

British Columbia Utilities Commission

BC Hydro 2015 Rate Design Application

**Final Argument of
B.C. Sustainable Energy Association and Sierra Club B.C.**

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Part I – INTRODUCTION AND OVERVIEW

Overview

1. This is the final argument of the interveners B.C. Sustainable Energy Association and Sierra Club B.C.
2. This argument responds to BC Hydro's September 26, 2016 Final Argument.¹
3. This argument also responds to BCOAPO's September 26, 2016 Final Submission on BCOAPO Proposals regarding low-income measures.²

BCSEA and SCBC

4. BCSEA is a non-profit association of citizens, professionals and practitioners committed to promoting sustainable energy, energy efficiency and energy conservation in British Columbia. BCSEA has five chapters across B.C. and approximately 400 individual and corporate members. BCSEA works toward the province's transition to a lower-carbon economy. Many members of BCSEA are ratepayers and potential ratepayers of BC Hydro. BCSEA is a ratepayer group in this proceeding.
5. SCBC is a non-profit organization of British Columbians from all walks of life who care about a broad range of environmental issues including climate change and clean energy. SCBC has five local groups and over 12,000 members and supporters across the province, many of whom are ratepayers and potential ratepayers of BC Hydro. The promotion of environmentally sustainable energy falls within SCBC's mandate. SCBC is a ratepayer group in this proceeding.

¹ http://www.bcuc.com/Documents/Arguments/2016/DOC_47663_09-26-2016-BCH-Final-Argument.pdf

² http://www.bcuc.com/Documents/Arguments/2016/DOC_47664_09-26-2016-BCOAPO-Final-Arguments.pdf

6. BCSEA-SCBC's interests in this proceeding are as non-profit public interest environmental and energy policy organizations, and as representatives of their members' interests as ratepayers. BCSEA-SCBC's objectives include energy conservation and efficiency, fair rates, regulatory efficiency, and social justice.
7. As counsel for BCSEA-SCBC said in his opening statement during the oral hearing:

“Many of the members of BCSEA and SCBC are ratepayers of BC Hydro. They are green ratepayers. They want the electricity they purchase to be produced and transmitted sustainably, and in ways that minimize harm to the natural environment.

Regarding rate design, BCSEA and SCBC's members want rates that are fair and reasonable and that give appropriate price signals to encourage energy conservation and efficient use of energy.”³

8. BCSEA and SCBC participated in BC Hydro's 2015 Rate Design Application workshops. BCSEA-SCBC have also participated in many of the Commission's previous proceedings regarding topics that are addressed in the 2015 RDA, including for example Hydro's Residential Inclining Block (RIB) Rate, Transmission Service Rate, General Service conservation rate, and 2007 Rate Design Application Phase 1. BCSEA-SCBC also participated in the 2013 review by the Industrial Electricity Policy Review Task Force appointed by the B.C. Minister of Energy and Mines.
9. BCSEA-SCBC participated in the Commission's expedited proceedings regarding the following topics within the 2015 RDA that have already been dealt with:
 - (a) the F2016 Cost of Service Study,
 - (b) the Medium General Service (MGS) and Large General Service (LGS) pricing proposal for customers without historical baselines to take service at 100 percent Part 1 pricing,

³ T3:392, lines 5-13.

- (c) the freshet rate pilot for Transmission Service customers,
 - (d) a change to the definition of “availability” and a change in the definition of High Load Hours in Rate Schedule (RS) RS 1852,
 - (e) the division of the Street Lighting rate class into two classes - a BC Hydro-owned and non BC Hydro-owned rate class, and
 - (f) changes to the Minimum Reconnection Charges in BC Hydro’s Electric Tariff terms and conditions.
10. Also, BCSEA-SCBC are participating as stakeholders in the Commission’s proceeding regarding the RIB Rate Report to the Government of British Columbia.⁴ This is noted here because the two proceedings are partially interconnected. BCSEA-SCBC intend to make comments regarding the RIB Rate Report within that proceeding.
11. Looking forward, BCSEA-SCBC intend to participate in BC Hydro’s anticipated stakeholder engagement process regarding Module 2 of the Rate Design Application, and in the Commission’s proceeding to review BC Hydro’s the RDA Module 2 application expected to be filed in the summer of 2017.⁵

BC Hydro’s Requested Order

12. BC Hydro provided an updated draft form of order in Appendix B of its Final Argument. It will be referred to as the Draft Consolidated Order.
13. BCSEA-SCBC take no issue with BC Hydro’s request that all orders it seeks be made effective April 1, 2017.⁶

⁴ BCUC [Project No. 3698845](#).

⁵ BC Hydro Final Argument, para.7.

⁶ BC Hydro Final Argument, para.11.

Part II – CONTEXT

Legal Regime and Previous Commission Decisions

14. BCSEA-SCBC have no comments on BC Hydro's submissions under this heading.

Energy LRMC

15. BC Hydro makes several points in paragraphs 22 and 23 that warrant comment.
16. In BCSEA-SCBC's view, conservation and efficiency are important regardless of whether BCH is long or short on energy or capacity and whether this position is in the short, medium or long term.
17. BC Hydro implies that the consideration of bill impacts in designing conservation oriented rate structures is or ought to be related to the utility's current load-resource balance and LRMC of new supply (energy and capacity.)⁷ BCSEA-SCBC respectfully disagree.
18. In BCSEA-SCBC's view, bill impacts are always a limiting factor in designing a new conservation oriented rate. And, of particular importance in this proceeding, bill impacts are also a limiting factor when existing conservation oriented rate structures are revised or examined with a view to possible revision. BCSEA-SCBC submit that in reviewing the TSR stepped rate, the RIB, and the MGS and LGS two-part rates the current state of the ebb and flow of BC Hydro's load-resource balance is not a determinative factor.
19. BC Hydro implies that its current LRB and LRMC situation "raise[s] the issue of the degree to which BC Hydro's conservation rates ought to be maintained."⁸ BCSEA-SCBC respectfully disagree.

⁷ BC Hydro Final Argument, paras.22-23.

⁸ BC Hydro Final Argument, para.23.

20. In BCSEA-SCBC's view, the issue of whether the LGS and MGS conservation rates should be maintained arose entirely because they simply did not work in achieving conservation, not because of any diminishment in the importance of conservation.

Rate Design Criteria

21. BCSEA-SCBC support the Commission applying the Bonbright principles, summarized in no particular order by BC Hydro as follows, to the rate design proposals in this proceeding:

- “• Price signals that encourage efficient use and discourage inefficient use;
- Fair apportionment of costs among customers;
- Avoid undue discrimination;
- Customer understanding and acceptance, practical and cost effective to implement;
- Freedom from controversies as to proper interpretation;
- Recovery of the revenue requirement;
- Revenue stability; and
- Rate stability.”⁹

22. BC Hydro refers to “a number of parties” having “commented on BC Hydro’s change in prioritization of the Bonbright Criteria and specifically, the absence of ‘efficiency’ as one of the top principles.”¹⁰ That wording, followed by BC Hydro subsequent paragraphs addressing its load-resource balance and energy LRMC could be interpreting as suggesting that the prioritization means abandonment of “efficiency” as a Bonbright principle or as a B.C. energy objective.

⁹ BC Hydro Final Argument, para.25.

¹⁰ BC Hydro Final Argument, para.29.

23. During the stakeholder engagement process and in the Application, BC Hydro articulated what it referred to as prioritization of the Bonbright principles that it said should apply to the proposals in this rate design application. BCSEA-SCBC did not object to that prioritization during the engagement process and, to be clear, they don't object to it now.
24. However, BCSEA-SCBC wish to emphasize that their understanding of BC Hydro's prioritization of the Bonbright principles in this Application does not imply abandonment of the "efficiency" principle.
25. For example, during the engagement process BCSEA-SCBC expressed its position on BC Hydro's prioritization of customer understanding and acceptance, rate stability and fairness (Bonbright criteria) as follows:
- "BCSEA-SCBC believe that 'efficiency' (price signals that support economically rational energy conservation and efficiency) should remain an important Bonbright criterion in BC Hydro's RDA.
- Nevertheless, as BCSEA-SCBC have said in earlier comments, it is evident that the complex general service rate structure (status quo) is not achieving the energy savings results that were predicted and desired. BCSEA-SCBC support moving to a much simplified GS rate structure. This would greatly improve customers' understanding of the rate and would, BCSEA-SCBC believe, contribute to natural conservation and efficiency."¹¹
26. It is important to note that this is not a proceeding about how much DSM energy savings BC Hydro should aim to achieve. Those are matters for an integrated resource plan and a DSM expenditure schedule.

Stakeholder Consultation

27. Counsel for BCSEA-SCBC summarized the groups' experience with BC Hydro's stakeholder engagement process as follows:
- "BCSEA and SCBC participated actively in BC Hydro's stakeholder workshops regarding the 2015 rate design application. We commend BC Hydro for this pre-application

¹¹ Letter of August 13, 2015 from counsel for BCSEA-SCBC to BC Hydro, Exhibit B-1, pdf p.858.

process, both the concept of it and the implementation of it. BCSEA/SCBC were able to learn about numerous topics and potential topics within the RDA rubric in a way that was much more efficient and more effective than a written Information Request process would have been. Many questions and concerns were resolved through that informal process, and won't have to be dealt with in the current proceeding or specifically in the current oral hearing. In addition, the selection of topics and the content of the topics that would form the first module of the RDA application evolved over the course of the process based at least in part on input from stakeholders.”¹²

28. BCSEA-SCBC suggest that it would be helpful for the Commission to comment on BC Hydro’s pre-application stakeholder engagement process in the Commission’s final decision.

Part III – RELIEF SOUGHT BY BC HYDRO

A. BC Hydro Residential Rate Proposals

RIB Rate – RS 1101/RS 1121

29. In his opening statement in the oral hearing, counsel for BCSEA-SCBC summarized the groups’ approach to the RIB rate as follows:

“Residential rates, the main topic of course is the RIB rate design. BCSEA/SCBC support continuation of the RIB rate as the default residential rate because it achieves measurable energy conservation. Design elements such as the threshold, the basis for setting the Tier 1 and Tier 2 prices, and the pricing principles, are always a matter of balancing multiple objectives and impacts. Based on the information and analysis to date, and subject to evidence that may emerge during the oral hearing, BCSEA/SCBC are inclined to support the existing design elements.”¹³

30. Having considered the evidence in the oral hearing and BC Hydro’s final argument, BCSEA-SCBC reconfirm their support for the *status quo* RIB rate in this proceeding.

¹² T3:393, line 16 to T3:394, line 6.

¹³ T3:394, line 14-25.

31. Specifically, BCSEA-SCBC support BC Hydro's proposal to retain the *status quo* regarding the residential inclining block (RIB) rate that has been in place since 2008. RS 1101 is the default residential rate. RS 1121 is the RIB rate for Multiple Residential Service.
32. The *status quo* RIB rate provisions that BCSEA-SCBC support retaining include:
 - (a) the size of the threshold for moving from Step 1 to Step 2, which is 675 kWh/month, and
 - (b) the ratio of Step 1 to Step 2.
33. BCSEA-SCBC concur with BC Hydro¹⁴ that a Commission order is not required in order to achieve continuation of these provisions of the RIB rate.
34. BCSEA-SCBC also support BC Hydro's proposal to continue in F2017, F2018 and F2019 the current RIB rate pricing principles. This would mean that each of the Step 1 energy rate, the Step 2 energy rate, and the basic charge would increase by the provincially directed rate increases in F2017, 2018 and F2019. As BC Hydro explains,¹⁵ the RIB pricing principles approved by Order G-13-14 expired on March 31, 2016, and G-40-16 gives interim approval to the RIB pricing principals for F2017 only. So a final order approving the RIB pricing principles for F2017 to F2019 would be required.¹⁶
35. BCSEA-SCBC support the RIB rate fundamentally because the RIB achieves measurable energy savings through conservation and efficiency.
36. BCSEA-SCBC support maintaining the *status quo* RIB rate elements and approval of the pricing principles for F2017-F2019 for four simple reasons:
 - (a) the existing parameters are working well,
 - (b) customers understand the RIB as it is,

¹⁴ BC Hydro Final Argument, para.41.

¹⁵ BC Hydro Final Argument, para.42 and 43.

¹⁶ BC Hydro Final Argument, para.43.

- (c) changing the RIB rate in any given way would necessarily cause both positive and negative bill impacts for different customers without achieving clear conservation benefits, and
- (d) in the context of the ongoing substantial general rate increases, any change to the RIB rate would almost certainly be misperceived as the source of the affordability problem.

