

BRITISH COLUMBIA UTILITIES COMMISSION

IN THE MATTER OF THE *Utilities Commission Act*, RSBC 1996, c.473

and

BCUC Project No. 1598939

FortisBC Inc.

2017 Cost of Service Analysis and Rate Design Application

FINAL ARGUMENT OF THE INTERVENERS
B.C. SUSTAINABLE ENERGY ASSOCIATION and
SIERRA CLUB BRITISH COLUMBIA

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Part 1. Introduction

A. BCSEA-SCBC Final Argument

1. This is the final argument of the intervenors B.C. Sustainable Energy Association (BCSEA) and Sierra Club British Columbia (SCBC) concerning FortisBC Inc.'s (FBC) 2017 Cost of Service and Rate Design Application.
2. This argument responds to FBC's October 17, 2018 final argument (FBC Final Argument).
3. In summary, BCSEA-SCBC take the following positions:
 - (a) BCSEA-SCBC oppose FBC's proposal to phase out the RCR to a flat rate.
 - (b) BCSEA-SCBC support aligning the RS 03A Customer Charge to the RS 01 Customer Charge, rather than the other way around.
 - (c) BCSEA-SCBC oppose FBC's proposed residential optional TOU rate.
 - (d) BCSEA-SCBC have reservations about FBC's proposed optional TOU rates for non-residential retail customer classes.
 - (e) BCSEA-SCBC support flattening the Commercial RS 21 Rate.
 - (f) BCSEA-SCBC support the proposed changes to the General Terms & Conditions (and take no position regarding the proposed contribution and fee amounts).
 - (g) BCSEA-SCBC support the proposed rate rebalancing.
 - (h) BCSEA-SCBC support making no changes to the Net Metering rate structure in this proceeding.

B. BCSEA and SCBC

4. BCSEA is a non-profit association of citizens, professionals and practitioners committed to promoting the understanding, development and adoption of sustainable energy, energy efficiency and energy conservation in British Columbia. BCSEA supports the province's transition to a lower carbon economy. BCSEA has five chapters across B.C. and approximately five hundred individual and corporate

members. Virtually all of BCSEA's members are ratepayers of one or more of BC's public energy utilities. BCSEA represents individuals and corporations in BC who care about energy sustainability and climate change, and who want the energy they purchase and use to be sustainably produced and transported.¹

5. SCBC is a non-profit organization of British Columbians from all walks of life. SCBC represents individuals in BC who care about a broad range of environmental issues, including climate change and clean energy, and who want the energy they purchase and use to be produced and transported in ways that minimize harm to the natural environment. SCBC has five local groups and over 12,000 members and supporters across the province. Virtually all of SCBC's members are ratepayers of one or more of BC's public energy utilities.²
6. BCSEA-SCBC have participated fully in this proceeding. They reviewed the Application, filed two rounds of information requests to FBC,³ reviewed FBC's responses to IRs from Commission staff and interveners, made submissions on procedure,⁴ filed expert evidence by Phillip Raphals,⁵ reviewed the intervener evidence⁶ and letters of comment,⁷ made information requests to AMCS RDOS regarding their evidence,⁸ and responded to information requests on their expert evidence by the Commission staff,⁹ FBC,¹⁰ AMCS RDOS,¹¹ BCOAPO,¹² and CEC.¹³
7. Mr. Raphals is well qualified to provide expert evidence in the current rate design proceeding. He is cofounder and executive director of the Helios Centre, a non-profit energy research and consulting group based in Montreal. Over the last 25 years, Mr. Raphals has written extensively on issues related to hydropower and competitive energy markets, and has appeared many times as an expert witness before energy

¹ Exhibit C3-1.

² Exhibit C3-1.

³ Exhibits C2-2, C2-5.

⁴ Exhibits C2-3, C2-4.

⁵ Exhibit C2-6.

⁶ Exhibits C3-7, C4-11, C9-4, C12-6.

⁷ E-series exhibits.

⁸ Exhibit C2-7.

⁹ Exhibit C2-10.

¹⁰ Exhibit C2-12.

¹¹ Exhibit C2-8.

¹² Exhibit C2-9.

¹³ Exhibit C2-11.

and environmental regulators in several provinces. Mr. Raphals has been formally recognized as an expert witness by energy regulators in the provinces of Quebec, Nova Scotia, Newfoundland and Labrador, and Manitoba.¹⁴

8. BCSEA-SCBC endorse Mr. Raphals' evidence and commend it to the Commission. His evidence addresses three topics:

- (a) FBC's proposal to replace the current RIB rate with a flat rate, including an adjusted LRMC value as a referent for the Tier 2 pricing,
- (b) the proposed increase in the residential customer charge, and
- (c) the proposed optional residential TOU rate.

C. Outline of Argument

9. Following this introductory Part, Part 2 addresses the Residential Conservation Rate. Part 3 addresses FBC's proposed optional time of use rates. Part 4 addresses several additional topics. Part 5 is a brief conclusion.

Part 2. Residential Conservation Rate

A. Introduction

10. BCSEA-SCBC oppose FBC's proposal to phase out the RCR to a flat rate. They support retention of the FBC RCR rate structure. The original and on-going purpose of the FBC RCR is to encourage conservation and efficiency in accordance with legislated energy policy objectives and the Bonbright principles of rate design. The FBC RCR has achieved substantial amounts of conservation and efficiency, which FBC does not deny. Going forward, the conservation and efficiency purpose of the FBC RCR remains as important as ever and it continues to be fully supported by legislated energy policy objectives and consistent with the Bonbright principles.

B. FBC RCR Background

11. The B.C. government's emphasis on the promotion of energy conservation efficiency goes back at least to the 2002 Energy Plan.¹⁵ With reference to BC Hydro, Policy

¹⁴ Exhibit C2-6, pp.37-38.

Action #21 said “New rate structures will provide better price signals to large electricity consumers for conservation and energy efficiency.”

12. In 2003, the government directed the BCUC to make recommendations regarding changes in BC Hydro’s rates for transmission voltage customers to accomplish the objectives set out in the Energy Plan.
13. Following public hearings, the Commission issued its report and recommendations in October 2003.¹⁶ The Commission recommended, among other things, implementation of stepped rates for BC Hydro’s transmission service customers. It said the Tier 2 rate should reflect the long-term opportunity cost of new supply, understood to include the acquisition cost to obtain that supply. The Commission recommended a Tier 1/Tier 2 split of 90%/10%, with the Tier 1 rate derived from the Tier 2 rate so as to achieve revenue neutrality to the extent reasonably possible. The Commission also recommended implementation of time-of-use rates for transmission service customers.¹⁷
14. In November 2003, the government responded,¹⁸ accepting the Commission’s recommendations regarding the stepped rate design. The government approved Heritage Special Direction No. HC2 (HSD #2),¹⁹ directing the Commission to design rates for BC Hydro transmission service customers consistent with Commission’s recommendations.
15. In March 2005, BC Hydro applied to the Commission for approval of new rate designs for transmission service customers. Following a negotiated settlement process, the Commission approved a negotiated settlement agreement in August

¹⁵ "Energy Plan for our Future: A Plan for BC" (Ministry of Energy and Mines, November 2002).

¹⁶ "In the Matter of BC Hydro and an Inquiry into a Heritage Contract for BC Hydro’s Existing Generation Resources and Regarding Stepped Rates and Transmission Access - Report and Recommendations (BCUC October 17, 2003).

¹⁷ The Commission also recommended exemptions for Aquila (now FBC), New Westminster and UBC, being BC Hydro customers that distribute all or a significant portion of their load to others.

¹⁸ Backgrounder Heritage Contract, Stepped Rates and Transmission Access BCUC Recommendations and Government Response, Ministry of Energy and Mines, EM0020-001 071 , November 28 , 2003.

