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July 10, 2018

Anarchist Mountain Community Society and Regional District of Okanagan-Similkameen
c/o Bennett Jones LLP
2200 – 1055 West Hastings Street
Vancouver, BC V6E 2E9

Attention: Mr. David Bursey

Dear Mr. Bursey:

Re: FortisBC Inc. (FBC)

Project No. 1598939

2017 Cost of Service Analysis and Rate Design Application (the Application)

Response to the Anarchist Mountain Community Society and Regional District of Okanagan-Similkameen (AMCS-RDOS) Information Request (IR) No. 2

On December 22, 2017, FBC filed the Application referenced above. In accordance with the British Columbia Utilities Commission Order G-101-18 establishing the Regulatory Timetable for the review of the Application, FBC respectfully submits the attached response to AMCS-RDOS IR No. 2.

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

Sincerely,

FORTISBC INC.

Original signed:

Diane Roy

Attachment

cc (email only): Commission Secretary
Registered Parties

1.0 Topic: Residential Rate (RS1) Design

Reference: FBC Response to BCUC IR#1, Attachment 38.8, Option IR 38.4; BC Hydro 2008 Residential Inclining Block Application, p I-9 and I-11; FBC Response to CEC IR#1, Request 1.1, p 2.

In the 2008 BC Hydro RIB Application, BC Hydro stated:

> "The desire to incorporate an incentive for conservation into its rates has prompted BC Hydro to apply for approval of a rate structure that sends a price signal to customers that better reflects the higher long-run cost of new electricity supply. In the current and foreseeable future, where the long-run cost of new electricity supply is substantially higher than the embedded cost of BC Hydro's existing assets, such a rate structure sends price signals that will encourage economically efficient electricity consumption choices and, thus, electricity conservation".

> "The Step-2 Rate in the proposed RIB rate structure better reflects the higher cost of new electricity supply than a flat rate structure. Thus, compared to a flat rate, BC Hydro's RIB rate proposal is more likely to incent economically efficient choices and result in electricity conservation".

> "The Step-2 Rate provides a better reflection of the long-run incremental costs of new supply than the otherwise applicable flat rate, while not exceeding a reasonable estimate of those costs".

In response to CEC IR#1, Request 1.1, FBC states:

> "FBC's proposed default flat rate structure can be considered to be a neutral option, meaning that although it does not necessarily encourage or discourage increased electrification, efficient use of the system and energy conservation, it does strike a balance among all of the conflicting qualities of the rate structures".

Request

1.1 Does FBC agree that to achieve economically efficient consumption choices the rate structure needs to reflect the cost of supply as part of the correct price signal? If not, please explain.

Response:

Yes. In order to provide appropriate price signals for economically efficient consumption, the cost of power supply needs to be reflected in the rates.

1.2 Does FBC agree that, if the marginal cost of new generation and other marginal costs of providing service are higher than the embedded costs, the economically efficient level of consumption occurs when customers base their consumption choices on the marginal cost of supply? If not, please explain.

Response:

FBC agrees that if the marginal cost is higher than the embedded costs, a rate structure that reflects the marginal cost in the rates can lead to more economically efficient levels of consumption. As explained in FBC's response to BCUC IR 1.79.1.4, FBC's proposed TOU rates for example, were developed using the variance between power supply components as a proxy for short-run marginal cost to calculate the price differential between off-peak, mid-peak and on-peak periods and incent the efficient use of the system. Nevertheless, as explained in various sections of the Application, FBC's current Tier 2 rate is higher than its LRMC.

1.3 Does FBC agree that the original intention of the RIB Rate(as described in BC Hydro's 2008 RIB Application) was to incent energy efficient consumption choices by setting the Tier 2 rate equal to the marginal cost of supply? If not, please explain FBC's view on the original intention of the RIB Rate.

Response:

FBC does not agree. The rationale and objectives stated by BC Hydro in its RIB Rate Application reflect its particular circumstance and were not cited as the original intention of the RIB rate for FBC. FBC was under no direction to set the Tier 2 rate equal to the marginal cost of supply and did not propose to do so. The primary intent of FBC's RIB rate is to incent customers to use less electricity.

1.4 Please confirm that FBC's marginal cost is 9.6 cents/kWh.

Response:

Confirmed. FBC's LRMC is $96 per MWh, or 9.6 cents per kWh, stated in real dollars (2015$) at the point of interconnection to FBC's System and based on FBC's preferred portfolio A4 as presented in the 2016 Long Term Electric Resource Plan (LTERP). Adjusted to 2017$, the LRMC is $99 per MWh. Please also refer to the response to BCOAPO IR 1.42.1. In the LTERP decision published on June 28th 2018, the BCUC did not accept FBC's proposed preferred portfolio in its entirety, specifically accepting up to the year 2024 and rejecting the years 2025 to the end of the planning horizon (G-117-18, Directive 1).

1.5 Please confirm that the RCR's current Tier 2 rate is 15.6 cents/kWh, which is 63% above the marginal cost.

Response:

The RCR's current Tier 2 rate is confirmed to be 15.617 cents per kWh. The Tier 2 rate is 58 percent above the long run marginal cost expressed in 2017$ of 9.9 cents per kWh. Please note the Tier 2 rate is a delivered rate while the LRMC is stated at the point of interconnection to FBC's system and the two rates are not directly comparable.

1.6 Does FBC agree that having the Tier 2 rate significantly above marginal cost promotes economically inefficient consumption choices in that those customers with significant consumption in Tier 2 will tend to over-conserve (i.e. it would be economically efficient to add more supply rather than reduce demand to that level)? If not, please explain.

Response:

FBC does not agree that having a Tier 2 rate above the marginal cost will lead to "over-conservation" where it would be economically efficient for customers "to add more supply rather than to reduce demand". This is because:

- Customers cannot "over-conserve": As evidenced by third party studies, the utility customers (particularly residential customers) have a low price elasticity of demand. This means that changes in prices do not lead to significant changes to the demand for

electricity. In other words, the customers' ability to conserve energy is limited. This is supported by the comments received from some of FBC's customers during workshops regarding their inability to further decrease their bill amounts despite their best efforts (including the investment made for energy conservation).

- The marginal cost of power supply available to these customers may be higher than the current Tier 2 rate: While FBC's marginal cost of power supply is lower than the current Tier 2 rates, the same cannot always be said for the marginal cost of power generated by the customers. Therefore looking from the customers' perspective, it may not be more economically efficient to add more supply (which means generating their own electricity) rather than reduce demand as suggested in the question.

From the customer's perspective, the main effect of the variance between the Tier 2 price and FBC's marginal cost is in economic fairness. As explained in Section 6.1.5 of the Application, FBC's proposal will help to improve the intra-class fairness since low use customers, who currently benefit from the lower Tier 1 rate and the low Customer Charge at the expense of higher consuming customers, would pay a more equitable share of the fixed costs they impose on the system.

