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September 23, 2016

**VIA ELECTRONIC MAIL**

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**Attention: Ms. Laurel Ross, Acting Commission Secretary and Director**

Dear Sirs/Mesdames:

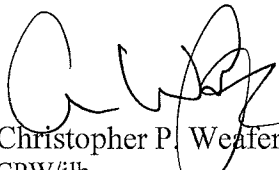
**Re: FortisBC Inc. (FBC) Net Metering Program Tariff Update Application ~ Project No. 3698875**

We are counsel to the Commercial Energy Consumers Association of British Columbia (CEC). Enclosed please find the CEC's Final Submissions with respect to the above-noted matter.

If you have any questions regarding the foregoing, please do not hesitate to contact the undersigned.

Yours truly,

**OWEN BIRD LAW CORPORATION**



Christopher P. Weafer  
CPW/jlb

cc: CEC  
cc: FBC  
cc: Registered Interveners

**COMMERCIAL ENERGY CONSUMERS  
ASSOCIATION OF BRITISH COLUMBIA**

**FINAL SUBMISSIONS**

**FortisBC Inc. Net Metering Program  
Tariff Update Application  
Project No. 3698875**

**September 23, 2016**

**COMMERCIAL ENERGY CONSUMERS ASSOCIATION  
OF BRITISH COLUMBIA**

**FINAL SUBMISSIONS**

**FortisBC Inc. Net Metering Program Tariff Update Application  
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**Contents**

INTRODUCTION.....3

A) kWh Bank.....4

B) Rate Revision .....5

C) Tariff Language Regarding Program Intent .....11

INTENT OF TARIFF.....11

D) Billing Methodology .....13

IMPACT OF CHANGES ON EXISTING NET METERING CUSTOMERS .....15

**COMMERCIAL ENERGY CONSUMERS ASSOCIATION OF BRITISH COLUMBIA**  
**FINAL SUBMISSIONS**

**FortisBC Inc. Net Metering Program Tariff Update Application**  
**Project No. 3698875**

- The Commercial Energy Consumers Association of British Columbia (CEC) represents the interests of ratepayers consuming energy under Commercial tariffs in applications before the British Columbia Utilities Commission (BCUC or Commission). FortisBC Inc. (FortisBC, FBC or the Company) has applied to the Commission to update the tariff for their Net Metering program. The CEC has participated in the proceeding and provides the following Final Submission.

**INTRODUCTION**

- FBC provides a Net Metering Program which provides an opportunity for FBC customers to generate energy and offset all or a portion of their consumption. Overall, net metering customers represent a relatively small portion of the total customer classes as shown below:

	2014				2015			
	Total Class *	# NM Customers	Net Metering Participants (kWh)	%	Total Class	# NM Customers	Net Metering Participants (kWh)	%
Residential	1,296,900,000	30	44,425	0.003%	1,298,100,000	57	278,501	0.021%
Commercial	865,700,000	12	1,022,298	0.118%	853,200,000	16	1,083,968	0.127%
Irrigation & Lighting	55,600,000			n/a	61,900,000	1	24,240	0.0392%

1

- The overwhelming type of generation is PV solar,<sup>2</sup> and the total cost may be expected to be in the order of \$16,000 for a 4 kW system generating about 4,400 kwh/year or about 123,000 kWh over its expected life of 30 years. At the current tariff rates, the simple payback periods are likely to be beyond the 30 year life for each customer class.<sup>3</sup>
- FBC proposes several changes to the tariff which include the establishment of a kWh bank system, a reduction to the rate paid for Net Excess Generation (NEG), clarification of the language in the Tariff limiting the available compensation and a change to the billing methodology.

<sup>1</sup> Exhibit B-7, CEC 1.1.2

<sup>2</sup> Exhibit B-7, CEC 1.1.3

<sup>3</sup> Exhibit B-7, CEC 1.1.5

5. The CEC submits that all the changes to be directionally acceptable and valuable in ensuring the integrity of the program and necessary for the protection of non-participating ratepayers for the reasons outlined below. The CEC supports FBC's proposed changes to the kWh bank, the clarification of language and the change to the billing methodology and recommends approval by the Commission. The CEC recommends that the Commission consider basing the rates paid for Net Excess Generation on the lowest cost equivalent energy that is available for purchase by FortisBC. The CEC also recommends that the Commission consider establishing a specified limitation to the NEG that a customer could accumulate in a given year for further clarity.
6. The CEC submits that it is in FortisBC's customers interests to utilize clean distributed energy and supports the Net Metering program as long as it remains reasonably cost-effective. The *Clean Energy Act*, SBC 2010, Chapter 22 objectives include generating at least 93% of the energy in BC from clean and renewable resources, using and fostering the development of innovative technologies that support energy conservation and efficiency and the use of clean or renewable resources, reducing BC GHG emissions and reducing waste by encouraging the use of waste heat, biogas and biomass.<sup>4</sup> The Net Metering program is consistent with the objectives.

