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British Columbia Utilities Commission
Sixth Floor, 900 Howe Street, Box 250
Vancouver, BC, V6Z 2N3
Attn: Laurel Ross, Acting Commission Secretary and Director
By Web Posting

Dear Madam:

Re: British Columbia Utilities Commission Residential Inclining Block (RIB) Rate Report to the Government of British Columbia; BCUC Project No.3698845,
BC Sustainable Energy Association and Sierra Club BC Comments

These are the comments of the stakeholders B.C. Sustainable Energy Association and Sierra Club BC in response to the Commission's October 7, 2016, invitation¹ to stakeholders and members of the public to comment on reports filed with the Commission on September 30, 2016 by BC Hydro and by FortisBC Inc. (FBC) regarding the RIB Rate Report that the Commission will provide to the Government of B.C.

These comments are based on BCSEA-SCBC's review of the two utility reports, most, though not all, of the comments filed by members of the public,² and the comments filed by Nicolas and Teresa Marty in this proceeding.³

BCSEA-SCBC support the existing BC Hydro and FBC RIB rates because they produce significant, measurable energy savings due to conservation and efficiency without unacceptable bill impacts on customers with high electricity consumption.⁴

Part I. General Comments

1. Disconnect between utilities' reports and letters of comment

BCSEA-SCBC are concerned that there is a disconnect between the utilities' responses to the Minister's Question 1 and the concerns expressed by the RIB critics. Question 1 asks whether the RIB rates cause "cross-subsidy" between customers with and without access to natural gas. Quite reasonably and properly, the Commission interpreted this question as requiring an examination of "cross-subsidy" as the term is used within the world of public utility regulation in B.C. The Commission required the utilities to use fully allocated cost of service (FACOS) and long run margin cost (LRMC) analyses to address whether the RIB rates cause cross-subsidization. The

¹ Exhibit A-20.

² The "E" series of exhibits.

³ Marty, Teresa & Nick Submission, October 13, 2015; Marty Comments on BC Hydro Extension Request, September 19, 2016; Marty Utility Report Comments, October 19, 2016.

⁴ BC Hydro states in its 2015 Rate Design Application that "The 2013 RIB Evaluation Report concluded that the RIB rate appears to be achieving its overall objective of encouraging conservation through Residential customer response to higher marginal prices at the Step 2 energy rate – particularly among customers with the highest consumption." [p.5-16, pdf p.212.]

utilities did carry out these analyses, and their responses to Question 1 are discussed below. However, in BCSEA-SCBC's view, the utilities' analysis and results regarding "cross-subsidization" do not respond directly to the concerns and opinions of the RIB critics filed in this proceeding.

It appears to BCSEA-SCBC that the concerns expressed by most of the Without Access to Natural Gas critics of the RIB rates are not primarily that RIB rates cause an intra-class "cross-subsidy" in a regulatory sense. Most don't use the term "cross-subsidy" and those who do refer to it don't use it in the sense of FACOS and/or LRMC analysis.⁵

Rather, the concern evident in the letters of comment is that RIB rates cause customers without access to natural gas to have to pay 'too much' for electricity. 'Too much' in this context is not a rigorously defined concept, nor is it used in the same way by all the commentators. For some, 'too much' means more than they can afford. For others, 'too much' means paying more for electricity than they would if they did have access to natural gas. For others, 'too much' means paying more for electricity than is paid by customers With Gas Access. None of these concerns is directly addressed by Question 1 and the utilities' responses to Question 1.

2. Misconceptions should be addressed

BCSEA-SCBC believe that serious factual misconceptions underlay many of the criticisms of the RIB rates filed in this proceeding. Further, BCSEA-SCBC are concerned that the utilities' reports do not provide clear data and discussion to correct these misconceptions. BCSEA-SCBC are concerned that these crucial errors will go unaddressed if the Commission's report to the Minister is limited strictly to the cost of service analysis of whether there is "cross-subsidization" in regulatory terms.

In BCSEA-SCBC's view, the questions that arise out of the letters of comment are essentially:

- Do the RIB rates cause Without Gas Access customers and Low-Income customers to pay too much for electricity?
- What would be the consequences of moving to a flat rate for both Without Gas Access customers and With Gas Access customers, and Low-Income customers and Non-Low Income customers?

Although these questions were not explicitly stated by the Minister, BCSEA-SCBC respectfully submit that the Commission should ensure that these questions are addressed clearly and effectively in the Commission's report to the Minister.

