA, Directive 5 of Order G-156-10 ordered FBC "... to develop a plan for introducing residential inclining block rates that also incorporate a lower Basic Charge

[22] Application, page 67.

in the immediate future...", and as noted in the G-3-12 Decision, the Company noted at the time that, upon implementing the RIB rate in 2012, the Customer Charge would also,"…decrease in absolute terms as compared to the Customer Charge that would be in effect in 2012 if the RIB rate were not put in place."[23]

84. Returning the Customer and Energy Charges to their pre-RCR relative levels is consistent with the Panel's acknowledgement of "…the need for revenue stability…" and,"…that decreasing the Customer Charge could increase revenue volatility, a claim which no Intervener has refuted."[24]

85. There are a limited number of possible outcomes with regard to the level of the Residential Customer Charge going forward. FBC views these outcomes as:

1. Set both the RS 01 and RS 03 Customer Charges at $18.70 per month (the FBC proposal);
2. Set both the RS 01 and RS 03 Customer Charges at $16.05 per month;
3. Maintain the status quo with two different charges; and
4. Set the Customer Charge at some other level.

86. The concept of reducing the level of the Customer Charge, as would be the likely result of outcome 2 and a possible result under outcome 4, where setting the Customer Charge in relation to some other utility or jurisdiction with a lower Customer Charge such as BC Hydro, has been considered by the BCUC in the past. This suggestion prompted the following determinations in the 2009 COSA Decision:

> The Panel does not agree with the submission of Mr. Shadrack that the difference between BC Hydro's and FortisBC's Customer Charges must be addressed, or, indeed, that it even constitutes an anomaly. The cost structures of the two utilities are different, which alone could lead to a difference in the Customer Charge.[25]
>
> […]

[23] G-3-12 Decision, page 23.
[24] Ibid, page 27.
[25] Ibid, page 26.

> The Panel acknowledges the need for revenue stability and notes FortisBC's comments that decreasing the Customer Charge could increase revenue volatility, a claim which no Intervener has refuted.[26]

87. KSCA81 in its evidence (Exhibit C4-11) includes Exhibit 21 which it states, "…explicitly tackles the implication of increasing the Basic Customer Charge…" Exhibit 21 consists of reproductions of two articles, Dividing the Pie: Cost Allocation, the First Step In the Rate Design Process, by Jim Lazar and Fixed Charges and Utility Customers, prepared by Synapse Energy Economics. However, these articles do not consider the starting point of the customer charges, nor are they specific to FBC's circumstances. Notably, the Synapse Energy Economics piece states that, "Utilities prefer to collect revenue through fixed charges because the fixed charge reduces the utility's risk that lower sales (from energy efficiency, distributed generation, weather, or economic downturns) will reduce its revenues." This is incorrect in the FBC context given the decoupling that exists between sales and revenues provided by the Flow-through deferral account. FBC submits that, without the ability to question the findings from a jurisdiction specific vantage point, or indeed to question the authors at all, they are of limited use and should not carry much if any weight.

88. The MSS is the methodology that has been consistently used by FBC to classify distribution costs within the COSA. As such, it serves to gauge whether there is any significant change in these costs over time. However, as with all other rates, the residential Customer Charge is not currently set at the COSA determined amount, nor is there an expectation that all rates will precisely mirror their COSA unit costs. If an alternate methodology were adopted that produced different results, it would not be a foregone conclusion that the Customer Charge would necessarily change as a result since considerations other than the COSA factor into the historical setting of rates. What would be lost, however, is the consistent review of results that provides valuable input into the changes in the nature of service and related costs.

89. This view would differ if the expectation on the part of the Company and interveners was that the Customer Charge would be set at the level indicated by the COSA inclusive of the MSS. In this case, the varying results of differing methodologies would be particularly relevant. However, while the MSS is used as the methodology within the COSA, the actual Customer Charge has not historically been set or adjusted as the result of a COSA, and has only changed

[26] G-3-12 Decision, page 27.

in recent memory with the outcome of annual revenue requirement increases or due to rebalancing.