#### A) kWh Bank

7. FBC proposes to discontinue the current practice of monetizing any Net Excess Generation (NEG) at the end of each billing period and applying the resulting dollars to the account balance in favour of carrying forward any NEG kWh within a billing period in a kWh Bank.<sup>5</sup> Any amount of unused annual Net Excess Generation may be valued and purchased by the Company only once per year. The Basic Charge and GST are assessed each billing period under either approach. FBC is not proposing to pay interest on banked NEG kWhs. Assuming that the customer has generation in compliance with Net Metering (NM) policies, any NEG carryover from billing-period-to-billing-period should be small and short-term.<sup>6</sup> Most customers do not have NEG in a billing period.<sup>7</sup> FBC indicates that in a review of other utilities all utilities examined use some form of kWh Bank to track excess generation.<sup>8</sup>
8. The use of a kWh Bank that either 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 will alleviate the payment at different rates for NEG as well as calculation issues.<sup>9</sup> The Company believes a kWh bank should be put into

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<sup>4</sup> Exhibit B-8, Resolution Electric, IR 1, #8

<sup>5</sup> FBC Final Submission, Page 1

<sup>6</sup> Exhibit B-10, Shadrack, 1.15b

<sup>7</sup> Exhibit B-4, BCUC 1.7.1

<sup>8</sup> Exhibit B-1, Page 11

<sup>9</sup> Exhibit B-1, Page 10

place even under a flat rate circumstance so that NEG within a billing period gets carried forward to future billing periods to offset consumption within the twelve month period with unused annual NEG paid out at the avoided cost rate.<sup>10</sup> FBC outlines its proposed implementation in BCUC 1.7.1.

9. From a Company perspective, the proposal put forward in the Application is straightforward to administer and is consistent with other NM programs.<sup>11</sup>
10. The CEC agrees that the kWh bank is an appropriate methodology for carrying the Net Excess Generation and is appropriately simple and easily understood.
11. The CEC recommends Commission approval of the proposed kWh bank as proposed by FortisBC.

## **B) Rate Revision**

12. FBC proposes to alter the rate at which it compensates customers for any unused annual NEG. FBC formerly compensated Net Metering customers for NEG at the customer's existing retail rate. This was originally conceived of as a matter of practicality because with a flat rate, and without the use of a kWh Bank, it was the most cost-effective and administratively simple method to implement.<sup>12</sup> Residential rates are currently \$0.09845/kWh for the first 1,600 kWh and \$0.15198 for additional kWh. Small Commercial service is billed at \$0.0921/kWh while other commercial service is billed at \$0.0843/kWh for the first 8,000 kWhs and \$0.06998/kWh thereafter. All services have additional Customer Charges, and Commercial service includes an additional Demand Charge.<sup>13</sup>
13. FBC now proposes to purchase the NEG once per year at the Tranche 1 price paid by FBC for power under the BC Hydro Rate 3808 tariff schedule, (the current BC Hydro RS3808 Tranche 1 energy rate is \$0.04475 per kWh, or \$0.0470 per kWh after the 5% rate rider,<sup>14</sup> FBC has not taken any Tranche 2 energy to date).<sup>15</sup> All customer generation used by the customer to meet their own load on-site will continue to be valued at the retail rate.<sup>16</sup> FBC has instituted the reduction to the Tranche 1 price because it does not believe that it is appropriate that NEG beyond the customer's own use should be given a greater value than that from other readily available resources or for purchases from other independent power producers. This will ensure that into the future the impact to Program Non-Participants is mitigated and participants will not be encouraged to install systems larger than they need to offset their own consumption.<sup>17</sup>

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<sup>10</sup> Exhibit B-4, BCUC 1.8.1

<sup>11</sup> Exhibit B-4, BCUC 1.7.2

<sup>12</sup> Exhibit B-4, BCUC 1.8.1

<sup>13</sup> [www.fortisbc.com/About/RegulatoryAffairs/ElecUtility/ElectricBCUCsubmissions/Rates/Pages/default.aspx](http://www.fortisbc.com/About/RegulatoryAffairs/ElecUtility/ElectricBCUCsubmissions/Rates/Pages/default.aspx)