RIB Rate Background

37. When BCSEA-SCBC supported the initial adoption of the RIB rate in 2008, they stated the following in their final argument:

“BCSEA-SCBC are convinced that the RIB rate proposal is acceptable and desirable. The RIB rate proposal is consistent with the Government’s 2007 Energy Plan, the Commission’s 2007 RDA Design Decision, and Bill 15. It would promote conservation. It would be just, reasonable and not unduly discriminatory. It would provide a Step 2 price that is more economically efficient because it is closer to the long-run marginal cost of new supply. It would provide a Step 1 price that is low enough to induce customers to avoid consuming at the Step 2 levels without being so low as to be a price decrease. It would not cause unacceptable customer bill impacts. Its implementation would be feasible and realistic.”¹⁷

38. BCSEA-SCBC believe that those factors continue to apply today.
39. The RIB rate is a conservation rate. It provides a price signal to customers to the effect that ‘the more electricity you use the more you pay,’ and ‘the more you cut back on electricity the more you save.’ The RIB rate provides a financial incentive to higher consuming customers to consume less and a financial incentive to lower consuming customers not to consume more.
40. In regulatory terms, the conservation that is attributed to the RIB is the reduction in electrical energy that is due strictly to the RIB rate, and not to the fact that rates may be increasing from year to year. Reduced energy consumption due to customers’ response to general rate increases is called

¹⁷ Written argument of BCSEA-SCBC, July 23, 2008, BC Hydro 2008 Residential Inclining Block Rate Application, BCUC Project No. 3698504.

“natural conservation” (which is not necessarily an intuitively descriptive term).

41. As of F2016, the Step 1 energy rate is 7.97 cents/kWh, the Step 2 energy rate is 11.95 cents/kWh, and the Basic charge is 17.64 cents/day. The threshold between Step 1 and Step 2 is 1,350 kWh per two-month billing period (or 675 kWh per month for customers billed monthly).

42. As BC Hydro explains:

“The basic charge is a fixed daily charge which does not vary with usage and recovers a portion of customer-related fixed costs allocated to the Residential rate class, such as metering and billing. The Step 1 and Step 2 rates recover the balance of customer-related costs allocated to the Residential class as well as all the demand-related and energy-related costs incurred by BC Hydro to serve Residential customers.”¹⁸

43. The RIB rate is “revenue neutral” on a customer class basis.¹⁹ All of the parameters have to be adjusted simultaneously so that the revenue BC Hydro receives from the customers paying the RIB rate is equal to the amount of revenue the Commission has approved (the “revenue requirement”). As the Commission is aware, this is important because it means that changing one aspect of the RIB rate, say increasing or decreasing the Step 1/Step 2 threshold or raising or lowering the Step 1 or Step 2 energy rate, has to be accompanied by a change in other aspects of the rate so that the same amount of revenue is produced. If a change to the RIB rate causes some customers to pay less, then it automatically causes other customers to pay more.

44. The Commission uses the concept of “bill impact” as one method of evaluating different rate design options. BC Hydro defines the bill impact of

¹⁸ BC Hydro Final Argument, para.45.

¹⁹ Revenue neutrality on a customer class basis means that the utility’s revenue from residential customers in total has to remain the same despite any changes to the residential rate design. It is not an option to reduce the revenue from residential customers by increasing the revenue from another customer class such as commercial or industrial customers.

a change from one rate design in one year to another rate design in the next year as the percentage change in a customer's annual bill from one year to the next if consumption stays the same.²⁰ Bill impact includes general rate increases from one year to the next. Generally, if a change in rate design would cause the worst-impacted customers to have a bill impact of 10% or more then the change is viewed with caution.²¹

45. The combination of revenue neutrality and consideration of bill impacts imposes significant constraints on the types of changes to the RIB rate that would be possible under the current legislation.
46. When the Commission approved the RIB rate in the 2008 RIB Decision²² it set the Step 1/Step 2 threshold at 1,350 kWh per two-month billing period. This figure is approximately 90% of the median consumption of BC Hydro's Residential customers (then about 760 kWh per month.) The Commission settled on this amount because it would reflect the typical residential use.²³
47. The median consumption of BC Hydro's Residential customers has increased only slightly since the 2008 RIB Decision. In BCSEA-SCBC's view 1,350 kWh/two-month billing period is a threshold that continues to fit the 2008 RIB panel's rationale for selecting it. BCSEA-SCBC agree with BC Hydro that there is no compelling reason to change the Step 1/Step 2 threshold.²⁴

²⁰ Exhibit B-5, BCSEA 1.2.1; Exhibit B-1, page 2-58, lines 8 to 9

²¹ T5:862, line 5 to T5:863, line 8.

²² Decision and Order G-124-08.

²³ 2008 RIB Decision, p.107. The rationale for, and purpose of, the Step 1/Step 2 threshold is misunderstood in some of the public comments filed in this proceeding and in the BCUC RIB Report proceeding. The Step 1/Step 2 threshold is not intended to be the maximum amount of electricity that a responsible customer would use. The threshold is not intended to be the amount of electricity required to heat a customer's premises.

²⁴ BC Hydro Final Argument, para.47.

2013 RIB Evaluation Report

48. BC Hydro conducted an extensive evaluation of the impacts and customer response to the RIB rate, resulting in the 2013 RIB Evaluation Report. The authors examined the period F2009 to F2012. They excluded the conservation effects of DSM programs and natural conservation. The authors estimated price elasticities using econometric models. Then they estimated the conservation impacts of the RIB rate. They analyzed differences in price elasticity by customer characteristics such as region, heating type, dwelling type and consumption levels. Finally, the authors evaluated the customer response and understanding of the RIB rate using customer survey data and billing data.²⁵
49. BCSEA-SCBC had the opportunity to review and discuss the 2013 RIB Evaluation Report during the stakeholder engagement process. In addition, BC Hydro's witness Ms. Jubb testified about the report during the oral hearing. BCSEA-SCBC submit that the Commission should find that the report was well conducted and that its conclusions are accurate subject to the limitations noted in the report.
50. The 2013 RIB Report sets out its findings and recommendations in considerable detail. BCSEA-SCBC endorse BC Hydro's selection of highlights as follows:
- “• The majority of residential customers are now aware of the RIB rate structure;
 - Almost 80 per cent of residential customers are aware of the RIB rate and believed it serves as an incentive to manage their electricity consumption;
 - The RIB rate enjoys strong customer support;
 - Large consumers have higher elasticities than smaller consumers and, specifically, show a substantially higher than average response to higher prices;

²⁵ Exhibit B-1, Appendix C-3B, pdf p.1900.

- Many aspects of the RIB rate, including total bill, Step 2 price and threshold, are motivating to BC Hydro's residential customers."²⁶

51. BCSEA-SCBC submit that the Commission should accept the 2013 RIB Report's conclusion:

"The RIB rate appears to be achieving its overall objective of encouraging conservation through the customer response to higher marginal prices – particularly amongst the customer[s] with the highest consumption."²⁷

Alternatives to the RIB Rate

52. During the stakeholder engagement BC Hydro undertook an iterative process of providing information on the RIB rate, obtaining suggestions of alternatives to the RIB rate that should be examined, analyzing the alternatives, and providing information back to the stakeholders.
53. BCSEA-SCBC are satisfied that BC Hydro examined the most potentially viable alternatives to the RIB rate, and that the results confirm that the *status quo* RIB rate is superior. The alternatives and BCSEA-SCBC's summary conclusions about them are set out in the following paragraphs.
54. A flat rate is certainly the simplest alternative to the RIB rate. However, a flat rate would lose the conservation and efficiency savings induced by the RIB rate.
55. Further, moving from the RIB rate to a flat rate would cause substantial adverse bill impacts to a large majority of customers, including a large majority of low income customers. Table 5-3, Bill Impact Distribution by Customer Segment for Flat Rate in F2017, shows that moving from the RIB rate in F2016 to a flat rate in F2017 would cause adverse bill impacts of greater than 10% to some 70% of customers now on the RIB rate, to 80%

²⁶ BC Hydro Final Argument, para.49, footnotes omitted.

²⁷ Exhibit B-1, pdf p.1907.

of low income customers, and even to 59% of customers using electric heat.²⁸

56. BCSEA-SCBC respectfully submit that the Commission should reject the flat rate alternative to the RIB rate because it would reduce the conservation savings and cause unacceptable bill impacts.
57. At the request of stakeholders, BC Hydro examined various three-step rates. None proved better than the existing RIB rate, in BCSEA-SCBC's view. Essentially, the problem with three-step designs is that they cannot be configured to provide significant increases in conservation and efficiency savings without the bill impacts being too extreme. During the engagement process, BCSEA-SCBC expressed the view that BC Hydro should not further pursue a three-step rate. They said, and continue to believe, that the two-step RIB has the advantage of simplicity, ease of understanding and customer acceptance.
58. BC Hydro was asked to consider a RIB model that uses a customer-specific baseline. With some 1.6 million residential customers,²⁹ there would have to be 1.6 million different customer-specific baselines. That would not be feasible.
59. BC Hydro examined a seasonal rate that would increase the Step 1/Step 2 threshold in the winter months. This would have the effect of reducing electricity bills during the winter; but it would have to be compensated for by increasing electricity bills in the non-winter months. The problem, as BC Hydro summarizes in the Application, is that "This design would be misaligned with BC Hydro's peak period cost causation and would result in some customers facing lower effective rates in winter."³⁰
60. BC Hydro also examined seasonal rates in which residential customers pay a higher rate for electricity during winter months and a lower rate for

²⁸ Exhibit B-1, p.5-25, pdf p.221.

²⁹ Exhibit B-1, pdf p.1902.

³⁰ Exhibit B-1, p.5-20, pdf p.216.

electricity during non-winter months compared to the existing RIB rate. This design aims at reducing residential winter peak loads. However, this design proved ineffective. Winter rates high enough to reduce peak loads would cause unacceptable bill impacts, particularly on customers with high winter consumption who already see Step 2 through the winter, and the correspondingly lower summer rates would tend to reverse the conservation savings.

Alternative Means of Delivering the RIB Rate

61. Several different ways of delivering the RIB rate were examined during the stakeholder engagement process.
62. Two pricing principles options for F2016 to F2019 were examined:
 - (a) Option 1 – applying general rate increases (referred to as RRA – revenue requirement application – increases) equally to all three RIB pricing elements (Step 1, Step 2 and the Basic charge); and
 - (b) Option 2 – applying the RRA increases to the Step 1 energy rate and basic charge only while holding the Step 2 energy rate at its current level.³¹
63. As noted above, applying the RRA increases equally to the RIB pricing elements is the *status quo* approved by the Commission in Order G-13-14 and now being applied on an interim basis pursuant to Order G-40-16. This is BC Hydro's proposed option. BCSEA-SCBC support this option.
64. Under the equal RRA increases pricing principles the bill impact would be the same for all RIB customers; it would be the same as the RRA increases.
65. BCSEA-SCBC would emphasize that the fact that the Option 1 RIB pricing principles result in the same bill impacts for all RIB customers does not mean that Option 1 would lessen the bill affordability challenge caused by the general rate increases. But it does mean that the RIB pricing principles

³¹ Exhibit B-1, s.5.2.5.1, pdf p.229.

would not exacerbate the bill affordability challenge for some customers while reducing the challenge for other customers.

66. As shown in Figure 5-18: Requested RIB Rate Pricing Principle (Option 1), F2017-F2019,³² the Step 2 rate currently exceeds the upper range of BC Hydro's energy LRMC and under Option 1 it would remain slightly above the upper range through F2019.
67. That is acceptable, in BCSEA-SCBC's view, for the following reasons:
- (a) BCSEA-SCBC do not disagree with the energy LRMC being the referent for the Step 2 energy rate. However, in their view the energy LRMC should not be considered a strict upper bound on the Step 2 energy rate.
 - (b) The energy LRMC is itself an estimate; it should not be treated as a bright line for rate design purposes.
 - (c) Residential customers do not have a demand charge, so the Step 2 energy rate incorporates recovery of both energy and capacity costs. Therefore the Step 2 energy rate could be notionally grossed up to account for capacity. This would be appropriate since the residential class has the largest impact on coincident peak. From this perspective, the Step 2 energy rate provides an economically rational price signal even if it slightly exceeds the upper bound of the energy LRMC.
 - (d) The energy LRMC does not include distribution line losses and distribution capacity costs. The conservation induced by the Step 2 energy rate does to some extent offset these costs.
 - (e) The Option 1 RIB pricing principles (equal percentage increases to each of the pricing elements) are the *status quo* that customers are familiar with and they are notably simple and easy to understand. Option 1 is very strong in terms of the customer acceptance and understanding Bonbright principle. On balance, this outweighs any weakness of Option 1 in terms of the efficiency principle.

³² Exhibit B-1, pdf 230.

