

September 23, 2016

**VIA EMAIL**

Laurel Ross  
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BC Utilities Commission  
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Our file: 7638

**Re: FortisBC Inc. (“FBC”)  
Net Metering Program Tariff Update**

1. We make the following submissions on behalf of our clients, the British Columbia Old Age Pensioners’ Organization, Disability Alliance BC, Council of Senior Citizens’ Organizations of BC, and the Tenant Resource and Advisory Centre, known collectively in regulatory processes as “BCOAPO”. The constituent groups of BCOAPO represent the interests of FBC’s low and fixed income residential utility customers

**Approvals Sought**

2. In this Application, FBC requests Commission approval, pursuant to section 60 of the Utilities Commission Act<sup>1</sup>, to:
  - Add language to the Program documentation to more clearly reflect that the intent of the program is to allow small-volume customers to off-set their own consumption.
  - Change the accounting for Net Excess Generation (NEG) during a billing period to incorporate a “kWh Bank” with an annual settlement for annual remaining unused NEG; and
  - Compensate customers for that remaining unused NEG at the RS 3808 tranche 1 rate.
3. In addition, FBC seeks Commission confirmation of its approach to the billing calculation methodology as described in Section 6 and Appendix B of the Application. FBC says this requires no changes to the Tariff or program documentation but will remove the potential for misunderstanding about the application of the Net Metering Tariff schedule.

**Changes to RS 95 Language**

4. In section 3 of the Application, FBC describes in general terms how the net metering program works and to whom it is available. In essence, the program is available to residential, small commercial and irrigation customers who may generate up to 50kW.
5. In each billing period, the customer is either a net consumer or a net generator of electricity. In either case, under the existing program, in each billing period, the net kWh are valued at

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<sup>1</sup> BCUC IR 1.1.1

the applicable retail rate and either billed to the customer or credited to the customer's account in dollars.

6. FBC says the intent of the net metering program is to allow customers to off-set their own consumption, not to generate excess electricity for sale to the utility. FBC also argues that some customers misunderstand the purpose of the program and either install or seek to install generation capacity in excess of their own anticipated use, in the expectation that the program will generate revenue for the customer. Because net excess generation (NEG) is valued at retail rates, it results in the utility having to pay artificially high rates for the electricity generated. This has the result of raising power purchase costs for the utility and potentially raising costs for non-generating customers.
7. FBC says it is not the intent of the proposed changes to disallow incidental NEG. However, FBC seeks to clarify the program language to disallow generation sized to routinely result in NEG for the customer.
8. BCOAPO supports the principle that the purpose of the net metering program is limited to allowing customers to off-set their own consumption, thereby reducing the amount of power they require from the utility. BCOAPO does not support use of the net metering program to supply excess generation to the utility. This is especially the case while the current pricing mechanism is in place. In our submission, FBC cannot justify paying retail rates (at either tier 1 or tier 2) for NEG because doing so has the potential to adversely impact non-generating customers.
9. BCOAPO *may* support a program that allows small generators to be paid to supply power to the utility, but such a program would need to take into consideration the costs and benefits of such supply, as well as alternative sources of supply and their respective costs and benefits. The price paid by FBC for distributed micro-generation would need to take into account factors such as the need for supply, alternative sources of supply, and the costs and benefits associated with various sources of supply (e.g., contribution to capacity, reduced need for transmission assets, etc.).
10. Consequently, BCOAPO supports FBC's application to add language to the program documentation to more clearly reflect that the intent of the net metering program is to allow customers to reduce the amount of electricity they take from the grid.

### **Changes to the Treatment of Net Excess Generation**

11. When the net metering program began, the default rate for FBC's residential customers was a single tier flat rate. The default rate for these customers is now a two tier stepped rate. With the introduction of the stepped rate, net excess generation (NEG) from residential customers is now compensated at the Tier 1 rate up to the threshold of 1,600 kWh over 2 months and at the Tier 2 Rate for amounts over 1,600 kWh over 2 months. FBC does not believe this to be reasonable because:
  - The implementation of the residential conservation rate means that NEG can be valued at different amounts depending on the type of customer and the level generated in a billing period, without any particular rationale;

- NEG can be valued at the Tier 2 rate (\$0.15198/ kWh<sup>2</sup>) which is far in excess of the cost of other resources available to the utility and also in excess of any measure of long run marginal cost the utility uses in resource planning<sup>3</sup>; and
  - The relatively high per unit compensation amount incents generation above the levels intended by the Net Metering Program.<sup>4</sup>
12. In essence, the current pricing scheme requires non-participating customers to provide a subsidy to participating customers through the payment at retail rates for NEG, when much cheaper alternative sources of supply are readily available.
  13. FBC proposes two changes to the treatment of NEG to address this issue. First, FBC proposes to use of a kWh bank that alternately carries NEG forward to offset consumption in a future billing period, or applies previously accumulated NEG in a billing period when net consumption exceeds net generation. Second, where a net metering customer has a balance in its kWh bank at March 31 each year, those kWh hours will be purchased by FBC at the BC Hydro RS 3808 Tranche 1 rate.
  14. The rationale for the first proposed change is to prevent NEG from being valued at different rates depending on whether the customer's generation is above or below 1,600kWh in a billing period (or similar effect under other two-tiered billing schemes). The rationale for the second proposal is to bring the price paid for NEG in line with the price paid for other resources available to FBC.
  15. BCOAPO does not support FBC's first proposal, which is to establish a kWh bank to annualize generation/consumption. BCOAPO does support FBC's second proposal, which is to pay the RS 3808 tranche 1 rate for NEG.
  16. In our submission, the net metering program does result in costs, however minimal, to FBC's non-generating customers while providing a resource that has very little value to the utility. Annualizing generation/consumption through a kWh bank negates the primary system benefit provided by the net metering program, which is its potential to off-set load during winter peak.
  17. NEG is not a firm or reliable resource for the utility. It contributes little capacity benefit, and is available primarily in summer when load is low. However, from a system perspective, net-metering does have the potential to reduce transmission and distribution costs, and to reduce winter peak load by off-setting some amount of winter consumption by net metered customers. Retaining a system in which net-metered generation/consumption is assessed per billing cycle allows FBC and the customer to recognize that net-metered generation has a greater value during periods when system load is high. This is because winter generation by the net-metered customer is more likely than summer generation to off-set consumption that would otherwise be billed at the tier 2 retail rate. If generation/consumption is netted (or assessed) only annually, the benefit of winter generation is reduced and the benefit of