Nevertheless, FBC notes that from the economic efficiency perspective and excluding the government climate policy considerations, in the event of excess generation capacity it may be more economically efficient to invest in increasing the demand (not supply as suggested in the question) rather than invest in conservation efforts. The recent government focus on increased electrification efforts can be partly explained by BC's potential generation capacity surplus in future and the need for increased demand.

On a theoretical level, in competitive markets if a firm is producing at levels where the marginal revenue (price) is greater than the marginal cost, then by producing one more unit the firm can gain more revenue than it does in costs and thereby makes a marginal profit. Therefore a rational, profit-maximizing firm can increase profits by increasing the supply (output) up to the point where marginal cost and marginal revenue (price) reach the equilibrium. In the regulated world of public utilities however, the rates are set by the regulator (and not the utility). It will be the regulator's responsibility to set the rates in a way that strikes a balance among competing interests and policy considerations (the regulators' decisions are not generally based on profit-maximization for the utility). What would add to profit in the case of a non-regulated company, would actually lead to lower rates that benefit all customers in the case of a regulated company like FBC.

1.7 Does FBC agree that, for an electric utility like FBC, where the marginal cost of supply is below embedded costs, the flat rate sends the correct price signal for achieving economically efficient consumption choices? If not, please explain what the correct price signal would be to incent economically efficient consumption behaviour.

Response:

FBC disagrees with the premise of the question. As explained in response to BCUC IR 1.2.3, FBC's LRMC for new incremental generation is higher than FBC's current embedded cost of generation. The current Tier 2 rate however is higher than both FBC's embedded and long-run marginal cost. FBC continues to believe that a flat rate is an appropriate rate structure for FBC's residential customers as it strikes an appropriate balance among various rate design considerations and there is no cost-based rationale to continue with an inclining block rate.

2.0 Topic: Residential Rate (RS1) Design

Reference: BCUC Decision, FBC RIB Rate, January 13, 2012, p 21; FBC 2017 COSA & Rate Design Application, Section 6.1.5, p 71. FBC Response to CEC IR#1, Request 31.2, p 73.

In its current Application, FBC states:

> "There is no cost basis for the current levels of the Tier 1 and Tier 2 rates that form the RCR, nor for any particular threshold and tiered pricing"

In response to CEC IR#1, Request 31.2, FBC states:

> "One of the objectives of the original RIB Application was to introduce price signals for residential customers that *reflect* the marginal cost of electricity being higher than the embedded cost of electricity. The objective (of the RCR), however, was not to set any rate component at the cost of new energy."

In the BCUC Decision on FBC's 2011 RIB Rate Application, the BCUC stated:

> "In a perfectly competitive market, the price of any increment of a resource will be driven to the full economic cost of that increment, and will therefore be an 'economic efficient' price which achieves optimal resource utilization. In the absence of market pricing, as is the case in the regulated sector, the challenge for utilities and regulators is to establish an economic efficient price, or rate, that encourages energy conservation while ensuring that the utility's revenue requirement is met. While an arbitrary increase in a rate may well encourage less consumption, it may not be an economically efficient reduction in consumption. In any event, given revenue requirement constraints, a flat rate cannot simply be increased. An inclining block structure, which charges a lower rate for amounts consumed below a threshold and a higher rate above that threshold, can potentially be structured to be both economically efficient and meet the utility's revenue requirements. However, a RIB rate structure that is incorrectly priced can have disadvantages and unintended consequences, the principal among them being that customers overuse underpriced resources and underuse overpriced resources. The choices made are suboptimal and the consequence is lower productivity and/or lower conservation. A rate structure based on sound rate-making principles can ensure that what consumers pay will reflect the true economic value of the energy they buy, and that energy resources find their best possible uses."

Request

2.1 Does FBC agree that the RCR was <u>not</u> "structured to be both <u>economically efficient</u> and meet the utility's revenue requirements" since it resulted in a

situation where only a minority of customers have a significant percentage of their consumption in Tier 2 and the Tier 2 rate is significantly above marginal cost? If not, please explain.

Response:

FBC agrees that the current design of the RCR rates with the Tier 2 rates higher than the marginal cost may not be aligned with economic efficiency theory and cost causation. In terms of meeting the utility's revenue requirements, the RCR was structured to be revenue neutral with the flat rate structure that preceded it.

From the economic theory perspective, the inclining block rate can be used to improve economic efficiency when the marginal cost is higher than the embedded costs. However as stated in the preamble above, it is difficult to determine the appropriate design of the inclining rate structure (the appropriate threshold level and/or the variance between Tier 1 and Tier 2 rates) that can achieve this goal. Further and as the above question suggests, a review of economic texts indicate that due to certain characteristics of natural monopolies such as their significant fixed costs, strict marginal cost pricing may not provide the utility with sufficient revenue to operate.

As explained in Section 6.1.5 of the Application, the RCR was initially set to achieve lower residential class energy use, particularly for those customers with consumption levels over the Tier 2 threshold, and not necessarily to improve economic use of the system (to increase load factor and reduce the peak load). A TOU rate structure is a better way of achieving both of these goals.

2.2 Does FBC agree that the RCR has a "RIB rate structure that is incorrectly priced" and has therefore had "disadvantages and unintended consequences, the principal among them being that (low-use) customers overuse underpriced resources and (high-use) customers underuse overpriced resources". If not, please explain.

Response:

As stated in the preamble there is no cost basis for the current levels of the Tier 1 and Tier 2 rates that form the RCR, nor for any particular threshold and tiered pricing. FBC has applied in the Application to remove the RCR as the default rate for residential customers. Therefore, FBC agrees that the current RCR is not appropriate. FBC's Application has also discussed the unintended consequences of the current RIB rate design including the issue of some customers

replacing electricity with other more GHG intensive sources of energy. Please also refer to FBC's response to BCUC IR 1.4.3 regarding the unintended consequences of the current RIB rate.

2.3 Does FBC agree that the RCR has been encouraging less consumption through an "arbitrary increase in a rate", since, as FBC has acknowledged in Section 6.1.5 of its application: "there is no cost basis for the current levels of the Tier 1 and Tier 2 rates that form the RCR, nor for any particular threshold and tiered pricing"? If not, please explain.

Response:

The phrase "arbitrary increase in a rate" implies that the Commission set rates based on random choices without any thinking or reasoning. FBC believes it would be better to characterize the current RIB rate pricing as based on the Commission's judgement and the required threshold for achieving government energy policy objectives rather than an arbitrary increase. Nevertheless, FBC acknowledges that the material put forth in this Application points to the unintended consequences of the current pricing mechanism and that FBC's proposal will strike a better balance among competing rate design considerations and customer impact.

3.0 Topic: Residential Rate (RS1) Design

Reference: FBC Response to BCUC IR#1, Request 38.1, p 102; FBC Response to AMCS/RDOS IR#1, Request 8.1, p 17; FBC Response to CEC IR#1, Request 31.2, p 73.