90. In the view of FBC, the reasonable alternative for the harmonizing of the Residential Customer Charges is to bring the RS 01 rate in line with the RS 03 rate. Lowering the RS 03 rate would move further away from costs, leaving the rates different has no logical basis, and FBC is not aware of any non-arbitrary means for setting the charges at some other amount.

K. LONG RUN MARGINAL COST

91. The Company's Long Run Marginal Cost (LRMC) of supply has been a topic of discussion in the regulatory process, though only through the being introduced by interveners. No FBC rate is currently set with reference to the LRMC and FBC has not suggested in any of its proposals in the Application that a rate should be set with reference to the LRMC. The term appears twice in the Application, once in a quote from a BCUC decision[27], and once where the Company states, "…FBC agrees that no measure of the Company's Long Run Marginal Cost (LRMC) of power is close to the current 2017 Tier 2 rate of $0.15617 per kWh."[28]

92. Two interveners discussed setting the residential rate relative to the LRMC in their evidentiary filings. The first, AMCS RDOS, expresses an opinion that a properly constructed RIB rate would be set with, "… the Block 2 rate equal to the marginal cost of new electricity supply."[29] However, AMCS RDOS also concludes that, with the current LRMC below the current flat rate and both the Tier 1 and Tier 2 rates of the RCR, it is not practical to utilize the LRMC to set rates. AMCS RDOS therefore advocates for a flat residential rate.

93. The BCSEA-SCBC stands alone in asserting that the RCR should be maintained with the Tier 2 rate being set at a measure of LRMC. BCSEA-SCBC also provides an analysis of what that LRMC value should be. FBC does not agree with the assessment of BCSEA-SCBC. FBC also expects that BCSEA-SCBC will provide a final submission that will confirm its preferred residential rate structure. FBC will address that submission in its Reply. As preliminary considerations, FBC does offer the following points.

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[27] Application, page 17.
[28] Ibid, page 65.
[29] Exhibit C3-7, page 31.

94. First, in its evidence, BCSEA-SCBC puts forth its calculation of "a preliminary estimate of FBC's full LRMC…" with a value of $129.71/MWh.[30], which it has updated to $131.13/MWh at the meter and further described as, "The appropriate referent for FBC's Tier 2 energy price…"[31] FBC notes that, as a LRMC measure, this value will not go up year to year because it already accounts for expected increases in costs for power and T&D over time. Further, given that the rates in the Application are based on 2017 revenue requirements, they will first need to be updated to 2019 values, and going forward will likely increase as future revenue requirements necessitate additional rate increases. If the Tier 2 rate were tied to this LRMC, it is likely that any rate increases would affect only the Tier 1 and/or Customer Charge rates since it would not be appropriate to increase the Tier 2 rate in this circumstance. The natural effect of this proposal is the erosion of the rate differential, which over time would lead to a flat rate, assuming no further increases to the LRMC.

95. Regardless, the $131.13/MWh LRMC value derived by BCSEA-SCBC is not valid. The BCSEA-SCBC value relies on adding an amount for a residential Deferred Capital Expenditure (DCE) avoided cost of $43.16/kW-yr (2017$) (or $23.03/MWh) to a power supply LRMC of $97.21 ($2017) and grossing up by 8.3 percent for line losses.[32] This amount is not appropriate for the following reasons:

- The DCE is calculated on a $ per kW-yr basis and is intended to apply only to the system peak hour. This is how it was used for DSM planning. Converting it into a $/MWh number is inappropriate. Setting this fact aside, and allowing the MW to MWh conversions, the value would only apply for the system as a whole, which is the same basis as for the energy supply LRMC, not for any particular customer class as BCSEA-SCBC has done. Even if this conversion were valid, which FBC says it is not, the DCE would need to be adjusted for the system-wide load factor not the residential-specific load factor, which would result in a lower T&D amount per kWh.

- Further, since the DCE value was calculated prior to the transmission plans included in the LTERP and was not updated to reflect the transmission projects included in the LTERP, the

[30] Exhibit C2-6, page 11.
[31] Exhibit C2-10, BCSEA response to BCUC IR 1.1.7.
[32] Exhibit C2-10, BCSEA response to BCUC IR 1.1.7. The full BCSEA calculation of LRMC is included in this response.

value would need to be updated accordingly and may well end up lower based on the current LTERP.