¹⁹ November 27 2003, effective April 1, 2004.

2005 establishing, among other things, a default mandatory conservation-oriented Stepped Rate for BC Hydro's transmission service customers.²⁰

16. In 2007, the BC government issued a new Energy Plan²¹ that, among other things, specifically identified new rate structures to encourage energy efficiency and conservation. In addition, the 2007 Energy Plan²² calls for a coordinated approach to conservation and efficiency in B.C., which highlights the relevance to FBC's RCR of BC Hydro's default mandatory RIB rate.
17. BC Hydro filed a Rate Design Application in 2007. In that application BC Hydro indicated its intention to file (in the future) an application for approval of a residential inclining block (RIB) rate. In its 2007 BC Hydro RDA Decision,²³ the Commission directed BC Hydro to do so.
18. In 2008, BC Hydro filed a RIB application, which was approved by the Commission in September of that year.²⁴ BCSEA-SCBC intervened in that proceeding and strongly supported the BC Hydro RIB rate application.
19. On October 29, 2009, FBC filed its 2009 Rate Design and Cost of Service Analysis application (2009 RDA) with the Commission. In the 2009 RDA, FBC acknowledged that it was encouraged by the 2007 Energy Plan and the government energy objectives in the then recently amended *Utilities Commission Act* to develop rates that promote energy efficiency.²⁵ However, FBC chose not to propose a residential inclining block rate.²⁶ Instead, FBC said it would consider developing optional residential time-based rates in the future after implementing advanced metering infrastructure (smart meters).

²⁰ Decision and Order No. G-79-05.

https://www.bcuc.com/Documents/Proceedings/2005/DOC_8278_G-79-05_BCHydro_TSRA%20Reasons%20for%20Decision.pdf.

²¹ *The BC Energy Plan: A Vision for Clean Energy Leadership*, Government of British Columbia, 2007, https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/electricity-alternative-energy/bc_energy_plan_2007.pdf, Policy Action #4, p.39.

²² *Ibid.*, Policy Action #2.

²³ Decision and Order G-130-07, October 26, 2007.

²⁴ BCUC Decision and Order G-124-2008, September 24, 2008.

²⁵ Exhibit B-1, p.53, in the FBC 2009 Rate Design and Cost of Service Proceeding, BCUC Project No. 3698564.

²⁶ *Ibid.*, p.59.

20. In 2010, during course of the 2009 FBC RDA proceeding, the BC government tabled, and the Legislature enacted, the *Clean Energy Act*.²⁷ Among other things, the CEA enshrined the key goal of energy conservation and efficiency. The question of whether FBC should propose a RIB rate, as BC Hydro had done in 2008, was addressed in the proceeding. In its final written argument, FBC argued against being required to develop a RIB rate, saying it would instead consider optional time-based rates after it had implemented its advanced metering infrastructure project.²⁸ The Commission disagreed.
21. In its 2009 FBC RDA Decision, the Commission said that delayed implementation of an FBC RIB rate would be “a foregone opportunity for energy efficiency and conservation.”²⁹ The Commission directed FBC “... to develop a plan for introducing residential inclining block rates that also incorporate a lower Basic Charge in the immediate future and to file an RIB rate application with the Commission no later than March 31, 2011.”³⁰
22. In 2011, FBC applied to the Commission for approval of Residential Inclining Block (RIB) rates with pricing principles that would freeze the residential customer charge. BCSEA participated in the Commission’s proceeding regarding the application, and supported approval of the FBC RIB rate and freezing the customer charge.
23. In January 2012, the Commission approved FBC’s RIB rate application, finding it to be in the public interest.³¹ The Commission directed FBC to:
- (a) implement the residential RIB rate by no later than July 31, 2012,
 - (b) establish a control group and monitoring to provide a RIB Rate Evaluation Report (Report) on conservation impacts of the RIB rate by April 30, 2014,

²⁷ *Clean Energy Act*, SBC 2010, c.22.

²⁸ FBC Final Argument, June 30, 2010, paras.65-71, https://www.bcuc.com/Documents/Arguments/2010/DOC_25770_FortisBC_Final%20Argument.pdf.

²⁹ Decision and Order G-156-10 (2009 FBC RDA Decision), pp. 56-57, <https://www.ordersdecisions.bcuc.com/bcuc/decisions/en/item/111613/index.do>.

³⁰ Decision and Order G-156-10.

³¹ Decision and Order G-3-12, https://www.bcuc.com/Documents/Proceedings/2012/DOC_29557_FBC%20Inc-RIB_Decision-WEB.pdf

- (c) provide an update of the Conservation Potential Review,
- (d) provide an in-depth analysis of its long-run marginal cost (LRMC) including the cost to distribute and transport the energy, and
- (e) freeze the residential customer charge until 2015.³²

24. In the 2012 FBC RIB Decision, the Commission confirmed that the purpose of a RIB rate is to promote conservation:

“A RIB rate is intended to promote conservation by employing a tiered rate structure in which consumption that occurs above a certain threshold level is billed at a higher rate. The higher tier rate is designed to incent customers to reduce their consumption.”³³

25. The Panel in the 2012 FBC RIB Decision also noted that “introduction of RIB rates in the FortisBC service area is befitting an era where the provincial legislation encourages conservation” and that “BC Hydro has had a residential inclining block rate structure in place since October 2008.”³⁴ Both points remain valid today.

26. In November 2014, FBC filed its 2014 RCR Information Report.³⁵ The conclusion is that “The RCR is delivering conservation results of between 36 and 46 GWh, or 2.6-3.3% of total system requirements.” The report notes that, “For comparison purposes, the system-wide savings expected from FBC’s DSM programs are 14 GWh (1.0%) for 2014 and 22 GWh (1.6%) for 2015.”³⁶

27. In July 2015, the Minister of Energy and Mines and the Minister Responsible for Core Review wrote to the Commission, requesting a report regarding BC Hydro’s and FBC’s respective RIB Rates. The request referred to complaints regarding “unreasonable bill impacts” on some customers, in particular rural customers who do not have access to natural gas to heat their homes and low-income customers.

³² Order G-3-12 also directed FBC to address the possibility of a two-tier wholesale rate, and the interaction of the RIB rate with potential time-of-use rates.

³³ Decision and Order G-3-12, p.1.

³⁴ *Ibid.*, p.3.

³⁵ Residential Conservation Rate, Information Report For the Period July 1, 2012 to June 30, 2014, November 28, 2014, at Exhibit B-12, Attachment 1.2 pdf p.77.

³⁶ *Ibid.*, p.20, pdf p.101.

28. As part of the Commission's ensuing proceeding, FBC filed a RIB Rate Report³⁷ with the Commission on September 30, 2016.

29. On March 28, 2017, the BCUC issued its report to the B.C. Government on RIB Rates.³⁸ The Commission concluded that it "does not find that the RIB rate causes a subsidy between customers in areas with and without access to natural gas, and hence there is no compelling reason to consider restructuring the RIB rate on that basis."³⁹

C. FBC's Proposed Phase-out of RCR to Flat Rate

30. In the application now before the Commission, FBC seeks approval of two changes to the default residential rate:

(a) phase-out of the two-tier Residential Conservation Rate, which is discussed in this section, and

(b) upward adjustment of the Customer Charge, which is discussed below in section D.

31. As a preliminary point, while FBC calls its proposal a "five-year phase out," in BCSEA-SCBC's view the proposal is more accurately described as a four-year phase-out. The proposal is that in years 1 to 4 the differential between the Tier 1 rate and the Tier 2 rate would be successively reduced and the Customer Charge would be successively increased. This is a phase-out period of four years. FBC's proposal is that in year 5, RS 01 would be a flat rate and the Customer Charge would be equal to the RS 03A Customer Charge. No 'phase out' occurs in year 5.⁴⁰

32. It is BCSEA-SCBC's understanding that FBC provides four general reasons for its proposal to eliminate the RCR:

(a) FBC says elimination of the RCR is consistent with legislated energy policies.

