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April 15, 2016

British Columbia Utilities Commission
6th Floor, 900 Howe Street
Vancouver, BC
V6Z 2N3

Attention: Ms. Laurel Ross, Commission Secretary and Director

Dear Ms. Ross:

Re: FortisBC Inc. (FBC)
Net Metering Program Tariff Update Application

Please find attached an Application for revisions to the FBC Net Metering Program. Any questions with respect to the Application should be directed to Corey Sinclair, Manager, Regulatory Services at 250-469-8038 or corey.sinclair@fortisbc.com.

Sincerely,

FORTISBC INC.

Original signed:

Diane Roy

Attachments

FORTISBC INC.

Net Metering Program Update Application

April 15, 2016

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List of Appendices

1. EXECUTIVE SUMMARY

FortisBC Inc. (FBC or the Company) has had a Net Metering Program (the Program) available to customers in certain rate classes since 2009. The Program currently has approximately 100 participants with the majority generating power utilizing small scale residential solar photovoltaic installations.

As a result of experience gained in administering the Program and interacting with customers, it is apparent that a number of changes are required such that the Program is better understood by customers, better reflects the intent of the Program as originally approved by the British Columbia Utilities Commission (BCUC or the Commission), and is administered financially such that the treatment of consumption and generation is clear, consistent and does not impact negatively on non-participants.

With this Application, the Company is requesting Commission Approval to:

1. Add language in the Program documentation to more clearly reflect the original intent of the Program as approved by the Commission;
2. 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
3. Compensate customers for that remaining unused NEG at a rate more reflective of the Company's avoided cost.

In addition, FBC is seeking Commission confirmation of the Company's approach to the billing calculation methodology as described in Section 6 and Appendix B of the Application. 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.

Each of the Company's requests are described fully in a following section of the Application.

The impact of these changes will be minimal to most Program participants. FBC therefore suggests that the Application can be reviewed with a regulatory process consisting of only Intervener and Company written submissions, with Information Requests only should the Commission deem it necessary.

2. OVERVIEW OF THE APPLICATION

The Application contains a brief description of the background of the Program in Section 3. The changes to the Net Metering Program that FBC is recommending with this Application serve three primary purposes that are addressed in separate sections of the Application as follows:

1. To more clearly reflect the intent of the Program; namely that the Program is a means of offsetting personal consumption rather than a revenue generating opportunity. FBC allows the separately-metered interconnection of customer-owned generation generally under Section 10 of its Electric Tariff for parties that wish to build larger commercial installations. FBC will also discuss the purchase by the Company of the output of these facilities with the default rate being reflective of the avoided cost of displaced purchases the Company would otherwise make. However the Program was not designed for this situation. The purpose of the Program is further explained in Section 4;
2. To adopt the more common industry practice of carrying forward kWh in a "kWh Bank", rather than carrying forward dollars, when a customer is a net generator of energy. This purpose is explained further in Section 5.[1]
3. To provide annual compensation for unused kWh's in the kWh Bank at a rate more reflective of the Company's avoided cost for purchased power. This purpose is explained further in Section 5.

The Company is also using the Application process to provide notice to residential customers and receive Commission confirmation that the billing practice in use for Net Metering since the Residential Conservation Rate (RCR) was implemented will be updated. The wording of the Tariff with respect to billing does not need to be amended, however, as two interpretations are now possible, the calculation methodology should be revised on a go-forward basis to better match the original intent of the Program and the adoption of the kWh carry-forward being proposed with this Application. Once billing has transitioned to the kWh Bank approach, this change will have no further impact. This purpose is further explained in Section 6.

The introduction of the RCR has not impacted the non-residential rate schedules that are eligible for the Program. Accordingly, items 1, 2 and 3 in the above list apply to all customers while the billing practice issue mentioned above only applies to residential customers taking service on the RCR.

[1] In reviewing Net Metering programs across Canada, FBC was unable to find another utility that carries forward excess generation as a dollar amount as opposed to a kWh credit.

