

REQUESTOR NAME: **BC Sustainable Energy Association and Sierra Club BC**  
INFORMATION REQUEST ROUND NO: 1

TO: **FortisBC Inc.**

DATE: **September 7, 2017**

PROJECT NO: **3698875**

APPLICATION NAME: **FortisBC Inc. Application for Reconsideration and Variance of Order G-199-16 FBC Net Metering Program Tariff Update Decision ~ Phase 2**

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**1.0 Topic: Dollar Bank Mechanism**  
**Reference: Original Proceeding, Exhibit B-1, 3. Background to the Net Metering Program**

In the original application, FBC describes the existing RS95 Dollar Bank Mechanism as follows:

“The current process for billing under the Program is described below.

In each billing period [Footnote: A billing period may be either approximately 30 days or 60 days depending on rate schedule.], unless a customer exactly matches generation to consumption, the customer will either be a net consumer of electricity or the customer will have Net Excess Generation (NEG). If, in any billing period, the customer is a net consumer of power from FBC, net billed amounts are calculated according to the applicable retail rate contained in the tariff schedule.

If, in any billing period, the customer has NEG, the net kWh delivered to FBC is valued at the applicable retail rate and a billing credit, in dollars, is included in the customer’s account balance but not paid out at that time. [Next step is addressed in the IR below.] In the event that there is a net credit balance on the customer’s account at the end of a calendar year, the credit may be purchased by the Company (paid to the customer). Per the tariff, if the amounts are not large, they will be carried forward and included in the billing calculation for the next period at the discretion of the Company.” [Explanatory text added and underlined.]

1.1 Please comment on the following observation:  
The description of the dollar credit mechanism in the original application is not wrong but it skips the main part of the mechanism. A dollar credit for net excess generation in a billing period is applied as a credit to reduce the balance on the bill for the next billing period. The main mechanism is that a dollar credit arising from net excess generation in one billing period is not “paid out.” Rather, it is applied as a dollar credit in the next bill.

1.2 Please comment on the following observation:  
It is only in rare circumstances that there is “a net credit balance on the customer’s account at the end of a calendar year.” This is because at present the vast majority of NM customers have a generation facility that is not big enough in relation to their own consumption to produce a net credit balance due to net metering over the course of a year.

**2.0 Topic: Valuation of Net Annual Surplus in Dollar Bank v. kWh Bank**  
**Reference: Decision and Order G-199-17**

- 2.1 Does FBC agree that under both a Dollar Bank mechanism and a kWh Bank mechanism, where a NM customer's generation facility is sufficiently large in relation to the customer's own consumption there could be a net surplus at the end of a year, in dollars or in kWhs respectively?
  - 2.2 For clarity, does FBC agree that the difference between the Dollar Bank and kWh Bank mechanisms means that there is a subtle difference in whether a given pattern of self-generation and consumption will result in a net annual surplus (whether in dollars or kWhs) depending on which mechanism is used?
  - 2.3 Given that the Commission determined in Order G-199-16 that "new customers will not be accepted into the Net Metering Program if their proposed generating capacity exceeds their anticipated annual consumption," does FBC agree that, regardless of whether a Dollar Bank or a kWh Bank is selected, it will be rare for there to be a net surplus (whether in dollars or in kWhs) at the end of a year?
    - 2.3.1 Setting aside the few existing NM customers with sufficiently large generation facilities to produce an annual net credit, does FBC agree that one way in which it could come about that a new NM customer could produce an annual net credit (under a Dollar Bank) or an annual surplus of banked kWhs (under a kWh Bank) is where the customer's generation facility met the 'not to exceed anticipated annual consumption' criterion when the customer entered the NM Program but the customer's consumption later dropped for an unanticipated reason?
  - 2.4 Does FBC agree that one factor relevant to the comparison of a Dollar Bank mechanism and a kWh Bank mechanism is that the implicit value of annual net excess generation is determined by the customer's retail rate in a Dollar Bank mechanism whereas in a kWh Bank mechanism the price the utility will pay to the customer for annual net excess generation has to be defined expressly?
    - 2.4.1 Would FBC agree that this particular factor applies in only a very small number of cases and is therefore relatively minor in comparison with the other factors relevant to the merits of a Dollar Bank compared to a kWh Bank?
- 3.0 Topic: Dollar Bank v kWh Bank**  
**Reference: Exhibit B-1, Reconsideration Application; Exhibit B-3, Phase One Reply**

Preamble: FBC's Reconsideration Application and Phase One Reply submission focus on the alleged errors in the Original Decision rather than the merits of a kWh Bank compared to a Dollar Bank. FBC's September 9, 2016 final argument in the original proceeding addresses the merits of a kWh Bank compared to a Dollar Bank only in the context of the treatment of annual net excess generation.