³⁷ https://www.bcuc.com/Documents/Arguments/2016/DOC_47696_09-30-2016_FBC_Utility-Report.pdf.

³⁸ Report to The Government of British Columbia on the Impact of BC Hydro and FortisBC's Residential Inclining Block Rates.

<http://www.bcuc.com/ApplicationView.aspx?ApplicationId=506>

³⁹ BCUC RIB Report, p.9.

⁴⁰ FBC confirms this interpretation of its proposed phase-out period in Exhibit B-4.

(b) FBC says continuation of the RCR will provide no conservation benefits in the future.

(c) FBC says continuation of the RCR is not supported by the COSA results.

(d) FBC says continuation of the RCR would be inequitable to high consumers who have already adopted all reasonable conservation and efficiency measures.

33. BCSEA-SCBC disagree with each of these arguments, for the reasons set out below.

(a) Energy policy supports continuation of the FBC RCR

34. FBC argues that none of its rate design proposals conflicts with government policies, legislation and/or regulations.⁴¹ In BCSEA-SCBC's view, this is not correct regarding FBC's proposed elimination of the RCR. The proposal to terminate the RCR runs directly counter to the strong emphasis on energy efficiency and conservation in BC's legislated energy objectives.

35. FBC's RCR was approved by the Commission in explicit recognition that the RCR is supportive of the conservation and efficiency objectives of the *Clean Energy Act*.⁴²

The G-3-12 Panel states:

"As previously described in this Decision, this Application was brought forward by FortisBC in response to a directive by the Commission. This directive is supportive of the objectives of the CEA for British Columbia to take demand side measures, to conserve energy, and to achieve electricity self sufficiency. These objectives can benefit from the use of conservation rates, such as the RIB, for electricity."⁴³

36. BCSEA-SCBC submit that the conservation and efficiency objectives of the CEA remain as valid today as they were when the RCR was approved. The proposal to phase out and eliminate the RCR is contrary to the BC energy objectives.

37. In its Final Argument, FBC argues that energy conservation is no longer the primary driver "to the same degree today, particularly in light of the Province's increased focus on electrification."⁴⁴ BCSEA-SCBC respectfully disagree. In their view, there

⁴¹ FBC Final Argument, para.11.

⁴² Decision and Order G-3-12, with reference to the Commission's direction to FBC in the 2009 FBC RDA Decision and Order G-156-10.

⁴³ Decision and Order G-3-12, p.21, underline added.

⁴⁴ FBC Final Argument, para.71.

has been no diminishment of the policy objective to reduce electricity consumption through conservation and efficiency measures. Nor should there be. Low carbon electrification is a crucial energy objective that BCSEA-SCBC strongly support. Wasting clean renewable electricity by failing to implement cost-effective conservation and efficiency measures is a hindrance to low carbon electrification.

(b) RCR conservation savings will continue in the future

38. Strong evidence rebuts FBC's implication that continuation of the RCR would no longer result in conservation and efficiency savings.

39. First, FBC's 2019-2022 DSM Plan⁴⁵ identifies considerable volumes of cost-effective conservation and efficiency savings available within the Residential class. For the four-year period, the Residential Program Area targets 24.1 GWh of savings, and the Low Income Program Area (which addresses both residential customers and general service customers that provide housing services to low income customers) targets an additional 4.9 GWh of savings.⁴⁶ These are substantial amounts of cost-effective energy savings that remain to be obtained. The RCR will play an important role in helping to achieve these savings.

40. Second, FBC's assertion that "much of the low hanging fruit has been picked over the last five years"⁴⁷ is misplaced. What matters is that there is a considerable amount of cost-effective energy savings that remains to be obtained. In its final argument, FBC concedes that "simply because conservation measures characterized as 'low hanging fruit' have been taken, that not all conservation opportunities have been exhausted."⁴⁸ And, FBC acknowledges that it has not verified claims that "most of the steps available to reduce the impact of the RCR on billing have been taken."⁴⁹

⁴⁵ FBC 2019-2022 DSM Plan, August 2, 2018, Appendix A, Exhibit B-1 in the BCUC's proceeding regarding FBC's 2019-2022 DSM Expenditure Schedule.

⁴⁶ Errata, Exhibit B-1-1, Appendix A, Table 1-1, DSM Plan Expenditures & Savings, 2019-2022, p.2, pdf p.7, in the BCUC's proceeding regarding FBC's 2019-2022 DSM Expenditure Schedule.

⁴⁷ Exhibit B-8, BCUC IR 48.2.

⁴⁸ FBC Final Argument, para.70.

⁴⁹ Exhibit B-8, BCUC IR 48.1; Exhibit B-1, p.72.

41. Third, with respect, FBC's comparison of the 2013 and 2016 CPR results is not methodologically sound. FBC states:

“Though the Company does not have specific further references, it notes that for the residential sector the Conservation Potential Reviews conducted by the FBC on a periodic basis have shown a decrease in potential conservation from 299 GWh in 2013 to 222 GWh in 2016.”⁵⁰

42. CPR estimates from one year to another cannot be subtracted to give an estimate of achieved savings. In addition to the adoption of efficiency measures, many other factors⁵¹ combine to produce a decline in estimated “residential potential conservation” between the CPR in 2013 and the CPR in 2016. Moreover, a 2016 CPR estimate of 222 GWh in residential potential conservation contradicts the assumption that all reasonable conservation and efficiency measures have already been taken, and provides powerful evidence that residential conservation and efficiency savings are indeed available going forward.

43. Fourth, FBC argues that during the 2011 RIB process “the total rate-related conservation impact was assumed to be fully realized over 5 years, or by 2017,”⁵² and that this supports an expectation that continuation of the RCR will no longer achieve conservation savings. With respect, there is no merit in this argument.

44. When FBC proposed the RIB rate in 2011 it did not predict that the RIB rate would achieve conservation benefits for only five years and no longer. And, the Commission panel that approved the FBC RIB rate in January 2012 did not mention any expectation that savings would disappear after five years. On the contrary, the G-3-12 Panel cautioned FBC not to consider the RIB rate to be a temporary measure. These points are elaborated upon in the paragraphs that follow.

45. During the 2011 FBC RIB proceeding, FBC clearly and conspicuously took the position that the figures it provided for conservation impacts of the RIB rates in future years were not to be understood as estimates of savings (as noted above). In its final argument in the 2011 RIB proceeding, FBC expresses its belief “that based on the

⁵⁰ Exhibit B-8, BCUC IR 48.2.

⁵¹ Such as changes in benchmark efficiency levels due to the adoption of codes and standards.