3. Most Without Gas Access customers and most Low-Income customers would pay more under a flat rate than a RIB rate

Most of the criticisms of the RIB rates in the letters of comment are based on the assumption that Without Gas Access customers would have lower electricity bills under a flat rate design than under the existing RIB rates. This assumption is quite incorrect. In fact, most Without Gas customers would likely pay more for electricity with a flat rate than with their current RIB rate.

⁵ Mr. Marty states that the RIB rates cause "significant cross-subsidization" [pdf p.1], however his discussion of cross-subsidization [pdf pp.12-14] does not include a cost of service analysis. 2016-10-19 Marty Utility Report Comments.

This is because residential customers without access to natural gas span the full spectrum of electricity consumption levels between very low and very high. In a RIB rate there is a break-even point⁶ in terms of the amount of consumption. Customers whose consumption is below the break-even point will have a lower bill under the RIB rate than under a flat rate,⁷ and customers whose consumption is above the break-even point will have a higher bill under the RIB design than under a flat rate. For example, about 73% of FBC customers were better off with the RIB rate than they would have been with a flat rate.⁸ For BC Hydro, changing from the RIB rate to a flat rate would cause bill increases of more than 10% to some 70% of customers.⁹

Without Gas Access customers do use a somewhat higher amount of electricity on average than With Gas customers. For example, FBC Without Gas Access customers on average used 23% more electricity than With Gas Access customers.¹⁰ However, this “average” masks the fact that most Without Gas customers use significantly less electricity than the break-even point above which they would be financially better off with a flat rate.

Unfortunately, the two utility reports do not provide direct estimates of the number and percentage of With Gas Access and Without Gas Access customers who would be better off or worse off with a flat rate. However, using “electric heat” as a proxy for Without Gas Access, it is notable that only 26% of BC Hydro residential customers with electric heat¹¹ would be better off under a flat rate than the RIB rate in F2017.¹² And for FBC, it appears that the number of Without Gas customers who would be better off with the RIB rate is roughly double the number of Without Gas customers who would be substantially (>10%) worse off with the RIB rate.¹³

What this means is that if the Without Gas Access critics of the RIB rate succeeded in having the RIB rate replaced with a flat rate then most of the electricity customers in the Without Gas Access areas would be worse off financially. In BCSEA-SCBC’s view, this fundamentally refutes the argument that customers in Without Gas Access areas are hard done by by the RIB rate because they don’t have access to natural gas. In fact, it is only the high-consuming

⁶ The break-even “point” is actually a range, because of different customers having different patterns of consumption by billing period within a year.

⁷ Assuming the same amount of consumption of electricity.

⁸ FBC Report, Table 3: RCR Bill Impact by Consumption (2015 Rates), p.9.

⁹ BC Hydro 2015 Rate Design Application, p.5-23, pdf p.219.

¹⁰ FBC reports that for 2009 With Gas Access customers had annual consumption of 12,574 kWh per customer and Without Gas Access customers had 15,454 kWh per customer. FBC Report, pdf p.33 of 120. These figures apparently contradict Mr. Marty’s assertion that “All things equal, the home that uses electricity for both space and water heating will, on average, consume four times the amount of electricity as a home that uses natural gas for both purposes.” 2016-19-19 Marty Utility Report Comments, pdf p.11, underline added.

¹¹ Electric heat is used as a proxy for without access to natural gas here. The BC Hydro report does not expressly state the number and percentage of “Access to Gas” and “No Access to Gas” customers who would be better off financially with a flat rate rather than a RIB rate.

¹² BC Hydro 2015 Rate Design Application, Exhibit B-1, page 5-25, pdf p.221.

¹³ FBC Report, Table 5: RCR Dwelling Type (% Incidence) – High-Use vs. Not-High-Use Households by Access to Natural Gas, p.13; and Table 3: RCR Bill Impact by Consumption (2015), p.9.

customers in the Without Gas Access areas who pay more under the RIB rate than a flat rate, and this observation applies equally to customers in the With Gas Access areas.

The same analysis applies to the claim by some of the Without Gas Access critics of the RIB rate that the RIB rate is particularly burdensome for low-income customers in the Without Gas Access areas (or in all areas). The fact is, as the Commission has been well aware since it first approved the BC Hydro RIB rate in 2008, that the vast majority of low-income customers are better off financially under a RIB rate than a flat rate (because low-income customers have relatively low consumption). This applies in the Without Gas Access areas as well as in the With Gas Access areas. If the Without Gas Access critics of the RIB rate succeeded in having the RIB rate replaced with a flat rate then most of the low-income electricity customers in the Without Gas Access areas (and in all other areas) would be worse off financially.