3. BACKGROUND TO THE NET METERING PROGRAM

FBC filed an Application for a Net Metering Tariff in April of 2009 (the 2009 Application). The 2009 Application was filed in support of both Section 64.01 of the *Utilities Commission Act* and the 2002 and 2007 Provincial Energy Plans. As well, customer interest in the development of such a program was recognized by the Company and the Commission.[2]

The current FBC Net Metering Tariff (RS 95) was approved in July of 2009 by Order G-92-09. The Program, inclusive of the changes proposed in this Application, remains consistent with objectives of the 2009 Application and the provincial policy consideration that it sought to address.

Key features of the Program currently are that it:

- Is available to residential, smaller commercial, and irrigation customers;
- Is available for installations defined as a clean or renewable resource in the BC Energy Plan;
- Is limited to a capacity of not more than 50 kW;
- Is located on the customer's premises;
- Operates in parallel with the Company's transmission or distribution facilities; and
- Is intended to offset part or all of the Customer requirements for electricity.

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

In each billing period[3], 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. 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.

[2] Further information on the rationale for the 2009 Application can be found in Section 1 of that document which is available here: https://www.fortisbc.com/About/RegulatoryAffairs/ElecUtility/ElectricBCUCsubmissions/OtherApplications/Pages/Net-metering-tariff-application.aspx

[3] A billing period may be either approximately 30 days or 60 days depending on rate schedule.

As of March 31, 2016, FBC had 86 customers enrolled in the Program, 22 of which are served on Commercial rate schedules with the balance served on a Residential Rate. As not all customers have been on the program for a full year, the Company cannot determine with certainty the number of customers that will have a positive NEG balance after a 12 month period however a review of the accounts suggests that 6-8 Program participants may be in this position.

4. CLARIFICATION OF PROGRAM INTENT

The Program was designed with the intent that a customer's generation should be sized to meet no more than its electricity consumption. Put another way, the generation capability should be capped at the approximate amount of electricity used annually by the home or business that is served under one of the eligible rates.

The intent of the Program is evident in documents that form part of the regulatory record and the final version of RS 95 approved by the Commission. The Company's experience to date reveals that without the benefit of knowledge of the original regulatory process, and with insufficient clarity in the approved program documentation (including the RS 95 tariff schedule) some customers may embark upon the installation of a Net Metering System under certain material misconceptions about the potential program benefits. The Company is not proposing to change the treatment of NEG with respect to the incidental amount of NEG that the program was originally intended to accommodate. Rather, the Company is seeking to clarify the primary purpose of the Program as it has always existed. That is, installed generation capacity should not be in excess of the customer's annual requirements. In the following section, the Company summarizes the portions of the 2009 Application and associated regulatory process that described the purpose of the Net Metering program.

While there exists no requirement that FBC and British Columbia Hydro and Power Authority (BC Hydro) rates and programs be the same, and differences between the Net Metering programs of the two utilities have always existed, the Company notes that the intent of its Program in consistent with that of BC Hydro RS 1289. BC Hydro has stated,

> BC Hydro continues to be of the view that the primary purpose of RS 1289 is to allow individual customers to meet all or part of their electricity demand in a simple and cost-effective manner, and not to sell energy to BC Hydro.[4]

4.1 *THE 2009 APPLICATION*

The 2009 Application contained a number of statements describing the intent of the program. These portions of the Application are reproduced below, with the portions that deal directly with the intent of the program underlined.

> **Net Metering** - Net Metering is a metering and billing practice that allows for the flow of electricity both to and from the customer through a single, bi-directional meter. With Net Metering, consumers with small, privately-owned generators can efficiently <u>offset part or all of their own electrical requirements</u> by utilizing their own generation.[5]

[4] BC Hydro 2014 Application to Amend Rate Schedule (RS) 1289 for Net Metering Service, page 5
[5] Application – *Definitions* (and the approved Rate Schedule 95)

> A successful Net Metering Program will promote distributed renewable generation, and allow customers to take responsibility for their own power production, and to reduce their environmental impact.[6]
>
> It is the overriding intent of the program that customers gain the ability to offset their own consumption with a clean and renewable resource. It is not the intent of the program to provide a means for larger scale Independent Power Producers ("IPP") to bring their output to the market.[7]
>
> The subject of the compensation for NEG tends to garner an amount of attention that is not commensurate with its overall impact on a Net Metering Program. Given that a Customer-Generator must comply with the Program intent that generation is intended only to offset consumption, the likely magnitude of any NEG should be small.[8]

4.2 *THE APPROVED RATE SCHEDULE*

The language that appeared in the 2009 Application is echoed in the text of the approved rate schedule (RS 95). The following excerpts are from the Definitions and Eligibility portions of RS 95 respectively.