- The DCE is a non-time differentiated value. The DCE is a demand-based cost, not an energy cost. Signaling the cost of capacity via a non-time-differentiated energy rate (the RCR Tier 2 rate) is not appropriate.

- Use of the DCE does not account for locational attributes. FBC network planning is based on the actual load growth trajectory for specific lines and substation equipment. For example, there may be cases where a large new customer is added to the system or there is an area of concentrated growth in one particular service region (e.g. Kelowna) that results in additional infrastructure requirements based on locational conditions, but not necessarily the need for additional power supply resources. The need for planned T&D infrastructure projects within the planning horizon for FBC is driven by ongoing peak load growth in the Kelowna area.

- Including a T&D component is inconsistent with FBC's definition of LRMC and could introduce the risk of redefining the scope of the LRMC. The appropriate time to establish a value for LRMC is during the resource planning process. Given the BCUC decision in respect of the 2016 LTERP, even the foundations for the BCSEA-SCBC proposed LRMC value cannot be taken as solid. In its decision regarding the 2016 LTERP Application, the BCUC rejected the Company's LTERP beyond 2024, and did not accept the portfolio methodology for calculating LRMC (e.g. including DSM in the calculation). It is therefore unclear what should be the underlying basis for avoided cost in any rate-setting scenario.

96. In summary, while LRMC has not played a role in the setting of the RCR in the past, and is not incorporated into any of the rate proposals in the Application, there is interest from interveners in discussing its value as a rate setting parameter. For AMCS RDOS it is noted as a component of a "properly designed two-tier RIB Rate"[33]. However, AMCS RDOS does not advocate for the continuation of a RIB rate and notes that, "… the complexity of designing multiple thresholds, the associated administrative costs and the risk of making design mistakes suggest that even

[33] Exhibit C3-9, response to IR 1.1.0.

such a RIB Rate should only be implemented in those circumstances where the potential benefits clearly exceed the potential costs."[34]

97. BCSEA-SCBC advocates for the setting of the Tier 2 RCR rate as a measure of LRMC (as discussed above), even in the event that doing so resulted in a version of the RCR where the Tier 1 and Tier 2 rates were the same. As noted, FBC views this outcome as likely, and in any event, FBC does not agree with the LRMC that BCSEA-SCBC has put forward. For the reasons cited above, FBC believes the BCSEA-SCBC value for the FBC LRMC it is over-stated. Further, the value is based on an LRMC that has not been accepted by the BCUC as the LRMC in the LTERP was not accepted beyond 2024. A value for LRMC remains uncertain as evidenced by the various values for LRMC Presented by BCSEA-SCBC in its own submissions.

PART FOUR: COMMERCIAL, WHOLESALE, AND IRRIGATION RATES

98. With the exception of the flattening of the Commercial (RS 21) rate, there are no structural changes being proposed to any of the Commercial, Wholesale, or Irrigation rates. The reallocation of revenue recovery for each rate related to fixed cost recovery is discussed in Part E of this submission.

99. For RS 21, the flattening of the existing declining block is a continuation of the move from 3 tiers to 2 tiers that was approved with the 2009 RDA. Maintaining a declining block rate structure is viewed by FBC as running counter to the conservation objectives of the CEA.[35]

100. The proposal to flatten RS 21 coupled with the increase in the Demand charge results in an energy rate that is less than with the current rate. FBC addressed this in the response to BCUC IR 1.50.2, noting:

> The effect of the lower RS 21 energy charge should not be considered in isolation from the other proposed rate changes for the class. For example, the proposed higher demand charge for RS 21 also constitutes a price signal promoting customers to use the system more efficiently by keeping their demand profile flatter in order to reduce demand charges. FBC believes that, with all changes considered, the proposed RS 21 rates will serve rate design principle 3: "Price

[34] Ibid, response to IR 1.1.1.
[35] See the discussion in the response to BCUC IR 1.50.1.

signals that encourage efficient use and discourage inefficient use" more effectively than the current declining block structure.