BCSEA-SCBC respectfully submit that Commission's report to the Minister should emphasize these salient facts. Not only do RIB rates produce significant energy savings, RIB rates are financially beneficial to most customers in the Without Access to Gas areas. RIB rates are financially beneficial to most low-income customers in the Without Access to Gas areas. The purpose of RIB rates is to incent conservation and efficiency and they achieve that objective. High-consuming customers pay slightly more per kWh under a RIB rate than they would under a flat rate in both Without Gas Access areas and With Gas Access areas. BCSEA-SCBC respectfully submit that the Commission should report to the Minister that the complaint that RIB rates are especially burdensome for Without Gas Access customers as a whole compared to With Gas Access customers as a whole is not substantiated.

Part II. Comments on the Utilities' Responses to the Five Questions

Question 1: Do the residential inclining block rates cause cross-subsidy between customers with and without access to natural gas?

The Commission panel determined that BC Hydro and FBC are to use “both (i) a FACOS [fully allocated cost of service] approach and (ii) a comparison of average rates to long-run incremental costs approach, to analyze whether the RIB rates cause a cross-subsidy between customers with and without access to natural gas. BC Hydro's analysis and conclusions will be addressed first, and then FBC's.

BC Hydro

BC Hydro concludes that it “does not find a cross-subsidy caused by the residential inclining block rate between customers with and without access to natural gas.”¹⁴ BC Hydro says that both its FACOS analysis and its LRMC analysis indicate that “the revenue to cost ratio for customers without access to natural gas is greater than for customers with access to natural gas, particularly if they are heated by using natural gas.”¹⁵ However, BC Hydro concludes that is result is not “substantive given the inherent limitations to the analysis.”¹⁶

In BCSEA-SCBC's view, BC Hydro's analysis and conclusion is consistent with the Commission's specific directions.

¹⁴ BC Hydro Report, p.1 (pdf p.6)

¹⁵ *Ibid.*

¹⁶ *Ibid.*

While BC Hydro does not address this point in this portion of the report, BCSEA-SCBC submit that the underlying reason why “the revenue to cost ratio for customers without access to natural gas is greater than for customers with access to natural gas, particularly if they are heated by using natural gas” is that the group defined as ‘customers without access to natural gas’ includes a higher proportion of large electricity consumers who are above the RIB break-even point than does the group defined as ‘with access to natural gas.’ This reflects the fact that the impact of the RIB rate on the size of customers’ bills is due almost entirely to the amount of consumption: any group that has an above-average number of high-consuming customers (e.g., single family dwellings) will have a higher R/C ratio than the rest of the customers in the rate class.

This interpretation is reinforced by BC Hydro’s observation that the R/C ratio for without access to gas is higher than for with access to gas “particularly if they are heated by using natural gas.” Customers with access to gas who heat with gas will be, on average, lower consumers of electricity than customers with access to gas who heat with electricity; and the more electricity consumed the higher the R/C ratio.

To put BC Hydro’s finding in context, once the data confirm the supposition that a defined group has an above average number of high-consuming customers (such as customers without gas access, customers with single family dwellings, or customers with a high number of household occupants) then it is axiomatic that under a RIB rate the defined group will higher revenue per kWh than the rest of the customers.¹⁷ BC Hydro has used real data to confirm the predicted result in the case of With and Without access to natural gas residential customers.

Regarding the utility’s cost of serving each of the two defined groups (the “C” in R/C ratio), BC Hydro did include capacity costs based on the groups’ respective coincident peak in its R/C analysis using the LRMC.¹⁸ BCSEA-SCBC are less clear whether and how BC Hydro considered capacity costs and coincident peak in its FACOS analysis of the two groups. In any event, it appears that BC Hydro did not factor into the R/C ratios the differences in its costs of distribution between the With and Without Gas Access groups (because of insufficient data).

Having confirmed with data that Without Gas Access customers have a higher R/C ratio than With Gas Access customers, assuming that all the costs of serving the two groups are considered, BC Hydro then asks, in effect, what meaning can be drawn from that finding. It concludes, as quoted above, that the result is not “substantive given the inherent limitations to the analysis.” While this wording is a bit abstract, in BCSEA-SCBC’s view the point is correct. The finding – that Without Gas Access customers have a higher R/C ratio than With Gas Access customers, assuming all the costs of serving each group is the same – has no real-world implications because the all the costs of serving each group are not expected to be the same, contrary to the assumption on which the R/C ratio was calculated.