> With Net Metering, consumers with small, privately-owned generators can efficiently offset part or all of their own electrical requirements by utilizing their own generation.
>
> 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.

4.3 *EXCERPTS FROM THE 2009 APPLICATION REGULATORY PROCESS*

During the regulatory process for the 2009 Application, FBC was queried on the value placed on NEG. The Company's response makes it clear that FBC intended that customer generation was to offset personal consumption and that excess generation was expected to be incidental and occurring in amounts small enough that consideration of the value placed upon it was not necessary.

> Q7.5.1 FortisBC indicated that it did include any amount in the purchase rate as an incentive, but it was not clear why it did not do so. Please clarify specifically the reason. For example, is FortisBC waiting for the details of the potential Government policy; is FortisBC waiting for an order from the Commission?
>
> A7.5.1 FortisBC assumes the above question was intended to read "FortisBC indicated that it did not include any amount in the purchase rate as an incentive…" The intent of

[6] Application Page 3
[7] Application Page 5
[8] Application Page 20. NEG = Net Excess Generation

> 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. Should Government or Commission policy regarding a potential incentive be released, FortisBC will consider it at that time.
>
> The proposed Net Metering Program allows participants, termed "Customer-Generators", to take responsibility for their own power production, and to reduce their environmental impact by interconnecting small generating facilities with the FortisBC system.
>
> It is the overriding intent of the program that customers gain the ability to offset their own consumption.

The Company's interactions with customers, both prior to and after the interconnection of a Net Metering System, have demonstrated to FBC that misconceptions exist about the intent of the Program. The Company believes the language should be made more explicit, to ensure that the RS 95 Tariff clearly reflects the purpose of the Program, and 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. The program should not encourage customers to generate electricity in an amount greater than required for their own needs by paying for excess energy at artificially high prices. Distributed generation installations may become more prevalent in the future, and given that NEG is currently valued at retail rates (which includes the Tier 2 rate of the RCR), such installations have the potential over time to raise average power purchase costs and increase the rates of all customers including those that are not participating in the Program.

FBC believes that changes in the Program documentation to provide clarity on the existing intent and restrictions on the Program do not constitute a change in the original intent for which the Program was designed and approved. Rather, they are necessary to clearly reflect the purpose of the Program such that confusion and mistaken assumptions do not lead to poor purchase decisions by customers, and Program-related conflicts, in the future.

It is not the intention of FBC to disallow any and all NEG. Clearly, some amount of NEG is to be expected periodically and the Program contemplates that this will be the case. FBC will continue to compensate customers for incidental and reasonable amounts of NEG delivered into the FBC system at a price more appropriate for the purpose of the Program. What will be disallowed under the Net Metering tariff, is generation sized to routinely exceed a customer's annual requirements, which is counter to the intent of the Program.

For parties that wish to connect generation in excess of the size allowable under the Program, FBC permits the interconnection of customer-owned generation with capacities of 50 kW and greater utilizing existing interconnection standards, and will typically compensate for the power delivered by such installations at the same rate proposed for net-metering NEG. FBC does not

therefor have any capacity related gaps in opportunities for self-generators to connect to the FBC system.

4.4 *CHANGES TO RS 95 TO CLARIFY INTENT*

The changes required to RS 95 are minimal and are intended to clarify that the Program does not allow a customer to systematically generate a surplus. An insertion is proposed to the DEFINITIONS as follows,

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.***

In addition, the Eligibility criteria are updated in a similar manner.

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.***

These changes will also be reflected on the Company's website page[9] that describes the Program generally. The additional documents used in the administration of the Program, *(Application for Net Metering Program, Net Metering Interconnection Guidelines, and Net Metering Interconnection Agreement*) are technical in nature and do not speak to the Program intent and require no changes.