In response to BCUC IR#1, Request 38.1, FBC states:

> "In theory, the reference to LRMC in setting a higher second block rate, as in the RCR, is to provide a price signal for conservation that is linked to the long run costs that will be avoided if the conservation is undertaken. However, for FBC the Tier 2 rate of the RCR has never been set with reference to the LRMC. In the original RIB Application, the Tier 1 and Tier 2 rate were calculated in order to ensure that 95 percent of customers would experience bill impacts no greater than 10 percent".

In response to CEC IR#1, Request 31.2, FBC states:

> "One of the objectives of the original RIB Application was to introduce price signals for residential customers that reflect the marginal cost of electricity being higher than the embedded cost of electricity. The objective (of the RCR), however, was not to set any rate component at the cost of new energy."

In response to AMCS/RDOS IR#1, Request 8.1, FBC states:

> "FBC is not aware of policy and legislative imperatives that require a conservation price signal that is above the Long-Run Marginal Cost (LRMC) of new electricity generation and has not stated or inferred that this is the case. The term "policy and legislative imperatives" refers to the objectives articulated under the *Clean Energy Act* (CEA). Section 3 (1) (b) (iv) of CEA discusses "the use of rates, including rates to encourage energy conservation or efficiency". However, government regulations and the CEA in particular are not prescriptive as to how these objectives should be achieved and do not require a "conservation price signal" that is above the LRMC of new electricity generation. The Commission may consider what type of rate structure can better achieve these objectives or other objectives, and how the elements of the determined rate structure should work together. In the 2012 RIB rate decision, the Commission determined to set the tier two rate above the FBC generation LRMC".

In the 2008 BC Hydro RIB Application, economic efficiency was BC Hydro's guiding principle for determining how much conservation is desirable.

Request:

3.1 How did FBC's decision not to set any rate component at the cost of new energy "better achieve" the CEA objectives of encouraging energy conservation or efficiency?

Response:

With the 2011 Application, FBC proposed a pricing structure that satisfied the objectives of the proposal filed at the time, including the constraint on bill impact, and the energy rates that were current at the time. There was not a decision to preclude the use of an energy referent, any more than there was a similar decision to not structure the rate in a number of other possible variations.

Also, at the time of the original RIB Application, setting the cap for the Tier 2 rate at the long run marginal cost (LRMC) would quickly result in a return to a flat rate given that subsequent rate increases would all be reflected in only the Tier 1 rate. The setting of the Tier 2 rate higher than the LRMC did in fact discourage energy use since it maintained a price signal to do so.

In any case, the manner in which the rate elements were determined in 2011 has little, if any, relevance to whether the Company's proposal to remove the RCR as the default residential rate should be approved in the circumstances before the Commission now.

3.2 Was an objective of the RCR to benefit the majority of customers by reducing their electricity bills below what they would otherwise be charged under a flat rate?

Response:

No. As stated in the response to AMCS-RDOS IR 2.1.3, the primary intent of a RIB rate is to incent customers to use less electricity. The original objectives of the RIB rate are as described in Section 3.2 of the 2011 Application.

3.3 Please provide details of the RCR's objective of promoting "conservation".

Response:

It is unclear what details are being requested. The conservation objective was straightforward and was achieved by implementing a rate that encouraged customers to conserve by increasing electricity rates as consumption rose.

3.4 What is FBC's guiding principle for determining how much conservation is desirable?

Response:

In the original RIB Application, the achievable conservation was considered in light of the customer bill impact, and a balance between the two factors informed the Commission decision to approve the rate proposed by the Company. A greater conservation impact could have been achieved, but not without contravening the customer bill impact levels approved by the Panel.

As a general matter, FBC believes that conservation measures should be considered as long as they are cost effective as measured pursuant to the Demand Side Measures Regulation related to the *Utilities Commission Act* (UCA).

3.5 Does FBC agree that, in allowing the Tier 2 rate to rise above the marginal cost of electricity, customers are incented to make uneconomic investments in demand reduction rather than economic investments in demand reduction. If not, please explain.

Response:

Under specifically defined conditions, economic efficiency is maximized (in the long run) where price equals long run marginal cost. Therefore, if price is either higher or lower than long run marginal cost, efficiency will not be maximized.

3.6 What, if any, are the economic or environmental benefits of allowing the Tier 2 rate to rise above the marginal cost of electricity?

Response:

FBC has not claimed any economic or environmental benefits from the implementation of the RCR, or its current structure. From a theoretical perspective, having the Tier 2 rate above the marginal cost would be suboptimal from an economic efficiency perspective; however, FBC does not believe there is any way to measure that with respect to the RCR. Similarly, it would be very difficult to ascertain whether there has been an increase or decrease in environmental benefits due to the implementation of the RCR. The Company notes however that the lack of a clear cost basis for the rate is the primary reason why it has applied to phase the RCR out in favour of a flat rate.

3.7 Since the RCR resulted in the majority of customers paying rates below the flat rate, does FBC agree that the RCR provided no incentive, relative to the flat rate, to the majority of customers to increase their efficiency or reduce their demand? If not, please explain.

Response:

Please refer to the response to AMCS-RDOS IR 2.6.3.

3.8 Does FBC agree that, given how the RCR is structured, a minority of customers are required to undertake uneconomic investments in conservation while the majority of customers are not required to undertake any conservation actions? If not, please explain.

Response:

No customers are “required” to undertake investments in conservation. FBC has no basis upon which to assess the degree to which the RCR may influence investment decisions since it cannot assess the extent to which a customer’s investment decision may be economic in their particular circumstances. It should be noted also that customers with net annual bill decreases

1 under the RCR may still experience the higher price signal of the Tier 2 rate at certain times due
2 to seasonal consumption variations.

3 Customers may also consider non-financial factors in their decision-making.

4 As stated, FBC is applying to remove the RCR primarily due to a lack of cost-causation support
5 for the structure.

6

4.0 Topic: Residential Rate (RS1) Design

Reference: FBC 2017 COSA & Rate Design Application, Section 6.1.5, p 71; FBC Response to BCPIAC IR#1, Request 48.3, p 82; FBC Response to KSCA IR#1, Request 8.6.1, p 81; FBC Response to BCUC IR#1, Request 48.3.1, p 146; FBC 2013 RCR Evaluation Report, Appendix C, Conservation Results Methodology, p 23-24,

In its current Application, FBC states:

> "These rates were initially set to achieve a desired result (lower residential class energy use)."

In Response to BCPIAC IR#1, Request 48.3, FBC states:

> "Energy efficiency is not necessarily always aligned with 'conservation objectives'. In other words, energy conservation (less electricity use) may or may not result in more efficient use".

In Response to KSCA IR#1, Request 8.6.1, FBC states:

> "FBC also notes that burning wood for heating purposes instead of using electricity does not necessarily indicate 'conservation efforts' (it indicates a shift from one energy source to another which may or may not be coupled with conservation efforts) and is not aligned with government policy for increased electrification".