In particular, BC Hydro’s cost of serving Without Gas Access customers is higher than its cost of serving With Gas Access customers. As BC Hydro states:

“The distribution costs of serving customers without access to natural gas is more than the cost of serving customers with access to natural gas since these customers

¹⁷ Because higher-consuming customers pay a higher average price per kWh because more of the electricity they consume is at the Step 2 rate.

¹⁸ BC Hydro Report, p.18.

are generally located in more remote areas and are also likely to be located in less densely populated areas.”¹⁹

So there are two findings:

- (a) The R/C ratio for BC Hydro Without Gas Access customers is higher for With Gas Access customers, without taking into account the difference in distribution costs between the two groups, and
- (b) The distribution costs to provide service to Without Gas Access customers are higher than for With Gas Access customers.

The result is that the evidence does not support the contention that the RIB rate causes cross-subsidization between BC Hydro’s Without Gas Access customers and With Gas Access customers.

Furthermore, the postage stamp principle must be considered. Intra-class cross-subsidization does not equal undue discrimination. The postage stamp rate principle applies to both BC Hydro’s rates and FBC’s rates. It also applies to both a RIB rate structure and a flat rate structure. Under the postage stamp rate principle, the rates of the utility’s residential customers²⁰ are the same regardless of where within the utility’s service area the customer is located.²¹ Inevitably, it costs the utility somewhat more to serve some residential customers and somewhat less to serve other residential customers.²² However, under the postage stamp rate principle any variations in the utility’s cost of serving different residential customers or different types of residential customer are not reflected in a different rate: all customers in the utility’s residential rate class pay the same rate. The utility’s total cost of serving all the residential customers is recovered from all the residential customers using the same rates.

In BCSEA-SCBC’s view, the Commission should emphasize in its report to the Minister that even if the evidence did show a cross-subsidy between Without Gas Access RIB customers and With Gas Access customers, which it doesn’t, there would still be no basis for concluding that the RIB rate is unduly discriminatory.

FortisBC Inc.

FBC’s analysis and conclusions regarding whether its RIB rate causes a cross-subsidy between customers With and Without access to natural gas are, in BCSEA-SCBC’s view, basically the same as BC Hydro’s, although the numbers, analysis and wording are somewhat different.

¹⁹ BC Hydro Report, p.9, pdf p.13, underline added.

²⁰ For BC Hydro, the postage stamp rate principle applies to grid-connected residential customers. Rates in non-integrated areas are in a different category.

²¹ BC Hydro states: “Both approaches [FACOS and LRMC] use a high level postage stamp approach to allocating costs and they do not consider local or geographic factors which would likely decrease the estimated revenue to cost ratio for those without access to natural gas.” BC Hydro Report, p.9, pdf p.14.

²² For example, it may cost the utility less to provide service using an existing distribution line in an established neighbourhood than to provide service with a new distribution line in a new development. Or, it may cost the utility less on a per customer basis to maintain a distribution line with densely distributed customers than with sparsely distributed customers.

First, FBC begins its summary of its results and conclusions overall by stating:

“The presence of an inclining block rate in comparison to a flat rate will lead to higher bills for customers with relatively high consumption.”²³

BCSEA-SCBC commend FBC for the prominence given to this point, because this is the fundamental dynamic between a RIB rate, a flat rate and customers’ bills.

FBC followed the Commission’s prescribed FACOS methodology for addressing Question 1. FBC finds that the data confirms that the Without Gas Access group has a higher R/C ratio than the With Gas Access group. FBC states:

“The results of the modelling indicate that according to the 2009 COSA, the customers in the *without-access* group would have had an R/C ratio of approximately 108.5%, while customers in the *with-access* group would have had an R/C ratio of approximately 94%.”²⁴

FBC then states:

“Based solely on the COSA and the data used, these results are an indication that as a group, the customers in the *without-access* group would have been paying more than it costs to serve them, while customers in the *with-access* group would be paying less than it costs to serve them.”²⁵

However, like BC Hydro, FBC did not take into account the potentially higher cost of distribution assets required to serve the more remote Without Gas Access customers. FBC states:

“While isolating the *without-access* group regarding revenue and load profile, FBC did not isolate the distribution plant required to serve the group, which given it’s more remote and rural nature could also influence the costs to provide service and potentially reduce the R:C ratio for this group.”²⁶

FBC concludes:

“Given the position of the R/C ratios just outside the last accepted FBC range of reasonableness, and the difficulty ascribing that difference solely to the presence or absence of gas in the community, there is not enough evidence to conclude that there is a cross-subsidy.”²⁷

FBC goes on to state:

“The analysis does confirm that the RIB rate design in general is not supported by the cost causation principle when reviewed on an embedded cost basis.”²⁸

BCSEA-SCBC note that this is an acknowledged aspect of the RIB rates and is taken into account by the Commission when RIB rates are considered and approved.