- 3.1 Please confirm, or otherwise explain, that the following factors favour replacement of the existing Dollar Bank mechanism with a kWh Bank mechanism:
- 3.1.1 A kWh Bank is more consistent with the “net metering” concept of a billing arrangement that allows a customer who generates some or all of his, her or its own electricity to, in effect, use that electricity at times other than when it is generated. Net metering facilitates a swap of electricity, not money, between the customer and utility. Net metering is not a feed-in tariff.
  - 3.1.2 A kWh Bank has jurisdictional support. It is used for net metering programs run by BC Hydro and by other surveyed electrical utilities across Canada.
  - 3.1.3 A kWh Bank interacts with a two-tier energy rate more logically than does a Dollar Bank mechanism. A kWh Bank treats net excess generation energy in one billing period as energy in the next billing period. The Dollar Bank mechanism can put a different implicit financial value on a kWh of net excess generation energy depending on whether it applies to Step 1 or Step 2 consumption.
  - 3.1.4 Replacing the Dollar Bank with a kWh Bank would have non-existent or positive bill impacts for most NM participants. For a small number of NM participants with relatively high self-generation there would be a negative bill impact.

**4.0 Topic: Cost Recovery and Dollar Bank v kWh Bank  
Reference: Exhibit B-4, pdf p.5. Further Evidence, Excerpts from FBC 2016 LTERP proceeding, FBC Response to BCUC IR 1.11.4**

FBC provides a lengthy quote from the FBC 2016 LTERP proceeding. The quote contains the Commission’s preamble to IR 11.4, the question itself, and FBC’s response. The context is “distributed generation” (DG) as a potential resource for consideration in long-term planning and FBC’s expressed “cost recovery” concern about how the utility will recover its fixed costs in the event of distributed generation situation. FBC states that for residential customers the fixed Customer Charge collects less than 50% of the utility’s fixed costs and that the remainder of the utility’s fixed costs are collected through the variable energy charge (cents per kWh).

- 4.1 Please confirm, or otherwise explain, that in FBC’s situation the DG “cost recovery” challenge is primarily a matter of intra-rate class fairness or acceptability between customers, i.e., whether and how to recover from DG customers their ‘fair share’ of the fixed costs of serving them rather than having some of the fixed costs of serving DG customer paid for by non-DG customers.
- 4.2 Please confirm, or otherwise explain, that when FBC states that for the residential customer class “the fixed charges in the current rate structures do not adequately recover the cost of connection to the distribution

system,” this means that the fixed Customer Charge does not fully cover the fixed costs of service in terms of a cost of service analysis, but that FBC is not ‘out of pocket,’ because it recovers through the variable charge (per kWh) any fixed costs not recovered through the Customer Charge.

Citing the Net Metering Program as an example of distributed generation, FBC notes two challenges:

- NM customers “pay lower variable consumption charges, and, since some of the Company’s fixed costs are collected through the variable (energy and demand) charges, fixed charges are under-recovered.”
- “In the case of net metered customers, the compensation for net excess generation during a billing period may reduce the contribution toward fixed costs to zero or negative.” [underline added]

4.3 Please confirm, or otherwise explain, that the first bulleted point is not relevant to whether the Dollar Bank should be replaced by a kWh Bank, because under both mechanisms the NM participant in effect pays less for variable consumption (or pays for less variable consumption) than he, she or it would pay in the absence of the NM Program (even assuming the customer maintains its own generation).

4.4 Please confirm, or otherwise explain, that the second bulleted point (underlined) is relevant to whether the Dollar Bank should be replaced by a kWh Bank, because under the Dollar Bank mechanism the very small number of NM participants with sufficiently high self-generation in relation to consumption in a given billing period or annually can offset the Customer Charge in addition to the energy charge (kWh) on their bill, whereas under a kWh Bank mechanism even the NM participants with very high self-generation still pay the Customer Charge.