In Response to BCUC IR#1, Request 48.3.1, FBC states:

> "Because the measured conservation impact was only slightly below the medium case results, FBC expects that the timeline for achieving the expected savings would be similar to the initial assumptions and that the majority of the expected savings have been realized".

In FBC 2013 RCR Evaluation Report, Appendix C, Conservation Results Methodology, p 23-24, EES Consulting states:

> "For electric space heat customers, and to a lesser extent for customers with no gas availability, the higher block 2 rate impacts a greater portion of their bills and kWh usage. While the regression results for these groups were not robust, the findings did seem to infer a much higher elasticity in the range of -0.23 to -0.30 for these customers. Because electric heat customers see a larger bill impact, they also have a bigger reduction in their energy use. And because there has not been sufficient time for much change in heating source, it is likely that these customers are reducing their usage through lowering their thermostats. This behavioral change may not continue over the long term for all customers, and the

higher bills may eventually lead to a shift away from electric heat. While it may be desirable for the RCR rate to promote the efficient use of energy, in the short term it may be coming at the expense of customers' comfort levels in their homes".

Request

4.1 As reported by EES Consulting in FBC's 2013 Information Report, electric heat customers may respond in three different ways to higher bills they experience under the RCR:

(1) energy efficiency improvements;

(2) behavioral change, such as sacrificing comfort by turning down the thermostat; and

(3) shifting away from electric heat to other energy sources, such as wood or natural gas.

Did FBC design the RCR to incent all three types of responses to achieve lower residential class energy use? If not, please explain what actions the RCR is intended to incent and how the RCR was structured to target those actions.

Response:

The EES commentary in the 2013 Information Report described typical ways that a customer would be likely to respond to the price signal contained in the RCR. However, the RCR was not designed to target any particular conservation behaviour over another but rather to generally incent customers to reduce consumption by whatever measure was applicable to their circumstances.

4.2 Have all three types of responses been included in FBC's forecast "conservation" impact?

Response:

It is reasonable to assume that customers have responded to the price signal included in the RCR at least to some extent through each of the three response types. FBC cannot however provide any quantitative assessment of the degree to which each response has contributed to the reduction in energy use attributable to the implementation of the RCR. The analysis

provided to the Commission included only an estimate of the overall reduction in the energy use and while the EES commentary included in the 2013 Information Report addressed likely customer responses to the RCR, these were in no way original objectives of the RCR or metrics against which the success of the RCR was proposed to be measured.

4.3 Have all three types of responses been included in FBC's measured conservation impact?

Response:

Please refer to the response to AMCS-RDOS IR 2.4.2.

4.4 Has FBC analyzed the relative share of the actual reduction in electricity demand incurred since 2012 attributable to each type of response? If so, please provide the analysis.

Response:

Please refer to the response to AMCS-RDOS IR 2.4.2.

4.5 Given its response to KSCA IR#1, FBC does not appear to view shifting from one energy source to another as a "conservation effort" and it recognizes that such shifting "is not aligned with government policy". How has FBC ensured that, in evaluating the success of the RCR against its conservation objective, it has not included reductions in demand due to fuel shifting as a "conservation" response?

Response:

Please refer to the response to AMCS-RDOS IR 2.4.2.

4.6 FBC claims that the majority of expected savings have been realized. How much of the realized savings are due to customers investing in energy efficiency home improvements that will have a lasting impact and how much is due to customers engaging in sacrificial behaviour, such as turning down the thermostat or curtailing electricity-using activities, which are generally temporary in nature and reversible?

Response:

Please refer to the response to AMCS-RDOS IR 2.4.2.

5.0 Topic: Residential Rate (RS1) Design

Reference: FBC Response to BCUC IR#1, Request 48.2, p 144

In Response to BCUC IR#1, Request 48.2, FBC states:

> "FBC believes that it is a reasonable assumption that much of the 'low hanging fruit' has been picked over the last five years and this is supported by the comments of at least some residential customers."

Request:

5.1 What does FBC mean by the term "low hanging fruit"?

Response:

FBC adopts a common definition of "low hanging fruit" as the obvious or easy things that can be most readily done or dealt with in achieving success or making progress toward an objective. In the context of conservation measures, examples are changing the thermostat settings in a residence and changing to energy efficient lighting.

5.2 Approximately how many residential customers have made this comment? Please provide copies of their written statements.

Response:

FBC has indicated that the comment has been made by "…at least some residential customers", and does not have a formal tracking system for the occurrences. This sentiment has been expressed at public open houses, as part of the written submissions to the BCUC RIB Rate review process and during this process as part of some of the letters of comment, particularly Exhibits E-3, E-4, E-6, and E-8.

6.0 Topic: Residential Rate (RS1) Design

Reference: FBC Response to BCUC IR#1, Request 48.4, p 146

In Response to BCUC IR#1, Request 48.4, FBC states:

> "It seems reasonable to FBC to conclude that where a low consumption customer and a high consumption customer have both undertaken reasonable conservation measures and are not viewed as using energy in an inefficient manner, imposing an inclining block rate on customers that results in higher bills for higher consumption that may be the result of occupancy levels or dwelling size could be considered inequitable".

Request:

6.1 What constitutes "reasonable conservation measures", by which the customer is not viewed as using energy in an inefficient manner?

Response:

Nothing in the referenced passage hinges on a definition of reasonable conservation measures. The point of the commentary is that where two customers have both undertaken whatever conservation measures their particular circumstances allow, it may be the case that due simply to occupancy level or dwelling size, one may still be left with higher consumption that would result in relatively high bills under the RCR. Nothing in occupancy level or dwelling size is indicative of consumption that could be considered wasteful or inefficient in and of itself. This seeming disparity in customer outcomes is supportive of the Company's proposal to remove the RCR as the default residential rate.

6.2 Are these "reasonable conservation measures" the same for high consumption customers as they are for low consumption customers?

Response:

In the context of the discussion and the use of "reasonable" contained in the response to AMCS-RDOS IR 2.6.1, there is no differentiation between high and low consumption customers.

6.3 Does FBC believe the RCR has incented low consumption customers to undertake these "reasonable" conservation measures? Please explain and provide FBC's evidentiary support for that belief.

Response:

The analysis of the conservation impact of the RCR completed to date has not differentiated customers based on consumption or the types of conservation activities that have been undertaken. Studies related to this response are not therefore available. From interactions with customers, however, the Company is aware anecdotally that there are low consumption customers that have benefitted from the implementation of the RCR that have undertaken conservation initiatives because they would have anyway, they see benefit in reducing their bills generally, or under the misconception that they are negatively impacted by the RCR.

6.4 How does FBC determine whether a customer is using energy in an inefficient manner? Does FBC make that determination before or after conservation measures are taken?

Response:

FBC does not routinely make assessments of whether or not a customer is using energy efficiently. The Company will, at the request of customers, assess energy usage and suggest ways to lower consumption as part of ongoing Conservation and Energy Management programs.