- (f) The Option 1 RIB pricing principles are proposed for the period F2017 to F2019. If there is a need to revisit the RIB pricing principles to be applied in subsequent years then that can be done at the time, based on the circumstances then evident.
- (g) BC Hydro has said it will review and revise its thinking on DSM as part of its development of the 2018 integrated resource plan (2018 IRP). It will incorporate those conclusions and the results of the in-progress Conservation Potential Review in a DSM expenditure scheduled to be filed after F2019. From BCSEA-SCBC's perspective, it would make sense not to change the RIB rate before these processes have been completed, as they might give a better indication on the role of the RIB rate going forward.
68. The second option would narrow the differential between the Step 1 energy rate and the Step 2 energy rate over time. BCSEA-SCBC do not support this option, because it would increasingly diminish the conservation and efficiency savings induced by the RIB rate.
69. In addition, the second RIB pricing principles option would cause adverse bill impacts particularly for customers with lower levels of consumption including low income customers. As shown in Figure 5-20, most customers are worse-off under Option 2 across all segments examined.³³ This is displayed graphically in Figure 5-23: Bill Impact Box-Plot for Moving to the Option 2 of the RIB Rate in F2017.³⁴
70. In BCSEA-SCBC's respectful submission, the Option 1 RIB pricing principles should be preferred over Option 2.
71. BC Hydro examined whether the Basic charge in the RIB rate should be increased or decreased (and Step 1 and Step 2 readjusted accordingly).

³³ Exhibit B-1, pdf p.232.

³⁴ Exhibit B-1, pdf p.234; See explanation of the graphs at T5:864, line 3 to T5:870, line 26.

The current RIB rate basic charge recovers 45% of customer-related costs, the rest of which are covered by the Step 1 and Step 2 energy charges.

72. From BCSEA-SCBC's perspective there are two main problems with increasing the RIB basic charge. It would reduce the energy price signal, thereby diminishing rate design and natural conservation effects. And, it would have adverse bill impacts on low-usage customers including low income customers. BC Hydro also rejects increasing the RIB basic charge.
73. BC Hydro also rejects decreasing the basic charge because it says this would "diminish the relationship between the basic charge and fixed costs."³⁵ BCSEA-SCBC do not necessarily agree with that position. However, in the current proceeding they do not propose decreasing the basic charge because doing so would be inconsistent with the Option 1 RIB pricing principles that they support for the reasons expressed above.
74. Accordingly, BCSEA-SCBC support BC Hydro's proposal that the RIB basic charge not be changed except in accordance with the approved pricing principles.
75. BC Hydro also examined the interaction of the RIB rate structure with the minimum charge (which is currently the same as the Basic charge). BC Hydro reports that it was unable to precisely target a minimum charge that materially improved cost recovery from dormant or low use accounts. BCSEA-SCBC agree with that conclusion.
76. BC Hydro examined whether there should be a change in the Step 1/Step 2 threshold. The evidence showed that moving the Step 1/Step 2 threshold results in no expected substantive changes from status quo RIB conservation forecasts. Further, changing the threshold has significant bill impacts to customers (depending on which variable is changed). BCSEA-SCBC agree with BC Hydro that the Step 1/Step 2 threshold should not be

³⁵ BC Hydro Final Argument, para.56.

changed at the present time. Again, retaining the *status quo* RIB rate has strong benefits in terms of customer understanding and acceptance.

Conclusion on RIB rate and RIB Pricing Principles

77. For the reasons set out above, BCSEA-SCBC support BC Hydro's proposal to retain the *status quo* RIB rate and its request for Commission approval of the Option 1 RIB pricing principles for F2017 to F2019.

Residential E-Plus Amendment – RS 1105

78. Broadly speaking, the Commission has before it three options for the residential E-Plus rate: Option 1 – natural attrition (the *status quo*), Option 2 – phase out, and Option 3 – make the rate fully interruptible.

Residential E-Plus Background

79. BC Hydro introduced E-Plus rates to residential and commercial customers in 1987.³⁶ The purpose of the rates was to market surplus energy that would have been spilled because at the time consistent access to the spot market was not available. The commercial E-Plus rates will be addressed in Module 2. The focus here is on the residential E-Plus rates.

80. The Residential E-Plus rate (RS 1105) is a non-firm service under which customers pay a discounted rate for power to be used only for heating on the condition of having an alternative fuel back-up heating system. The Residential E-Plus rate was closed to new customers in 1990 and was made non-transferable effective April 1, 2008. The Residential E-Plus energy rate for F2016 is 5.22 cents/kWh³⁷ and there is no basic charge.³⁸ (Residential E-Plus customers also have service under the applicable default rate, i.e., the RIB rate.)

³⁶ The regulatory history of BC Hydro's E-Plus rates is discussed in section 4.2.2 of the 2007 RDA Decision, beginning on page 111.

³⁷ Compare the F2016 RIB Step 1 energy rate of 7.97 cents/kWh and Step 2 energy rate of 11.95 cents/kWh.

³⁸ Exhibit B-1, pdf p.2372.

81. Because the Residential E-Plus Rate is closed and non-transferable, the number of customers receiving service under the rate is declining due to attrition. There are approximately 7,500 residential E-Plus customers. Absent regulatory intervention, the number of residential E-Plus customers will continue to decline naturally. BC Hydro says that a reasonable estimate of the natural termination of the E-Plus rate for Residential customers is about 20-25 years.³⁹
82. BC Hydro has never interrupted service to residential E-Plus customers under the terms of the rate.⁴⁰
83. Further, BC Hydro states that under the existing RS 1105 terms and conditions, “operationally, it is impractical to interrupt the E-Plus [service].”⁴¹ BCSEA-SCBC agree with that assessment.
84. In BCSEA-SCBC’s view it is important to acknowledge that while E-Plus is non-firm service the rate was not designed to be interruptible in the same sense, or for the same purpose, that the Shore Power Rate or load curtailment agreements are interruptible.
85. In its 2007 RDA, BC Hydro proposed to phase out the E-Plus rates over a 10-year period from 2008 to 2018. However, the Commission panel in the 2007 RDA Decision⁴² demurred. It ordered BC Hydro to make the E-Plus rates non-transferable. In addition, among other things, the Commission directed BC Hydro to include E-Plus customers as a separate class in future cost of service studies, and to invest time and resources to ensure that E-Plus customers comply with the terms of service (e.g., to do with

³⁹ It is understood that virtually all residential E-Plus customers are individuals (human beings as distinct from legal entities). BCSEA-SCBC are not aware of whether there is evidence on the record clarifying whether there are any residential E-Plus customers that are not individuals. This is a minor point but one that would affect whether the rate would become unused due to natural attrition.

⁴⁰ Exhibit B-1, p.5-50.

⁴¹ BC Hydro Final Argument, para.66.

⁴² Decision and Order G-130-07.

having an alternative fuel back-up heating system).⁴³ BC Hydro has subsequently implemented these directions.

86. In the 2007 RDA proceeding, an E-Plus customers group argued that BC Hydro is required to honor a statement in BC Hydro letter to E-Plus customers, that the customers said they relied upon in making investments in alternative heating systems, that the price of E-Plus energy would never exceed two thirds of the “regular rate.” However, the Commission found that “such a communication cannot bind the Commission.”

87. More broadly, the 2007 RDA panel says that:

“The Commission Panel is not persuaded by the E-Plus Group’s argument that its members have “contracts” with BC Hydro that the Commission has limited jurisdiction to abrogate, or that those contracts are everlasting in nature with a guaranteed price cap. Commission Orders No. G-24-87 and No. G-21-92 do not reference “contracts.”

88. BC Hydro’s estimate of the revenue/cost ratio for the residential E-Plus class as of F2014 is 65% or 45%, depending on whether generation energy costs are not assigned, or are assigned, respectively.⁴⁴

89. In BCSEA-SCBC’s view, the more appropriate approach is to not assign generation energy costs to the residential E-Plus class, in order to be consistent with the non-firm characteristic of the E-Plus rate. For present purposes, therefore, the revenue/cost ratio for the residential E-Plus class should be understood to be about 65%.

90. By comparison, the estimate of the revenue/cost ratio for the residential class as a whole is 93.3%.⁴⁵

⁴³ Exhibit B-1, pdf p.524.

⁴⁴ Exhibit B-1, p.5-51, Table 5-13.

⁴⁵ T4:724, lines 12-16. 93.3% is the estimate after the changes in the approved COS NSA.

91. BC Hydro estimates that “Ending the Residential E-Plus rate would eliminate the current subsidization [by all residential ratepayers] of Residential E-Plus service, estimated between approximately \$3 million to \$6 million per year.”⁴⁶

Residential E-Plus Options

92. Early in the 2015 RDA customer engagement, BC Hydro identified two options to E-Plus customers: maintaining the *status quo* terms and conditions, and phasing out E-Plus over a period of time “(e.g., five to ten years).”⁴⁷

93. At that point, BCSEA-SCBC expressed the view that the E-Plus rate should be phased out if (IF) it is not serving a useful function.⁴⁸ In the same time period, BC Hydro received feedback from residential E-Plus customers and the intervener E-Plus Homeowners Group (EPHG) overwhelmingly supporting the *status quo* over phase-out.⁴⁹

94. Later in the stakeholder engagement process, BC Hydro developed a third option for consideration: amendment of the E-Plus terms and conditions to provide what BC Hydro called “a practical interruptible option.” This is BC Hydro’s preferred option (“Option 3”) in the present application.

95. EPHG opposes the ‘practical interruptibility’ option and the phase-out option. It supports retention of the E-Plus *status quo*, which is natural attrition.⁵⁰

96. BC Hydro says that the ‘practical interruptibility’ option “ensures that customers who use the E-Plus rate would continue to receive the current

⁴⁶ Exhibit B-1, pdf p.2386.

⁴⁷ Exhibit B-1, p.5-52.

⁴⁸ Exhibit B-1, pdf p.652.

⁴⁹ Exhibit B-1, p.5-52.

⁵⁰ Exhibit C10-4.

discount, while also ensuring that the rate is truly interruptible and serves a useful function as was intended when the discount was offered.”⁵¹

Information about the E-Plus Rate

97. During the engagement process, BCSEA-SCBC asked BC Hydro detailed questions about the E-Plus rate. BCSEA-SCBC believe it may be useful to review BC Hydro’s responses.⁵²

98. Concerning the function of the residential E-Plus rate, BC Hydro states:

“BC Hydro is not aware of any other purposes of the Residential E-Plus rate other than... the marketing of surplus energy to BC Hydro customers to avoid spills. Avoiding spills is no longer a compelling reason given that BC Hydro has access to export markets.”⁵³

99. BCSEA-SCBC asked BC Hydro if in its view the residential E-Plus rate serves a useful function. BC Hydro responded:

“No. The current wording of Special Condition 1 of RS 1105 frustrates the interruptible nature of the E-Plus rate.”⁵⁴

100. BC Hydro had said that the E-Plus residential rate was initially targeted to serve “those areas where natural gas is not available such as Vancouver Island, Sunshine Coast and certain communities in the Interior.” Asked whether the E-Plus residential rate was later targeted more broadly, BC Hydro states:

“Yes, to permit natural gas as an alternate back-up heating source (refer to British Columbia Utilities Commission (BCUC or Commission) Order No. G-68-88).”⁵⁵

⁵¹ Exhibit B-1, p.5-55.

⁵² Exhibit B-1, Appendix C3-B, Attachment 6, pdf p.2359, *et seq.*

⁵³ Exhibit B-1, pdf p.2360.

⁵⁴ Exhibit B-1, pdf p.2387.

⁵⁵ Exhibit B-1, pdf p.2361. Actually, the correct reference may to BCUC Order G-21-92, in which the Commission approved an application by BC Hydro to, among other things, remove the requirement that the availability of service be contingent upon there being no natural gas service to customer’s premises. Cited in the 2007 RDA Decision at page 115.

“BC Hydro understands that some [E-Plus] customers have access to natural gas service; however, BC Hydro does not have information as to the number and location of such customers.”⁵⁶

101. BC Hydro had said earlier that “The [E-Plus] rates were closed to new customers in 1990 when energy conditions changed.” [underline added] Asked why the residential E-Plus rate was closed to new customers, BC Hydro states:

“For purposes of responding to this question, BC Hydro reviewed its 10 October 1989 application to the Commission to close availability of the Residential E-Plus rate. Among other things, BC Hydro advanced three major reasons for proposing to close the availability of the Residential E-Plus rate:

1. The need for E-Plus rates in the Vancouver Island area was largely diminished as a result of issuance of an Energy Project Certificate for construction of Vancouver Island Pipeline;
2. Overall customer acceptance of the Residential E-Plus rate had been less than anticipated;
3. The Residential E-Plus interruptible load achieved was of questionable value.

BC Hydro also reviewed its 18 December 1989 responses to Commission information requests (IRs) concerning the above noted application. In 1989 BC Hydro was moving out of an energy surplus situation and was concerned about secondary energy availability (e.g., the energy provided to E-Plus customers for heating load).