[9] http://www.fortisbc.com/Electricity/CustomerService/NetMeteringProgram/Pages/default.aspx

5. CHANGES TO THE TREATMENT OF NET EXCESS GENERATION

5.1 *DISCUSSION*

The discussion in this section is focused on residential rates; however, the proposals made in the Application are applicable to all rates eligible under the Program.

At the time the Program and accompanying rate schedule (RS 95) were approved by the Commission, residential customers were primarily billed on a default rate that was comprised of a fixed Customer Charge and a single energy rate for each kWh consumed (ie. a "flat" rate). Currently, the default rate for the Company's residential customers is a two-tier "stepped" rate (the Residential Conservation Rate or RCR) comprised of a fixed Customer Charge and two energy rates: a lower rate for consumption below 1,600 kWh on a bi-monthly basis and a higher rate for consumption above that threshold.

NEG is defined in RS 95 as occurring when, over a billing period, Net Generation exceeds Net Consumption. In the current Tariff, any NEG is valued at the rates specified in the applicable Rate Schedule and credited to the customer's account as a dollar value that contributes to the overall financial standing of the account. Under the flat rate that was in effect at the time of the 2009 Application, all generation, whether used to serve load or fed back into the FBC system, was to notionally be given the same value within the same customer class (each customer class would have a different valuation).

With the introduction of the RCR, and following the Tariff language of RS 95, NEG for 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.[10] FBC does not believe this to be reasonable given that:

1. The implementation of the RCR means that NEG can be valued at different amounts depending on the level generated, without any particular rationale;
2. NEG can be valued at the Tier 2 level approaching 15 cents/ kWh which is far in excess of the cost of other resources available to the Company and also in excess of any measure of long run marginal cost that the Company utilizes in resource planning, potentially encouraging customers to install more generation than they need to offset their own consumption; and
3. The relatively high per unit compensation amount incents generation above the levels intended by the Program.

While a customer has the ability under the Program to offset personal consumption, FBC does not believe that other customers (non-participants in the Program) should support the Company

[10] For a customer that is billed monthly, the threshold above which the Tier 2 rate applies is 800 kWh.

purchasing power on their behalf at rates far above what is available from other sources. This situation would arise when residential customers in the Program generate excess electricity.

Small, clean and renewable electricity generation is a relatively new technology that has a long payback period for customers (even when they are receiving compensation for NEG). Therefore, it is not likely that net metering installations intended to offset on-premise consumption are installed for purely economic purposes. FBC is concerned the net metering program is inappropriately being used to reduce the payback period for participating customers by effectively having non-participating customers provide a subsidy through the payment at retail rates for NEG on an annual basis.

It is recognized that if the intent of the program is adhered to, and customers enrolled in the Program have generation sized only to meet the approximate load of the premises, the compensation rate will have only a minor financial impact to other customers since any amount of NEG should be small. However, in the opinion of the Company, the compensation rate should be corrected now in order to not distort the price signal to potential Program participants and to minimize the potential impact to non-participants in the event that there is significant future participation.

For clarity, the changes discussed above only pertain to the small amount of excess generation that a customer may have after his or her consumption at the premises has been offset. The generation used to offset that consumption is still inherently valued at the prevailing retail rate. FBC is not proposing to change the value of the energy used to offset consumption at the customer premises.

5.2 *PROPOSED PROGRAM CHANGES*

As a solution, FBC is proposing two changes to the Program. The first is to adopt an NEG carry-forward methodology consistent with that used by BC Hydro and other utilities surveyed across Canada. That is, the 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. The second change is, in those situations where a customer under RS95 has a balance in its kWh bank at March 31[11], those kWh hours will be purchased by the Company at the BC Hydro RS 3808 Tranche 1 rate.

The use of a kWh Bank will alleviate both the payment at different rates for NEG without any rationale as well as the calculation issues described in Section 6.

FBC continues to believe that all customer generation used by the customer to meet its own load on-site should be valued at the retail rate. However, the Company does not believe it is appropriate that NEG that it purchases from the kWh Bank should be given a greater value than either other readily available resources or for purchases from other independent power

[11] March 31 has been chosen as it allows customers to take full advantage of any banked kWh through the high consumption winter season.

producers that currently deliver power into the FBC system. It is also not equitable that customers receive a different valuation for their NEG simply due to the rate class under which they happen to be taking service.