<sup>14</sup> Exhibit B-7, CEC 1.8.5

<sup>15</sup> Exhibit B-7, CEC 1.8.5

<sup>16</sup> Exhibit B-1, Page 10

<sup>17</sup> Exhibit B-1, Pages 10-11

14. FBC has energy available to it from a variety of sources and at different prices.<sup>18</sup> FBC's proposal to utilize the BC Hydro RS3808 Tranche 1 rate is below the expected rate required to build new long term generation but above the rate from several existing long term sources of supply.<sup>19</sup>
15. FBC also states that given that the intent of the program is for customers to be able to offset only their own consumption and not to sell power to FBC, it believes that the most appropriate rate would be zero.<sup>20</sup> There is precedent for such a scheme in that two Canadian jurisdictions (SaskPower and HydroQuebec) do not compensate customers for excess generation that has not been used within a defined period.<sup>21</sup> However, since the Company does provide compensation to other parties for unscheduled deliveries into the FBC system FBC is proposing to compensate Net Metering customers for unused annual net excess generation<sup>22</sup> at the BC Hydro RS 3808 Tranche 1 rate. Given that FBC considers the energy acquired from excess energy purchases to be short-term in nature, FBC believes the BC Hydro RS 19 3808 Tranche 1 rate is the appropriate rate to apply to excess energy.<sup>23</sup>
16. The CEC agrees with FBC that the purchase of net excess energy should not be at the retail rate because:
- a) the Program is not intended to enable customers to do more than offset their personal use (residential) or corporate use (commercial); (see discussion below);
  - b) compensation at the retail rate would result in non-participating customers paying for energy at a rate above that at which it could be acquired more cost-effectively, and
  - c) paying the retail rate could actually represent a net loss to FBC, since the Energy charge (retail rate) includes recovery for costs related to capacity and customers.
17. A valuation at the Tier 1 retail rate for unused NEG remaining in the proposed kWh Bank at the end of the billing year as compared to the Tranche 1 BC Hydro 3808 rate would have a negative impact to the rates of all customers, including Program participants and non-participants as the higher dollar value would be reflected in rates in the subsequent year.<sup>24</sup> The CEC also agrees with FBC that energy it purchases from a Net Metering customer should not be purchased at a higher rate than that provided to any other equivalent producer.

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<sup>18</sup> Exhibit B-7, CEC 1.7.1

<sup>19</sup> Exhibit B-7, CEC 1.7.1

<sup>20</sup> Exhibit B-7, CEC 1.7.1

<sup>21</sup> Exhibit B-13, CEC 2.6.1

<sup>22</sup> Exhibit B-7, CEC 1.7.1

<sup>23</sup> Exhibit B-7, CEC 1.7.1

<sup>24</sup> Exhibit B-8, Resolution Electric, IR 1, #1

18. FBC provides the following costs for its energy rates in CEC 1.8.2. FBC notes that the PPA costs are for combined energy and capacity.

Power Purchase Volumes (GWh)							
Description	2009	2010	2011	2012	2013	2014	2015
FBC Owned Generation	1,588	1,530	1,527	1,531	1,568	1,571	1,627
Brilliant PPA	923	922	922	921	918	890	917
BC Hydro PPA	836	600	608	418	385	599	507
Market and Contracted Purchases	121	291	497	524	609	378	339
Independent Power Producers	41	37	17	6	7	13	5
Loss Recovery, Surplus Sales, Other Adjustments	(28)	(53)	(10)	13	4	1	(11)
<b>Total</b>	<b>3,479</b>	<b>3,328</b>	<b>3,451</b>	<b>3,413</b>	<b>3,488</b>	<b>3,451</b>	<b>3,384</b>
Loss Recovery					16	15	17
Other Adjustments	10	-4		13	0	0	-8
FBC Surplus Sales	-38	-49	-10		-12	-14	-23

Power Purchase Expense (\$'000)							
Description	2009	2010	2011	2012	2013	2014	2015
Brilliant	30,931	33,216	32,115	35,450	36,782	35,742	37,054
BC Hydro PPA	34,584	29,544	28,012	26,030	24,770	35,273	32,941
WAX							24,875
Market and Contracted Purchases	5,242	10,302	12,297	14,513	21,254	18,068	15,281
Independent Power Producers	1,034	914	205	201	264	447	144
Other Adjustments	(1,114)	(2,012)	(1,111) <sup>*</sup>	(195)	(618)	(1,193)	412
<b>Total</b>	<b>70,777</b>	<b>71,984</b>	<b>71,519</b>	<b>75,999</b>	<b>83,062</b>	<b>85,337</b>	<b>110,707</b>
CPA Balancing Pool							
Loss Recovery	-712	-398	-595	-125	213	311	427
Other Adjustments	371	-815	-453	-0,091	-572	-1,154	-15
FBC Surplus Sales	-773	-1,000	-63		-259	-320	