⁵² Exhibit B-1, p.72, with reference to the FBC response to BCUC IR 2.3.1.1 in the 2011 FBC RIB Application (Exhibit B-12).

conservation analysis, the implementation of a RIB rate will lead to conservation behavior on the part of those customers.” However, FBC immediately qualifies this statement by quoting its response to a BCUC IR as follows:

“However, in response to BCUC IR1 Q18.1, FortisBC noted:

‘The Company has provided conservation impacts of the RIB rates by using a range of elasticity values, intended only to demonstrate the relative range of savings should those values represent the response of customers. The Company takes no position on the likelihood or degree to which the conservation results will materialize while the RIB rate is in place and further cannot forecast annual conservation impacts with any degree of confidence.’⁵³

46. FBC’s position in the 2011 RIB proceeding was that the amount of energy savings attributable to implementation of the RIB rate should be reported in an evaluation report to be filed at the end of 2013. FBC states in its final argument in the 2011 RIB proceeding:

“Given the uncertainty surrounding the elasticity estimates and the resulting conservation forecasts, the Company believes a prudent and conservative approach to evaluating the efficacy of the RIB rate is to implement its preferred option, submit to the Commission its plan for monitoring and evaluating the RIB rate over the period ending December 31, 2013, and then address any program modifications that may be indicated by the resulting report.”⁵⁴

47. Furthermore, nothing in the Commission’s G-3-12 Decision indicates that the Panel thought that the RIB rate that it approved would provide energy savings for only five years and no longer. Very much to the contrary, the G-3-12 Panel expressly cautioned FBC not to see the newly approved RIB as being temporary. The Panel states:

“FortisBC refers to the “interim nature” of the RIB rate, being effective between the current flat rate and the implementation of any time based rates. The Commission Panel cautions FortisBC against concluding that the RIB rate is only temporary in nature, particularly in view of not yet

⁵³ November 4, 2011 FBC Final Submission regarding application by FBC for approval of a Residential Inclining Block Rate. BCUC Project No.3698628, pp.10-11, underline added. https://www.bcuc.com/Documents/Arguments/2011/DOC_28987_11-04-2011_FortisBC-Final-Submission.pdf

⁵⁴ *Ibid.*, p.11.

having made application for its AMI initiative, nor for any TOU rates associated with it. The RIB rate could well be an integral part of a longer-term conservation initiative and should be designed with that in mind, including the approaches used to measure and manage its ongoing efficacy.”⁵⁵

48. In paragraphs 21 and 22 of its Final Argument in the current proceeding, FBC says BCSEA-SCBC’s evidence misinterpreted an IR response in FBC’s 2011 RIB Application. That is not correct. In the Application, FBC speculated that conservation from continuation of the RCR is “likely subject to diminishing returns,” and in support of this assertion FBC itself cited a particular IR response in the 2011 RIB proceeding. BCSEA-SCBC’s evidence correctly points out that IR response discusses a yearly breakdown requested by the Commission of FBC’s five-year estimate of conservation savings in the 2011 RIB application. Evidently, FBC ought to have cited the five-year estimate in the 2011 application and not the yearly breakdown in the IR response. But that does not matter now. The five-year figure was characterized as fundamentally uncertain by FBC during the 2011 proceeding. As BCSEA-SCBC’s evidence on this point correctly concludes, “while the assumption that the total rate-related conservation would be realized over five years was indeed made by FBC ‘during the original 2011 RIB process,’ it was unsupported at the time, and should be given no weight today.”⁵⁶

49. Fifth, in its Final Argument FBC appears to ‘walk back’ its “diminishing returns” contention and to replace it with an argument that efficiency savings due to the RCR will not be valuable. After acknowledging that the ‘picking of low hanging fruit’ does not mean that all conservation opportunities have been exhausted, FBC argues that uncertainty regarding the proper LRMC figure implies uncertainty about the value of conservation. FBC states:

“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...”⁵⁷

50. While the LRMC itself may be somewhat uncertain,⁵⁸ in BCSEA-SCBC’s view there is no uncertainty that achieving incremental conservation and efficiency savings is

⁵⁵ 2012 FBC RIB Decision, p.52, underline added.

⁵⁶ Exhibit C2-6, p.16.

⁵⁷ FBC Final Argument, para.70, footnote omitted.

valuable to FBC and its customers. As noted above, both the recent FBC CPR and the FBC 2019-2022 DSM Plan identify substantial amounts of cost-effective conservation and efficiency savings available in the residential customer class. The LMRC is also discussed further, below.

51. Sixth, FBC makes three additional arguments in paragraph 70 of its Final Argument that warrant response.

52. FBC says that “the phasing out of the RCR will keep some further conservation incentive in place in the near term” (i.e., during the proposed four-year phase-out period.) In response, this point supports retaining the RCR, not phasing out and eliminating it.

53. FBC says that, regardless of the size of the rate, a customer will save money by taking conservation measures and therefore have a financial incentive to conserve. In response, this does not support elimination of the RCR.

54. Next, FBC states:

“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.”⁵⁹

55. In response:

(a) Under a RIB rate, low-consuming customers, who never see the Tier 2 rate, save less money by reducing their energy load, but have less load from which to achieve reductions.

(b) There is no reason to believe that many of FBC’s high-use customers cannot reasonably alter their consumption habits or invest in alternate technologies such that they will see reductions in their load billed at Tier 2 and hence reductions in their average price of electricity.

⁵⁸ Due to the Commission’s approval of FBC Long Term Electricity Resource Plan only for the period through 2024. Decision and Order G-117-18.

⁵⁹ FBC Final Argument, para.70.

56. Seventh, in response to paragraphs 26-29 of FBC's Final Argument, BCSEA-SCBC stand by Mr. Raphals' evidence⁶⁰ regarding the Faruqui et al. study cited by FBC for the proposition that eliminating the RCR might lead to additional conservation. On a specific point, contrary to FBC's assertion, Mr. Raphals' evidence does not "assume that the Marginal Price methodology is most reflective of consumer behaviour."
57. BCSEA-SCBC fundamentally disagree with FBC's contention that "the potential for losing conservation benefits is not a significant concern in transitioning from the RCR to a flat rate."⁶¹ BCSEA-SCBC submit that if the RCR remains in place then it will continue to provide conservation and efficiency savings. To lose these valuable savings by terminating the RCR would indeed be of significant concern and would be contrary to the legislated energy objectives and the interests of FBC's residential customers as a whole.

(c) The FBC RCR is consistent with COSA and economic efficiency principles

58. FBC says that its proposal to return to the flat rate structure for its default residential rate "is based primarily on considerations related to the COSA, with support from other factors as described in Section 6.1 of the Application."⁶²
59. BCSEA-SCBC's view is that neither cost causation considerations nor economic efficiency factors justify terminating the RCR. Rather, BCSEA-SCBC submit that the focus going forward should be on whether, and, if so, how, to modify the RCR rate elements (Tier 1 rate, Tier 2 rate, threshold, customer charge⁶³) in order to optimize the conservation and efficiency savings within constraints such as bill impacts and class revenue neutrality.
60. BCSEA-SCBC submit that cost causation considerations do not justify elimination of the RCR. Cost causation was not a factor in the Commission's approval of the RCR in 2012. The Commission approved the RCR as a rate design intended and structured to promote conservation and efficiency. The RCR has successfully produced substantial energy savings, and, as argued in the previous section, the RCR will continue to produce energy savings if it is allowed to continue.

⁶⁰ Exhibit C2-10, BCSEA-SCBC Response to BCUC IR 2.1.

⁶¹ FBC Final Argument, para.28.

⁶² FBC Final Argument, para.16, underline added.

⁶³ And, potentially, a minimum charge.

61. In the Application, FBC acknowledges that the components of the RCR – the Tier 1 rate, the Tier 2 rate and the threshold – were not set on any cost of service basis but instead “were initially set to achieve a desired result (lower residential class energy use) within a constraint linked to the annual bill impact of customers.”⁶⁴ FBC states, “There is no particular relationship between the level of the existing rates, and any operational or cost basis.”⁶⁵
62. In Section 6.1 of the Application, cost causation is addressed mainly, if not entirely, in the context of whether the RCR is unduly discriminatory or causes cross-subsidization against customers who do not have access to pipe natural gas (which it does not, as the Commission determined in its 2017 RIB Rate Report to the BC government).
63. BCSEA-SCBC agree with FBC’s decision not to pursue a special rate design for residential customers without access to natural gas. They agree with FBC’s explanation as follows:
- “The principle of cost causation is a foundational consideration in rate setting. While it is the case that the analysis performed in order to provide the Company’s submission in the BCUC RIB Report process indicated that “no-gas” customers had a slightly higher revenue to cost ratio than customers in general, this was due to higher than average revenues and an atypical load profile as opposed to any significant difference in the cost to serve. In addition, it is expected that these factors would be similar to customers that have access to gas, but do not choose to use it. The Commission examined this issue of cross-subsidization as part of the BCUC RIB Report and found no basis to conclude that a cross-subsidy exists. This is not inconsistent with FBC’s earlier statement that the group of customers without gas service has higher average annual bills owing to their higher than average consumption.”⁶⁶
64. Turning to economic efficiency principles and the RCR, FBC essentially argues that the LRMC does not matter because the RCR was not proposed with reference to the LMRC. BCSEA-SCBC respectfully disagree.