Consistent with the approach used for other ad-hoc deliveries to the FBC system, the NEG will be valued at the BC Hydro RS 3808 Tranche 1 rate (currently 4.303 cents per kWh plus a 5% rate rider) and credited to the RS 95 customer's account balance annually. This will ensure that into the future, the impact to Program non-participants will be mitigated and participants will not be encouraged to install larger systems than they need to offset their own consumption.

The use of the BC Hydro RS 3808 Tranche 1 rate better reflects the value of the NEG to FBC than does the retail rate. Although the 3808 rate may not be the least cost resource available to the Company at any given time, it does represent a consistent short term option for purchasing incremental energy and on an annual planning basis is used as the resource to balance load and resources in the Annual Electric Contracting Plan, as accepted by the Commission. The Company does not consider small-scale customer-owned renewable power to be a secure or reliable firm resource and therefore believes that valuing at a level greater than this is not justified.

As stated previously, as a practical matter, given the overriding intent of the Program which limits production to a level approximating annual consumption, the change to the pricing should have minimal impact on program participants. It does however provide a better price signal and assist in communicating the correct message to customers about the purpose of the Program.

In Appendix D, the Company provides a summary of various net metering programs across Canada. All utilities examined use some form of kWh Bank to track excess generation. While some compensate for unused NEG at a retail rate, others provide no compensation at all. FBC believes that such NEG does have value, but that the compensation should be consistent with that provided to other sources of unscheduled deliveries into the FBC system.

As noted in Section 3, not all current Program participants have a full year net metering history. However, FBC has reviewed the 25 residential Program participants that were active for the February 2015 to February 2016 period and has determined that all but two would have received lower total billings had the changes recommended by the Company been in place.

5.3 *REQUIRED CHANGES TO RS 95*

In order to implement a kWh Bank for Net Metering customers, several changes are required to the Billing Calculation section of RS 95. These changes are shown below in a black-lined excerpt from the rate schedule. Examples of the operation of a kWh Bank for both a non-TOU and TOU customer are provided in Appendix A to the Application. While these amendments are prompted by changes in the residential rates, they would apply to all rate classes that are eligible for the Net Metering Program.

Billing Calculation:

3. If in any billing period, the eligible Customer-Generator is a net generator of energy, the Net Excess Generation, as measured in kWh, shall be ~~valued at the rates specified in the applicable Rate Schedule and credited to the Customer's account~~ held in a "kWh Bank" and used in subsequent billing periods to offset net consumption.

4. For eligible Customers receiving Service under a Time-of-Use (TOU) rate schedule, consumption and generation during On-Peak Hours shall be recorded and netted separately from consumption and generation during Off-Peak Hours and held in separate kWh Banks such that any balance in the respective Banks ~~charges or credits applied to the account reflect~~ can be applied in subsequent billing periods in either the On-Peak or Off-Peak Hours ~~the~~ as appropriate ~~time-dependent value for the energy~~.

5. In the event that the operation of a renewable energy generating system results in a ~~credit~~ balance ~~on~~ in the Customer-Generator's ~~account~~ kWh Bank at ~~the end of a calendar~~ March 31 in each year, the kWh Bank will be valued at the Energy Price and credited on the customer's next bill, then the kWh Bank will be reduced to zero. ~~not large, they will be carried forward and included in the billing calculation for the next period at the discretion of the Company.~~

6. Energy Price – The price paid to a Customer-Generator for electricity represented by kWh remaining in the kWh Bank at March 31 in each year shall be the BC Hydro 3808 Tranche 1 energy rate in effect as at March 31.

