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September 16, 2016

British Columbia Utilities Commission
6th Floor, 900 Howe Street
Vancouver, BC
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Attention: Ms. Laurel Ross, Acting Commission Secretary and Director

Dear Ms. Ross:

**Re: FortisBC Inc. (FBC)**

**Project No. 3698875**

**Application for the Net Metering Program Tariff Update (the Application)**

**FBC Final Submission**

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On April 15, 2016, FBC filed the Application referenced above. In accordance with Commission Order G-126-16 establishing further process in the Regulatory Timetable for the review of the Application, please find attached FBC's Final Submission.

If further information is required, please contact Corey Sinclair, Manager, Regulatory Services at 250-469-8038.

Sincerely,

**FORTISBC INC.**

***Original signed:***

Diane Roy

Attachments

cc (email only): Registered Parties

**BRITISH COLUMBIA UTILITIES COMMISSION**

**IN THE MATTER OF the *Utilities Commission Act,***
**R.S.B.C. 1996, Chapter 473 (the "*Act*")**

**and**

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

**FINAL SUBMISSIONS OF**

**FORTISBC INC.**

**September 16, 2016**

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## PART One: INTRODUCTION

1. On April 15, 2016, FortisBC Inc. (FBC or the Company) filed an Application with the British Columbia Utilities Commission (BCUC or the Commission) to make a number of changes to both the structure of its existing Net Metering Program (the Program) and to the language contained in the Rate Schedule 95 tariff pages. FBC's Net Metering Program Tariff Update Application (the Update Application) seeks four determinations from the Commission. These determinations are that:

    a. 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 be discontinued in favour of carrying forward any NEG within a billing period in a kWh Bank as described in the Update Application, Section 5.2. This aspect of the Update Application is discussed further in Part Three.

    b. Any unused annual NEG resulting from the use of a kWh Bank be purchased by the Company at the Tranche 1 price paid by FBC for power under the BC Hydro Rate 3808 tariff schedule. This aspect of the Update Application is discussed further in Part Three.

    c. Rate Schedule 95 be amended as described in Appendix C to the Update Application for the reasons discussed in Section 4 of the same. This amendment does not change the Program, but will provide clarity and help to remove misconceptions that may result from the current tariff wording. This aspect of the Update Application is discussed further in Part Two.

    d. The preferred billing calculation methodology described in Section 6 of the Application be approved by the Commission. This methodology would allow for the Net Generation and Net Consumption recorded at a premise during a billing period to themselves be netted prior to the calculation of the customer's bill. This aspect of the Update Application is discussed further in Part Four.

2. The Program, as it is currently structured pursuant to Commission Order G-92-09, contains a number of key characteristics that the Company is not proposing to change as part of the Update Application.

3. There is currently a 50 kW limit on the nameplate rating of an installed Net Metered system. As described in the response to BCUC Information Request (IR) 1.6.2, this cap is in place because in the opinion of FBC, an installation beyond this 50 kW power limit (regardless of the operating voltage) could have safety and reliability impacts to the FBC distribution system. The presence of this limit does not mean that all customers meet the eligibility criteria to install a system of 50 kW. The size of any individual system is also limited by the approximate amount of energy that a customer will consume over a one year period. The Company is not proposing to change either of these eligibility criteria.

4. The Program currently allows for the net metering of sources of generation from clean or renewable resources including sources of energy that are constantly renewed by natural processes, such as water power, solar energy, wind energy, geothermal energy, wood residue energy, and energy from organic municipal waste. The Company is not proposing to change the types of generation allowed under the Program.

5. Since both the customer load and customer generation are located behind the Company's meter, only the net amount of energy being delivered to, or received from, the customer over the course of a billing period is recorded by FBC. This inherently results in generation consumed by the customer being valued at the marginal retail rate the customer would otherwise pay for electricity. Nothing in the Update Application decreases the value to the customer of the electricity produced by the customer's net metering installation and used by the customer to offset their own consumption.

6. The Program, as originally intended, limits the annual generation output of any net metered system to the annual consumption of the associated load. This aspect of the Rate Schedule 95 Eligibility is currently summarized in the tariff by specifying that, *"…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."* FBC is not proposing to change this limitation, or the manner in which this aspect of the Program is administered, but is seeking to add clarifying language to the tariff as described in Section 4.4 of the Update Application.

7. As part of its response to Resolution IR 1.14, FBC indicated that it would review the technical standards referenced in the question and provide comment on any required changes to the Program technical requirements, if any, during its final submission in this process. The Company can confirm that it is aware of, and is currently updating its standards which will be reflected in a revised version.