BC Hydro also reviewed an extract of BC Hydro Board of Directors meeting minutes dated 16 October 1989 in which it was decided that the Residential E-Plus rate conflicted with BC Hydro’s Demand-Side Management (DSM) program strategy. (The first significant suite of DSM programs were launched in 1989). This concern was brought to the attention of the Commission in a letter 22 December 1989.

The Commission approved BC Hydro’s application pursuant to Order No. G-3-90. In response to Commission Order No. G-3-90 BC Hydro filed its E-Plus interruption criteria, which included:

⁵⁶ *Ibid.*

- Interruption no longer than one year;
- Price no greater than two-thirds the cost of firm energy.

The Commission, pursuant to Order No. G-37-90, approved interruption criteria as follows: “*BC Hydro may, at any time and from time to time, interrupt the supply of energy under this Rate Schedule*”. [Emphasis added].⁵⁷

102. BC Hydro explains that the financial impact of (hypothetically) ending the residential E-Plus rate relates to cross-subsidization between E-Plus and non-E-Plus customers, and that BC Hydro itself, i.e., as a corporate entity, would not save money:

“A financial issue with respect to E-Plus rates is cross-subsidization between E-Plus and non-E-Plus customers.

“Administration costs of the Residential E-Plus rate are *de minimis*. In addition, ending the Residential E-Plus rate would not achieve a cost saving to BC Hydro given that any under-recovered costs to serve E-Plus customers are recovered in the rates of other customers.

“BC Hydro will recover its revenue requirement on a forecast basis whether the E-Plus rate is ended or not, subject to Commission approval.”

“BC Hydro would not anticipate substantive administrative cost savings from ending the Residential E-Plus rate.”⁵⁸

“Generally speaking, all other BC Hydro ratepayers in the same rate class pay the under-recovered costs of serving E-Plus customers.”⁵⁹

103. After the Commission in the 2008 RDA decision directed BC Hydro to invest time and resources to ensure E-Plus customers comply with terms of service, BC Hydro told residential E-Plus customers the following:

“As part of BC Hydro’s request for confirmation of rate compliance, E-Plus customers are advised that their continued eligibility on the rate requires:

⁵⁷ Exhibit B-1, pdf p.2361-2362.

⁵⁸ Exhibit B-1, pdf p.2365-2366.

⁵⁹ Exhibit B-1, pdf p.2379.

- An installed permanent back-up heating system, using an alternative fuel other than electricity, or a permanent back-up independent electrical generating system;
- A back-up heating system in good working order with an adequate supply of fuel to continue heating operations if the supply of E-Plus electricity is interrupted;
- A back-up heating system that is able to supply and meet all heating needs. In the event of an interruption, connection of portable heaters is not permitted; and
- Only heating loads be connected to the E-Plus service as no other loads are allowed.”⁶⁰

104. BC Hydro states that “Over the course of the compliance initiative activities, about 2,000 E-Plus customers have come off of the rate due to attrition.”⁶¹
105. BC Hydro makes the point that under the Bonbright principles for rate design “fairness” relates to cost causation, whereas the issue of residential E-Plus customers having an opportunity to recoup investments in back-up heating systems – which BCSEA-SCBC had described as a “fairness” consideration – falls within the “customer understanding and acceptance” criterion in the Bonbright scheme.⁶²
106. BC Hydro does acknowledge the Commission’s jurisdiction to consider the investment recovery factor in the hypothetical event the E-Plus program was to end:
- “It is the jurisdiction of the BCUC to review and determine how the Bonbright criteria apply as well as the degree to which it would be fair from an investment recovery perspective if the E-Plus program were to end.”⁶³
107. BCSEA-SCBC do not disagree with BC Hydro’s description of the Bonbright principles in this respect. However, BCSEA-SCBC still maintain

⁶⁰ Exhibit B-1, pdf p.2366-2367.

⁶¹ Exhibit B-1, pdf p.2368.

⁶² Exhibit B-1, pdf p.2374.

⁶³ Exhibit B-1, pdf p.2374.

that a reasonable opportunity to recoup, through the rate, investments made to comply with the conditions of the rate is a legitimate and important factor even if it falls under “customer understanding and acceptance” in a Bonbright analysis.

108. On the topic of investment recovery, BC Hydro states:

“BC Hydro is of the view that the Commission’s 2007 RDA Decision did not ‘restart the clock’ on what would be fair from an investment recovery perspective. The requirement was to confirm compliance on the terms and conditions of service that date back to the inception of the Residential E-Plus rate.”⁶⁴

109. BCSEA-SCBC respectfully disagree. In their view, the obligation on a participating customer to maintain an alternative fuel back-up system in order to comply with the terms of E-Plus service is an ongoing obligation. Further, in practical terms, it is reasonable to expect that residential E-Plus customers may have made investments in maintaining or replacing their alternative fuel back-up system, particularly in response to BC Hydro’s post-2008 emphasis on compliance.

110. During the engagement period, BC Hydro expressed the view that in the hypothetical event of an end to RS 1105 its “primary consideration in developing a phase-out period would be customer bill impacts.” It said it “has no comment on an appropriate phase-out period if RS 1105 were to end (hypothetically) in relation to any customer investments made to remain compliant with RS 1105.”⁶⁵ BCSEA-SCBC address this further, below.

111. In terms of the bill impact of (hypothetical) termination of the residential E-Plus rate, BC Hydro provides the following information:

“The estimated annual bill for the average E-Plus residential customer would increase by about 42 per cent if RS 1105 were to end in one year; or, as described in the Discussion Guide, an annual increase of about 10 per cent if the rate were to end over 4 years, an annual increase of about 4 per cent if the rate were to

⁶⁴ Exhibit B-1, pdf p.2374.

⁶⁵ Exhibit B-1, pdf p.2374.

end over 10 years, etc. Table 5 of the Discussion Guide reports the distribution of estimated bill increases for the E-Plus residential customers as a whole.”⁶⁶

112. BC Hydro’s energy supply situation has moved from surplus to deficit and back again from time to time since the original adoption of the E-Plus rate. The relevance or materiality of BC Hydro’s energy position to the merits of E-Plus has also been addressed from time to time since the adoption of E-Plus. In BCSEA-SCBC’s view, it could be said that the outcome is inconclusive.

113. During the 2015 RDA stakeholder engagement period, BC Hydro stated the following:

“Energy: Some E-Plus Residential customers assert that BC Hydro has a surplus of energy and therefore the current Residential E-Plus rate is beneficial given that it is priced above spot market forecasts. BC Hydro agrees with the observation that in the short-term, when it has an energy surplus, the RS 1105 energy rate is likely to be above spot market forecasts. The RS 1105 energy charge for F2016 is 5.22 cents/kWh, which is above the mid spot market forecast contained in the 2013 IRP at 3.3 cents/kWh in 2020. However, the 2013 IRP forecasts a need for energy in F2017 without the acquisition of future resources such as DSM, and the duration of the estimated natural termination of the E-Plus rate for residential customers is about 20 to 25 years.”⁶⁷

114. BC Hydro goes on to state that it “places more weight on the potential value of capacity” [as compared to energy].⁶⁸ However, in BCSEA-SCBC’s view, this goes to BC Hydro’s proposal to change RS 1105 into a ‘practically interruptible rate,’ which is not at present the function of RS 1105.

115. Some E-Plus customers had told BC Hydro that their use of “non-firm” BC Hydro electricity for heating with the F2016 energy rate of 5.22

⁶⁶ Exhibit B-1, pdf p.2380.

⁶⁷ Exhibit B-1, Appendix C-3B, BC Hydro Consideration Memo, April 28, 2015/May 21, 2015 Workshop Nos. 9a and 9b, pdf pp.2137-2138.

⁶⁸ Exhibit B-1, pdf p.2138.

cents/kWh is a net benefit to BC Hydro due to current low market prices. Presumably the argument is that if BC Hydro didn't sell energy to E-Plus customers at the E-Plus rate it would have to sell the energy at a lower price on the market. This argument appears to rely on the assumption that in the absence of the E-Plus rate the erstwhile E-Plus customers would not use grid electricity for heating. Pertinent to that point, BC Hydro states "BC Hydro has no information available on how E-Plus customers would respond to changes to the rate."⁶⁹

116. BC Hydro did provide a response to the 'net benefit' argument:

"...it is BC Hydro's view that Option 2 [transfer of residential E-Plus customers to RIB] is complicated by the current circumstances of available surplus energy for a period of time and low spot market prices. It is also BC Hydro's view that assuming E-Plus service is truly non-firm and provided on an as available basis, it would not necessarily always be the case that the service would be a net benefit to BC Hydro given its access to mature energy markets; for example, if comparing the provision of service to the value of a forgone market opportunity."⁷⁰

117. Respectfully, BCSEA-SCBC do not fully understand BC Hydro's point here. Perhaps the difficulty lies in BC Hydro's counter-factual assumption "assuming E-Plus service is truly non-firm and provided on an as available basis." This takes the discussion beyond Option 2 (transfer of residential E-Plus customers to RIB) and into Option 3 (making the E-Plus rate 'practically interruptible.')

118. In any event, when asked specifically whether it agrees with the position that in the short-term the E-Plus residential rate is a net benefit to BC Hydro due to current low market prices, BC Hydro states:

"BC Hydro does not agree, given BC Hydro's practical inability to interrupt service as a result of Special Condition 1 of RS 1105."⁷¹

⁶⁹ Exhibit B-1, pdf pp.2378.

⁷⁰ Exhibit B-1, pdf pp.2381.

⁷¹ Exhibit B-1, pdf pp.2382.

119. Noting that some residential E-Plus customers had said that some residential E-Plus customers are low-income and would have financial difficulty paying for electricity on the regular Residential Inclining Block (RIB) rate, BCSEA-SCBC asked BC Hydro what information it has on the profile of low-income E-Plus customers compared to low-income RIB customers. BC Hydro’s response states:

“The following table, based on BC Hydro’s 2014 Residential End-Use Survey, compares the distribution of low-income customers as between E-Plus accounts and the Residential class as a whole, as measured by whether customers are within the Low-Income Cut-off (LICO) defined by Statistics Canada.⁷²

LICO Status	E-Plus	All Residential
No	95%	90%
Yes	5%	10%

120. The figures indicate that LICO status is half as common among residential E-Plus customers as it is among all residential customers. However, it is acknowledged that the figures provided by BC Hydro do not include confidence intervals, which might be relevant due to the presumably relatively small number of residential E-Plus customers within the REUS sample.

121. A concern expressed by some residential E-Plus customers is that ending RS 1105 or making the conditions more onerous would prompt some customers to make more use of carbon-intensive alternative heating systems, such as oil or natural gas. BCSEA-SCBC asked BC Hydro for figures on the types of back-up heating systems in place. However, BC Hydro’s response is that:

“BC Hydro does not have records of E-Plus customers’ back-up heating system usage and is unable to provide an estimate.”⁷³

⁷² Exhibit B-1, pdf pp.2376-2377.

⁷³ Exhibit B-1, Appendix C-3B, Attachment 6, Response to IR 7.10.2, pdf 2377.

122. BCSEA-SCBC asked BC Hydro whether it would consider a program that would provide a financial incentive to E-Plus customers to switch from a carbon-intensive alternative heating source (such as oil) to an efficient electric heat pump heating system that would mitigate the financial impact on the customer of transitioning from the E-Plus rate to the RIB rate.

“To date, BC Hydro has not considered such a program. BC Hydro notes that the B.C. Government is in the process of developing Climate Action 2.0 and direct BCSEA’s attention to that forum given the references to carbon intensity in the question.”⁷⁴

123. BCSEA-SCBC asked BC Hydro for its view regarding how statutory constraints on rate rebalancing (e.g., *Utilities Commission Act*, s. 58.1), and legal constraints on general rate increases, affect whether and how an end to the E-Plus rates could be phased in. BCSEA-SCBC do not take issue with BC Hydro’s response, as follows:

“In BC Hydro’s view, the recent amendment to Direction No. 7 (B.C. Reg. 140/2015) preventing the Commission from setting rates for BC Hydro for the purpose of changing the R/C ratios for a class of customers does not apply in the context of Option 2 (ending RS 1105 and transferring [e.g., to the RIB rate]) because Residential E-Plus customers are not a separate rate class.

With respect to GRI [general rate increases], section 16(4) of Direction No. 7 makes clear that the F2017-F2019 rate caps do not prevent the Commission from making determinations in the 2015 RDA with respect to rate design.”⁷⁵

BC Hydro’s Residential E-Plus Interruptibility Proposal

124. BCSEA-SCBC asked BC Hydro questions about the practical value of a residential E-Plus amended to provide true interruptibility. They asked:

“In the hypothetical event that the E-Plus rates were changed to a fully interruptible service (such as the Shore Power Rate), can BC Hydro provide a realistic example of a scenario in which BC Hydro would actually interrupt power to one or more E-Plus customers?”