Average Price (\$/kWh)							
Description	2009	2010	2011	2012	2013	2014	2015
Brilliant PPA	0.034	0.036	0.035	0.039	0.040	0.040	0.040
BC Hydro PPA	0.041	0.049	0.055	0.062	0.064	0.069	0.065
Market and Contracted Purchases	0.044	0.035	0.025	0.028	0.036	0.043	0.045
Independent Power Producers	0.025	0.025	0.012	0.035	0.039	0.034	0.031
<b>Total</b>	<b>0.037</b>	<b>0.040</b>	<b>0.033</b>	<b>0.041</b>	<b>0.044</b>	<b>0.047</b>	<b>0.045</b>

19. The CEC notes that at \$0.04475 per kWh, or \$0.0470 per kWh after the 5% rate rider the tranche 1 energy rate is well above that of the average price of the Independent Power Producers of 0.031/kWh, and more than double that of the lowest priced purchases from IPPs which are at a monthly energy rate ranging from \$17 to \$43 per MWh for 2015, based on individual contracts with the IPP.<sup>25</sup>

<sup>25</sup> Exhibit B-12, BCUC 2.13.5



20. FBC provides the following rates in response to BCUC 2.14.1:

Estimated market value of delivered energy	CAWh estimate (or range)	Source/Key assumptions
Short-term (less than 3 years) non-firm	0.017 to 0.043	Based on IPP's in FBC's service area (See BCUC IR2.13.5). Total volume is 5 GWh in 2015.
Short-term firm	0.038	Based on a short-term contract for a BC Clean Resource. Total volume is 79 GWh in 2015.
Long-term (more than 15 years) non-firm	n/a	FBC does not have any long-term non-firm contracts and has no information to base a price on.

Estimated market value of delivered energy	CAWh estimate (or range)	Source/Key assumptions
Long-term firm	0.0404	Based on long-term contracts for BC Clean Resource, not including the PPA with BC Hydro. Total Volume of 217 GWh in 2015.

26

21. FBC states that it is possible that the energy delivered from Net Metering customers could displace energy purchased under the Tranche 1 energy rate. However, the more likely scenario is that BC Hydro PPA purchases would not be displaced by the output of Net Metered systems, but instead market-based resources that are more cost-effective than the BC Hydro PPA purchases would be displaced.<sup>27</sup>
22. The CEC directionally accepts FBC's proposal for the use of the Tranche 1 energy rate as the compensation rate, but submits that the purchase price is most appropriately established at the cost of the lowest-priced equivalent purchasable resource. Additionally, a discount to such a cost might even be included to account for the lack of committed contracts and other benefits derived from larger suppliers.
23. The CEC submits that given the likely scenario of displacing IPP energy and the risks to displacing BC Hydro 3808 energy there is no good reason why the compensation for residual energy should be above that of the IPPs. Additionally, the CEC submits that Distributed Generation NEG energy cannot be considered firm nor long term<sup>28</sup> it might be reasonable to assess the NM energy as being at the lower end of the Short-term (less than 3 years) non-firm energy of \$0.017/kWh.