²³ FBC Report, p.3, pdf p.7.

²⁴ FBC Report, p.5, pdf p.9.

²⁵ *Ibid.*, footnote omitted.

²⁶ FBC Report, p.5, pdf p.9, underline added.

²⁷ FBC Report, p.6, pdf p.10, underline added.

²⁸ FBC Report, p.6, pdf p.10, underline added.

FBC then addresses the postage stamp rate principle. FBC states:

“In addition, even if a cross-subsidy could be confirmed, as discussed in the Company’s response to BCUC IR 1.4.1, given the acceptance of postage stamp rates in the province, there may be a number of factors, such as geography, seasonality, or demographic attributes, that when examined in isolation may demonstrate a potential intra-class cross-subsidization. Postage stamp rates in general will result in some intra-class subsidies. This does not mean that separate rate classes, or subdivisions within a particular rate should be pursued. FBC supports the postage stamp rate concept where all customers with substantially similar characteristics are billed on the same rate.”²⁹

BCSEA-SCBC concur with this analysis.

Regarding the LRMC analysis, FBC observes that the Step 2 rate for both With Gas Access and Without Gas Access customers is above FBC’s current measure of LRMC. However, FBC notes that “attempting to maintain a two tier rate while lowering the price of the higher tier energy to approximate the LRMC would simply result in a rate with a minimal differential between the Tier 1 and Tier 2 rate.”³⁰

BCSEA-SCBC are satisfied that FBC followed the methodology for Question 1 required by the Commission.

Question 2: What evidence is available about high bill impacts (greater than 10 percent as a result of the adoption of the residential inclining block rates) on low income customers?

In BCSEA-SCBC’s view, the dynamic between a flat rate and RIB rate as it affects low-income customers can be summarized at a high level as follows:

- A change from a flat rate design to a RIB design automatically means lower bills for lower-consuming customers and higher bills for higher-consuming customers, assuming no change in the amount of electricity consumed.³¹ The opposite also applies: a change from a RIB rate to a flat rate automatically means higher bills for lower-consuming customers and lower bills for higher-consuming customers.
- Low-income customers are spread out across the range of consumption, from low to high. However, most low-income customers are in the low to middle consumption brackets, while some low-income customers are in the high consumption bracket.

²⁹ FBC Report, p.6, pdf p.10, underline added.

³⁰ FBC Report, p.7.

³¹ This is a general statement. There may be exceptions for customers with very unusual consumption patterns, e.g., extremely high consumption in one billing period and below-threshold consumption in the other billing periods.

- A change from a flat rate to a RIB rate reduces the electricity bills for the majority of low-income customers,³² and increases the bills for those low-income customers who have high consumption.
- The opposite also applies: a change from a RIB rate to a flat rate would increase the bills of most low-income customers and would reduce the bills of the high-consumption, low-income customers.

BC Hydro

In response to the Minister's Question 2, BC Hydro states:

“BC Hydro's modelling does not find evidence of high bill impacts on low income customers as a result of the adoption of the RIB rate. Furthermore, the results indicate that the majority of the low income customers are better off with lower bills under the RIB rate than the Flat rate as detailed below:

- For Low Income customers moving from the Flat rate to the RIB rate:
 - ▶ 88 per cent of customers are better off on RIB rate.
 - ▶ 1 per cent of customers experience a bill impact higher than 10 per cent.
- For Low Income customers moving from the RIB rate to the Flat rate:
 - ▶ 8 per cent of customers are better off on Flat rate.
 - ▶ 72 per cent of customers experience bill impact higher than 10 per cent.”³³

BCSEA-SCBC support Commission acceptance of BC Hydro's analysis and findings in response to Question 2.

FortisBC Inc.

FBC says it does not have data on the consumption of customers who are considered “low-income” as defined by the Statistics Canada low-income cut-off (LICO).³⁴ However, FBC does provide data based on self-reported income levels of REUS (residential end use study) respondents.³⁵ FBC acknowledges that the data is not very robust, for example, because a high proportion of respondents declined to provide income figures. With that caveat, the data indicates that of FBC customers who reported annual income of less than \$20,000 about 67% were better off financially with the RIB rate than a flat rate.³⁶ FBC notes that “The results

³² In the Commission's Decision and Order G-124-08 approving BC Hydro's RIB rate the Commission panel said that it “concur with BC Hydro's evidence that the vast majority of BC Hydro's low-income customers will be better off under a simple two-step inclining block structure that is revenue neutral for the residential customer class than under the current flat rate structure.” [pdf p.88 of 157.]