6.5 In response to BCUC IR#1, Request 48.4, FBC states: "imposing an inclining block rate on customers that results in higher bills for higher consumption that may be the result of occupancy levels or dwelling size could be considered inequitable". Does FBC agree that

6.5.1 imposing an inclining block rate on customers that results in higher bills for higher consumption that may be the result of using electricity, rather than fossil fuels, for space and water heating could also be considered inequitable?

Response:

FBC has addressed the availability of alternate fuel sources and choice of heating sources in the Application and as part of the first round of IRs, including AMCS-RDOS IRs 1.4.1 and 1.5.1. If the question relates more to the availability of fossils fuels (i.e., natural gas) rather than a choice to use electricity for domestic heating, then the Commission has already determined that the RCR is not unduly unjust, discriminatory, or unfair. To the extent that any party holds an opinion that the RCR is inequitable on any basis, whether or not there is general agreement on the point, the fact remains that the residential proposal contained in the Application will address the concern.

6.5.2 such outcomes are inequitable? If not, please explain.

Response:

FBC does not understand what "outcomes" are being referenced that are not addressed in the preceding question and response.

7.0 Topic: Residential Rate (RS1) Design

Reference: FBC Response to BCUC IR#1, Request 4.3, p 13; FBC Response to BCUC Request 79.1.4, p 241; FBC Response to CEC IR#1, Request 1.1, p 1-2

In its response to BCUC IR#1, Request 4.3, FBC states:

> "As explained in Section 3.3.2 of the Application, FBC's existing RIB rate structure was initially developed to satisfy some of the objectives advanced in the CEA, including energy conservation and efficiency, GHG emission reductions and encouraging fuel switching to lower carbon intensity energy sources."

In its response to CEC IR#1, Request 1.1, FBC states:

> "As their name implies, residential conservation rates are applied to conserve electricity usage, which is somewhat contrary to the purpose of electrification in the residential sector. For example, a customer that has maximized its electrification potential with electric space and water heating appliances, electric stove and electric vehicle can pay considerably more than a customer who only uses electricity for non-heating purposes and therefore is charged under the first block rate. The RCR rates also do not necessarily promote the efficient use of the system as a low use customer can consume most of its energy during the peak time and still be charged under the first block while a high use customer who uses electricity in both off-peak and on-peak periods can be charged under the higher rate block. "

In Response to BCUC IR#1, Request 79.1.4, FBC states:

> "…in the short term FBC does not have the need for new resources and has sufficient capacity to meet load growth for several years".

Request

7.1 What environmental benefits has the RCR achieved through its "conservation objective", given that FBC's generating system relies on hydropower rather than fossil fuel and has sufficient capacity to meet load growth for several years?

Response:

FBC has not ascribed any environmental benefits to the implementation of the RCR. As the question alludes to, the RCR was established under the Province's initiatives to promote energy conservation and efficiency through the CEA and portions of the UCA – any environmental benefits or costs of the RCR are more incidental in nature.

8.0 Topic: Residential Rate (RS1) Design

Reference: FBC Response to BCUC IR#1, Request 6.3, p 19

In Response to BCUC IR#1, Request 6.3, FBC states:

> "There will be low-income customers spread throughout the range of annual consumption. For this reason, FBC does not view the RCR removal as having an impact that either adds to or reduces the burden on customers based on income".

Request:

8.1 Does FBC agree that the RCR has added to the financial burden of low income customers that live in dwellings (self-owned or rented) that rely entirely on electricity for space and water heating? If not, please explain.

Response:

The addition of the qualifiers related to domestic heat and hot water do not change the views included in the referenced IR response. Please see the full content of that response for FBC's comments as well on the present statutory environment.

8.2 Does FBC agree that the removal of the RCR could reduce the financial burden of those low-income customers who live in dwellings that rely entirely on electricity for space and water heating? If not, please explain.

Response:

As stated in the response to AMCS-RDOS IR 2.8.1, the addition of the qualifiers related to domestic heat and hot water do not change the views included in the referenced IR response. Please see the full content of that response for FBC's comments as well on the present statutory environment.

8.3 Does FBC agree that the reduction in the financial burden on a high use, low-income customer, resulting from the removal of the RCR, will, in dollar terms, be

much greater than the associated increase in the financial burden on a low-use, low-income customer? If not, please explain.

Response:

It is the case that the removal of the RCR will, on average, provide a larger financial benefit (in dollar terms) to high consumption customers than the average financial detriment experienced by low consumption customers. This is the case at all income levels.

It is difficult to generalize about the relative financial burden that may result since there will be high consumption-high income customers for which the bill decrease may have a relatively minor impact as compared to the additional burden faced by a low income-low consumption customer.

Please refer to FBC's full response to BCUC IR 1.6.3 for discussion of the statutory context for these AMPC-RDOS IRs.

9.0 Topic: Residential Rate (RS1) Design

Reference: FBC Response to AMCS/RDOS IR#1, Request 10.3, p 20 and Request 3.1, p 5&6.

In Response to AMCS/RDOS IR#1, Request 10.3, FBC states:

> "…the general expectation would be that low use customers are in general and to some degree being subsidized by high use customers. This issue has been explored in previous Commission processes with regard to the RCR, such as the 2011 RIB Rate proceeding and the 2015 BCUC RIB Rate Review. In the context of all goals and objectives for residential electricity rates, such as achieving a satisfactory level of cost recovery from customers (and other Bonbright principles) and at the same time serving provincial policy objectives like energy conservation and efficiency, any inherent cross-subsidization between high and low use customers has not been found by the Commission to be inappropriate".

Request:

9.1 Please elaborate on why it was necessary and appropriate to structure the RCR so high use customers subsidize low-use customers? How did this better satisfy the Bonbright principles and the policy objectives of energy conservation and efficiency?

Response:

A basic premise in the introduction of an inclining block rate is that energy should become increasingly expensive as the level of consumption rises. Given that the overall revenue to be collected from the residential class is fixed, there is an inevitable shift in the revenue burden from low to high consumption customers.

In the Decision related to the Company's 2009 Rate Design (G-156-10), the Commission Panel expressed that "…Bonbright Principle 3 regarding the price signals encouraging conservation should trump Principle 2"[1] (Fair apportionment of costs among customers (appropriate cost recovery should be reflected in rates).

9.2 A customer using electricity for space and water heating who consumes 30,000 kWh/yr or more would have to reduce their consumption by at least 50% to avoid a bill increase relative to the flat rate. Does FBC believe that such a reduction is

[1] G-156-10 Decision, Page 57.

achievable through reasonable conservation measures? If so, please provide analysis to support this view.