⁶⁴ Exhibit B-1, p.71, underline added.

⁶⁵ Exhibit B-1, p.71, underline added.

⁶⁶ Exhibit B-1, p.63, underline added.

65. In BCSEA-SCBC's view,⁶⁷ economic efficiency principles indicate that the avoided cost of new supply is the appropriate referent for the Tier 2 energy price in a conservation-oriented inclining block rate design.⁶⁸ Where there is no separate demand change, as with the RCR, the volumetric price (\$/kWh) recovers both energy and demand costs. Accordingly, an energy-only LRMC has to be adjusted to include consideration of avoided demand costs. Further, since RCR savings are at the customer meter, an LRMC at the point of interconnection has to be adjusted to include consideration of avoided transmission and distribution costs. In addition, as it happens, the LRMC figure in FBC's most recent Long Term Electricity Resource Plan is also somewhat uncertain because it was based on a long-term plan that was approved only for the period through 2024.⁶⁹

66. Mr. Raphals' evidence is that appropriate adjustments of FBC's LRMC produce an avoided cost reference figure that is not far below the RCR Tier 2 rate.⁷⁰ His use of deferred capital expenditure (DCE) is well founded and is based on an established methodology of the Régie de l'énergie of Quebec.⁷¹

67. In paragraph 95 of its Final Argument, FBC criticizes Mr. Raphals' specific adjustments. However, FBC has not provided its own estimate of an appropriate referent for the Tier 2 rate. Instead, FBC emphasizes that "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." In essence, FBC wants to eliminate the RCR, not to reform it.

68. During the 2017 public consultations, FBC did conduct some analysis of ways to modify the RCR.⁷² From BCSEA-SCBC's perspective, it is disappointing that FBC did not follow through with this. In BCSEA-SCBC's view, the pertinent topic is how to

⁶⁷ Exhibit C2-6, Evidence of P. Raphals.

⁶⁸ This is supported by Commission decisions including the 2008 BC Hydro RIB Decision (G-124-08), the 2011 BC Hydro RIB Re-pricing Decision (G-45-11), and the 2012 FBC RIB Decision (G-3-12).

⁶⁹ Decision and Order G-117-18.

⁷⁰ Exhibit C2-6.

⁷¹ Exhibit C2-6, p. 9; and Exhibit C2-12, Attachment 2.1: Translation of Appendix A: Presentation of the Methodology for Calculating Avoided Costs, Technical Meeting, May 12, 2006, Hydro-Québec Distribution.

⁷² Exhibit B-1, p.66.

adjust the RCR rate elements in order to optimize the conservation and efficiency outcomes while retaining consistency with the principle of class revenue neutrality.

(d) Continuing the RCR would not be inequitable to high-consuming customers

69. FBC says it “is in agreement with the customer sentiment that the impact of the RCR has become overly burdensome on high consuming customers.”⁷³ FBC implies that high-consuming customers have already adopted all reasonable conservation and efficiency measures.⁷⁴

70. BCSEA-SCBC’s view is that many of FBC’s residential customers – both high-consumers and low-consumers – face hardships paying their electricity bills. This is why BCSEA-SCBC support measures aimed at mitigating the impact of the cost of electricity for low-income customers.

71. However, BCSEA-SCBC say that continuing the RCR would not be inequitable to high-consumers. They say that the assertion that all high-consuming customers have taken all reasonable conservation and efficiency measure is significantly exaggerated. In addition, BCSEA-SCBC note that phasing out and terminating the RCR would cause adverse bill impacts for medium- and low-consuming customers, which for some of them would be a hardship.

72. BCSEA-SCBC add the following two points.

73. First, complaints about the RCR by individual customers based on the assumption that they pay more under the RCR than they would under a flat rate have to be individually evaluated because sometimes a customer may be factually incorrect in this assumption. This is confirmed by FBC, which states:

“FBC’s experience with responding to customers who contact FBC individually with this concern has shown that this perception is not always reflective of an actual comparison of flat rate versus RCR billing over the course of a year. Customers may fail to account for lower bills during the lower consumption months or for the increase in the level of rates generally.”⁷⁵

⁷³ Exhibit B-1, p.61.

⁷⁴ FBC Final Argument, para.70.

⁷⁵ Exhibit B-1, p.59

74. AMCS-RDOS acknowledges that it has not reviewed the testimonials it filed (opposed to the RCR) to determine if the customer in question would actually be financially better off under a flat rate than the RCR.⁷⁶ Similarly, FBC acknowledges that it has not independently verified the individual claims of customer comments critical of the RCR.⁷⁷
75. Second, the implication that all high-consuming customers have adopted all reasonable conservation and efficiency measures is not supported by the 2014 survey information that among the highest-consuming 5% of residential customers sampled:
- (a) 44% reported having done no DSM measures in the preceding five years, and
 - (b) 73% said they do not expect to take any energy efficiency measures in the next two years.⁷⁸
76. The authors of the 2014 report state that “The results do not lead to a conclusion that the high use group is particularly inefficient in its energy use, although they may have above-average opportunities to undertake conservation measures given the nature of their residences.”⁷⁹
77. In BCSEA-SCBC’s view, the RCR is not “overly burdensome” on high consuming customers. The RCR allows high consuming customers to cost-effectively undertake conservation and efficiency measures.

(e) Conclusion regarding RCR

78. BCSEA-SCBC support continuation of the FBC Residential Conservation Rate. The RCR is strongly supported by applicable energy policy. The RCR achieves substantial amounts of conservation and efficiency savings and will continue to do so in the future. There is no basis for FBC’s speculation that no more energy savings are available to be incented by the RCR. Continuing the RCR would not be inequitable to high-consuming customers. Neither cost causation considerations nor

⁷⁶ Exhibit C3-13, AMCS-RDOS Response to BCSEA IR 14.2, pdf p.15.

⁷⁷ Exhibit B-8, BCUC IR 48.1, pdf p.145.

⁷⁸ Exhibit B-12, Residential Conservation Rate, Information Report For the Period July 1, 2012 to June 30, 2014, November 28, 2014, at Exhibit B-12, Attachment 1.2 pdf p.77

⁷⁹ Exhibit B-12, Attachment 1.2, p.33, pdf p.114.

economic efficiency factors justify terminating the RCR. Going forward, the focus should be on ensuring that the RCR is optimized to produce conservation and efficiency savings within constraints such as bill impacts and class revenue neutrality.

79. In the alternative, if the Commission decides to eliminate the RCR, then there should be a phase-out period of at least four years. BCSEA-SCBC oppose immediate elimination of the RCR, as that would cause rate shock.