6. CHANGES TO BILL CALCULATION METHODOLOGY

6.1 *DISCUSSION*

The Program allows customers with self-generation to use electricity generated at the customer's premises to serve their own load prior to electricity being taken from FBC. During any given period of time, energy consumed by customer load at the premise may be greater than or less than the amount of energy produced by the on-site generation. When such installations were connected to an analogue utility meter with a single register, at times when load was greater than generation the meter would "spin" forward indicating that energy was flowing from the utility to the customer. Conversely, at times when generation was greater than load the meter would spin backward indicating that energy was flowing from the customer to the utility. Over the course of the billing period, the meter dial would move further in one direction or the other indicating that the customer was, from the perspective of the utility, either a net consumer or net producer of energy.

Today, with the advent of electronic meters, the direction of flow of electricity is typically recorded and accumulated in two separate registers. One register will record the total amount of energy delivered to the customer during the periods when energy was flowing from the utility to the customer, and the other register will record the total amount of energy delivered to the utility during the periods when energy was flowing from the customer to the utility.

With either the electronic or analogue meters, because both the load and the generation are behind the meter, the utility has no visibility into the actual amount of energy consumed by the load at the site or the actual amount of the energy produced by the customer's generating facilities.

With the introduction of the RCR, 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. 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.

An examination of this issue and the Company's preferred solution, which is that the threshold in the RCR is applied to the net consumption or generation after the two registers are themselves netted, is contained in Appendix B.

7. PUBLIC CONSULTATION

FBC intends to provide written notice to all current participants in the Program that the Application has been filed with the Commission and to make the Application publicly available on its website and by hard copy upon request. In addition, all interveners in the 2009 Application process will receive similar notification. Due to both the limited scope of changes to the Program and the minimal impact to Program participants, the Company does not believe that the expense of further consultation activities such as public open houses can be justified. Participation in the associated Commission led regulatory process should provide ample opportunity for comment.

8. REQUESTS FOR APPROVAL

FBC requests the Approval from the Commission for the following changes to its Net Metering Program:

1. Changes to the RS 95 Rate Schedule to clarify the intent of the Net Metering Program as described in Section 4 of the Application and reflected in the revised RS 95 tariff contained in Appendix C.
2. Use of a kWh Bank as described in Section 5 of the Application to carry forward Net Excess Generation for an annual period with compensation at the end of that annual period.
3. Compensation for any positive kWh balance remaining at the end of the annual period using the BC Hydro RS3808 Tranche 1 rate, including the resulting RS 95 Tariff changes.

In addition, the Company is requesting Commission confirmation that the preferred billing calculation methodology described in Section 6 of the Application is appropriate on a go-forward basis.

9. SUGGESTED REGULATORY PROCESS

The Company respectfully suggests that due to the narrow scope of the Application and the relatively small impact to individual Program participants, Commission determinations regarding the Application can be made after a single round of Intervener submissions followed by a Reply submission from FBC. If the Commission sees a need for Information Requests, these should be limited to a single round with BCUC Information Requests preceding those of interveners. FBC proposes the following schedule.

Table 9-1: Proposed Regulatory Timetable

ACTION	DATE (2016)
Commission Information Request No. 1 (If Required)	Friday, May 6
Intervener Information Request No. 1 (If Required)	Friday, May 13
FBC Responses to Information Requests No. 1	Wednesday, June 1
Intervener Final Written Submission	Friday, June 17
FBC Written Reply Submission	Friday, June 24

Should Information Requests not be required the schedule can be adjusted accordingly.

Appendix A
kWh BANK EXAMPLES

Account Activity with kWh Bank – Non-TOU

	Period 1		Period 2		Period 3		Period 4		Period 5		Period 6		
	Meter Reading	kWh Usage	Meter Reading	kWh Usage	Meter Reading	kWh Usage	Meter Reading	kWh Usage	Meter Reading	kWh Usage	Meter Reading	kWh Usage	
		kWh		kWh		kWh		kWh		kWh		kWh	Total
Delivered to Customer	1,600	1,600	3,400	1,800	6,900	3,500	10,900	4,000	11,900	1,000	13,300	1,400	13,300
Recieved from Customer	1,500	1,500	3,500	2,000	6,600	3,100	8,600	2,000	9,700	1,100	11,300	1,600	11,300
Net kWh Delivered to Customer or Received from Customers		100		-200		400		2,000		-100		-200	2,000
Opening kWh Bank Balance (kWh)		0		0		-200		0		0		-100	
kWh Bank Impact		0		-200		200		0		-100		-200	
Closing kWh Bank Balance (kWh)		0		-200		0		0		-100		-300	-300
Billed kWh in Billing Period		100		0		200		2,000		0		0	2,300

Notes:

- A negative balance shown in the kWh Bank in the example represents kWh available to reduce consumption in future billing periods.