<sup>26</sup> Exhibit B-12, BCUC 1.14.1

<sup>27</sup> Exhibit B-13, CEC 2.4.1

<sup>28</sup> Exhibit B-12, BCUC 2.14.3

24. The CEC submits it may also be reasonable to consider the cost of DSM energy in assessing a higher bound for the price of NM energy. Although the DSM marginal cost is likely above that of the Tranche 1 energy rate at this point, it may well be reduced in the future. The CEC also notes that FBC's CPR Update found that a 3kW residential solar PV was not cost-effective, failing the Total Resource Cost Benefit/Cost test by a large margin.<sup>29</sup> The CEC submits that FBC should not be purchasing energy that is not as cost-effective as its alternatives.
25. The CEC does not believe that FBC should provide NM customers with compensation in excess of the lowest cost, readily available resource. The CEC agrees with FBC that the persistent accumulation of unused annual NEG runs counter to the basic principle that FBC should seek to minimize costs to customers by providing reliable service at the lowest reasonable cost.<sup>30</sup> FBC already supports NM customers by providing the opportunity to offset personal consumption at retail rates through the installation of behind-the-meter generation and supports the installation with a readily available source of utility-supplied supplemental power.<sup>31</sup>
26. The CEC also notes that FBC is not able to make good use of the energy it receives as it has only very limited seasonal storage availability.<sup>32</sup> Net Metering is dominated by solar installations that produce more power in the summer months than in winter, and customers generally have higher consumption in the winter.<sup>33</sup> November through March is considered FBC's winter peak period.<sup>34</sup> However, no storage is available to move energy acquired in May, June or July to the rest of the year.<sup>35</sup> It is possible that any NEG energy purchased May through July will either have to be spilled or if stored, it will reduce energy storage for the following winter storage season.<sup>36</sup> Importantly, winter energy security could be disrupted<sup>37</sup> as outlined in BCUC 2.13.1. The CEC submits that potentially the spring to summer freshet market rates may also be an appropriate basis for valuing NEG energy.
27. About 20 GWh in total can be acquired in the months of April, August, September and October for use in the November through March period. However, this tends to be fully utilized through existing generation and market opportunities. Therefore, storing incremental renewable energy for winter use would come at the cost of acquiring less of other available resources that are likely to be more cost effective.<sup>38</sup> Additionally, in order to make a contribution to meeting FBC peak loads, the Net Metering technology must

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<sup>29</sup> Exhibit B-8, Resolution Electric IR 1, #12

<sup>30</sup> Exhibit B-8, Resolution Electric IR 1, #9

<sup>31</sup> Exhibit B-8, Resolution Electric IR 1, #9

<sup>32</sup> Exhibit B-7, CEC 1.1.8

<sup>33</sup> Exhibit B-13, CEC 2.1.1

<sup>34</sup> Exhibit B-13, CEC 2.2.1

<sup>35</sup> Exhibit B-7, CEC 1.1.8

<sup>36</sup> Exhibit B-12, BCUC 2.13.1

<sup>37</sup> Exhibit B-12, BCUC 2.13.1

<sup>38</sup> Exhibit B-7, CEC 1.1.8

make energy available during peak load times either through generation or the release of previously stored energy. If a Net Metering installation can only generate during the day and doesn't employ any storage for later release then that Net Metering technology will only assist with the summer peak and there will likely be little to no contribution to peak costs.<sup>39</sup>

28. Further, there is no legitimate argument that the clean nature of the supply justifies a higher price. In the FBC service area there are no particular benefits that accrue to the broader customer base from net metering installations given the clean power supply resources the Company already utilizes.<sup>40</sup> Power from FBC-owned generation and the Brilliant plants contributed to 77% of the total generation and is from sustainable/clean generation. FBC purchased a further 15% from BC Hydro and IPPs, which is also assumed to be 100% sustainable/clean. The remaining 8% was purchased from the market. FBC is not able to calculate how much of this supply is from sustainable/clean generation, but it is likely that a significant amount is.<sup>41</sup>
29. FBC states that it is not in breach of its contract with existing customers effectively because the wording allows for changes to the rates.<sup>42</sup> They state:

‘The NEG compensation is established by Schedule 95. Schedule 95 specifies that the NEG shall be valued at the rates specified in the Rate Schedule under which the Customer receives Electric Service. The Tariff provides that the customers shall pay for Electricity in accordance with the applicable rate schedule, as amended from time to time and accepted for filing by the British Columbia Utilities Commission. As a result, any change in NEG compensation, if accepted by Commission, will not be a breach of the agreement between FBC and its existing customers.’

30. The CEC agrees that a change to the tariff is not a breach of its contract, and submits that customers are regularly subjected to price changes in all their dealings with utilities and that changes are to be expected.
31. The CEC notes that customers in compliance with the program intent (discussed below) should not experience significant NEG, and any dollar change should therefore not be significant. An FBC analysis indicates that for 9 customers the total NEG that would have been paid out over 36 months will be reduced by about \$43,000.<sup>43</sup>
32. The CEC recommends that the Commission approve a change in compensation rates to a price based on the lowest priced equivalent energy purchasable by FBC, or at the market price for which the NEG energy could be sold on the Mid-C market.