D. RS 01 Customer Charge

80. When the Commission approved the FBC RCR in January 2012 it determined that the RS 01 Customer Charge would be exempt from general rate increases for the years 2012 to 2015.⁸⁰ The purpose of holding the Customer Charge constant was to incent conservation, in accordance with the Commission's direction in the 2010 FBC RDA Decision. In that decision, the Panel states:

“...the Commission Panel is concerned that the existing relatively high basic charge gives wrong pricing signals and believes that Bonbright Principle 3 regarding the price signals encouraging conservation should trump Principle 2 which seems to support a higher basic charge.”⁸¹

81. In the current application, FBC proposes to raise over four years the RS 01 Customer Charge to the level of the RS 03 and RS 03A Customer Charge that was not frozen from 2012 to 2015. FBC proposes this change in tandem with its proposal to phase out and eliminate the RCR.

82. There are no customers in RS 03. RS 03 is for the control group created for the evaluation of the RCR completed in 2014 and has since been dissolved. RS 03A is a flat rate for qualified farm customers, with some 510 participants as of December 2017.⁸² FBC says it intends to apply, toward the end of the phase-out of the RCR, to terminate RS 03A, presumably because after the phase-out of the RCR both RS 01 and RS 03A would be flat rates at the same price per kWh.

⁸⁰ 2012 FBC RIB Decision, p.56.

⁸¹ 2012 FBC RIB Decision, p.57.

⁸² Exhibit B-11, FBC response to BCOAPO 38.1, pdf p.65.

83. According to the COSA, RS 01 and RS 03A Customer Charges recover 45% and 53%, respectively, of the utility's fixed and demand costs.
84. In the application, FBC states a desire to move to a 55% recovery of fixed costs through fixed charges for each rate class. However, in its Final Argument,⁸³ FBC takes exception to BCSEA-SCBC's summary statement that FBC's residential customer charge proposal is "part of a proposal whereby the various customer classes would have their respective fixed costs recovered by the same percentage of fixed charges."⁸⁴ FBC insists that the rationale for its proposal is to achieve alignment between the customer charges for RS 01 and RS 03A so that (with elimination of the RCR) all residential customers would have the same Customer Charge (and the same flat volumetric rate). In response, BCSEA-SCBC stand corrected as to FBC's rationale for the proposal to increase the residential Customer Charge.
85. Given that alignment of RS 03A and RS 01 is the rationale, BCSEA-SCBC submit that the Customer Charge for RS 03A should be aligned to the Customer Charge for RS 01, not the other way around. The Customer Charge for the 510 qualified farm customers served under RS 03A should be reduced to the level of the Customer Charge for the approximately 115,000 customers served under RS 01, the default residential rate schedule. This is particularly so given that FBC intends to dissolve RS 03A and merge those customers into RS 01.
86. In determining their approach to the RS 01 Customer Charge in the current proceeding, BCSEA-SCBC take into account the following factors:
- (a) The combination of the volumetric energy charge (\$/kWh) and the customer charge (\$/month) will be revenue neutral for the customer class. FBC will neither gain nor lose regardless of where the customer charge is set.
 - (b) Directionally, a lower customer charge (and higher volumetric charge) benefits low-consuming customers compared to high-consuming customers. *Vice versa*, a higher customer charge benefits high-consuming customers compared to low-consuming customers.

⁸³ FBC Final Argument, paras.79-81.

⁸⁴ Exhibit C2-6, p.21.

- (c) Directionally, a lower customer charge and correspondingly higher volumetric charge provides a stronger price signal for conservation and efficiency than does a higher customer charge with a lower volumetric charge. For this reason, BCSEA-SCBC support a lower customer charge, other things being equal.
- (d) The size of FBC's proposed change in the RS 01 Customer Charge is small enough that it does not give rise to the kinds of issues associated with extremely low, or extremely high, customer charges, such as cross-subsidies to, or major bill impacts on, customers with periodically unoccupied premises.

87. BCSEA-SCBC also note that if, contrary to BCSEA-SCBC's submissions, the Commission approves phase-out and elimination of the RCR, then a phased increase in the RS 01 Customer Charge would be a 'double whammy' for medium- and low-consuming customers. Both changes would cause adverse bill impacts for low- and medium-consuming customers. If the Commission is inclined to approve elimination of the RCR, then the adverse bill impact on the majority of residential customers should be ameliorated, albeit slightly, by retention of the existing RS 01 Customer Charge.⁸⁵

Part 3. Proposed Optional Time Of Use Rates

88. FBC seeks Commission approval of optional TOU rates for each retail customer class, with newly designed time periods and prices. FBC proposes that the optional TOU rates would be subject to review after three years. FBC is amendable to an annual reporting requirement.⁸⁶

89. FBC currently offers optional time of use rates for all of its retail classes, although the residential TOU rate (RS 2A) has been closed to new participants since 2012 when the RCR was approved. Few customers are enrolled in FBC's optional TOU rates. FBC reports that in 2016 there were approximately 175 customers in RS 2A, 20 customers in the commercial TOU rate (RS 22A), and one customer on the large commercial service TOU rate (RS 32A).⁸⁷

⁸⁵ Subject to general rate increases.

⁸⁶ FBC Final Argument, para.120.

⁸⁷ Exhibit B-1, p.109.

90. In summary, BCSEA-SCBC take the following positions regarding FBC's proposed optional TOU rates:

- (a) BCSEA-SCBC oppose approval of the proposed optional residential TOU rate. The potential for freeridership outweighs any reasonable expectation of cost-effective load shifting. This proposal is not a conservation rate and it should not be seen as a substitute for the genuine Residential Conservation Rate.
- (b) BCSEA-SCBC have substantial reservations about the merits of the proposed optional TOU rates for the commercial, wholesale and irrigation customer classes. The 'implement first, evaluate later' approach is risky. Net financial benefit to all customers is a doubtful outcome. Cross-subsidization is more likely. Indeterminate evaluation results will complicate modification or elimination of optional rates that participants benefit from despite potential disadvantage to other customers.

A. The Purpose of Optional TOU Rates

91. FBC's existing and proposed TOU rates are all optional TOU rates. Default mandatory TOU rates (or default TOU rates with an optional opt-out) are not under consideration in the current proceeding.⁸⁸

92. BCSEA-SCBC agree with FBC's statement of the purpose of time of use rates:

"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."⁸⁹

93. BCSEA-SCBC support the concept that rate designs should send economically efficient price signals to customers in order to optimize conservation and efficiency and to reduce costs for all ratepayers. However, as FBC acknowledges, "Unless the changes in behaviour caused by the [optional TOU] rate results in the desired financial benefit, the rate will not have achieved its objective."⁹⁰

⁸⁸ Exhibit B-8, BCUC IR 1.93.1; FBC Final Argument, para.111.

⁸⁹ Exhibit B-1, p.108.

⁹⁰ Exhibit B-12, BCSEA IR 34.5, pdf page 64; FBC Final Argument, para.113.

94. The goal of the proposed optional TOU rates is to reduce the overall peak demand, not to shift loads simply because the utility's cost of power differs by time period. FBC states in its Final Argument:

"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."

95. This point is important, because it underlines that "customer choice" is not a standalone purpose of optional TOU rates. Rather, "customer choice" is a secondary benefit of an optional TOU rate that is successful because it reduces the utility's peak demand such that a rate benefit accrues to all customers. BCSEA-SCBC are concerned that FBC's justification of the proposed optional TOU rates overemphasizes "customer choice" and underemphasizes net financial savings to the utility and hence customers as a whole.

96. This concern is amplified by FBC's characterization of the proposed optional TOU rates as "conservation rates." FBC argues that "customer satisfaction may also be improved by the additional optional rate option for customers that would like to enroll on a conservation rate."⁹¹ An optional TOU rate is not a conservation rate unless it reduces peak demand cost-effectively. However, FBC does not argue that the proposed optional TOU rates will actually reduce peak demand cost-effectively. Instead, FBC proposes that this basic question will be addressed in the proposed three-year review.