³³ BC Hydro Report, pp.19-20, pdf pp.24-25.

³⁴ FBC Report, p.9.

³⁵ FBC Report, Table 4: REUS Income vs. Consumption, p.10.

³⁶ *Ibid.*

support FBC's earlier conclusion that it is high use, regardless of income, that leads to relatively high bill impacts."³⁷

BCSEA-SCBC support Commission acceptance of FBC's analysis and findings in response to Question 2.

BCSEA-SCBC fully accept that low-income customers of BC Hydro and FBC have a serious problem affording electricity service. However, in BCSEA-SCBC's view the RIB rates are not the cause of this affordability challenge and changing to a flat rate would exacerbate the problem for most low-income customers.

Question 3: What evidence is available about factors that lead to high energy use and, therefore, bill impacts for customers without access to natural gas, including low income customers?

The Commission provided the following directions to the utilities regarding their responses to Question 3:

“For the purposes of answering this question, the utilities shall provide analysis of:

- a. all factors that lead to high energy use and therefore bill impacts;
- b. factors that lead to high energy use and therefore bill impacts for customers with access to natural gas;
- c. those factors from a) that lead to high energy use and therefore bill impacts for customers without access to natural gas; and
- d. those factors from c) that lead to high energy use and therefore bill impacts for customers without access to natural gas who are also low income.”³⁸

The Commission confirmed that the utilities should use their REUS results in answering Question 3. And the Commission asked the utilities to report on a lengthy list of end-uses and factors that may lead to high energy use, to the extent the data is available.

BC Hydro

BC Hydro describes its key findings as follows:

“BC Hydro's analysis finds that high use customers as a group, regardless of income or access to natural gas, generally exhibit a higher proportion of factors that result in greater use of energy relative to the not-high use group. Thus, they are more likely to have consumption in step 2 of the RIB rate, leading to higher energy bills.”³⁹

Regarding factors that lead to high energy use and therefore bill impacts (from the RIB rate compared to a flat rate) for customers without access to natural gas, BC Hydro confirms that the high electricity consuming Without Gas Access customers use electric baseboard heaters more than do high consuming With Gas Access customers. BC Hydro says that:

³⁷ *Ibid.*

³⁸ Exhibit A-9, p.4.

³⁹ BC Hydro Report, p.24, pdf p.29.

“This helps explain why although 5 per cent of the population [of BC Hydro residential accounts] has no access to natural gas, they make up 14 per cent of high energy use customers.”⁴⁰

BC Hydro presents in Appendix C⁴¹ its results regarding the factors the Commission required the utilities to report on. However, the results are presented in terms of how each factor contributes to high-use compared to not-high-use, separately for all customers, With Gas Access customers, Without Gas Access customers, and Low-Income customer. This presentation makes it difficult to determine whether and how the factors that contribute to high electricity usage among Without Gas Access customers differ from the factors that contribute to high electricity usage among With Gas Access customers (beyond the reported result that the high-use Without Gas Access customers have higher reliance on baseboard heaters than high-use With Gas Access customers).

The same presentation comment applies to Appendix D: Detailed REUS Distributions of Attitude and Behaviour. The presentation first separates all customers, With Gas Access, Without Gas Access, and Low-Income and then makes comparisons between the high-use and not-high-use tranches within each group. The presentation does not directly compare high-use With Gas Access customers to high-use Without Gas Access customers, or not-high-use With Gas Access customers to high-use Without Gas Access customers. However, in the case of Appendix D, it is note that the results do not appear to be particular strong or indicative in any event.

In both Appendix C and Appendix D most of the results for the Low-Income group are indeterminate because the sample size is too small to draw conclusions.

BCSEA-SCBC support Commission acceptance that BC Hydro’s response to Question 3 is consistent with the Commission’s requirements.

It should be noted that BC Hydro’s category “Not High Energy Use” is not the same as FBC’s “Not-High Use” category. BC Hydro defined “High Energy Use” as 22,000 kWh/year or more, and “Not High Energy Use” as less than 22,000 kWh/year.⁴² As 22,000 kWh/year is about double the average consumption, BC Hydro’s term “Not High Energy Use” is not limited to low-use customers. FBC defined “High-Use” as 23,000 kWh/year (twice the average yearly usage for all FBC customers). However, FBC defined “Not-High Use” as 11,500 kWh/year or less (the average yearly usage).⁴³ So, FBC’s “Not-High Use” category means ‘below average use,’ whereas BC Hydro’s “Not High Energy Use” category means consumption of up to double the average use.