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<sup>39</sup> Exhibit B-13, CEC 2.2.2

<sup>40</sup> Exhibit B-10, Shadrack 1.21.a

<sup>41</sup> Exhibit B-8, Resolution Electric, IR 1, #8

<sup>42</sup> Exhibit B-12, BCUC 2.15.2

<sup>43</sup> Exhibit B6, BCSEA 1.2.2

### C) Tariff Language Regarding Program Intent

33. FBC proposes to amend Rate Schedule 95 ‘to provide clarity and to help remove misconceptions that appear to have resulted from the current tariff wording.’<sup>44</sup> The Company’s interactions both prior to and after the interconnection of a Net Metering System have demonstrated that misconceptions exist about the intent of the program. FBC proposes to alter the language to avoid situations where a customer incurs an expense from installing a system larger than is necessary, or seeks to install such a system under the expectation that the Program may be a revenue generator for the customer.<sup>45</sup> FBC proposes the following changes to the tariff which are italicized below.

Net Metered System - A facility for the production of electric energy that: e) is intended *only* to offset part or all of the Customer-Generator’s requirements for electricity on *an annual basis*. *The program is not intended for customers who generate electricity in excess of their annual requirements.*

ELIGIBILITY: To be eligible to participate in the Net Metering Program, customers must generate a portion or all of their own retail electricity requirements using a renewable energy source. The generation equipment must be located on the customer’s premises, service only the customer’s premises and must be intended *only* to offset a portion or all of the customer’s requirements for electricity *on an annual basis*. *The program is not intended for customers who generate electricity in excess of their annual requirements.*

#### INTENT OF TARIFF

34. The CEC is in agreement with FBC that the program was originally intended to provide an opportunity for customers to offset personal/corporate consumption, and was not intended to provide an opportunity for customers to sell power to FortisBC.
35. The FBC website reads:

The BC Utilities Commission approved FortisBC’s net metering tariff application in September 2009, allowing residential and commercial customers enrolled in the Net Metering Program to be credited for electricity they produce. FortisBC has defined net metering as the metering and billing practice that allows for the flow of electricity both to and from a customer through a bidirectional meter. Residential and commercial customers can offset part or all of their own electrical requirements up to

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<sup>44</sup> FBC Final Submissions, Page 1

<sup>45</sup> Exhibit B-1, Page 7

50kW through generating their own clean energy and selling it back to FortisBC. FortisBC will credit customers for net energy they produce at their existing retail rate.

36. The CEC agrees with FBC that the wording "...consumers with small, privately-owned generators can efficiently offset part or all of their own electrical requirements by utilizing their own generation" is descriptive of the tariff limitations to offsetting personal consumption.
37. The CEC also accepts FBC's view that program limitations regarding annual generation output of any net metered system to the annual consumption of the associated load is summarized in the tariff<sup>46</sup> under the eligibility requirements.
38. The tariff Eligibility requirements state:

‘ELIGIBILITY: To be eligible to participate in the Net Metering Program, Customers must generate a portion or all of their own retail electricity requirements using a renewable energy source. The generation equipment must be located on the Customer's Premises, Service only the Customer's Premises and must be intended to offset a portion or all of the Customer's requirements for Electricity.

39. The CEC submits that a plain reading of the phrasing 'must be intended to offset a portion or all of the Customer's requirements for Electricity' is quite clear.
40. The CEC submits that the Definitions in the tariff provide further clarity regarding the purpose of the program. The Net Metering Definitions state:

Net Metered System: - A facility for the production of electric energy that...

(e) is intended to offset part or all of the Customer-Generator's requirements for Electricity.

41. This definition is quite definitive in terms of the purpose of the program.
42. The CEC notes that the program name is 'Net Metering' and the basis for the credit is for 'Net Excess Generation.' These terms also serve to convey the intent of the tariff, which is to provide an opportunity to offset consumption rather than to sell power to FortisBC for use by other customers. An interpretation that customers are invited to sell all their power generated up to the 50kW nameplate capacity maximum is not an accurate or appropriate interpretation.
43. Finally, FBC notes that the program could not have been established to include offsetting all or a portion of a customer's peak demand as the technology to enable that was not in place at the time of the original tariff.<sup>47</sup>

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<sup>46</sup> FBC Final Submission, Page 2