⁷⁴ Exhibit B-1, pdf pp.2376-2377.

⁷⁵ Exhibit B-1, pdf pp.2381.

125. BC Hydro's response is:

"The 2013 IRP forecasts a need for capacity in F2019 even with continuation of existing DSM initiatives. This is one of the reasons why BC Hydro is interested in Option 3 which would permit the rate to serve a useful purpose. As discussed in section 5.2 of the Workshop 9a/9b Consideration Memo, Option 3 aligns with 2013 IRP Recommended Action 2, which is to explore capacity-focused DSM initiatives."⁷⁶

126. BCSEA-SCBC are certainly in favour of the development and implementation of capacity-focused DSM initiatives. However, they are not convinced that changing the interruptibility provisions of RS 1105 would turn it into a viable capacity-focused DSM initiative.

127. Residential E-Plus customers are located on feeder lines co-mingled with non-E-Plus customers. BCSEA-SCBC asked:

"Under what combination of system conditions would there be a problem providing energy to one or more feeder lines that would be solved by interrupting service to E-Plus customers on those feeder lines or elsewhere?"

128. BC Hydro's response is:

"...The co-mingling of E-Plus and non-E-Plus customers on the same feeder is not an issue for the interruption of the E-Plus service. Special Condition 3 of RS 1105 allows for service interruption to be done manually or automatically or called by written notice. The manual or automatic means of interruption would be at the meter."⁷⁷

129. With respect, BC Hydro may have missed the implication of the question. The question was not intended to address the practicality of interrupting E-Plus service in multiple locations around the Province (although that would be a challenge except if smart meters were used). The implicit premise of the question was that an interruptible rate populated by customers with tiny loads located in multiple locations would not be useful for responding to local transmission or distribution related capacity problems, but would be

⁷⁶ Exhibit B-1, pdf p.2382.

⁷⁷ Exhibit B-1, pdf p.2383.

only useful, if at all, for responding to system peak conditions. BCSEA-SCBC had tried to explain that meaning with the next question:

“Is it correct that, in contrast, Shore Power load is typically a large single load at the end of a line where situations can arise such as maintenance in which interrupting the Shore Power load is actually a viable solution to what would otherwise be a problem?”⁷⁸

130. However, BC Hydro’s response to that question was to refer to the response to the previous question.
131. To make the point affirmatively, in BCSEA-SCBC’s view, making RS 1105 interruptible similar to the way the Shore Power rate is interruptible would not provide either the load-building benefits or the capacity-focused DSM benefits that may be associated with the Shore Power rate.
132. One significant problem is that changing RS 1105 into a truly interruptible rate intended to be called upon to respond to system peak load situations would require BC Hydro telling the subject residential customers to shut off their electric space heating on the very coldest day of the year.
133. BCSEA-SCBC put the problem to BC Hydro as follows:
- “Would BC Hydro agree that even if the E-Plus terms of service allowed unlimited interruption there would be substantial, if not insurmountable, public relations challenges with actually interrupting certain people’s electrical heating power – challenges that do not arise with a commercial rate such as the Shore Power rate where the customer has a confirmed alternative source of energy?”⁷⁹
134. BC Hydro’s response is short but telling. It states:
- “BC Hydro acknowledges that there could be public relations challenges with interrupting E-Plus service.”⁸⁰
135. Later, BC Hydro reiterates the point:

⁷⁸ Exhibit B-1, pdf p.2383.

⁷⁹ Exhibit B-1, pdf p.2383.

⁸⁰ Exhibit B-1, pdf p.2383. underline added.

“...as noted in BC Hydro’s response to Question 11.1.3, public relation challenges is a consideration with Option 3.”⁸¹

136. BCSEA-SCBC pressed the point further, and asked BC Hydro:

“Would BC Hydro agree the main problem with the nominally interruptible aspect of the E-Plus rate is not merely that the wording of the existing terms of service inhibit BC Hydro from readily exercising interruption rights but that the possibility of interrupting the service to this small number of scattered tiny loads has no material system or financial benefits to BC Hydro?”⁸²

137. BC Hydro’s response is as follows:

“BC Hydro has considered the relatively small size and nature of the E-Plus load for purposes of Option 3.

The size of the Residential E-Plus load is less of an issue than the ability to readily call on it. This is because aggregation is a possibility. As noted in section 5.2 of the Workshop 9a/9b Consideration Memo, as part of 2013 IRP Recommended Action 2, BC Hydro initiated a Residential DSM capacity-focused DSM pilot in Sidney, Vancouver Island that among other things is testing aggregating scattered, small loads. Aggregation of many small loads, including Residential E-Plus loads, could have a material benefit for localized constraints and/or contribute to overall tactics to address system level needs. Thus a truly interruptible E-Plus rate could be one of many tools in the toolbox for load curtailment purposes.

The Sidney pilot entails testing curtailment of small loads (water heaters) using wireless controls that would allow BC Hydro to initiate and conclude control events directly with no customer intervention. This mechanism potentially provides greater reliability of response from the load as opposed to a relying on a customer to curtail his or her own equipment. Option 3 could entail E-Plus curtailments enacted remotely by BC Hydro for those Residential E-Plus customers with smart meters that have remote disconnect/reconnect capability.”⁸³

138. BCSEA-SCBC respectfully submit that these arguments in favour of Option 3 are not persuasive.

⁸¹ Exhibit B-1, pdf p.2384.

⁸² Exhibit B-1, pdf p.2383.

⁸³ Exhibit B-1, pdf pp.2383-2384, underline added.

- (a) BC Hydro is to be commended for initiating a Residential capacity-focused DSM pilot in Sidney. However, no results from that pilot are in evidence. There is no information on the objectives of the test treatments, the description of the test treatments, enrolment in the pilot, demonstrated capacity benefits, cost of demonstrated capacity benefits, or participant willingness to participate in a longer-term program. Without such information it is impossible to determine whether the Sidney pilot supports or contraindicates the idea of RS 1105 being turned into a small-scale distributed capacity DSM program.
- (b) The Sidney pilot and Option 3 are very different models. The Sidney pilot appears to involve utility-controlled remote turn-down of participants' water heaters, presumably for periods of time short enough to allow the participant to retain reasonable ongoing hot water service without an alternative heating system. Presumably, this model involves frequent, short-duration curtailments. In contrast, RS 1105, even as modified by Option 3, would involve infrequent, much longer-lasting periods of curtailment, physically achieved by the customer not by the utility and certainly requiring an alternative heating system.⁸⁴
- (c) It is assumed that the participants in the Sydney pilot project did so voluntarily. At this point, the RS 1105 customers have indicated quite clearly that they do not wish to have RS 1105 turned into a truly interruptible rate like the Shore Power Rate.⁸⁵
- (d) If the Sydney pilot demonstrates the potential for a successful capacity-focused program involving aggregated small distributed loads, then

⁸⁴ BCSEA-SCBC's understanding is that the Option 3 interruptibility provisions that BC Hydro proposes do not include allowing BC Hydro to remotely disconnect a participating customer's heating load using a smart meter. This is consistent with BC Hydro's wording, quoted above, that "Option 3 could entail E-Plus curtailments enacted remotely by BC Hydro for those Residential E-Plus customers with smart meters that have remote disconnect/reconnect capability." [underline added]

⁸⁵ Exhibit C10-4.

presumably BC Hydro should consider scaling up a full-scale program. There is no apparent reason why only existing residential E-Plus customers would be able to participate in small-scale distributed load curtailment.

Conclusion Regarding Residential E-Plus Options

139. In conclusion, BCSEA-SCBC's analysis is as follows:

- (a) The residential E-Plus rate does not currently serve a useful function. The original function of E-Plus was to market surplus energy that would otherwise be spilled, at a time when BC Hydro did not have consistent access to the export spot market. That function is now obsolete.
- (b) On a cost of service basis, the residential E-Plus rate currently entails an implicit subsidy between all residential customers and residential E-Plus customers that BC Hydro has estimated at approximately \$3 million to \$6 million per year.⁸⁶
- (c) Turning the residential E-Plus rate into a fully interruptible rate is not a desirable approach. It would not result in a capacity resource that has value for BC Hydro. The concept would likely be opposed by the very residential E-Plus customers whose enthusiastic participation would be necessary for success. Instead, this approach would likely be seen as a device to force customers to leave the residential E-Plus rate. BC Hydro's efforts to develop small-scale, distributed capacity-focused DSM are commendable and should not be distorted by trying to turn the E-Plus rate into something that it is not.
- (d) In BCSEA-SCBC's view, the Commission should choose between ending the residential E-Plus rate by natural attrition or by phase-out.
- (e) In the natural attrition scenario, the *status quo* terms and conditions should continue to apply. Participants would continue to be required to

⁸⁶ Exhibit B-1, pdf p.2386. This would decline over time due to natural attrition.

maintain an alternative heating system. BC Hydro's right to interrupt E-Plus power would continue to exist in theory but not in practice.

- (f) In the phase-out scenario, the requirement for participants to maintain an alternative heating system, and BC Hydro's right to interrupt E-Plus service, should both be discontinued. If the Commission adopts a phase-out scenario, then in BCSEA-SCBC's view it would be appropriate for the Commission to set a generous termination date based on full consideration of both the bill impacts and the recoupment of investments in alternative-fuel heating systems. Such investments should be deemed to have been in place as of beginning of the phase-out period.
- (g) BCSEA-SCBC do not take a position between natural attrition and phase-out.

B. BC Hydro General Service Rate Proposals

140. BC Hydro proposes to use the F2016 COS study rather than the F2016 COS (NSA) to effect the MGS and LGS pricing effective April 1, 2017 if its proposals are accepted, for reasons set out in paragraph 83.⁸⁷ BCSEA-SCBC consider that proposal reasonable.

SGS Rate Class – RS 1300/1301/1310/1311 (collectively, RS 13xx)

141. The SGS rate class consists of General Service customers whose billing demand is less than 35 kW. The current default rate structure for SGS customers consists of a flat energy rate and a basic charge; and no demand charge. There are approximately 180,000 SGS accounts. Consumption patterns are very diverse. Annual consumption ranges from about 5,000 to 35,000 kWh per year.

142. BC Hydro proposes maintaining the existing SGS rate structure of a flat energy rate and a basic charge.

143. In addition, BC Hydro seeks approval of:

⁸⁷ BC Hydro Final Argument, para.83.

- (a) a one-time increase to the RS 13xx basic charge from about 33% to 45% recovery of customer-related costs attributable to the SGS class in the F2016 COS study, and
- (b) a one-time offsetting reduction of the energy rate, to maintain forecast revenue neutrality based on the SGS revenue target calculated using any applicable rate increases arising from the F2017 RRA. Thereafter RRA increases would be applied equally to each pricing element of RS 13xx.⁸⁸

144. BCSEA-SCBC agree with BC Hydro that there is no better alternative to the existing SGS rate. The SGS flat rate is easy to understand and simple to administer and generally reflects LRMC in its flat energy structure. A simple inclining block structure like the RIB rate would not be feasible given the high diversity of consumption patterns within the SGS rate class. A more complex inclining block rate structure using a customer baseline would not be practical with 180,000 accounts to contend with. BCSEA-SCBC endorse BC Hydro's submissions in this regard in paragraph 89 of its Final Argument.

145. Regarding the SGS basic charge, BCSEA-SCBC accept BC Hydro's view, as discussed in the stakeholder engagement process, that the appropriate reference is the RIB rate basic charge.

146. The basic charge recovers a portion of the "customer costs" as determined in the cost of service study. Neither the SGS rate nor the RIB rate include demand charges. So for both the SGS rate and the RIB rate the energy charge recovers the "energy cost," the "demand costs" and the balance of the "customer costs."

⁸⁸ Exhibit B-1, p.6-8, pdf p.287.

147. The results of the F2016 cost of service study are that the SGS rate and the RIB are very similar in terms of the classification of “customer costs,” at 12% and 13% respectively.⁸⁹
148. The current RIB rate basic charge is 17.64 cents/day which recovers 45% of that rate class’s customer-related costs. BC Hydro’s proposal would raise the SGS basic charge (for F2017) from 23.47 cents/day to 32.00 cents/day, which would recover 45% of the SGS customer-related costs. This would reduce the SGS energy rate (for F2017) from 11.16 cents/kWh to 11.01 cents/kWh,⁹⁰ which still leaves the SGS energy charge close to the upper bound of the energy LRMC.
149. BCSEA-SCBC support Commission approval of BC Hydro’s proposals regarding the SGS.