FortisBC Inc.

Like BC Hydro, FBC confirms that High-Use customers are more likely than Not-High-Use customers to have characteristics that require more electricity use. FBC’s list of these characteristics is:

- “• Single-family detached homes;

⁴⁰ *Ibid.*

⁴¹ BC Hydro Report, Appendix C: Detailed REUS Distributions of Factors, pdf p.74.

⁴² BC Hydro Report, p.26.

⁴³ FortisBC Report, p.11.

- Larger (half are larger than 2,500 square feet);
- Have more occupants (3 people vs. 2 people in non-high-use dwellings);
- Have children in the household;
- Use electricity as the primary heating fuel (two-thirds vs. one-quarter in non-high-use dwellings);
- Have a larger electric DHW tank;
- Have a higher incidence of secondary refrigerators, primary and secondary freezers; and
- Have a greater incidence of electrically heating swimming pools and/or hot tubs.
- Those that disagree with the statement that their household has reduced energy consumption as much as reasonably possible.”⁴⁴

Like the BC Hydro REUS results presentation, FBC presents the results oriented according to High-Use compared to Not-High-Use and then by All, Without Gas Access, and With Gas Access. FBC also provides results for three energy use groups defined as 10,000, 20,000 and 30,000 kWh/year, plus or minus 10%.

Like BC Hydro, FBC’s REUS data generally did not have enough data points for low-income customer to provide significant results for that group.

As noted above, it appears that the FBC REUS data results can be used to confirm that a substantial proportion of Without Gas Access customers would be worse off financially in a flat rate rather than the RIB rate. Table 1⁴⁵ in FBC’s Appendix B shows weighted sample sizes by energy use group. For “No access to gas,” the weighted sample size is 26 for the 11,500 kWh/y or less group, and only 14 for the 23, 000 kWh/y group. This indicates that among “No access to gas” customers the number of customers at or below 11,500 kWh/y is approximated double the number of customers at or above 23,000 kWh/y. Table 3 in the body of FBC’s Report shows that for all customers (not just “No access to gas”), customers consuming from 15,000 kWh/y or less are financially better off under the RIB rate than a flat rate, and that customers consuming 22,500 kWh/y and more are financially worse off under the RIB than a flat rate.

BCSEA-SCBC support Commission acceptance that FBC’s response to Question 3 is consistent with the Commission’s requirements.

Question 4: What is the potential for existing Demand Side Management (DSM) programs to mitigate the rate impacts of a RIB rate on customers Without Gas Access and Low-Income customers?⁴⁶

When BCSEA-SCBC provided input to the Commission regarding the methodology for the utilities’ reports they recommended that the Commission clarify that the core of question 4 is to address the potential for existing DSM programs to reduce electricity usage and hence customer

⁴⁴ FortisBC Report, p.13.

⁴⁵ FortisBC Report, pdf p.48.

⁴⁶ Question 4 is reworded here for clarity.

bills, for example, by ramping up the incentives in existing DSM programs achieve increased energy savings. The panel did not adopt that approach. The Commission panel stated:

“The Commission acknowledges BC Hydro’s position that this is not the appropriate venue for an assessment of Demand Side Management (DSM) programs or any direction on these programs.... The utilities should assume no changes to existing DSM programs or incentive levels.”⁴⁷

Accordingly, BCSEA-SCBC will not address changes to existing DSM programs or incentive levels in these comments under Question 4.

In their responses to this question, both BC Hydro and FBC describe their existing DSM programs in general and in particular their existing DSM programs that target (a) customers who use electricity for space and water heating, and (b) low-income customers.

Then, as BC Hydro says, “To the extent that customers participate in these programs, they have the potential to mitigate the factors that lead to high energy use...” No one could argue with that statement.

BCSEA-SCBC support Commission acceptance that the utilities have described their existing DSM programs as directed.

However, in the January 19, 2016 methodology decision letter the Commission panel also invited the utilities to comment on potential improvements to increase uptake in existing DSM programs. The panel states:

“In addition, utilities are also invited to comment on whether improvements could be made to increasing uptake or overcoming barriers to participating in these existing DSM programs by high-use customers, in particular low-income customers and those without access to natural gas.”⁴⁸

FBC’s Report is silent on opportunities to improve the uptake in its existing DSM programs.