<sup>47</sup> Exhibit B-12, BCUC 2.12.3

44. The CEC is in agreement with FortisBC's view of the program, and submits that the intent of the original tariff has not changed, and that the Company has not intentionally or inadvertently misled customers as to the specificity of the regulations with respect to the Net Metering program.
45. The CEC agrees that the issue of customers exceeding their consumption, and developing expectations with respect to payments is likely to have arisen as a result of confusion regarding the purpose and regulation of the tariff rather than as a specific intent by customers to circumvent the tariff regulations and therefore supports FBC's proposed changes for clarification.
46. The CEC submits that it is reasonable for FBC to continue to restrict the Net Metering program to avoid a situation in which a customer had a large system that provided consistent and relatively large amounts of unused net excess generation because other customers would be disadvantaged.<sup>48</sup> The CEC submits that selling energy to FBC is properly covered under such contracts as EPAs which are entered into with a specific purpose and intended to provide an established value to FortisBC and its ratepayers.
47. The CEC submits that it is appropriate for FBC to make the proposed wording changes to ensure better customer understanding of the intent of the tariff.
48. The CEC submits that it could also be appropriate for FBC to establish a maximum NEG beyond which the utility would not pay in order to ensure further clarity amongst customers.
49. The CEC recommends that the Commission approve the proposed wording changes to clarify the intent of the tariff as proposed by FortisBC.

#### **D) Billing Methodology**

50. FBC requests approval for its preferred billing calculation methodology. This methodology would allow for the Net Generation and Net Consumption recorded at a premise during a billing period to be netted from each other prior to the calculation of the customer's bill.
51. FBC states that since the introduction of the Residential Conservation Rate (RCR) there have been two possible interpretations for how to treat the net kWh produced or received by the customer. 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 themselves netted.<sup>49</sup> FBC proposes to use the methodology in which the net generation/consumption is valued after the two registers are themselves netted out.<sup>50</sup> FBC's preferred method will be to the advantage of the NM customer when net-consumption is greater than the net-generation during a billing period. FBC's preferred method will be to the disadvantage of the customer when net-consumption is lower than

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<sup>48</sup> Exhibit B-7, CEC 1.5.1

<sup>49</sup> Exhibit B-1, Appendix B, Page 1

<sup>50</sup> Exhibit B-1, Appendix B, Pages 2-3

the net-generation during a billing period.<sup>51</sup> Since most net metering customers are net consumers, most net metering customers will benefit.<sup>52</sup> FBC notes that most residential customers without excess annual NEG are expected to pay less with the proposed billing methodology, including non-consumptive charges such as the Basic Charge and GST.<sup>53</sup> There is no impact to the customer in terms of any amount owing or to be credited where neither register exceeds 1,600 kWh over a two-month billing period.<sup>54</sup> The billing issue will cease to be a concern once the kWh bank is implemented, assuming it is approved. If not approved, the change will be required. FBC does not propose to apply the billing methodology retroactively.<sup>55</sup>

52. The CEC supports FBC's proposal in this matter and agrees that FBC's proposal reflects the intent of the original tariff. The first three items of the Billing Calculation in the Net Metering tariff are as follows:

- a) Net metering shall be, for billing purposes, the net consumption at FortisBC's Service meter(s).
- b) If the eligible Customer-Generator is a net consumer of energy in any billing period, the eligible Customer generator will be billed in accordance with the Customer-Generator's applicable rate schedule.
- c) If in any billing period, the eligible Customer-Generator is a net generator of energy, the Net Excess Generation shall be valued at the rates specified in the applicable Rate Schedule and credited to the Customer's account.

53. The CEC submits that the netting of the two registers before applying the rates is the most logical interpretation of the above statements in that the reference is to net consumption itself, not to the net 'value' of the consumption. The value is only discussed after the determination as to whether or not the customer is a 'net' consumer or generator.

54. FBC's proposal is therefore in line with the original language of Rate Schedule 95 and is also consistent with how it was managed prior to the introduction of the RCR. Additionally, it is simpler to calculate and easier to understand. FBC's alternative is also more in keeping with the intent of the Net Metering program to enable customers to offset their own consumption rather than to generate income because it will produce a smaller credit for those customers with net excess generation, and a smaller bill for customers with net consumption.<sup>56</sup> The CEC does not believe there is any reason to enhance the credit to customers with net excess generation. Finally, it is an added benefit that more Net Metering customers are expected to benefit than from the alternative,

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<sup>51</sup> Exhibit B-4, BCUC 1.10.5

<sup>52</sup> Exhibit B-1, Appendix B, Pages 2-3

<sup>53</sup> Exhibit B-10, Shadrack, 1.15a

<sup>54</sup> Exhibit B-1, Appendix B, Page 2

<sup>55</sup> Exhibit B-4, BCUC 1.11.3

<sup>56</sup> Exhibit B-1, Appendix B, Page 2

which might avoid exacerbating any negative impacts that might be experienced as a result of this application.