MGS Rate Class – RS 1500/1501/1510/1511 (collectively, RS 15xx)

150. The most substantial changes to the *status quo* rate designs that the Commission will consider in this proceeding apply to the Medium General Service (MGS) and Large General Service (LGS) rate classes.
151. BC Hydro proposes, and BCSEA-SCBC support, moving both the MGS and LGS classes to flat energy rates and flat demand charges to replace the complex existing rate designs.
152. BCSEA-SCBC are acutely aware that the *status quo* MGS and LGS rate structures were designed with the intention that the rate design would induce conservation and efficiency. BCSEA-SCBC participated in the proceedings in which the LGS, first, and then the MGS, conservation rate designs were approved by the Commission.
153. During those processes, BCSEA-SCBC understood that the LGS and MGS conservation rate designs were very complex. The complexities were incorporated into the rate designs in order to contend with three basic

⁸⁹ Exhibit B-1, Table 3-7, p.3-37, pdf p.162.

⁹⁰ Exhibit B-1, Table 6-2, p.6-10, pdf p.289.

challenges: high diversity within the class meant that a simple two-step structure like the RIB rate would not work; the large number of customers in the classes meant that tailor-made customer baselines like those in the TSR rate would not work; and the LGS and MGS rate structures then in place were already complicated for historical reasons that didn't necessarily continue to apply, which meant that bill impacts were difficult to predict. Despite the complexity of the new LGS and MGS conservation rates, BCSEA-SCBC were hopeful that the new rate designs would actually induce conservation.

154. During the RDA stakeholder engagement process, BC Hydro presented two reports: "F2014 LGS and MGS Evaluation Report" and "Evaluation of the LGS and MGS Conservation Rates – Calendar Years 2011 and 2012."

155. The reports used a randomized control trial research design to evaluate electricity savings. BCSEA-SCBC carefully examined the methodology, results and recommendations of these reports. BCSEA-SCBC accepted the conclusion that the existing MGS and LGS rate structures have yielded little or no discernible energy conservation, and that the rate structures are too complicated to be understood. Consequently, BCSEA/SCBC supported in principle BC Hydro's proposed move to a flat rate structure for MGS and LGS energy and demand.

156. During the oral hearing, counsel for BCSEA-SCBC told the Commission panel that:

"BCSEA/SCBC see the complicated MGS and LGS rate structures as laudable initiatives that didn't turn out to meet the original conservation objective.

BCSEA/Sierra Club hope that the stark simplicity of the proposed flat rates will help MGS and LGS customers see more clearly the financial benefits of significant conservation and efficiency measures."⁹¹

⁹¹ T3:396, line 22 to 397, line 3.

157. Turning to the MGS rate design in particular, the MGS rate class consists of 16,427 accounts with total consumption of about 3,329 GWh (F2015).⁹²
158. The current MGS rate includes a two-part energy rate, and three-step inclining block demand charge, a basic charge, and a monthly minimum charge (a demand ratchet).
159. The complexity of the MGS two-part energy rate is evident from the schematic diagram shown in Figure 6-4, MGS 2-Part Energy Rate Structure.⁹³
160. The existing MGS three-step inclining block demand charge is relatively simple. However, the problem with it is that it does not send an accurate price signal because BC Hydro's cost to serve MGS customer peak demand is generally flat on a \$/kW basis.⁹⁴
161. The evaluation of the MGS conservation rate concluded that "Evaluated net energy savings for MGS rate were not statistically different than zero in 2011, 2012 and F2014, relative to calendar year 2010, as compared to a forecast conservation savings of about 140 GWh/year,"⁹⁵ which means that the MGS rate did not achieve any conservation.
162. Further, the evaluation found that customer awareness and understanding of the MGS conservation rate was very low. There was confusion about the concept and calculation of the rolling historical baseline (HBL), which is a key component of the two-part energy rate. Few MGS customers said the rate structure motivated conservation on their part.
163. BC Hydro's MGS proposal would result in the following illustrative⁹⁶ charges in F2018 (assuming the F2018 rate cap increase of 3.5 per cent):

⁹² Exhibit B-1, p.6-15, pdf p.294.

⁹³ Exhibit B-1, p.6-17, pdf p.296.

⁹⁴ Exhibit B-1, p.6-19, pdf p.298.

⁹⁵ Exhibit B-1, p.6-22, pdf p.301.

⁹⁶ BC Hydro says that final F2018 MGS pricing will be determined by the F2017 RRA decision.

- (a) a flat energy rate for all kWh of approximately 8.83 cents/kWh;
- (b) a flat demand charge of approximately \$4.92 per kW (reflecting BC Hydro's preferred 35 per cent level of cost recovery); and
- (c) a basic charge of about 24.29 cents per day.

164. BC Hydro proposes to continue with the current monthly minimum charge definition.
165. BC Hydro proposes a one-time transition on April 1, 2017 (F2018) from the current MGS rate structure to BC Hydro's proposed MGS rate structure. BCSEA-SCBC support this request.
166. For the reasons discussed above, BCSEA-SCBC support Commission approval of BC Hydro's proposals for the MGS rate design in this proceeding.

LGS Rate Class – RS 1600/1601/1610/1611 (collectively, RS 16xx)

167. The LGS class consists of approximately 6,850 accounts with total consumption of about 10,900 GWh (F2015).
168. The current LGS rate design includes a two-part energy rate, a three-part inclining block demand charge, a basic charge, and a monthly minimum charge (a demand ratchet).
169. The complexity of the LGS energy rate is illustrated by the schematic shown in Figure 6-1 8, Illustrated LGS 2-Part Energy Rate 2 Structure.⁹⁷
170. Similar to the MGS, the inclining-block demand charge in the LGS rate is relatively simple but it does not send an accurate price signal because BC Hydro's cost to serve LGS customer peak demand is generally flat on a \$/kW basis.
171. BCSEA-SCBC accept that BC Hydro's evaluation found that the LGS rate delivered lower than expected conservation savings with a declining

⁹⁷ Exhibit B-1, p.6-41, pdf p.320.

confidence in the persistence of the savings.⁹⁸ As a result, BC Hydro forecasts zero conservation from the present LGS rate structure.

172. Further, BCSEA-SCBC accept that BC Hydro's evaluation found low awareness and understanding of the LGS conservation rate among LGS customers. The complexity of the LGS rate was found to be a barrier to customer understanding of the price signal and customer ability to act on it.

173. During the stakeholder engagement process, BC Hydro and stakeholders examined the existing LGS rate structure, a flat energy rate and flat demand charge model, and various permutations and combinations. BCSEA-SCBC are satisfied that the simple flat energy and flat demand model proposed by BC Hydro is the best approach at the present time.

174. BC Hydro's LGS proposal would result in the following illustrative charges in F2018:

- (a) a flat energy rate for all kWh of approximately 5.56 cents/kWh;
- (b) a flat demand charge of approximately \$11.21 per kW (reflecting BC Hydro's proposed 65 per cent level of cost recovery); and
- (c) a basic charge of approximately 24.29 cents per day.⁹⁹

175. Notably, the flat energy rate in the proposed LGS rate structure is substantially below the lower end of the range of BC Hydro's energy LRMC. BC Hydro acknowledges this issue. It says the choice

“came down to a trade-off between customer understanding and acceptance [with the flat energy flat demand option], which BC Hydro's LGS Proposal addresses first and foremost, and economic efficiency.”¹⁰⁰

⁹⁸ Exhibit B-1, p.6-46, pdf p.325.

⁹⁹ BC Hydro Final Argument, para.127.

¹⁰⁰ BC Hydro Final Argument, para.130.

176. BC Hydro maintains that the below-LRMC flat energy rate in its LGS proposal will likely not result in either increased consumption or inefficient consumption. It makes the following points:

- “• BC Hydro forecasts that the LGS customers will respond to natural conservation (revenue requirement increases) and have some elasticity response to that;
- BC Hydro does not expect that a change from the two-part rate to the flat rate will impact conservation because the two-part rate is not achieving conservation and has seen declining conservation since 2012; and
- While some LGS customers are tracking their credits and charges, the majority are looking at their total bill and responding to their total bill so to the extent that their total bill will be similar under a flat rate, there is unlikely to be an effect.”¹⁰¹

177. These points are valid, in BCSEA-SCBC’s view. It is not ideal that the LGS flat energy is below the energy LRMC. However raising the flat energy rate would require lowering the flat demand charge. This would cause bill impacts on high load factor customers.¹⁰² BC Hydro states:

“A flat energy rate combined with a flat demand charge with a demand cost recovery of 65 per cent softens bill impacts and reduces variability [more] than if the demand cost recovery remained at 50 per cent, for the “typical” and larger customers with high load factors.”¹⁰³

178. BC Hydro proposes to continue with the current LGS ratchet charge.

179. BC Hydro proposes a one-time transition on April 1, 2017 (F2018) from the current LGS rate structure to BC Hydro’s proposed LGS rate structure. BCSEA-SCBC support this request.

180. For the reasons discussed above, BCSEA-SCBC support Commission approval of BC Hydro’s proposals for the LGS rate design in this proceeding.

¹⁰¹ BC Hydro Final Argument, para.130.

¹⁰² Exhibit B-1, Figures 6-10 and 6-11, pp. 6-58 and 6-59, pdf 337 and 338

¹⁰³ BC Hydro Final Argument, para.128, citing Exhibit B-1, Figures 6-10 and 6-11, pp 6-58 to 6-59/pdf 337-338

MGS and LGS: Three BC Hydro Requests

181. BCSEA-SCBC agree with BC Hydro if the Commission accepts BC Hydro's MGS and LGS rate proposals then three orders are required:
- (a) elimination of TS 82, the rules for LGS prospective growth applications for modified LGS pricing,
 - (b) amendment to RS 12xx to enable dissolution of the LGS and MGS Control Groups, and
 - (c) elimination of RS 26xx, under which Corix was granted an exemption from the LGS two-part energy rate and negotiated a flat rate with BC Hydro.

C. BC Hydro Transmission Service Rate Proposals

182. Transmission Service customers are served at transmission voltage level (69 kV and above). BC Hydro has eight transmission service rates. Of these, BC Hydro is only seeking an order regarding RS 1823, which is the default two-step energy rate for Transmission Service customers.
183. RS 1823 consists of the following pricing elements: Tier 1 energy rate, Tier 2 energy rate, demand charge, and the minimum monthly charge (ratchet charge).
184. The two-tier energy rate in RS 1823 uses a customer-specific annual customer baseline (CBL) based on 90% of the customer's historical load, with adjustments for DSM, plant capacity increase and *force majeure*.
185. Unlike BC Hydro's other conservation rates, the RS 1823 Tier 1 and Tier 2 energy rates are designed to be "customer bill neutral" when annual energy consumption is equal to 100 per cent of a customer's CBL. The Tier 2 energy rate is set based on BC Hydro's energy LRMC and the Tier 1 energy rate is derived to achieve customer bill neutrality.

186. BC Hydro takes the position that the main elements of RS 1823 are not within the Commission's authority to change.¹⁰⁴ Section 3(1) of Direction No. 7 under the *Utilities Commission Act* requires the Commission to ensure that the rates designed for BC Hydro transmission service customers are consistent with Recommendation #8 of the Heritage Contract Report. As a result, RS 1823 must adhere to the following:

- “• The Tier 2 rate should reflect BC Hydro's energy LRMC;
- The quantity of Tier 1 power sold to Transmission Service customers should be set at 90 per cent, and the Tier 2 quantity should make up the remaining 10 per cent; and
- The Tier 1 rate should be derived from the Tier 2 rate and the Tier 1/Tier 2 90/10 split to achieve, to the extent reasonably possible, revenue neutrality.”¹⁰⁵

187. BC Hydro proposes no change to the RS 1823 stepped rate structure, no change to the demand charge, and no change to the monthly minimum charge (ratchet).

188. BC Hydro also proposes to continue the RS 1823 pricing principles implicit in subsection 3(c) of Direction No. 6 to the Commission. However, to accomplish this, BC Hydro says a “very slight re-pricing of the Tier 1 and Tier 2 energy charges in F2017” is required. The problem has to do with the two definitions of revenue neutrality: customer bill neutrality and forecast revenue neutrality.

189. The problem starts with the fact that the F2016 Tier 2 rate is 8.50 cents/kWh, and increasing it by 4 per cent (which is the maximum allowed RRA increase in F2017) would only take it to 8.84 cents/kWh which results

¹⁰⁴ BCSEA-SCBC take no issue in this proceeding with BC Hydro's legal position regarding limits on the Commission's jurisdiction regarding RS 1823. It is not necessary for BCSEA-SCBC to agree or disagree with BC Hydro's position and so they will refrain from doing so.