**5.0 Topic: Customer Charge and Dollar Bank v kWh Bank  
Reference: Exhibit B-4, pdf p.5. Further Evidence, Excerpts from FBC 2016 LTERP proceeding, FBC Response to BCUC IR 1.70.1**

FBC responds to the Commission’s question about how fairness considerations in relation to the Residential Inclining Block (RIB) rate (or FBC’s Residential Conservation Rate (RCR)) apply to distributed generation in general and the Net Metering Program in particular:

“... Rates are designed such that all customers within a given rate class make a similar contribution to the fixed costs of the utility. For residential customers, this contribution is collected through the Customer Charge and is the same for all customers charged under a given rate. Although the Customer Charge does not collect 100 percent of the costs as determined during the Cost of Service Analysis (COSA), it is set at the same level for all customers.

Regardless of the relative impact of the RIB rate on individual customers, which is driven by the consumption habits of the customer and the variable portions of

the rate, all customers make, at a minimum, the standard contribution to the fixed charges.

The situation with DG customers is different. While the RIB rate is, as described in the reference, capable of producing an, "...incidental result flowing from a proper rate based upon the cost of service", the current application of the NEG provisions in the NM tariff has no relationship to a cost-based rate designed for that purpose. Rather, the compensation for NEG each billing period at the retail rate instead of the use of a kWh Bank enables customers with small-scale generation, such as those in the NM Program, to avoid even the minimum contribution to fixed charges if their bill is less than the Customer Charge. A customer that reduces their bill to zero, or less, is still using the FBC system, and still driving a system cost, which in the absence of a sufficient bill amount will fall to the account of the remaining customers. FBC is seeking the use of a kWh Bank and an appropriate compensation rate through its Application for Reconsideration of Order G-199-16, in part, to mitigate this situation." [underline added]

5.1 Please confirm that when FBC says "The situation with DG customers is different [than for RCR customers]" it is referring to the existing Dollar Bank mechanism in the NM Program.

**6.0 Topic: Bill Impact**  
**Reference: Exhibit B-4, Further Evidence, Part 2 – Additional Billing Analysis**

In its Additional Billing Analysis, FBC analyzes the combined impact of both replacing the Dollar Bank with a kWh Bank and setting the price that FBC would pay for annual net excess generation (if there is a kWh Bank) to be equivalent to the BC Hydro RS 3808 rate.

6.1 FBC says that 26 of the 35 customers included in the analysis would be unaffected, five would be better off and four would be worse off with a kWh Bank and the compensation rate for annual net excess generation being set at RS 3808. How would those numbers be affected if the compensation rate for annual NEG was (a) the Step 2 residential rate, (b) the average residential rate (e.g., the farm use residential rate), or (c) the Tier 1 residential rate?

6.2 How many of the 35 customers included in the analysis are residential customers and how many are commercial customers?

**7.0 Topic: Compensation rate for annual net excess generation with kWh Bank**  
**Reference: Exhibit B-4, Further Evidence, Part 2 – Additional Billing Analysis**

7.1 Please confirm, or otherwise explain, that the Commission could approve replacement of the Dollar Bank with a kWh Bank as proposed by FBC, and also approve a price for annual net excess generation that is different than the price FBC proposes.

**8.0 Topic: Removal of non-conforming NM participants**  
**Reference: Exhibit B-6, p.4**

Decision and Order G-199-17 states that “RS 95 customers cannot be removed from the Net Metering Program solely on the basis of producing annual Net Excess Generation.” FBC describes the issue as “whether Rate Schedule 95, properly interpreted, allows for customers to be removed from FBC’s net metering program for producing consistent annual net excess generation.”

- 8.1 In FBC’s view, if RS 95, properly interpreted, does allow for customers to be removed from FBC’s net metering program for producing consistent annual net excess generation does the Commission have authority to order that RS 95 customers cannot be removed from the Net Metering Program solely on the basis of producing annual Net Excess Generation?
- 8.2 Given that the Commission determined in Order G-199-16 that “new customers will not be accepted into the Net Metering Program if their proposed generating capacity exceeds their anticipated annual consumption,” and if, hypothetically, the Commission approved replacing the Dollar Bank with a kWh Bank and approved a compensation rate for annual net excess generation, please explain why in FBC’s view it would be necessary or desirable to remove RS customers from the NM Program solely on the basis of producing annual Net Excess Generation.
- 8.3 Given that the Commission determined in Order G-199-16 that “new customers will not be accepted into the Net Metering Program if their proposed generating capacity exceeds their anticipated annual consumption,” would FBC agree that the treatment of existing NM participants who produce consistent annual net excess generation is a transitional issue?
  - 8.3.1 If so, in FBC’s view, what are the options for a transition mechanism short of removal from the NM Program?