101. The rate impacts associated with this change are moderate, and the change would remove the final FBC rate that has a declining block structure. All other such rates were eliminated long ago.

PART FIVE: TRANSFORMATION DISCOUNTS

102. In the Application, FBC is seeking approval to update the Transformation Discount that is currently available to RS 21 and RS 30 customers. The updates reflect the same methodology historically used to determine the discounts as they are currently approved, but utilizing the data from the 2017 COSA. These changes would result in a reduction in the RS 21 discount from $0.53 /kVA to $0.32/kVA and an increase in the RS 30 discount from $2.676 /kVA to $5.26/kVA. These discount changes reflect a change in the underlying cost and load data and should be approved.

103. FBC is also seeking to add a transformation discount to RS 40 (the Wholesale Primary rate) that has the same rationale and calculation methodology as used for RS 21 and RS 30. The addition of a transformation discount to RS 40 will provide for any of the customers currently taking service on that rate to interconnect at transmission voltage without the need to submit an additional rate application to the BCUC for approval. FBC believes that this represents an efficient use of the regulatory process, is based on the COSA currently before the BCUC and is in the public interest.

PART SIX: TRANSMISSION SERVICES

104. FBC is seeking certain changes to the provision of transmission services described in the Application as:

1. updates to the pricing of the Point-to-Point (PTP) transmission rates (RS 101 and RS 102) in accordance with the COSA unit costs;

2. updates to the Ancillary Services contained in rate schedules RS 103 – RS 109;

3. revisions to the anti-pancaking provisions contained in RS 101 and RS 102; and

4. removal of the Non-Firm PTP rate (RS 102) from the Electric Tariff.

105. With regard to items 1 and 2 above, FBC believes that the suggested changes (which are primarily reductions to exiting rates) are well documented, justified, are in most cases cost-based, and should be approved.

106. With respect to item 4, the removal of the Non-Firm PTP rate (RS 102), FBC is withdrawing this request since it was justified largely on the basis that the Company had never had a customer utilize the rate. During the time in which the Application has been before the BCUC, it is anticipated that a customer will shortly begin to take service on RS 102. It is therefore necessary to keep the rate in effect.

107. For item 3, revisions to the anti-pancaking provisions of RS 101 and RS 102, FBC believes that the evidence clearly indicates that these changes should be made. The responses of BC Hydro to information requests regarding this aspect of the Application confirm that BC Hydro takes a similar view of the original intent of the anti-pancaking provisions and that it has business practices in place that provide treatment of transmission customers consistent with what FBC seeks to reflect with its proposed tariff amendments.

108. In Exhibit C1-5, the BC Hydro responses to intervener information requests, BC Hydro responded to an FBC question as follows.[36]

> 1.4.1 In addition to simply not objecting to FBC's specific tariff amendment proposal, does BC Hydro agree that the revision correctly reflects the intent of the original 1998 Application?
>
> RESPONSE:
>
> Yes. Please refer to the objective of rate harmonization as discussed in Recital A of Commission Order No. G-12-99 and BC Hydro's response to BCUC IR 1.1.1.

PART SEVEN: OPTIONAL TIME OF USE RATES

109. With the Application, FBC has proposed to revise the time-periods and pricing in the existing TOU rates to better reflect the current FBC context. FBC is also proposing to make a TOU rate

[36] The FBC response to BCUC IR 1.62.1 describes the potential situations that exist for the movement of power between and through the service areas of FBC and BC Hydro relevant to the issue of rate pancaking.

available to residential customers that is consistent with the revised rate structure. Under the FBC proposal, the TOU rate would be optional and subject to review after a period of 3 years.

110. FBC explained the rationale for continuing to offer TOU rates as optional, as opposed to mandatory in its response to BCUC IR 1.93.1:

> FBC believes that the interests of customers are best served through a combination of a cost-based default rate of basic structure complemented by an optional conservation rate available to those customers whose particular circumstances allow an opportunity for personal savings and with the potential to deliver benefits to customer in general. Customer choice was an important consideration in the original introduction of the TOU rates and remains so today.