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<sup>2</sup> BCUC IR 1.9.6

<sup>3</sup> BCUC IR 1.9.6 contains details on the rate potentially payable for NEG at different pricing levels, ranging from 4.45 cents/kWh under RS 3808 tranche 1 to 15.198 cents/kWh under residential retain tier 2 pricing.

<sup>4</sup> Application, p.9

summer generation is increased (i.e., because both now have the same value).<sup>5</sup> In our view, this change is not desirable.

18. Under the present program, FBC treats net metering as a load demand driver within the Long Term Electricity Resource Plan, rather than as a supply side resource. This suggests that greater value should be given to reducing load during periods of peak consumption.
19. In addition, FBC says that the technologies involved in net metering are not economic, and consequently are not likely to achieve widespread implementation for some time<sup>6</sup>. To the extent that FBC wishes to encourage demand side measures that address winter peak, it should strive to value winter net-generation more highly than summer net-generation.
20. As noted above, BCOAPO supports FBC's second proposal, which is to pay the RS 3808 tranche 1 rate for NEG. Given the complexity of FBC rate schedules, paying all net generating customers for NEG at the RS 3808 tranche 1 rate creates simplicity. FBC has a residential inclining block, a commercial declining block, time of use rates and irrigation seasonal rates. Consequently customers currently receive different rates for NEG depending on their rate schedule. It also becomes difficult to determine which rate to apply to a customer's generation over the course of a year for rate schedules which have a stepped rate or a seasonal rate. Compensating for NEG at a consistent price also creates equity by paying customers a consistent price for the energy they supply.
21. Payment for NEG under the RS3808 tranche 1 rate is consistent with the rate paid for other unscheduled deliveries to the FBC system. In addition, of the programs identified in other jurisdictions, some compensate for NEG at retail rates, but others do not provide any compensation for NEG at all. The later type of program removes any incentive for net metering customers to size generation facilities to consistently generate NEG. However, BCOAPO agrees with FBC that equity requires FBC to pay for NEG at a rate comparable to the rate paid for other non-firm, unscheduled deliveries to the FBC system.

### **Billing Calculation Methodology**

22. The third issue identified by FBC arises because of the introduction of electronic meters and stepped rates, both of which have occurred since the net metering program was developed. When the net metering program was introduced, FBC customers relied on analog meters, which spin either forward or backward depending on whether electricity is flowing from the utility to the customer or from the customer to the utility. This meant the meter recorded net consumption or generation. With the introduction of electronic meters, electricity flowing from the utility to the customer is tracked separately from electricity flowing from the customer to the utility.
23. With this new measuring system and introduction of the two tier stepped rate, it is possible to treat the net kWh produced or received by the customer in two distinct ways, each of which could represent a conceivable interpretation of the existing tariff language. As FBC says: "The distinction between the two is whether or not the 1,600 kWh threshold in the RCR is applied to the net consumption or generation before or after the two registers are

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<sup>5</sup> For example, in BCUC IR 1.5.3, the BCUC suggests using generation to off-set peak day or peak season loads. This would be a benefit to the utility and its non-generating customers at the expense of the net metering customer, relative to what is currently in place.

<sup>6</sup> BCUC IR 1.2.4

themselves netted.”<sup>7</sup> FBC’s preferred solution is that the rate be applied to net consumption or generation after the two registers are themselves netted.

24. The billing methodology preferred by FBC will produce a smaller credit for those customers that have NEG over the course of a billing period but will produce a lower bill for those customers that are net consumers of energy<sup>8</sup>.
25. BCOAPO prefers this same option. To the extent that it is possible for net-metering customers to adjust their generation, the incentive should be to increase generation during periods of peak consumption (i.e., to times when the net-metering customer is most likely to off-set tier 2 consumption) and reduce generation during periods of low consumption (thereby reducing NEG). In our submission, the option preferred by FBC best achieves this goal.
26. FBC also notes that once a kWh Bank billing methodology is fully implemented, the billing issue described in this section ceases to be a concern. Until such time as the kWh Bank is in use, or in the event that the Commission does not approve the use of a kWh bank at FBC, the change above is required<sup>9</sup>. As previously noted, BCOAPO does not support introduction of a kWh bank.

All of which is respectfully submitted.  
**BC Public Interest Advocacy Centre**

Tannis Braithwaite  
Executive Director | Lawyer

- c. FortisBC Inc.  
Registered Intervenors

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<sup>7</sup> Application, p. 13

<sup>8</sup> Application, Appendix B, p.2

<sup>9</sup> Application, Appendix B, p.3