## PART Two: PROGRAM INTENT

8. When FBC applied in 2009 for Commission approval of its Net Metering Program (the 2009 Application), it did so with the objective of allowing customers to achieve self-sufficiency for their electrical needs. The Program was not designed to provide an additional power supply resource for FBC.

9. This fact was articulated in the 2009 Application at page 5, "It is the overriding intent of the program that customers gain the ability to offset their own consumption with a clean and renewable resource." This was consistent with the parameters provided to BC Hydro by the Commission in Letter L-37-03 which informed the 2009 Application. In this letter, the Commission noted that, "*Customer generation should be limited to own use only at the registered location of the net metering installation…"*

10. This intent was reflected in the approved Rate Schedule 95 in the definition of both Net Metering and Net Metered System, and as part of the Eligibility conditions. In each case, net metering is described with words to the effect that the intent of net metering is to, "…offset part or all of the Customer-Generator's requirements for Electricity."

11. To the Company, this intent was clear in 2009, just as it is today. FBC responded to several information requests to this effect during the 2009 Application process, exemplified by the response to OEIA 1.7.5.1, which reads in part, *"The intent of the program is to allow customers to offset their own consumption. The payment of an incentive on net excess generation promotes a generation amount that is beyond the goal of the program."*

12. Many of the participants in this process were also active in the 2009 Application process, where the intent of the Program was made clear; however, the language ultimately included in the tariff pages did not sufficiently articulate the intent.

13. FBC has therefore proposed to amend the language of the tariff by adding the underlined portions to the existing text in a number of places, similar to the change to the Eligibility criteria set out below:

> *The generation equipment must be located on the Customer's Premises, Service only the Customer's Premises and must be intended to offset <u>only</u> 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 requirement.***

14. This change is specifically designed to prevent misconceptions about the Program. These misconceptions have become clear to FBC in reading the Letters of Comment and during the IR process in this Application. An example of this is the following question: *" …is it accurate to say that both FortisBC and its net metering customers have at all times been fully aware that the Program imposed no limitation on the amount of customer-generated power as long as the customer's system met the 50 kW design capacity limit?"*[1]

15. In its response to this question, the Company noted that the statement is not accurate. Assuming that the question was posed because this is a common perception of the parameters of the Program, the additional language being proposed by FBC will address the issue.

16. In addition, in the Letter of Comment from Micro Green Hydro[2], the writer erroneously summarizes the Application as follows: *"Fortis is proposing two alterations to RS 95 that MGH believes are unacceptable: a) Reducing the price for excess energy generation, and b) Reducing the size of generators".* This is not correct. Nowhere in the Application or in any of the Company's submissions in this process has FBC proposed to reduce the size of generation permitted under the Program. Again, the additional language being proposed by FBC will address the issue.

17. With respect to the Trotter - Poulin letter of comment, Exhibit E-4-1, the Company has no reason to dispute the claim made by the customer that they were informed that they would be compensated for any NEG at the retail rate as that is the current Program design and is in part the subject of the current Application. Similar to other comments and IRs, the letter shows that there is a misunderstanding of the changes being proposed as changes to the other aspects of the Program referenced are not being sought.

[1] Shadrack IR 1.5.
[2] Exhibit E-5.

## PART Three: NET EXCESS GENERATION

18. There are two aspects of NEG for consideration by the Commission in this process. The first is the treatment of billing period NEG as it is defined in the current Tariff, and the second is the treatment of annual unused NEG that would only be considered should the Commission approve the Company's request to implement a kWh Bank.

19. The use of a kWh Bank for carrying forward billing period NEG as a replacement for the current method of carrying forward billing credits is a benefit for most customers.

20. Should the Commission approve the use of a kWh Bank[3], then a determination must be made as to the appropriate rate for the Company's purchase of the kWhs remaining in a customer's kWh Bank at the end of a 12 month period.

21. FBC has proposed that the rate for the Company's purchase of the customer's kWh Bank be based on the Tranche 1 price in BC Hydro's Rate Schedule 3808. While this rate is generally higher than the cost to the Company for power from alternative resources with similar characteristics, it is the ceiling price that FBC would normally pay for IPP power, and will be adjusted for any BC Hydro rate changes.

22. Other than the annual kWh bank, kWhs that are carried forward from one billing period to another within the year have a value to the Rate Schedule 95 customer of either the Tier 1 or Tier 2 rate, depending on the level of consumption and generation in the period in which they are utilized. There is no change in the value to the customer of this consumption from the current method of compensation. Only the NEG that remains after 12 months would have its value reduced by the differential between the Rate Schedule 3808 Tranche 1 price and the Tier 1 or Tier 2 rate.