111. As with the RCR, customers have differing opportunities and resources available to manage energy usage. Mandatory TOU rates would potentially create an inequity between customers that cannot readily be justified by any constraints faced by the Company in meeting its load obligations.

112. The Company believes that customer choice is enhanced by the TOU offering and that customer satisfaction may also be improved by the additional optional rate option for customers that would like to enroll on a conservation rate.

113. TOU rates are generally intended to incent customers to shift the time of consumption in a manner that allows a utility to reduce costs or generate incremental revenue such that a rate benefit will accrue to all customers. Unless the changes in behaviour caused by the rate results in the desired financial benefit, the rate will not have achieved its objective.

114. The goal of the TOU rates is not to shift loads because prices differ by time period or season. The goal is to reduce the overall peak demand of the utility, which drives the need for many of FBC's facilities and power costs. On a total system basis, costs for power supply would be lower if customers have a sufficient response to the TOU rates; reducing the overall peak demand can reduce FBC's power supply costs in the long term.

115. The real savings potential for a FBC TOU rate would be as follows: if sufficient consumption were to be shifted away from the peak with certainty, it may, over the long-term, result in a reduction in power purchase expenses and at some point, result in deferred investment into new generation requirements that would otherwise be required to meet growing peak demand.

116. The selection of TOU periods was all based on 5 years of total system data. The TOU periods in the current Application were developed based on the total system load shape rather than specific shapes for different customer classes. This was done to reflect the need to procure power supply for the system as a whole. Time periods were grouped together on the basis of system load levels while also considering that TOU periods needed to be continuous hours, having long enough TOU periods that customers would not cause the system peak to shift by one or two hours rather than being reduced, and be relatively easy to understand and administer.

117. The pricing for TOU rates was set to reflect the cost differentials for FBC power supply during different time periods. This was done so that customers would face the appropriate price signals as to how much FBC could save as a result of reduced consumption in on-peak periods.

118. FBC acknowledges that the TOU proposal is a complex set of rates. As discussed in the response to BCUC IR 1 .79.1.6, they may appeal to customers that are more sophisticated and FBC will provide help in making an assessment of the advisability of switching to a TOU rate.

119. However, in the view of FBC, the TOU rate must be cost-based, reflecting actual circumstances regarding potential savings, and should not be devised simply as a means for individual customers to lower bills without any benefit that would come from greater adoption of the rates.

120. Although FBC has made certain reasonable assumptions regarding the shifting of customer load as a response to the price signals contained in the rates and the potential for cost savings to be realized in the course of designing the TOU rates, actual customer behaviour will not be known without experience. Also, the power supply impacts that the resulting shifts in load may provide also need to be assessed with operational experience. For these reasons, FBC is proposing a three-year evaluation period after which it will deliver a recommendation to the BCUC regarding the TOU rate program. FBC would also be amenable to an annual reporting requirement.

121. Part of the analysis that would inform the recommendation that FBC intends to provide to the BCUC would be an assessment of the changes in customer behaviour that the TOU rates have prompted and whether or not any adjustments would be required to make the rate as effective as possible in shifting load and creating a benefit for ratepayers.

122. FBC believes that the risk of such an approach is low, and that it would provide valuable insight into customer enrollment and response.

PART EIGHT: GENERAL TERMS AND CONDITIONS

123. FBC is proposing housekeeping and other amendments to its General Terms and Conditions and its rate schedules.

124. FBC's proposed changes to its General Terms and Conditions are described in section 10 of the Application and shown in a blackline version of the General Terms and Conditions in Appendix G of the Application.[37]