¹⁰⁵ Exhibit B-1, p.7-6, pdf p.363.

in an amount less than the lower bound of the F2017 LRMC range of 8.92 cents/kWh.¹⁰⁶

190. BC Hydro proposes to increase the Tier 2 rate in F2017 by more than the RRA rate increase, and to derive the Tier 1 rate in F2017 on the basis of either customer bill neutrality or forecast revenue neutrality, but not both, because, BC Hydro says, “in F2017 both definitions of revenue neutrality cannot be met and a choice between them must be made.”¹⁰⁷

191. BC Hydro explains further that the choice between customer bill neutrality and forecast revenue neutrality as the basis for deriving the Tier 1 rate is not necessary in F2018 and F2019 provided that the Tier 2 rate is set in F2017 at the lower bound of the LRMC, as BC Hydro proposes.

192. BCSEA-SCBC support this proposal.

D. BC Hydro Electric Tariff Terms and Conditions Proposals

193. BC Hydro proposes changes to the Electric Tariff Terms and Conditions of Service (“Terms and Conditions”) in three areas: standard charges, security deposits, and “general language.” These are addressed below.

194. BC Hydro’s request for Commission endorsement of proposals regarding review of standard charges are addressed under the Standard Charges heading.

195. BCOAPO’s proposals regarding Terms and Conditions related to low income customers are addressed in the section on BCOAPO’s proposals, below.

Standard Charges

196. BCSEA-SCBC support the general principle that the standard charges are determined on a cost basis.

¹⁰⁶ BC Hydro Final Argument, para.145.

¹⁰⁷ BC Hydro Final Argument, para.145.

197. BC Hydro's proposed Standard Charges are summarized in Table 8-1 of the Application. BCSEA-SCBC reviewed each of these items during the stakeholder engagement process and again through the IR stage and the oral hearing. BCSEA-SCBC are satisfied that BC Hydro's proposed Standard Charges are appropriately defined. And with the exception of the Late Payment Charge, BCSEA-SCBC are satisfied that the proposed sizes of the Standard Charges are cost based.
198. Regarding the Late Payment Charge, BCSEA-SCBC submit that the appropriate cost-based charge is 1.25% per month, rather than the current 1.5% per month that BC Hydro proposes to retain.
199. BCSEA-SCBC submit that the size of the LPC should be based on BC Hydro's short-term bank interest rate, not its weighted average cost of debt. This is because most of the instances in which a late payment charge is assessed involve a payment that is made within a short time of the due date.
200. This was confirmed by BC Hydro's witness Mr. Sanders during the oral hearing:
- "MR. ANDREWS: Q: Would you agree with me that the vast majority of the instances when a late payment charge is assessed is when there is a payment that is within a short time of the due date? That is, within a time -- a short time as roughly defined by banks, when they talk about short-term interest rates, say six months or less.
- MR. SANDERS: A: Yes, I think we could infer that from the arrears data that we've seen, and that Ms. Pritchard showed this morning, or Ms. Khan showed this morning."¹⁰⁸
201. BC Hydro's 1.5%/month LPC is based on the weighted average cost of debt. If the LPC was based on the short-term interest rate the charge would be 1.25%/month.¹⁰⁹ This was confirmed by Mr. Sanders:

¹⁰⁸ T6:1146, lines 17-26.

¹⁰⁹ Exhibit B-1, p.8-13 to 8-14, pdf pp.423-424.

“If what we had indicated was that if the interest that we paid on security deposits decreased to the amount of the short-term borrowing, that correspondingly the costs would also balance approximately if the late payment charge was reduced to 1.25 percent from 1.5 percent. The difference being that the change specifically in the interest rate on borrowing for deferred or delayed revenues.”¹¹⁰

202. BCSEA-SCBC note that while the LPC provides an incentive for prompt payment the size of the LPC is to be determined on a cost basis. On a cost basis, 1.25%/month is the appropriate LPC. While the difference between that and the *status quo* 1.5%/month LPC is small, reducing the Late Payment charge 1.25%/month would confirm that the LPC is strictly cost-based and is not intended to be a penalty.

Security Deposits

203. BC Hydro seeks Commission approval to change the Electric Tariff language regarding security deposits in two ways:
- (a) to allow it to charge a new security deposit or increase an existing security deposit if actual consumption is found to be significantly higher than the consumption that is estimated when the account was created, and
 - (b) to allow for greater flexibility in the amount that is assessed.¹¹¹
204. BCSEA-SCBC supported both these proposals during the stakeholder engagement process and they support them in the current proceeding.
205. The first change, to allow BC Hydro to require a new or increased security deposit if actual consumption is significantly higher than the estimate when the account was created, fills a gap in BC Hydro’s ability to use a security deposit to help reduce the risk of bad debt.

¹¹⁰ T6:1145, line 25 to T6:1146, line 16, underline added.

¹¹¹ BC Hydro Final Argument, para.164; Exhibit B-1, pp.8-19 to 8-22, pdf pp.429-432.

206. The second change responds to the fact that BC Hydro's Electric Tariff is extremely prescriptive regarding the size of a security deposit in the event that a security deposit is required. The proposal would allow BC Hydro to require a security deposit in an amount smaller than is currently prescribed. This increased flexibility would be beneficial on both the customer side and the utility side.

207. BC Hydro has said that if the security deposit flexibility change is approved one of the ways BC Hydro would use it is to set a standardized \$50 security deposit for new customers in apartments who are assessed a security deposit. BC Hydro has clarified that if a new customer in an apartment is assessed a security deposit that under the existing Electric Tariff would be less than \$50 then the security deposit would not be \$50 but would be either calculated under the existing formula or there would be no security deposit.¹¹² With that clarification, BCSEA-SCBC support this intention.

Miscellaneous Terms and Conditions Amendments

208. BCSEA-SCBC have reviewed BC Hydro's proposed changes to the wording of the Terms and Conditions identified in paragraph 172 of the BC Hydro Final Argument. BCSEA-SCBC are satisfied that these changes fall within the intention to update the language to reflect modern drafting techniques and to ensure consistency and clarity.

209. BC Hydro proposes two additional changes to the Terms and Conditions: to provide that an application for service can be made in person, and to correct the wording of s.2.10 to conform with the intended meaning. BCSEA-SCBC support these changes.

Low Income Terms and Conditions

210. BCSEA-SCBC commend BCOAPO for initiating and carrying out engagement with BC Hydro aimed at identifying and implementing

¹¹² BC Hydro Final Argument, para.170.

measures to improve BC Hydro's service to low-income customers. BCSEA-SCBC commend BC Hydro for participating actively in this engagement.

211. BC Hydro provides a lengthy list of its existing and proposed measures that BC Hydro says do, or will, benefit low-income customers.¹¹³ BCSEA-SCBC commend BC Hydro for the progress it has made and encourage BC Hydro to carry on.
212. BCSEA-SCBC address BCOAPO's proposals regarding Terms and Conditions in relation to low-income customers¹¹⁴ in the next section.

Part IV – LOW-INCOME PROPOSALS

213. BCOAPO makes proposals in six areas:
- (a) establishment of an "Essential Service Usage Block," available to qualified low-income customers,
 - (b) establishment of a crisis intervention fund, to assist low-income customers facing disconnection due to arrears,
 - (c) approval of certain changes to the Terms and Conditions of Service specific to qualified low-income customers,
 - (d) establishment of certain customer service rules, applicable to all residential customers,
 - (e) creation of a low-income customer service unit, preparation of income-based customer segmentation reports, and implementation of standardized data reporting, and
 - (f) expansion of BC Hydro's Energy Conservation Assistance Program (ECAP) for qualifying low-income customers.
214. In this section BCSEA-SCBC respond to BCOAPO's low-income proposals. The response is provided under the following headings: the

¹¹³ BC Hydro Final Argument, para.178.

¹¹⁴ BCOAPO Final Submission on BCOAPO Proposals.

Commission's role, Essential Services Usage Block and Low-Income Jurisdiction, Crisis Intervention Fund, Terms and Conditions, Customer Service Rules, Low-Income Services and Reporting, and ECAP.

The Commission's Role

215. The Commission has before it an unprecedented body of evidence on the relationship between BC Hydro's electricity service and the needs of low-income customers and their families.
216. BCSEA-SCBC urge the Commission to take this opportunity to present to the public, as well as to utilities and customers, broad recognition that hundreds of thousands of B.C. men, women and children are struggling to cope with the high and rising costs of electricity service from BC Hydro.
217. BCSEA-SCBC urge the Commission to "grasp the nettle" – to state clearly that the Utilities Commission has a public interest mandate to recognize and take steps within its jurisdiction to address the problem. The Commission has an opportunity in its decision in this proceeding to confirm that its traditional role to protect the interests of ratepayers includes protecting the interests of low-income ratepayers in receiving service from the regulated public utility.
218. BCOAPO asks the Commission to implement a low income strategy:
- "BCOAPO is asking the Commission, through the 2015 RDA, to implement a strategy to assist low income ratepayers who are having increasing difficulty paying their electricity bills in an environment where electricity rates continue to rise while many people's incomes have stagnated."¹¹⁵
219. BCSEA-SCBC endorse that request. They encourage the Commission to acknowledge that BC Hydro's low-income customers have a serious problem affording electricity service, to identify the ways in which the Commission can and will use its statutory powers to help address the

¹¹⁵ BCOAPO Final Submission on BCOAPO Proposals, p.2

problem, and to make the appropriate orders and directions to begin to tackle the problem.

(a) Essential Services Usage Block and Low-Income Jurisdiction

220. BCSEA-SCBC support Commission approval of BCOAPO's proposed Essential Services Usage Block.
221. BCSEA-SCBC submit that the Commission has jurisdiction under the *Utilities Commission Act* to approve a BC Hydro rate for qualified low-income customers, such as the ESUB proposal made by BCOAPO ("a low-income rate").
222. BCSEA-SCBC endorse BCOAPO's legal arguments set in BCOAPO's submission on pages 25 to 48.
223. BCSEA-SCBC also make the following points.
224. The Commission's authority flows from the *Utilities Commission Act*, expressly and by necessary implication.
225. The Commission's authority to approve a low-income rate flows from multiple provisions of the *UCA*, including the Commission's authority to supervise public utilities,¹¹⁶ a public utility's obligation to provide service,¹¹⁷ and the Commission's authority to approve rates.¹¹⁸
226. BC Hydro's obligation to "provide a service to the public that the commission considers is in all respects adequate, safe, efficient, just and reasonable" includes providing such service to low-income customers.
227. In determining whether BC Hydro's service to low-income customers is in all respects adequate, safe, efficient, just and reasonable, the Commission must consider the particular interests of low-income customers, as well as the public interest.

¹¹⁶ *UCA*, section 23.

¹¹⁷ *UCA*, section 38.

¹¹⁸ *UCA*, sections 58 to 61.

228. In exercising its public interest mandate under the *UCA* the Commission should take into account the common law principle that the alleviation of poverty is a charitable purpose.
229. The Commission's jurisdiction to approve rates that are 'just, reasonable and not unduly discriminatory' is not limited exclusively to a traditional cost of service analysis and manifestly includes consideration of customers' ability to pay. That includes low-income customers' ability to pay.
230. The Commission has broad authority under s.60(1)(b.1) to set rates using "any mechanism, formula or other method of setting the rate that it considers advisable." This authority allows the Commission to set rates using customer income as a basis. The Commission's authority under s.60(1)(b.1) is expressly excluded from the requirement¹¹⁹ that the Commission must otherwise ensure that BC Hydro's domestic service is provided on a cost-of-service basis.
231. The statutory provisions that in concert authorize and require the Commission to determine whether a BC Hydro electricity rate is 'just, reasonable and not unduly discriminatory' are not intended to preclude any and all rates that are discriminatory. The intention is to preclude a rate that is unduly discriminatory. This is a question of fact, of which the Commission is the sole judge. BCSEA-SCBC respectfully submit that the Commission can and should find that a BC Hydro rate available only to qualified low-income customers is not unduly discriminatory.
232. More broadly, BCSEA-SCBC submit that the Commission can and should find that a BC Hydro rate available only to qualified low-income customers does not, for that reason alone, fail to be "fair, just and not unduly discriminatory."
233. Turning to the content of BCOAPO's proposed Essential Service Usage Block, in BCSEA-SCBC's view the proposed rate is practical and desirable.

¹¹⁹ Special Direction No. 7, section 5(c) and (d).