Period 1

Over the course of the billing period, the customer receives 1,600 kWh from FBC and delivers 1,500 kWh to FBC for a net amount of 100 kWh in energy flowing to the customer. The customer is billed for the 100 kWh according to the applicable rate schedule. Since the customer is a net consumer of energy there are no kWh added to the kWh Bank.

Period 2

During this billing period, the customer receives 1,800 kWh from FBC and delivers 2,000 kWh to FBC for a net amount of 200 kWh of energy flowing to the customer from FBC. The customer is not billed for energy at the end of the period. The 200 kWh of excess generation are added to the kWh Bank.

Period 3

During this billing period, the customer receives 3,500 kWh from FBC and delivers 3,100 kWh to FBC for a net amount of 400 kWh of energy flowing to the customer from FBC. Prior to billing, the 400 in net consumption is reduced by the available kWh held in the kWh Bank (200 kWh). This leaves 200 kWh for which the customer is billed, and the balance of the kWh bank is reduced to zero.

Period 4

Over the course of the billing period, the customer receives 4,000 kWh from FBC and delivers 2,000 kWh to FBC for a net amount of 2,000 kWh in energy flowing to the customer. The customer is billed for the 2,000 kWh according to the applicable rate schedule since there are

no kWh available in the kWh Bank to offset consumption. Since the customer is a net consumer of energy there are no kWh added to the kWh Bank.

Period 5

During this billing period, the customer receives 1,000 kWh from FBC and delivers 1,100 kWh to FBC for a net amount of 100 kWh of energy flowing from the customer to FBC. The customer is not billed for energy at the end of the period. The 100 kWh of excess generation are added to the kWh Bank. The balance of the kWh bank at the end of the billing period increases to 100 kWh.

Period 6

During this billing period, the customer receives 1,400 kWh from FBC and delivers 1,600 kWh to FBC for a net amount of 200 kWh of energy flowing from the customer to FBC. The customer is not billed for energy at the end of the period. The 200 kWh of excess generation are added to the kWh Bank. The balance of the kWh bank at the end of the billing period increases to 300 kWh.

At the end of the year, which for the example is March 31, the balance of 300 kWh in the kWh bank will be purchased by the Company at the BC Hydro 3808 Tranche 1 Rate and the balance will be reduced to Zero kWh.

Account Activity with kWh Bank – TOU

Summer (July, August)	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9:00 am - 11:00 am	Off-Peak	Peak					Off-Peak
11:00 am - 3:00 pm	Off-Peak						
3:00 pm - 11:00 pm	Off-Peak	Peak					Off-Peak
11:00 pm - 9:00 am	Off-Peak						

All Other Months	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:00 am - 1:00 pm	Off-Peak	Peak					Off-Peak
1:00 pm - 5:00 pm	Off-Peak						
5:00 pm - 10:00 pm	Off-Peak	Peak					Off-Peak
10:00 pm - 8:00 am	Off-Peak						

On-Peak Usage

	Period 1		Period 2		Period 3		Period 4		Period 5		Period 6		
	Meter Reading	kWh Usage	Meter Reading	kWh Usage	Meter Reading	kWh Usage	Meter Reading	kWh Usage	Meter Reading	kWh Usage	Meter Reading	kWh Usage	
		kWh		kWh		kWh		kWh		kWh		kWh	Total
Delivered to Customer	1,600	1,600	3,400	1,800	6,200	2,800	10,200	4,000	11,200	1,000	12,600	1,400	12,600
Recieved from Customer	1,500	1,500	3,500	2,000	6,500	3,000	8,500	2,000	9,600	1,100	11,000	1,400	11,000
													1,600