125. The proposed amendments to the General Terms and Conditions include numerous minor changes intended to update and clarify existing language and, where appropriate, bring commonality to analogous sections in FEI's General Terms and Conditions. The proposed amendments also include the regrouping and reorganization of sections for easier referencing and the relocation of the Standard Charges Schedules 80 and 82, the Radio-off Advanced Meter Option Schedule 81, and Extensions Schedule 74 from the rate schedules to the General Terms and Conditions. More substantive changes include updates and increased clarity regarding the criteria for Residential Service, partial Commercial use at Residential Premises and Commercial Service, and changes to FBC's Security Deposit Policy to align with FEI's current processes.[38] FBC also updated the contribution and fee amounts for Extensions and Standard Charges based on a jurisdictional and internal cost review, as described in sections 10.4, 10.5, and 10.6 of the Application.[39]

126. FBC's proposed changes to its Standard Charges are described and shown in section 10.5 of the Application and the derivation of the proposed Standard Charges is provided in Appendix D.[40] FBC last updated its Standard Charges in its 2009 Cost of Service Analysis and Rate Design

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[37] Exhibit B-1, Appendix G.
[38] Exhibit B-1, Section 10.3.
[39] Exhibit B-1, Sections 10.4-10.5.
[40] Exhibit B-1, Appendix D.

Application, and the proposed updated Standard Charges have been updated to reflect FBC's current operating costs and environment.[41]

127. The proposed amendments to the General Terms and Conditions and Standard Charges were the subject of a small number of information requests, in which FBC provided further details such as additional supporting calculations for the Connection Charges, Account Setup or Transfer Charge and Returned Payment Charge.[42] The information requests also examined certain other aspects of FBC's proposed changes to its Standard Charges. A discussion of each of the items follows.

128. FBC provided additional support for the appropriateness of aligning its security deposit policy with FEI's to require a minimum security deposit amount of $50.[43] In FBC's view, the proposed security deposit policy change will not have a negative impact on customers nor create challenges for low-income customers. FBC expects the change to provide greater flexibility to work with customers on a case-by-case basis with the objective of providing or maintaining electric service to the customer.[44]

129. FBC is also proposing to continue its current practise of a single charge for both the setup or transfer of a customer account despite only new accounts requiring a security check. The work and costs involved for both scenarios are substantially similar, the ease of understanding for customers and administration for FBC, and consistency with current practice for both FBC and FEI all support FBC's proposal to continue with a single charge.[45]

130. FBC also provided additional information regarding its proposal to update the Per-Read Fee under the Radio-off Advanced Meter Option to reflect current costs and operations and to recover the projected 2018 balance in the AMI Radio-Off Shortfall Deferral Account. In response to Information Requests, FBC provided updated actual and forecast costs for the manual

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41 Exhibit B-1, Section 10.5; Exhibit B-8, BCUC IR 1.109.2.

42 Exhibit B-8, BCUC IR 1.109.1 to 1.109.8.1; Exhibit B-8, BCUC IR 1.110.1 to 1.110.4; Exhibit B-8, BCUC IR 1.110.5; Exhibit B-21, BCUC IR 2.143.1 to 2.143.7.

43 Exhibit B-8, BCUC IR 1.103.1.

44 Exhibit B-8, BCUC IR 1.103.1.

45 Exhibit B-8, BCUC IR 1.110.4.

reading of meters and determined that a reduction to the proposed Per-Read Fee of $25 (section 10.6 of the Application) to $19.50 per read is appropriate.[46]

131. In FBC's view, no material issues were raised with respect to FBC's proposed amendments.

132. To implement the proposed changes, FBC seeks the following:

- Approval of the housekeeping and other amendments to FBC's General Terms and Conditions as set out in Appendix G and discussed in Section 10 of the Application.
- Approval of the AMI Radio-off Meter Option Fee as amended in BCUC IR 1.97.1.

PART NINE: CONCLUSION

133. With the filing of the 2017 COSA and RDA, FBC has applied for approval of the following changes to existing rates:

134. For residential customers, the return to a flat rate. In consideration of bill impact, FBC requests that the BCUC approve this change by allowing for the decrease in the differential between the Tier 1 and Tier 2 price such that after a period of five years the differential between the Tier 1 and Tier 2 price will be zero, and the Customer Charge under RS 01 will rise to be equal to the Customer Charge under RS 03/03A.

135. Also for residential customers, approval to re-open the optional Residential TOU rate to all eligible customers as discussed in Section 8 of the Application and removal of RS 03 as this group has been disbanded.