Response:

The assertion put forward in this question is incorrect. In the sample of 89,661 residential accounts, there are 496 with consumption between 29,000 and 31,000 kWh per year (averaging 29,913 kWh). Under the RCR, the average annual bill for these customers is $4,339 and under the current flat rate, the average bills would be $3,739, or $600 lower. In order for these customers to be, on average, no worse off under the RCR than the flat rate they would need to reduce annual consumption by 3,842 kWh, assuming that this consumption is billed at the Tier 2 rate ($600/$0.15617/kWh=3,842 kWh).

This represents a reduction in consumption of approximately 13 percent on average.

9.3 Does FBC agree that it is likely many of the 5% of customers whose consumption is still greater than 25,000 kWh are incurring bills higher than under a flat rate because it is not possible for them to reduce their consumption to the flat rate equivalent level through reasonable conservation and energy efficiency measures?

Response:

FBC has no basis upon which to speculate on whether or not the proposition expressed in this question is likely. The Company has already stated that the efforts of its customers with respect to conservation measures already undertaken supports the residential rate proposals included in the Application.

9.4 Based on the "Current RCR" Table provided by FBC in response to AMCS/RDOS IR#1 Request 3.1, would it be correct to conclude that high use customers this year will pay about $6.6 million extra on their bills compared to what they would pay under the flat rate? If not, please explain.

Response:

Given that the residential revenue requirement is essentially fixed, it is correct to conclude that customers with relatively high consumption will pay more than they would under a flat rate while relatively low consuming customers will pay less. It is also the case that there are fewer customers paying more under the RCR than there are customers that pay less. The referenced $6.6 million is the total amount of revenue collected from those customer groups that, on average, pay more with the RCR. Whether this group as a whole is considered "high use" would be a matter for debate. It is incorrect to characterize this amount as "extra" since it is the amount collected pursuant to an approved rate schedule. As FBC understands the basic premise of the question, it can confirm that the structure of the RCR prompts a redistribution of the revenue responsibility form one group of customers to another based on consumption.

9.5 Given the RCR is revenue neutral, will low-use customers pay about $6.6 million less on their bills compared to what they would pay under the flat rate? If not, please explain.

Response:

Please refer to the response to AMCS-RDOS IR 2.9.4.

9.6 Is $6.6 million a reasonable estimate of how much high use customers will subsidize low use customers this year? If not, please explain.

Response:

The figures in the table are based on a sample of 2016 consumption at 2018 rates, and do not account for 100 percent of current customers. FBC does not have the data available to provide a comparable number for 2018, but assumes that considering all load and customers would result in a higher value than produced by the sample information.

9.7 According to the "2019" Table provided by FBC in response to AMCS/RDOS IR#1 Request 3.1, is it correct that, in Year 1 of FBC's proposed phase-in of the flat rate, high use customers would still pay about $5.4 million extra on their bills compared to what they would pay under the flat rate and low-use customers would pay about $5.4 million less? If not, please explain.

Response:

Noting FBC's objection to the use of the word "extra" in the response to AMCS-RDOS IR 2.9.4 and assuming that FBC's residential rate proposals are approved, the information contained in the 2019 Table can be described in exactly the same manner as provided in that response, with the exception that the rates used are those proposed for 2019. The revenue recovered from higher use customers in each year of the phase-out period is reduced from the previous year while the revenue collected from lower use customer is increased. This gradual reduction is the mechanism proposed to mitigate against large annual bill increases for the lower consumption customers.

9.8 Is it correct that, under FBC's phase-in proposal, high use customers will pay about $14.5 million extra and low-use customers will be subsidized by a similar amount when compared to an immediate return to the flat rate? If not, please explain.

Response:

It is the case that under the RCR on an annual basis, some customers will pay more than they would under a flat rate, and some customers will pay less. The group that pays more will on average have higher consumption than the group that pays less. FBC cannot simply agree to the statement as written because it does not consider all the customers in the group that pay more to be "high use customers" and would not characterize the impact of the RCR as a subsidy. In addition, since the data is based on a sample, dollar values do not represent the impact of the entire customer base. However, it is the case that the phase out of the RCR will continue the current effect of the RCR that sees higher use customers and lower use customers have offsetting aggregate bill impacts.

9.9 Does FBC believe it is "appropriate" for high use customers to subsidize low use customers by a further $14.5 million so that low use customers, who have had their bills subsidized since 2012, do not experience a bill increase greater than 3.5% per year. If so, please explain why?

Response:

FBC does not agree with the term "subsidized" in the context used in the preamble.

As explained in the Application, FBC has sought approval of the rate proposals included in the Application because it considers them to be appropriate and to best balance the competing objectives of rate design, while also considering bill impacts across its customer base. The purpose of this regulatory process is to review FBC's proposals, resulting in a Commission determination on rates that are just and reasonable.

10.0 Topic: Residential Rate (RS1) Design

Reference: FBC Response to BCSEA IR#1, Request 22.6, p 42 and 2011 FBC RIB Rate Application

In Response to BCSEA IR#1, Request 22.6, FBC states:

> "FBC agrees that the RIB rate, as designed and applied to all customers in a similar fashion, is not unjust, unreasonable, unduly discriminatory or unduly preferential."

Request

10.1 Does FBC agree that price discrimination occurs when different customers pay different prices for the same good or service? If not, how would FBC define price discrimination?

Response:

FBC notes that while there are different definitions of price discrimination, the regulatory framework for the approval of rates is as contained in Sections 59 and 60 of the UCA. Specifically, a rate must not be unjust, unreasonable, unduly discriminatory or unduly preferential. The Commission is the sole judge in these matters.

As noted in the referenced IR response, the Commission has already made a determination that the current rate structure meets the requirements set out in the UCA. However, for reasons unrelated to any consideration of price discrimination, FBC has proposed to return to a flat default rate.

10.2 Does FBC agree that, in the 2011 FBC RIB Rate Application, its intention to prevent an increase in the cost of service for 95% of customers resulted in an increase in the cost of service for the remaining 5% of customers, even though both groups of customers were receiving equivalent service?

Response:

Within the context of utility regulation, "cost of service" has a particular meaning which is distinct from the rates or bills applicable to customer consumption. Similarly, "equivalent service" does not equate to service that is differentiated by the level of consumption, as is the approved measure by which the price of a kWh under the RCR is set.

It is the case that the RCR as approved, including the constraint that no more that 5 percent of customers should be subject to annual bill increases greater than 10 percent, results in some customers having higher bills than they would have under an equivalent flat rate, and some customers will have bills that are lower. However, all customers are subject to the same pricing parameters, and all customers with the same level of consumption will be subject to the same rates and be billed the same amount. Pricing that changes with volume is not uncommon (both inclining block and declining block rates are common utility practice) and is not discriminatory.

10.3 Is it FBC's view that it is just and reasonable for the RCR to cause customers who use electricity for space and water heating to pay higher electricity prices than those who use natural gas for space and water heating? Please explain.

Response:

The RCR does not cause customers who use electricity for space and water heating (or that live in apartments instead of houses, or that have particular end-uses or whose dwellings or inhabitants have particular characteristics) to pay higher electricity prices than those who use natural gas for space and water heating. The RCR pricing is based solely on the level of consumption irrespective of the end use to which the electricity is put. FBC has applied to phase out the RCR primarily because there is no cost basis for the pricing to be tied to any particular level of consumption.