234. Key elements of the ESUB proposal include the following:
- (a) A customer under the ESUB rate would receive a discount of 4 cents/kWh on the customer's first 400 kWh per month. Otherwise, the customer's invoice would continue to be based on the customer's consumption and the RIB rate.
 - (b) A customer would be eligible for the ESUB rate if his or her income is less than the before-tax Low Income Cut-Off, which is set on a household basis.
 - (c) A mechanism would be established for determining whether a customer meets the eligibility criteria (a qualified low-income customer). Continuing eligibility would be required.
 - (d) The direct (operational) and indirect (lost revenue) costs of the ESUB rate would be borne by the residential rate class as a whole.
 - (e) ESUB is available only to residential customers.
 - (f) A qualified low-income customer participating the ESUB rate who has monthly consumption of 400 kWh or more would receive a benefit of about \$16 per month.
 - (g) An estimated 160,000 BC Hydro residential customers would be eligible for ESUB using the proposed before-tax LICO criterion.
 - (h) It is assumed that participation in ESUB would ramp up over time. Participation of 50% of eligible customers would correspond to bill discounts of roughly \$13 million per year.
235. BCOAPO provided much more detail on the ESUB proposal in its evidence, responses to information requests and testimony at the oral hearing.
236. To address one specific point, in its rebuttal evidence, BC Hydro indicated that the ESUB rate might induce increased consumption by

participants in the rate. In cross-examination, BC Hydro's witnesses acknowledged that:

- (a) using the elasticity method of estimating conservation impacts of rate design (changes in a customer's marginal rate), ESUB customers consuming 400 kWh/month or more would not be predicted to increase their consumption (because their marginal rate does not change), and
- (b) an ESUB customer consuming less than 400 kWh/month and who is motivated by a change in the marginal cost of their electricity to consume more, may well be consuming the additional electricity on items like keeping the apartment warmer, as a rebound from efforts that they had made previously to reduce their consumption because of the financial impact on them.¹²⁰

237. In BCSEA-SCBC's view, the ESUB proposal has been outlined in sufficient detail for the Commission to use the ESUB proposal as the factual setting for the Commission's legal analysis of the jurisdiction questions. BCSEA-SCBC suggest that the Commission do so.

238. BCSEA-SCBC submit that the Commission should make full use of the evidentiary record in determining the jurisdictional issues. On this point, BCSEA-SCBC respectfully disagree with BC Hydro if the implication of paragraph 183 of its Final Submission is that the Commission should determine the low-income rates jurisdiction issues without reference to the ESUB proposal. BCSEA-SCBC submit that it is better for a court or administrative tribunal to decide a jurisdictional question on the basis of a factual matrix than in the abstract. Even 'stated cases' typically include hypothetical facts.

239. If the Commission finds that it has jurisdiction to approve a BC Hydro low-income residential rate such as the ESUB, then what should come next?

¹²⁰ T7:1396, line 26 to T7:1399, line 26.

240. BCSEA-SCBC recognize that there are many ways in which a BC Hydro low-income electricity rate could be structured, and that many important elements would have to be fleshed out. In their view, the ESUB proposal provides an excellent starting point for further and more-detailed development of a low-income residential rate.

241. If the Commission finds that it has jurisdiction then BCSEA-SCBC respectfully submit that the Commission should direct BC Hydro to develop and file a residential low-income rate proposal, in consultation with BCOAPO, low income customers, stakeholders and government agencies such as MSDI.

(b) Crisis Intervention Fund

242. BCOAPO asks the Commission to direct BC Hydro to establish a Crisis Intervention Fund that would provide financial assistance to enable qualified low-income ratepayers to pay off bill arrears to avoid disconnection or to get reconnected. BCOAPO proposes that BC Hydro would fund the Crisis Intervention Fund through a \$0.25/month charge per BC Hydro account, which BCOAPO says would generate approximately \$5.4 million per year. BCOAPO says that a grant from the Crisis Intervention Fund is intended to respond to unexpected and temporary circumstances that place a customer's electricity service in jeopardy.¹²¹

243. In the alternative, BCOAPO asks the Commission to direct BC Hydro to prepare and file, within six months of the date of the Commission's order, a proposed crisis assistance program for low income customers who have arrears with BC Hydro and are unable to pay their electricity bills.¹²²

244. BCSEA-SCBC support a crisis intervention fund whose purpose is to respond to unexpected and temporary circumstances that place a customer's electricity service in jeopardy.

¹²¹ BCOAPO Final Submission on BCOAPO Proposals, pp.67-71.

¹²² BCOAPO Final Submission on BCOAPO Proposals, p.111.

245. BCSEA-SCBC note that BC Hydro has not responded yet to BCOAPO's proposed Crisis Intervention Fund. Anticipating that BC Hydro may argue that such a program is within what BC Hydro describes as "Basic Low Income Jurisdiction,"¹²³ BCSEA-SCBC say that the Commission does have Basic LI Jurisdiction, for the reasons provided by BCOAPO and by BCSEA-SCBC above.

246. BCSEA-SCBC offer the following comment: In the alternative to BCOAPO's particular design, consideration could be given to a crisis intervention fund to assist low-income residential customers funded only by residential customers.

(c) Terms and Conditions

247. BCOAPO asks the Commission to approve changes to the Electric Tariff language regarding qualified low-income customers in four ways:

- (a) to exempt qualified low-income customers from the minimum reconnection charge,
- (b) to exempt qualified low-income customers from the account charge,
- (c) to waive security deposits for qualified low income customers,
- (d) to exempt qualified low-income customers from the Late Payment Charge, going forward.¹²⁴

248. Having considered the matter, BCSEA-SCBC support a general exclusion of the minimum reconnection charge to customers where the disconnection resulted from non-payment. This would not be limited to low-income customers.

249. There is evidence that the number of disconnections for non-payment has gone up substantially with the advent of remote disconnection through

¹²³ BC Hydro Final Argument, para.180.

¹²⁴ BCOAPO Final Submission on BCOAPO Proposals, pp.5-6; 71-95; 111.

smart meters. Table 2 below sets out the number of disconnections for non-payment BC Hydro has carried out in the past five years.¹²⁵

Table 2: BC Hydro Disconnections for Non-payment

Year	Disconnections Ordered	Disconnections Completed
F2012	18,381	6,376
F2013	11,987	4,995
F2014	25,362	20,940
F2015	38,781	32,564
F2016	36,827	30,283

250. Table 2 shows that completed disconnections have risen from 6,376 in F2012 to 30,283 in F2016. That represents an almost five-fold increase over the five year period in which smart meters were installed.

251. Significantly, Table 2 also shows that the ratio of Disconnections Completed to Disconnections Ordered has risen from about 35% in F2012 to more than 80% in F2016.

252. It is apparent that the introduction of smart meters, with the ability to remotely disconnect for non-payment, has effectively removed two layers of protection that used to insulate customers in arrears, first from a Disconnection Order, and then from actual disconnection.

253. All residential ratepayers, including customers facing disconnection for arrears, are paying for the Smart Metering Infrastructure program. One of the benefits of SMI enjoyed by all residential ratepayers is prompter bill payments due to the enhanced incentive for prompt payment provided by the prospect of swift, remote disconnection. Another benefit of SMI enjoyed by all residential ratepayers is the increase in arrears payments and entry into payment plans when customers disconnected for non-payment are

¹²⁵ BCOAPO Final Submission on BCOAPO Proposals, p.25, citing Exhibit B-26 BCOAPO 1.192.1 REVISED Attachment 1, p. 35 of 63.

compelled by actual disconnection to pay the arrears or enter a payment plan.

254. BCSEA-SCBC submit that, in the era of smart meters, to impose a reconnection charge where the disconnection was for non-payment amounts to double charging the customer. The customer seeking reconnection after disconnection for non-payment has already paid for (or will pay for through the payment of arrears or implementation of a payment plan) the smart metering system. The customer service costs associated with disconnection for non-payment and reconnection are a cost of doing business and ought to be covered by all ratepayers, in BCSEA-SCBC's view.
255. It is noted that there is no 'moral hazard' associated with eliminating the charge for reconnection after disconnection for non-payment, because the customer would still have to pay the arrears or enter a payment plan in order to be reconnected.
256. In the alternative, if the Commission does not approve general elimination of the charge for reconnection after disconnection for non-payment, then BCSEA-SCBC respectfully submit that it should be eliminated for low-income customers.
257. The evidence of the advocates, filed by BCOAPO, describes the desperate straits of low-income customers attempting to be reconnected after having been disconnected.
258. Eliminating the reconnection charge in these circumstances would provide tangible assistance to customers in a time of need.
259. Regarding the account charge, BCSEA-SCBC support eliminating the account charge for qualified low-income customers. The charge may seem small to many people, but it is significant to a family on low income.
260. Regarding security deposits, BCSEA-SCBC support a provision being included in the Terms and Conditions that would provide BC Hydro with

discretion to waive a security deposit for any customer, or, in the alternative, a low income customer, based on the circumstances.

261. BCSEA-SCBC have reservations about a blanket exemption of qualified low-income customers from the Late Payment Charge, going forward. They are concerned that such an exemption could have the unintended adverse consequence of facilitating a low income customer to defer payment beyond the due date for immediate reasons only to build up arrears that could raise a risk of disconnection.

(d) Customer Service Rules

262. BCOAPO asks the Commission to require BC Hydro to change its customer service rules so as to bar the use of external credit scores as basis for security deposits for all customers.¹²⁶

263. BCSEA-SCBC have reservations about this proposal. In the absence of 'external credit scores,' BC Hydro would be motivated to assess a security deposit in situations where it might have chosen not to assess a security based on an 'external credit score.'

264. BCOAPO asks the Commission to require BC Hydro to allow a customer to provide sureties in lieu of a security deposit, whereby, for example, another person or organization could provide a guarantee for the applicant/account holder. BCSEA-SCBC support that proposal.

265. BCOAPO asks the Commission to require BC Hydro to change its practices regarding payment plans for low-income customers as follows:

- “• Setting the down payment at no more than 10% of arrears;
- Limiting the term to not less than 12 months; or
- In the alternative to the second recommendation, placing a limit on required arrearage payments so that arrearage payments would not exceed an average monthly bill.”¹²⁷

¹²⁶ *Ibid.*

¹²⁷ BCOAPO Final Submission on BCOAPO Proposals, p.112.

266. BCSEA-SCBC do not support requiring BC Hydro to limit the size of the down payment to 10% in an arrears payment plan, to limit the term to not less than 12 months, or to limit the payment size not to exceed an average monthly bill. Payment plans with down payments greater than 10% of the arrears, with a term less than 12 months, and/or with payment sizes higher than the average monthly bill may well be more suitable options for the customer.

267. In BCSEA-SCBC's view, it would be better to change the business practices to increase BC Hydro's flexibility to accept payment plans designed to meet the particular circumstances of the customer.

(e) Low-income Services and Reporting

268. BCOAPO asks the Commission to require BC Hydro to establish a dedicated, specially trained low income Customer Assistance Unit. BCSEA-SCBC support the intention behind this request. It may be more suitable for the Commission to direct BC Hydro to report on its services to low-income customers, including the extent to which it has provided specialized services to low-income customers.

269. BCOAPO asks the Commission to direct BC Hydro to conduct residential customer segmentation analysis based on income and to implement standardized data reporting regarding low-income customers. BCSEA-SCBC support the intention of these requests.

(f) ECAP

270. BCSEA-SCBC will address the ECAP program in two different proceedings: the BCUC RIB Report proceeding, and BC Hydro's F2017-F2109 Revenue Requirement Application and DSM Expenditure Schedule.

Part V – OTHER ISSUES

271. BCSEA-SCBC have no submissions on BC Hydro's points under this heading.

Part VI – CONCLUSION

272. On the issue that will impact the largest number of BC Hydro customers, BCSEA-SCBC support retention of the *status quo* RIB rate. The RIB rate works well. Now would be an inopportune time to change it.
273. On the issue that will substantially impact BC Hydro's MGS and LGS customers, BCSEA-SCBC support the proposed flat energy rate and flat demand charge rate structures. BCSEA-Sierra Club hope that the stark simplicity of the proposed flat rates will help MGS and LGS customers see more clearly the financial benefits of significant conservation and efficiency measures.
274. On the issue that most affects the hundreds of thousands of B.C. men, women and children who are struggling to cope with the high and rising costs of electricity service from BC Hydro, BCSEA-SCBC support BCOAPO's low-income rate proposal. They encourage the Commission to acknowledge that BC Hydro's low-income customers have a serious problem affording electricity service, to identify the ways in which the Commission can and will use its statutory powers to help address the problem, and to make the appropriate orders and directions to begin to tackle the problem.
275. On the issue that directly impacts the residential E-Plus customers, BCSEA-SCBC's view is that the rate does not currently serve a useful function and it should be ended either by natural attrition or a generous phase-out period.
276. BCSEA-SCBC's views on other matters are set out above.
277. BCSEA-SCBC wish to commend BC Hydro and its 2015 RDA team for conducting an exemplary pre-application stakeholder engagement process and managing an enormous application with excellent organization, clarity and objectivity.

278. BCSEA-SCBC wish to commend BCOAPO, its consultants and the low-income advocates for marshalling and presenting the first comprehensive low-income electricity rates case in the history of the BCUC.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

October 6, 2016

A handwritten signature in black ink, appearing to read 'WJ Andrews', with a horizontal line extending to the right from the bottom of the signature.

William J. Andrews
Counsel for B.C. Sustainable Energy Association and
Sierra Club B.C.