97. FBC appears to acknowledge the potential problem when it states in its Final Argument that a TOU rate "should not be devised simply as a means for individual

⁹¹ FBC Final Argument, para.112.

customers to lower bills without any benefit that would come from greater adoption of the rates.”⁹²

B. FBC’s Existing Optional TOU Rates

98. FBC says that the rates and time periods for the existing optional TOU rates were set during the 1997 RDA proceeding based on the 1997 COSA. While the rates have escalated with revenue related increases, the underlying assumptions have not been updated since then.⁹³

99. In BCSEA-SCBC’s view, the existing optional TOU rates and time periods are no longer justified. It is unclear whether the existing optional TOU rates ever provided cost-effective net benefits to all customers. In BCSEA-SCBC’s view, it is unfortunate that FBC did not examine the experience with the existing optional TOU rates, including participants’ perspectives, in the course of preparing the current optional TOU proposal. For example, while participation numbers are low, it would have been instructive to know what proportion of participants are free riders and what proportion would increase their on-peak consumption if the optional TOU rate was no longer available. This would be relevant to, among other things, what should happen with the existing optional TOU rates if the Commission does not approve the proposed new optional TOU rates.

C. Determination of TOU Rate Periods and Prices

100. In the Application, FBC presents the results of analysis of TOU rate periods and TOU pricing based on the total system loads by hour for the past 5 years, grouped into periods with similar load levels for TOU periods.⁹⁴ The TOU pricing is based on the cost differentials for power supply between TOU periods.⁹⁵ The On-Peak and Mid-Peak cost differentials are shown in Table 8-8. These cost differentials form the basis of the TOU rates and are the same for all classes. Different rate classes have different amounts of consumption in the different TOU time periods. The amount of

⁹² FBC Final Argument, para.119.

⁹³ Exhibit B-1, p.110.

⁹⁴ Exhibit B-1, p.110.

⁹⁵ Exhibit B-1, p.112.

load in each TOU time period was adjusted by an elasticity factor.⁹⁶ The breakdown of loads by TOU time period by customer class is shown in Table 8-9.⁹⁷ Revised TOU rates for on-peak, mid-peak and off-peak by customer class are shown in Table 8-10.⁹⁸

101. For present purposes, BCSEA-SCBC do not object to FBC's cost of power methodology for determining the proposed TOU rates for on-peak, mid-peak and off-peak by customer class. However, it is noted that the potential overall customer benefit from the proposed optional TOU rates would not come from participants simply paying the time-differentiated prices, but only from induced load shifting reducing the utility's peak demand for resource acquisition purposes. In addition, it is noted that the (time differentiated) cost of power is not necessarily the only valid basis for determining TOU price differentials. For example, adjustments could be made to take into account capacity savings.

D. Freeridership and Optional TOU Rates

102. One significant difference between the proposed optional TOU rates and mandatory TOU rates is that optional TOU rates are susceptible to freeridership whereas mandatory TOU rates are not.

103. As Mr. Raphals states, "Freeridership is a significant challenge with optional TOU rates."⁹⁹ He explains:

"Depending on their consumption patterns, certain customers will be able to reduce their bills simply by switching to the TOU rate, without making any behavioural changes. In these cases, doing so will reduce FBC's revenues but not its costs, resulting in an additional cost burden for other customers. For the proposed optional TOU rate to be successful, it would

⁹⁶ The elasticity estimates were based on the 2014 RIB Report estimates of -0.16 for Tier 2, used for the on-peak period, and -0.07 for Tier 1, used for the mid-peak and off-peak periods. Exhibit B-8, BCUC IR 88.1. Interestingly, these elasticity estimates support the conclusion that elimination of the RCR would result in a decrease in conservation and efficiency savings.

⁹⁷ Exhibit B-1-1, p.114.

⁹⁸ Exhibit B-1, p.115.

⁹⁹ Exhibit C2-6, p.3.

have to cause a reduction in the utility's costs that is significantly larger than the revenue deficiency due to freeridership."¹⁰⁰

104. For TOU rates to be successful they must not only induce some load shifting by participants, the induced load shifting must save more money for ratepayers than the program costs in the form of reduced bills for participants (net of increased bills to participants who are not financially better off under the optional TOU rate).

E. Proposed Residential Optional TOU Rate

105. FBC offers two basic reasons for the proposed residential optional TOU rate: rate benefits accruing to all customers, and customer satisfaction. BCSEA-SCBC do not believe that either point has been established. In their view, the proposal would likely put upward pressure on residential customer rates without achieving meaningful, cost-effective load shifting. And, BCSEA-SCBC disagree with FBC's rationale that the proposed optional residential TOU rate would be a "conservation rate" that would substitute for the genuinely effective Residential Conservation Rate (inclining block rate) that FBC proposes to eliminate.

(a) Upward pressure on rates without conservation benefits

106. There is a potential for a substantial amount of freeridership in the proposed residential optional TOU rate. FBC estimates that 22,421 residential customers – 19% of residential customers – would be financially better off under the proposed optional TOU rates with no change in consumption pattern.¹⁰¹ The lost revenues would be an estimated \$9.4 million per year if all of the customers who would benefit with no change in their consumption opted into the optional TOU rate and no other customers did.¹⁰² This would result in an added cost of \$0.007 per kWh for customers in the residential class.¹⁰³ The average lost revenue per free rider would be would be \$34.86 per month.¹⁰⁴

¹⁰⁰ *Ibid.*

¹⁰¹ Exhibit B-12, BCSEA IR 34.3, pdf page 64; Exhibit B-24, BCSEA IR 18.1, pdf p.34.

¹⁰² Exhibit B-12, BCSEA IR 34.3, pdf page 64.

¹⁰³ FBC goes on to say: "(or \$0.003/kWh if applied to all customer classes)." However, it is not clear why net losses in this residential program would be applied to all customer classes, given that the rate designs are intended to be class revenue neutral.

¹⁰⁴ Exhibit B-24, BCSEA IR 18.2, pdf p.36.

107. FBC denies that the customers who would benefit financially from participating in the proposed residential optional TOU rate with no change in their pattern of consumption (i.e., free riders) would actually choose to participate in the optional rate. FBC states:

“FBC does not believe that customers will opt for the TOU rate simply on the basis of being financially better off. The complexities of the TOU rate and having to change behaviour to avoid on-peak pricing may be a deterrent to many customers, even if they would save on their utility bills.”¹⁰⁵

108. In BCSEA-SCBC’s view, this does not resolve the free ridership problem with the proposed residential optional TOU rate, for the following reasons.

- (a) It seems wrong in principle to assume that customers who would benefit financially from participating in an optional rate would not be encouraged to do so. Further, it seems wrong in principle that comfort could be taken from the possibility that they may be deterred from doing so by the complexities of the rate.
- (b) It will be (or should be) straightforward for customers to determine with the online tool on FBC’s website whether they would benefit financially from participating in the optional TOU rate given no change in their previous year’s consumption pattern. FBC acknowledges that customers will be able to use the online tool to assess the impact of switching to the TOU option.¹⁰⁶
- (c) The complexities of the proposed residential optional TOU rate would be a potential deterrent to participation by both free riders and non-free riders (i.e., customers who intend to shift load in response to the price signal). However, “having to change behaviour to avoid on-peak pricing” is likely to be a larger deterrent to non-free riders, who would have to actually change their consumption pattern to benefit financially, than to free riders, who would merely have to maintain their previous consumption pattern to benefit financially.
- (d) It is unclear why “FBC does not believe that customers will opt for the TOU rate simply on the basis of being financially better off.” The financial incentive is the

¹⁰⁵ Exhibit B-12, BCSEA IR 34.3, pdf page 64.