10.4 Is it FBC's view that it is just and reasonable for the RCR to cause customers whose household's generate zero or few fossil fuel emissions to pay higher electricity prices than those whose households generate many times more emissions? Please explain.

Response:

FBC does not agree with the premise included in the question. The justness and reasonableness of FBC's rates and the RCR in particular has nothing to do with whether its customers are consumers of fossil fuels or not. FBC is an electric utility and its rates are set by the BCUC – approved rates have met the tests applied by the Commission to be just and reasonable. Further, the Company has no means by which to assess the amount of fossil fuel

emissions of customers. There are high consumption customers that use fossil fuels in their households, and high consumption customers that do not, and the RCR pricing is applied in equal measure to all customers. The impact of RIB pricing on customers with differing levels of access to alternate heating fuels was the topic of a separate Commission process that has concluded. Regardless, FBC has applied to phase out the RCR in the current Application.

10.5 Is it FBC's view that it is just and reasonable to use the same Tier 2 threshold for houses as for apartments? Please explain.

Response:

Please refer to the response to AMCS-RDOS IR 2.10.3.

10.6 Is it FBC's view that it is just and reasonable for the RCR to cause renters of dwellings heated by electricity to pay higher electricity prices when they have little or no ability to undertake conservation actions? Please explain.

Response:

Please refer to the response to AMCS-RDOS IR 2.10.3.

10.7 Is it FBC's view that it is just and reasonable to require a household consuming 30,000 kWh/yr to reduce their consumption by 50% to avoid a bill increase greater than what would be paid under the flat rate, while other households incur bills below what would be paid under the flat rate without having to make any reductions in consumption? Please explain.

Response:

Please refer to the response to AMCS-RDOS IR 2.10.3. Please note also the response to AMCS-RDOS IR 2.9.2 which corrects the error in the question asserting that a 30,000 kWh per year customer must reduce consumption by 50 percent to pay the same bill as under a flat rate.

11.0 Topic: Residential Rate (RS1) Design

Reference: FBC Response to BCUC IR#1, Request 7.1, p 22; FBC Response to BCUC Request 42.2, p 123; FBC Response to BCUC Request 47.3, p 143

In Response to BCUC IR#1, Request 7.1, FBC states:

> "FBC has considered the concept of 'rate shock' generally. What constitutes rate shock is not universally agreed upon, but a common metric to assess rate shock is an increase in rates greater than 10 percent over a short period of time."

In Response to BCUC IR#1, Request 47.3, FBC states:

> "FBC believes that the appropriate point of reference for the rate shock guideline is the total annual bill."

> "FBC believes that any rate design proposal should be implemented in a way that avoids rate shock to the majority of customers."

> "…it may or may not be appropriate to characterize a situation where a small percentage of customers have an annual bill increase of more than 10 percent as rate shock."

In Response to BCUC IR#1, Request 47.3, FBC states:

> "It is a sound and responsible policy to balance the interests of all residential customers, including high use and low use customers."

Request:

11.1 Please describe the circumstances under which, in the case of FBC's RCR, it is "appropriate" to dismiss or differently define the "rate shock" principle for those that make up a "small percentage" of FBC's total number of customers.

Response:

FBC does not see the relevance of this question in the context of either the Application or the referenced information requests. The concept of rate shock is not "dismissed" or "differently defined" depending on the number of impacted customers. Rate shock does not have either a universally agreed upon definition or a rigid application standard. Rate shock represents one of a number of considerations assessed when evaluating the impact of different rate design options.

11.2 What is the threshold percentage range of customers to constitute "a small percentage" of customers?

Response:

FBC notes that the second set of references to this IR are drawn from the response to BCUC IR 1.42.2 rather than 1.47.3 as stated.

There is no specific threshold percentage of customers that FBC would define as small. As the series of responses regarding rate shock explains, the particular circumstances of the situation must be considered and the Commission will assess these circumstances and determine when rate shock may be a potential outcome.

11.3 Customers that are completely reliant on electricity for space and water heating make up a small percentage of customers. Do they deserve less protection from rate shocks than the majority of customers that use natural gas or wood for space and water heating?

Response:

FBC cannot confirm that customers with electric heat and hot water are a small percentage of customers. The 2012 Residential End-Use Study (2012 REUS) found that 40 percent of FBC residential customers rely on electricity for space heating. Regardless, the concept of rate shock has general application as a consideration in the evaluation of a rate design proposal and does not exclude any segment of customers.

11.4 Similarly, rural customers make up a small percentage of customers. Do they deserve less protection from rate shocks than urban customers do?

Response:

Please refer to the response to AMCS-RDOS IR 2.11.3.

11.5 Under the RCR, a high-use electricity customer can experience a rate and dollar increase in their monthly or bi-monthly bills of more than 40% in winter. Does FBC consider that a rate shock? If not, please explain.

Response:

Assuming that the scenario described is comparing a single winter bill under the RCR to a single winter bill under the current flat rate FBC notes that it is impossible for an RCR bill to exceed a flat rate bill by 40 percent. A customer utilizing 10,000 kWh in a single month (i.e., close to FBC's residential average annual consumption in a single month) would have an RCR bill 28.5 percent higher than on the flat rate and it is not theoretically possible to have more than a 32 percent bill difference.

Regardless, this scenario is not rate shock. Rate shock is a consideration when comparing a current rate to a rate that is being proposed. The scenario being described in the question is comparing bills under the current rate (the RCR) to a rate that has not been available to customers since 2012.

The correct comparison upon which to assess rate shock in the context of the Application is the current RCR against the rates proposed in each year of the phase-out which will in fact lead to declining annual bills for high consumption customers each year.

11.6 In Year 1 of FBC's phase-in, a high-use electricity customer can still experience a winter rate shock of 35% or more, ten times larger than the 3.5% bill increase that FBC argues is the maximum allowable. Please explain how defining rate shock in a way that ignores the adverse bill impacts experienced every winter (and in some cases also in summer) by high-use electricity customers, "balances the interests of all residential customers, including high use and low use customers"?

Response:

Please refer to the response to AMCS-RDOS IR 2.11.5 for a discussion of the potential seasonal bill impacts and the proper time frame over which to compare bill impacts.

As discussed in the previous response, high use customers (or any other customers with higher bills in the winter than the summer) do not experience "winter rate shock" and the comparison being made is in reference to a rate that is no longer available. The current rate proposal before

the Commission will lead to year over year annual bill decreases for the majority of high consuming customers.

11.7 FBC states that it "believes that the appropriate point of reference for the rate shock guideline is the total annual bill". Does FBC agree that a 10% increase in the total electricity bill of an all-electric home is more onerous than a 10% increase in the total electricity bill of a natural gas heated home that only uses electricity for appliances and lighting, given that, in the case of the latter, the 10% increase is only on a small percentage of the customers total energy bill? If not, please explain.