136. For non-residential customers, FBC is proposing to improve consistency in the fixed cost recovery among rate classes by making a number of revenue-neutral adjustments to the Customer Charge and Demand Charges that exist for certain rate schedules. These adjustments necessitate changes to energy rates of those same classes to prevent an over-recovery of costs.

137. FBC is seeking approval to update to the transformation discounts in RS 21 and RS 30, as well as to introduce a similar discount for RS 40.

[46] Exhibit B-8, BCUC IR 1.97 and BCUC IR 1.98.

138. FBC is also seeking approval of the revised optional TOU rates as described in Section 8 of the Application. These changes are applicable to all the existing TOU rates, as well as the new residential TOU rates and are based on updated data from the 2017 COSA as described in paragraphs x to x in this document.

139. With regard to Transmission Service rates, FBC is seeking changes to the anti-pancaking language contained in RS 101 and RS 102 as well as to the pricing of the point-to point and ancillary charge rates as described in Section 7.3 of the Application.

140. Approval of the housekeeping and other amendments to FBC's General Terms and Conditions as set out in Appendices G and H. These updates have not garnered much attention from interveners and FBC believes they should be approved as requested.

141. A number of changes to the approval requests made in the Application have resulted during the regulatory process to this point. FBC has attached to this submission a revised Draft Order that captures these revisions for BCUC review.

142. Since the majority of these changes flow directly from the cost and load data in the COSA, they should be uncontroversial since, the COSA itself relies on past practice and methodologies that are consistent with past practice as accepted by previous BCUC panels.

143. With regard to the proposed move from the RCR to the flat rate for residential customers, the underlying data is not a matter of serious disagreement between process participants. Rather, there are differing opinions on whether from a policy perspective the change should take place, and for those that agree that it should, the matter of the duration of implementation needs to be resolved. FBC believes that the reasons for returning to the flat rate are supported by the evidentiary record, and bill impacts support a phased-in approach.

144. Changes to the residential rates have been reviewed with public participation during six public open houses, and two post-filing information sessions. Customers have been provided with a number of opportunities to comment in addition to the formal regulatory review. That review has included evidentiary filings from a number of interveners and their respective experts. FBC has responded to over 1,800 information requests.

145. For all these reasons, FBC requests that the BCUC provide approval of the requests it has submitted such that changes can be implemented in a timely manner and customer communication can commence.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

Dated: October 17, 2018

original signed by

Diane Roy

Appendix A
DRAFT ORDER

bcuc
British Columbia
Utilities Commission

Suite 410, 900 Howe Street
Vancouver, BC Canada V6Z 2N3
bcuc.com

P: 604.660.4700
TF: 1.800.663.1385
F: 604.660.1102

ORDER NUMBER
G-xx-xx

IN THE MATTER OF
the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

FortisBC Inc.
2017 Cost of Service Analysis and Rate Design Application

BEFORE:
[Panel Chair]
Commissioner
Commissioner

on Date

ORDER

WHEREAS:

A. On December 22, 2017, FortisBC Inc. (FBC or the Company) filed an Application with the British Columbia Utilities Commission (BCUC) seeking the necessary approvals, pursuant to sections 58 to 61 of the *Utilities Commission Act* (Act), to adjust its rate design and terms and conditions of service to improve the alignment with accepted rate design principles (Application);

B. On March 6, 2018, the BCUC held a procedural conference to address, among other things, the process and timetable for the review of the Application;

C. By Orders G-62-18 dated March 16, 2018, G-101-18 dated May 30, 2018, and G-180-18 dated September 25, 2018, the BCUC established the regulatory process consisting of two rounds of information requests to FBC, the filing of intervener evidence, one round of information requests on intervener evidence, written final submissions from FBC and interveners, and a written reply submission from FBC.

D. The BCUC has reviewed and considered the Application, the evidence filed, and the submissions provided by all participants, and has determined that the requested changes, as outlined in the Application, should be approved.