¹⁰⁶ Exhibit B-24, BCSEA IR 18.3, pdf p.36.

core mechanism by which a TOU rate is intended to promote load shifting. Many conservation-minded customers already shift their load to avoid peak periods, without being on an optional TOU rate. There is no apparent reason other than financial savings for a customer to participate in a TOU program. FBC's point here reinforces BCSEA-SCBC concern that the proposed residential optional TOU rate is intended for the optics of having a "conservation rate" to replace the Residential Conservation Rate.

109. In BCSEA-SCBC's view, the available evidence does not support a reasonable expectation that the proposed residential optional TOU rate would be financially successful given the potentially large revenue loss due to freeridership. Under the principle of class revenue neutrality, this financial loss would be made up in the form of higher rates paid by all residential customers.

(b) Wrong rationale for residential optional TOU rates proposal

110. In addition to the (asserted) bill reduction benefits for all customers, addressed in the previous section, FBC cites customer choice and customer satisfaction as a reason for the proposed residential optional TOU rate. FBC states:

"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."¹⁰⁷

111. FBC specifically pitches the proposed residential optional TOU rate as a "conservation rate" in substitution for the RCR, saying:

"FBC has based the TOU rates on cost causation principles and on continuing to have a conservation rate available as an option for customers in the event that the RCR is removed per the Company's request."¹⁰⁸

112. However, FBC acknowledges that the expressions of interest in an optional residential TOU rate may aimed more at bill mitigation than load shifting. FBC states:

"In the past decade, the general level of rates has risen, and the introduction of the RCR has raised the overall cost of energy for high

¹⁰⁷ Exhibit B-8, BCUC 1.76.4.2, pdf page 231, underline added.

¹⁰⁸ Exhibit B-12, BCSEA IR 34.4, pdf p.64, underline added.

consuming customers. This has raised interest in the availability of TOU rates, but it appears more as a bill mitigation opportunity than as a conservation measure.¹⁰⁹

113. This observation makes sense. Often, people are attracted to a TOU rate's lower price for off-peak consumption without taking into account that a TOU rate also has a higher price for on-peak consumption. Further, no specific customer could know for certain whether he or she would be financially better off under an optional TOU rate than under the RCR or a flat rate without knowing the TOU periods and prices defined for a particular optional TOU rate. This information has not been available.
114. That said, the concept of an optional TOU rate being a bill mitigation opportunity is unfortunately all too real. A bill mitigation opportunity that is not a conservation measure is another term for freeridership. It bears repeating that under FBC's proposed residential optional TOU rate approximately 22,421 residential customers – 19% of residential customers – would be financially better off under the proposed optional TOU rates with no change in consumption pattern.

(c) Conclusion regarding proposed residential optional TOU rate

115. BCSEA-SCBC oppose approval of the proposed optional residential TOU rate. The potential for freeridership outweighs any reasonable expectation of cost-effective load shifting. This proposal is not a conservation rate and it should not be seen as a substitute for the genuine Residential Conservation Rate.

F. Proposed Optional TOU Rates for Non-Residential Customer Classes

116. As noted above, BCSEA-SCBC have reservations about the merits of the proposed optional TOU rates for the commercial, wholesale and irrigation customer classes.
117. FBC acknowledges that "participation rates are unknown at this time, and that both these rates and the resulting power purchase savings cannot be reasonably estimated prior to implementation."¹¹⁰

¹⁰⁹ Exhibit B-8, BCUC 1.76.4.2, pdf page 231, underline added.

¹¹⁰ Exhibit B-8, BCUC IR 94.1, pdf p.298.

118. Instead, FBC relies on the proposed review after three years. FBC states in argument:

“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.”

119. FBC concludes that its approach – that BCSEA-SCBC would characterize as ‘implement first, evaluate later’ – has a low risk and would provide valuable insight into customer enrollment and response.¹¹¹

120. BCSEA-SCBC acknowledge that the three-year review would provide valuable insight into customer enrollment and response. However, BCSEA-SCBC’s concerns include the following:

- (a) FBC has not adequately demonstrated that all of the rate classes – Small Commercial, Commercial, Large Commercial, Wholesale Primary, Wholesale Transmission, and Irrigation – should necessarily receive optional TOU rates at this time.
- (b) There is a risk that it would be difficult to modify or eliminate optional TOU rates once they are in place. The existing optional TOU rates have been in place for more than twenty years, with no apparent confirmation that they are cost-effective.
- (c) The focus on the proposed optional TOU rates could eclipse the examination and development of other approaches to load shifting and demand response that may have better prospects of success. This would include critical peak credits or pricing, and direct (“smart”) load control, that other utilities have chosen over optional TOU rates.¹¹²

¹¹¹ FBC Final Argument, para.122.

¹¹² See Synapse Energy Economics, Best Practices in Utility Demand Response Programs, Appendix A in Exhibit C2-6, pdf p.43.

Part 4. Other Topics

121. In this Part, BCSEA-SCBC address several additional topics.

A. Flattening the Commercial RS 21 Rate

122. BCSEA-SCBC support FBC's proposal to flatten the Commercial RS 21 rate. As FBC says, this is a continuation of the move from 3 tiers to 2 tiers that was approved with the 2009 RDA. BCSEA-SCBC agree with FBC that maintaining a declining block rate structure would be counter to the conservation objectives of the CEA.¹¹³

B. General Terms & Conditions

123. Regarding FBC's proposed rewording of the General Terms & Conditions, BCSEA-SCBC support the intentions to clarify, to align with FortisBC Energy Inc.'s GT&Cs, and to regroup for easier referencing.

124. BCSEA-SCBC support the concept of updating fees and standard charges based on new COSA information. They take no position regarding the specific contribution and fee amounts proposed.

125. BCSEA-SCBC support the concept of aligning the FBC Security Deposit Policy with that of FEI.

C. Rate Rebalancing

126. FBC explains:

"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."¹¹⁴

127. The only two customer classes with R/C ratios outside the ROR are Large Commercial Transmission (107.0%) and Lighting (92.2%). FBC proposes to move these two customer classes to R/C ratios of 105% and 95% respectively by adjusting

¹¹³ FBC Final Argument, para.99.

¹¹⁴ FBC Final Argument, para.60.

the final rates approved by the BCUC in this process. FBC does not propose to adjust these customer classes (or the others) to unity.

128. BCSEA-SCBC support this rate rebalancing proposal.

D. Transformation Discounts

129. BCSEA-SCBC take no position regarding FBC's changes to the Transformation Discount.¹¹⁵

E. Transmission Services

130. BCSEA-SCBC take no position regarding FBC's proposed changes to the provision of transmission services.¹¹⁶

F. Potential Net Metering Rate

131. In section 3.6 of the Application, FBC discusses the increasing participation in FBC's Net Metering (NM) program from a cost recovery perspective. FBC says COSA results based on a small sample size indicate that NM customers have a lower load factor and revenue/cost ratio than similar customers without NM systems. However, FBC is not seeking any changes to the NM rate structure at this time. FBC says it will continue to monitor and assess the impact that net metering has on other customers.

132. BCSEA-SCBC strongly support the FBC Net Metering program. In their view, the NM program provides substantial benefits for both participants and non-participants. BCSEA-SCBC support FBC's decision not to propose changes to the NM rate structure.

¹¹⁵ FBC Final Argument, paras.102-103.

¹¹⁶ FBC Final Argument, paras.104-108.

Part 5. Conclusion

133. BCSEA-SCBC respectfully emphasize that eliminating the RCR would eliminate substantial amounts of future conservation and efficiency savings, contrary to the BC energy objectives and to the detriment of residential customers as a whole. If changes are required, the RCR should be optimized, not eliminated.

ALL THE ABOVE IS RESPECTFULLY SUBMITTED



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