23. A number of alternate valuations for annual unused NEG have been suggested in the Update Application process to date.

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[3] Should the Commission determine that a kWh Bank is not in the public interest and decline to approve the kWh Bank as part of this Application, FBC would as an alternative proceed with an application to provide compensation for NEG on a billing period basis at the rate proposed in this Application for annual unused NEG.

24. In Exhibit E-1, Mr. Moore advocates for payment for annual NEG at a rate of 80% of the average retail rate. For most Residential customers, assuming that the average rate is approximately equal to the Exempt Rate RS03, this would equate to 80% of $0.11433, or $0.915 / kWh. For Small Commercial customers, the rate would be $0.794 kWh, and for Commercial customers, the rate would be somewhere between $0.560 and $0.6744 / kWh. FBC submits that the 80% figure is arbitrary and suffers from the same issues that exist under the current methodology. That is, it overvalues the energy relative to other readily available and comparable alternatives, and it provides a different level of compensation for NEG based on a customer's applicable rate. The type of customer and their rate does not impact the value to FBC of energy being supplied to FBC.

25. In Exhibit D-4-1, Mr. Wheatley states, *"Rather than reducing the amount paid, I suggest the amount paid should be increased to the cost of new generation."* Along with the discussion prompted in some IRs such as BCUC IR 1.9.6, this raises the appropriateness of some level of long-run marginal cost being used as the price FBC would pay for unused annual NEG. As stated in the response to BCUC IR 1.9.4, the Company only includes sources of supply in the long term planning process where there is a long term commitment that the power will be available. Accordingly, there is no long term value from net excess generation from net metering customers and a measure approaching any value for firm, dispatchable long-term power is not an appropriate NEG rate.

26. FBC understands that Net Metering customers view the power they produce as a green and environmentally sound resource. At the same time, the Company's power supply which is being displaced by customer-owned generation is similarly considered clean and renewable. Regardless of the lengthy payback periods involved[4], FBC supports the customer's decision and ability to take responsibility for their own energy needs, the Company does not however support requiring that other customers pay for increased power purchase costs without the same ability to realize decreased electric bills that Net Metering customers enjoy.

27. For these reasons, FBC submits that the proposed rate of compensation for the annual NEG kWh Bank is fair to both Net Metering Customers and customers in general, appropriately reflects the value of the generation, is in-keeping with the both the intent of the FBC Program and its legislative underpinnings5, and ought to be approved.

[4] See the response to CEC IR 1.1.5.
[5] As described in Section 1 of the 2009 Application.

## PART Four: BILLING METHODOLOGY

28. As part of the Update Application, FBC is seeking the Commission's confirmation that although FBC has been using a proper interpretation of Rate Schedule 95, it should switch to an alternate interpretation on a go-forward basis. This change in the application of the billing methodology will mean, for rates that have either an inclining or declining energy charge based on levels of consumption, there will be a difference to some customer bills that may be either positive or negative depending on the rate class.

29. The methodology that FBC has properly used since the implementation of the Program treats the Net Generation and Net Consumption as two separate transactions. The implementation of the Residential Conservation Rate (RCR) has caused the current methodology to have a bill impact for some customers. The Company submits that a change in the underlying rate structure cannot invalidate the methodology that has been properly used since the Net Metering Program inception.

30. As FBC has been properly following its approved tariff, the Commission should not heed calls for the retroactive application of a new methodology.

31. For stepped rates, the current methodology results in the applicable step thresholds being applied to the Net Generation and Net Consumption in isolation prior to the bill being calculated. A second interpretation is preferred by FBC and those customers that have stated a preference.[6] Under this interpretation, the Net Generation and Net Consumption recorded at a premise during a billing period would themselves be netted prior to the calculation of the customer's bill. The impact of this change in billing methodology is reviewed in detail in response to BCUC IR 1.10.3.

32. FBC believes that the second interpretation of the methodology, which is generally consistent with that employed by BC Hydro, should be affirmed by the Commission. If this methodology is not put into effect, the kWh Bank as described in the Update Application cannot be implemented.

[6] See Exhibits C6-1, C7-1, and D-3-1.

## PART Five: CUSTOMER IMPACT

33. Customer Impact for both Program participants and non-participants is a consideration when evaluating changes to any rates. When assessing the customer impact of the proposals contained in the Update Application, there are three separate aspects of the Application to be examined. First, there is the potential for impact due to the clarification of the Program intent as discussed in Part 3. Second, there is the potential for impact due to the choice of billing methodology as discussed in Part 4. Third, there is the potential for impact due to the implementation of a kWh Bank and annual NEG compensation as discussed in Part 2.