NOW THEREFORE pursuant to sections 59 to 61 of the UCA, for the reasons provided in the decision issued concurrently with this order, the BCUC orders as follows:

1. The rate changes identified below in the various rate schedules are based on the FBC rates in effect in 2017 and are exclusive of any subsequent revenue requirement rate changes that have been approved or may be approved prior to implementation of the changes below.

2. The following rate design proposals for Rate Schedule 1 are approved:
    - To decrease the differential between the Tier 1 and Tier 2 price such that after a period of five years the differential between the Tier 1 and Tier 2 price will be zero, resulting in a flat rate.
    - To adjust the Customer Charge over the course of five years such that at the beginning of year five the Customer Charge under RS 01 will be equal to the Customer Charge under RS 03A (Residential Exempt Rate for Farm Customers).
    - To re-open the optional Time of Use rate for residential customers while also restructuring the rate as described in detail in section 8 of the Application.
3. Removal of RS 03 (RCR Control Group) from the Electric Tariff is approved.
4. The following rate design proposal for Rate Schedule 20 is approved:
    - An increase in the monthly Customer Charge from $19.40 to $23.00 and a corresponding decrease in the energy rate from $0.10195 per kWh to $0.10000 per kWh.
5. The following rate design proposals for Rate Schedule 21 are approved:
    - An increase in the monthly Customer Charge from $16.48 to $54.00 and a flattening of the energy rates resulting in an energy rate of $0.06875/kWh for all consumption.
    - An increase in the per-kVA Demand Charge from $7.72 to $10.22.
    - An update to the transformation discount from $0.53 per kW of Billing Demand to $0.32 per kW of Billing Demand
6. A change to the RS 30 transformation discount from $2.676 per kVA of Billing Demand to $5.26 per kVA of Billing Demand is approved.
7. The following rate design proposals for Rate Schedule 31 are approved:
    - An increase in the monthly Customer Charge from $3,116.03 to $3195.00 and a decrease in the energy rates from $0.05516 per kWh to $0.05367 per kWh.
    - An increase in the per-kVA Power Supply Demand Charge from $2.77 to $3.45.
8. The following rate design proposals for Rate Schedule 60 are approved:
    - An increase in the Customer charge from $20.06 per month to $22.09 per month and a decrease in the energy rates from $0.07259 per kWh to $0.07240 per kWh.
9. The addition of a discount for RS 40 customers that take delivery at Transmission voltage is approved.
10. An increase in the Customer Charge for RS 40 from $2,645.03 to $4,522.46 and a decrease in the energy rates for RS 40 from $0.05441 per kWh to $0.05388 per kWh.
11. The revised structure of existing optional TOU rate schedules is approved.
12. The following rate design proposals for Transmission Service Rates are approved:
    - Changes to the anti-pancaking language contained in RS 101 in order to prevent the possibility of zero dollar rates noted in those rate schedules being applied to wheeling transactions where no pancaking of rates is possible.
    - Updates to the Short and Long-term Firm and Non-Firm Wheeling rate for RS 101 and RS 102 with pricing as described in the Application.
    - Changes to the Ancillary Services (RS 103 to RS 109) as described in the Application.

13. The following proposals for the Electric Tariff are approved:
    - Amendments to FBC's General Terms and Conditions as set out in the Application, with the exception that the per read fee for the Radio-Off AMI option (Section 18.4 of the FBC Tariff) be set at $19.50
    - The removal of Schedules 74 (Extensions), 80 (Charges for Connection or Reconnection of Service Transfer of Account, Testing of Meters and Various Custom Work), 81 (Radio-Off Advanced Meter Option), and 82 (Charges for Installation of New/Upgraded Services).
    - The proposed rebalancing of rates for RS 50 and RS 31 is approved as described in Appendix A to this Order.
14. FBC is directed to submit to the BCUC within 60 days of the date of this Order a compliance filing outlining the proposed implementation date(s) for changes approved by this Order.
15. FBC is to comply with all directives stated in the Decision.

DATED at the City of Vancouver, in the Province of British Columbia, this (XX) day of (Month Year).

BY ORDER

(X. X. last name)
Commissioner