Response:

Rate shock is properly assessed by comparing the annual bills under rates that are currently in effect to the annual bills that would result from rates that are being proposed.

Under the Company's proposal, it is unlikely that an all-electric home, which is assumed to have higher than average consumption, would have an annual increase in bills at all. It is far more likely that a low consumption customer will experience bill increases.

Generally speaking, in those applications where a rate proposal does lead to an annual bill increase, a 10 percent increase in a high bill could be considered more onerous that a 10 percent increase in a relatively small bill. Regardless, the relative financial impact on an individual customer will vary depending on their circumstances.

11.8 Does FBC agree that the appropriate point of reference for the rate shock guideline should be the customer's total energy bill? If not, please explain.

Response:

No, the rate shock guideline should not be on the customer's total energy bill. It is not clear what resources additional to electricity the question may be considering. For example should it include all sources of home energy use other than electricity such as wood, natural gas, propane, none of which are provided by FBC. This is FBC's RDA, and the only element of the customers' energy mix that is being considered in the current process is the electricity provided

1 by FBC and this is the only element against which an assessment of rate shock should be
2 made.

3

12.0 Topic: Residential Rate (RS1) Design

Reference: FBC Response to AMCS/RDOS IR#1, Request 11.1, p 22

In Response to AMCS/RDOS IR#1, Request 11.1, FBC stated:

> "The ability to initiate conservation measures has always varied across the customer base, and has done so across all consumption levels. To the extent that in every consumption strata there will be customers that have pursued conservation and others that have not, the opportunities for some customers are diminished as compared to the past. This is common at all consumption levels."
>
> "In the view of FBC, some customers have reacted to the price signals in the RCR to the extent possible and should not continue to be subject to the Tier 2 rate."

Request:

12.1 Does FBC have any evidence that low-use customers have pursued conservation measures in response to the RCR's price signals, given that their electricity rates under the RCR have fallen below what they would have been under the flat rate?

Response:

Please refer to the response to AMCS-RDOS IR 2.6.3.

Just as a point of clarification in relation to terminology, the question is likely referring to customers' electricity bills (rather than Tier 1 or Tier 2 rates) when it refers to "their electricity rates". That is how FBC has interpreted and answered the question.

12.2 Does FBC agree that the only customers who have likely reacted to the price signals in the RCR are high-use electricity customers and that, by now, they have likely reacted to the extent possible? If so, why is FBC proposing to continue to subject them to the Tier 2 rate for four more years?

Response:

As discussed in the response to AMCS-RDOS IR 2.6.3, FBC does not believe that only high consumption customers have reacted to the RCR. As described in the response to BCUC IR 1.93.5, the end result of the default residential rate proposal is to return to a flat rate as this best

1 reflects cost causation for FBC. The reason for the phase-out period is simply to mitigate
2 adverse annual bill impacts for negatively impacted customers. During the phase-out period,
3 high consumption customers will see steadily decreasing annual bills.

4

13.0 Residential Rate (RS1) Design

Reference: FBC Response to AMCS/RDOS IR#1, Request 5.1, p 12

In Response to AMCS/RDOS IR#1, Request 5.1, requesting the number of FBC customers that had switched to natural gas, FBC states:

> "FBC does not have the information requested. Customers that might switch from electricity to natural gas for space or water heating are free to do so without informing FBC of their changes in electricity use".

Request:

13.1 Has FBC ever recommended to a customer that heats with electricity to mitigate their high electricity bills by switching to natural gas?

Response:

It is not possible for FBC to state that no employee has ever suggested to a customer that heating with natural gas would be less expensive than heating with electricity. However, FBC does not have a policy of making such a suggestion and does not believe this would be a common occurrence.

13.2 Is it correct that when an FBC electricity customer switches from electricity to natural gas FBC's profits do not decrease, because subsequent rate rebalancing adjusts the rates to ensure no loss in revenue?

Response:

Rate rebalancing is not a mechanism that adjusts for revenue variation such as that described. Rather, rate rebalancing is sometimes undertaken when the results of a COSA indicate that the revenue of one or more rate classes is over or under recovering the cost of service.

Under FBC's current rate setting plan, on an annual basis, where the revenue recovered from customers is below the amount forecast, the deficiency is recovered from all customers in a future year. Also, where the revenue recovered from customers is above the amount forecast, the surplus is returned to all customers in a future year. The allowable return on investment to FBC is unaffected in either case.

14.0 Topic: Residential Rate (RS1) Design

Reference: FBC Response to AMCS/RDOS IR#1, Request 6.3, p 14; FBC Response to BCUC IR#1, Request 3.3, p 7.

In Response to AMCS/RDOS IR#1, Request 6.3, FBC states:

> "The desired attributes of sound rates are often in tension. With respect to conservation rates in particular, there is a trade-off between achieving conservation and the resulting bill impacts that must be managed".

In Response to BCUC, IR#1, Request 3.3, FBC states:

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

Request

14.1 Is it FBC's position that inclining block rate structures are not cost-based? If so, please provide supporting evidence of inclining block structures that are not cost-based.

Response:

It is not FBC's position that inclining block rates are never cost-based. FBC has provided a discussion of the lack of cost-basis in its particular circumstance in Section 6.1.5 of the Application as follows:

> However, there is no cost basis for the current levels of the Tier 1 and Tier 2 rates that form the RCR, nor for any particular threshold and tiered pricing. These rates were initially set to achieve a desired result (lower residential class energy use) within a constraint linked to the annual bill impact of customers. There is no particular relationship between the level of the existing rates, and any operational or cost basis.

It is unclear what would constitute evidence of, "…inclining block structures that are not cost-based"; however, FBC considers that the COSA it has filed with the Application contains no support for the continuation of an inclining block rate for residential customers.

14.2 Does FBC agree that there are "conservation" rate systems designed to incent energy efficient behaviour without significantly raising any customer's rates or bills – e.g. tiered rate systems that use individual thresholds for customers based on a fixed percentage of historical usage or that use multiple thresholds for different sub-classes of residential customers?

Response:

FBC agrees that there are conservation rate structures in addition to inclining block rates. However, the Company also notes that a common feature of all conservation rates, including the examples cited, is that they contain a price-based incentive/disincentive to either lower consumption or maintain consumption at current levels. To the extent that, in the aggregate, customers reduce consumption that is not matched by a reduction in costs, some or all customers will experience an increase in rates.

14.3 Does FBC agree that the RCR structure reflects a trade-off between cost causation, conservation, energy efficiency and bill impacts?

Response:

FBC believes that all rate structures reflect a balancing of these factors.

14.4 Does FBC agree that there were different ways to structure the RCR that would have prevented the need to make such trade-offs? If not, please explain.

Response:

FBC does not agree. Regardless of the structure of a rate, there will need to be a balancing of competing rate design considerations.