34. With respect to the first item, the clarification of Program intent within the rate schedule, there is no financial impact to customers since this does not represent a change to the current program. The update will not impact the manner in which the Program is administered. It should however, provide better information to customers even prior to making contact with the Company and may prevent mistaken expectations regarding financial outcomes associated with Net Metering installations and could prevent the costly oversizing of an installation

35. With respect to the second item, the billing methodology discussed in Part 4, for most residential customers there is either little or no impact of the change. For most of those customers that will experience a difference, that difference would be reflected as lower total annual bills. This is due primarily to a reduction in the amount of kWh subject to the Tier 2 rate.

36. As discussed in the response to Shadrack IR 2.1, the customers that are most likely to be negatively impacted by the adoption of the preferred billing methodology are those that generate in excess of their own needs and who would see a reduction in the amount of NEG that would be purchased by the Company at the Tier 2 rate, at higher cost to FBC customers than other sources.

37. With respect to the third item, the implementation of the kWh Bank and annual purchase of unused NEG would have similar impacts to the adoption of the billing methodology discussed above. That is, the ability provided by the kWh Bank to carry forward unused kWh to a future billing period will benefit most customers because those kWh may be valued at the Tier 2 rather than the Tier 1 rate. Most customers do not have annual unused NEG and as such the purchase rate for these kWh has no impact.

38. For customers that may have a small amount of annual unused NEG, whether or not there is a benefit would depend on the value ultimately realized for the kWh that are carried forward in the kWh Bank.

39. The group of customers that are most disadvantaged by the proposed changes are those few individuals that routinely generate electricity far in excess of their load requirements and that are accustomed to receiving payments from FBC which value the associated kWh at the Tier 2 rate in each billing period (as well as the single TOU customer that may receive on-peak rates for NEG). These customers will still receive Tier 2 value for kWh carried forward in the Bank and used in a subsequent billing period, but will have the majority of their NEG purchased at the proposed rate.

40. Even at FBC's proposed compensation rate, these customers will still receive a benefit from their Net Metering system which will most often be higher than that enjoyed by other self-generators from which FBC makes intermittent purchases of power.

41. From the perspective of other customers the proposals contained in the Update Application adhere to the principle that non-participants should be protected to the extent possible from the choice of some customers to install a Net Metering System. At this point in time, with participation rates modest, customer impact is immaterial. However, it is appropriate to reflect this principle within the Program design regardless of the current level of participation.

## PART Six: THE NET METERING AGREEMENT

42. Some interveners have made submissions to the Commission requesting grandfathering of the existing rate and that their agreement with the Company should remain unchanged. The Company submits that customers could have had no reasonable expectation that they had entered into a fixed rate agreement with the customer nor that the Net Metering Service rates would remain unchanged. The rates established by Rate Schedule 95 were, from their inception, variable rates, as they were pegged at the rate that the customer receives electric service, which by their very nature, are often amended by the Commission. As such, the changes that the Company proposes do not represent a fundamental change to the existing Net Metering Customers' agreements.

## PART Seven: CONCLUSION

43. The Company has responded to two rounds of information requests and considered the content of the IRS and the Letters of Comment that were filed in this process. In the opinion of FBC:

44. No party has presented a compelling reason why the Company should not incorporate language into the Rate Schedule 95 Tariff sheets to clarify the intent of the Net Metering Program. While some Letters of Comment and questions posed during the IR process have seemed to challenge that intent, the intent as it currently exists is not the subject of the Update Application and no changes in this regard are being requested. These intervener comments should not be given weight by the Commission;

45. No party has argued against the use of the billing methodology advocated for by the Company. Customers have, in fact, expressed a preference for the proposed methodology. The use of the methodology on a go forward basis should be accepted by the Commission. The methodology should not be applied on a retroactive basis as this would not be to the advantage of all customers and in any case the Company has not operated in a manner inconsistent with its tariff by continuing to use the same methodology before and after the implementation of the RCR;

46. Use of a kWh Bank solves the difficulties encountered in the use of Net Metering together with the RCR and should be approved;

47. While Net Metering customers have argued for the highest compensation rate possible for the purchase of unused annual NEG, the Company has presented a rate that is supportable when considered alongside other comparable resources. The use of the BC Hydro 3808 Tranche 1 Rate should be approved.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

Dated: September 16, 2016

***[original signed by Corey Sinclair for]***

**Diane Roy**