55. The CEC recommends that the Commission approve the billing methodology as laid out in its application.

### **IMPACT OF CHANGES ON EXISTING NET METERING CUSTOMERS**

56. Certain customers have expressed concern regarding FBC's application<sup>57</sup> both with the compensation rate reduction and with respect to the limitations regarding the payment for generation exceeding the offset of consumption.
57. The CEC notes that customers in compliance with the program intent should not experience significant NEG, and any dollar change should therefore not be very large. Negative impacts should occur largely as a result of customers exceeding their consumption since customers will continue to be credited with the retail rate for their generation up to their personal consumption levels.
58. However, there are customers who may not be in compliance. Some customers have suggested in their comments and Information Requests that FortisBC did not advise them of any restriction with respect to maximum generation beyond the 50 kW limit<sup>58</sup> and that the FortisBC website does not address the issue either.<sup>59</sup> Customers may have already invested in their electricity generation infrastructure and could experience a reduction in the return the investment will provide. Some have requested grandfathering at the retail rate.<sup>60</sup>
59. The CEC submits that the impacts to existing customers are expected to be fairly small and limited to a small number of participants.
60. FBC identified 6-8 customers (of 86) that could experience a positive NEG balance at the end of the year.<sup>61</sup> FBC indicates that it has reviewed 25 Residential Program Participants over the February 2015 to 2016 and all but two would have received lower total billings had the changes recommended by the Company been in place.<sup>62</sup>
61. There are two small hydro-electric installations that have NEG well in excess of both the requirements of the associated premises, and relative to any other installation that has a smaller amount of annual NEG. To the best of FBC's knowledge, both are run-of-river plants and have system capacities of 10 and 21 kW.<sup>63</sup>
62. The CEC reiterates its statements above with respect to the intent of the original tariff as having provided reasonable clarity with respect to its intent. Additionally, FBC notes that it works with customers that are considering the installation of a net metering system at the design stage and the meaning of the eligibility requirements is discussed at an

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<sup>57</sup> E Exhibits, Letters of Comment

<sup>58</sup> Exhibit E-4-1, Trotter Poulin Letter of Comment

<sup>59</sup> Exhibit C8-4

<sup>60</sup> Exhibit E-4-1, Trotter Poulin Letter of Comment

<sup>61</sup> Exhibit B-1, Page 4

<sup>62</sup> Exhibit B-1, Page 11

<sup>63</sup> Exhibit B-12, BCUC 2.13.3



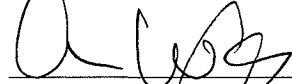
early point in the decision making process.<sup>64</sup> The CEC further submits that it is only reasonable and responsible for customers considering investments of several thousand dollars to have ensured confirmation with respect to their expected payments if they are an important consideration. The CEC notes that most installations are not made for purely economic reasons.<sup>65</sup>

63. Additionally the CEC submits that utility customers routinely experience increases to their rates as a result of many factors, and these increases may not be consistently applied. The CEC submits that cost increases are to be expected and if the dollar value is not significant, it should not be determinative of how policy should be established.
64. Nevertheless, the CEC accepts that certain customers may have made an alternative interpretation of their compensation at time of their equipment installation, which is costly. The CEC agrees that the language in the tariff has not been especially explicit and it would appear that FBC has not been proactive in addressing the issue for some time. For instance, FBC has not to date, removed any customer from the Program for non-compliance with eligibility criteria,<sup>66</sup> nor has it ever refused to enroll an applicant based on a submitted application. FortisBC has however had discussions with customers and advised them that their planned installation should be reduced in size.<sup>67</sup>
65. The CEC submits that the FBC changes are all acceptable but would not be averse to either a transition accommodation of existing retail rates for customers who experience a significant revenue decrease as a result of the changes in the current application, or to a gradual phase in for those same customers. Additionally, the CEC submits that it could be reasonable for those customers who are likely to experience large NEG to transition into IPP status with an Energy Purchase Agreement with FBC.
66. The CEC recommends that the Commission consider a transition accommodation for customers who might experience significant revenue decreases. The CEC recommends that the Commission avoid permanent grandfathering of rates for NEG which the CEC submits are not justified in an appropriate interpretation of the FBC tariffs.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

*David Craig*

David Craig, Consultant for the Commercial Energy  
Consumers Association of British Columbia



Christopher P. Weaver, Counsel for the Commercial  
Energy Consumers Association of British Columbia

<sup>64</sup> Exhibit B-6, BCSEA 1.3.1

<sup>65</sup> Exhibit B-8, Resolution Electric, IR 1, #4

<sup>66</sup> Exhibit B-15, Scarlett, IR2, #2

<sup>67</sup> Exhibit B-10, Shadrack, IR 1 #9a