BC Hydro comment is:

“Within our current DSM Plan and expenditure level, BC Hydro does not see any significant opportunity to improve the uptake of residential demand-side management programs to high electricity users based on this review, nor any major barriers that its current programs do not already attempt to address.”⁴⁹

The only analysis BC Hydro provides in support of this conclusion relies entirely on the letters of comment that were focused on the RIB rate, not DSM. BC Hydro states:

“BC Hydro’s view is that its residential demand-side management programs provide support and coverage for high electricity users as they address the factors that lead to high electricity use. This view is corroborated by the letters of comment received on the RIB Rate Report proceeding, with many customers being aware of their DSM opportunities and taking significant steps to reduce and

⁴⁷ Exhibit A-9, p.5.

⁴⁸ Exhibit A-9, p.5.

⁴⁹ BC Hydro Report, pp.41-42, pdf pp.46-47, underline added.

track their electricity consumption. Generally, those letters of comment did not identify a lack of DSM program initiatives.⁵⁰

BCSEA-SCBC respectfully submit that BC Hydro's analysis on this topic is patently inadequate and that its conclusion is unfounded. In BCSEA-SCBC's view, BC Hydro's response, and FBC's failure to respond, regarding opportunities to increase uptake and reduce barriers to participation in their existing DSM programs is disappointing.

Question 5: Within the current regulatory environment, what options are there for additional Demand Side Management (DSM) programs, including low income programs?

In the January 19, 2016 methodology decision the Commission panel required the utilities to "identify any additional DSM programs (for example, offered in other jurisdictions) that are targeted at the key drivers of high-energy use, in particular for low-income customers and those without access to natural gas."⁵¹

BC Hydro response is, in effect, to defend its DSM *status quo* and its proposed cutbacks to DSM spending in the F2017 to F2019 period, currently before the Commission in the BC Hydro Revenue Requirement Application.

BC Hydro concludes:

"In summary, our current residential demand-side management programs already provide support and coverage for high electricity users that address the factors that lead to high electricity use. There are no significant opportunities to add to or modify the DSM Plan to further address these factors. Given delayed system needs, the targets of the 2013 10 Year Rates Plan and the need to maintain a balance of DSM measures, the addition of programs to our current DSM plan is not warranted at this time."⁵²

BCSEA-SCBC respectfully disagree with BC Hydro's position that there are no significant opportunities to add to or modify the DSM plan to target the key drivers of high-energy use, in particular for low-income customers and those without access to natural gas. Further, they disagree with BC Hydro's position that such changes are not warranted at this time. These are issues to be determined in the BC Hydro F2017-F2010 RRA proceeding.

FBC's response to Question 5 is as follows:

"FBC believes the current regulatory environment is supportive of additional DSM programs, including low income programs, as long as the measures are cost-effective on a TRC basis. FBC increased its low-income plan budget in the 2017 DSM Plan that is now before the Commission.

The Company will file a long-term DSM Plan, based on its updated LRMC value, in conjunction with the LTERP later this year, based on the results of the BC wide dual-fuel Conservation Potential Review (CPR) now underway. The CPR updates

⁵⁰ BC Hydro Report, p.41, pdf p.46, underline added.

⁵¹ Exhibit A-9, p.6.

⁵² BC Hydro Report, p.45, pdf p.50, underline added.

the economics and potential of a wide range of measures that will inform future DSM Plan filings.”⁵³

BCSEA-SCBC concur with FBC that “the current regulatory environment is supportive of additional DSM programs, including low income programs, as long as the measures are cost-effective on a TRC basis.”⁵⁴

III. Conclusion

To emphasize the point stated above, BCSEA-SCBC respectfully submit that the Commission should report to the Minister that the complaint that RIB rates are especially burdensome for Without Gas Access customers as a whole compared to With Gas Access customers as a whole is not substantiated. The Commission should report that not only do RIB rates produce significant energy savings, RIB rates are financially beneficial to most customers in the Without Access to Gas areas and to most low-income customers in the Without Access to Gas areas. The bill impact of the RIB rates falls only on the highest-consuming customers regardless of whether they are in Without Gas Access areas or With Gas Access areas. Any customer paying the Step 2 rate in a billing period has the opportunity to save more money by reducing consumption through conservation and efficiency measures than they would under a flat rate.

All the above is respectfully submitted.

Yours truly,

William J. Andrews



Barrister & Solicitor

⁵³ FBC Report, p.25, pdf p.29, underline added.

⁵⁴ BCSEA-SCBC understand “TRC” here to included the cost-effectiveness tests in the DSM Regulation.