Off-Peak Usage

	Period 1		Period 2		Period 3		Period 4		Period 5		Period 6		
	Meter Reading	kWh Usage	Meter Reading	kWh Usage	Meter Reading	kWh Usage	Meter Reading	kWh Usage	Meter Reading	kWh Usage	Meter Reading	kWh Usage	
		kWh		kWh		kWh		kWh		kWh		kWh	Total
Delivered to Customer	700	700	1,200	500	2,200	1,000	2,950	750	3,850	900	4,050	200	4,050
Recieved from Customer	800	800	1,400	600	2,200	800	2,950	750	3,050	100	3,650	600	3,650
													400
On-Peak Net kWh		100		-200		-200		2,000		-100		0	
Off-Peak Net kWh		-100		-100		200		0		800		-400	
						On-Peak kWh Bank							
Opening kWh Bank Balance (kWh)		0		0		-200		-400		0		-100	
kWh Bank Impact		0		-200		-200		400		-100		0	
Closing kWh Bank Balance (kWh)		0		-200		-400		0		-100		-100	-100
						Off-Peak kWh Bank							
Opening kWh Bank Balance (kWh)		0		-100		-200		0		0		0	
kWh Bank Impact		-100		-100		200		0		0		-400	
Closing kWh Bank Balance (kWh)		-100		-200		0		0		0		-400	-400
On-Peak Billed kWh		100		0		0		1,600		0		0	1,700
Off-Peak Billed kWh		0		0		0		0		800		0	800
Total Billed kWh		100		0		0		1,600		800		0	2,500

Notes:

- A TOU bi-directional meter (or AMI meter), is capable of measuring the flow of electricity in both directions and recording such flow into time differentiated "buckets" within the meter. Therefore, a TOU Net Metering customer will be able to offset on-peak consumption with on-peak generation and have any excess generation placed in a time-differentiated kWh Bank as well.
- A negative balance shown in the kWh Bank in the example represents kWh available to reduce consumption in future billing periods.

Period 1

Over the course of the billing period, the customer receives 1,600 kWh from FBC and delivers 1,500 kWh to FBC during the on-peak periods for a net amount of 100 kWh in on-peak energy flowing to the customer. In addition, during the off-peak periods, the customer receives 700 kWh from FBC and delivers 800 kWh to FBC. The customer is billed for the 100 kWh of on-

peak consumption according to the applicable TOU rate schedule, and has 100 kWh added to the balance of the off-peak kWh Bank.

Period 2

Over the course of the billing period, the customer receives 1,000 kWh from FBC and delivers 800 kWh to FBC during the on-peak periods for a net amount of 200 kWh in on-peak energy flowing to the customer. In addition, during the off-peak periods, the customer receives 500 kWh from FBC and delivers 600 kWh to FBC. The customer is not billed for any consumption. 200 kWh is added to the balance of the on-peak kWh Bank (which now has a balance of 200 kWh), and 100 kWh is added to the balance of the off-peak kWh Bank (which now also has a balance of 200 kWh).

Period 3

During billing period 3, the customer receives 2,800 kWh from FBC and delivers 3,000 kWh to FBC during the on-peak periods for a net amount of 200 kWh in on-peak energy flowing to the FBC. In addition, during the off-peak periods, the customer receives 1,000 kWh from FBC and delivers 800 kWh to FBC. The customer is not billed for any on-peak consumption since it generated more energy during the on-peak periods than required to meet its needs. The excess on-peak generation is added to the on-peak kWh bank, increasing the balance to 400 kWh (200 kWh previous balance plus 200 excess generation for the period). During the off-peak periods, 200 kWh is required from FBC in order to meet the need of the customer. However, the customer has a balance of 200 kWh in its off-peak kWh bank which is applied to the consumption which reduces the amount of kWh billed, and the kWh Bank balance to zero.

This general sequence of events and billing calculations is applied to the account in each subsequent billing period until the billing period closest to March 31st. At that time, any balance in the two generation banks is reduced to zero and the sum of the balances will be purchased by the Company at the BC Hydro 3808 Tranche 1 Rate. No premium as paid for the kWh in the on-peak bank, nor is a reduced rate paid for any balance in the off-peak rate. This is in keeping with the intent of the Program which is only to allow a customer to offset consumption. The customer has inherently received the time-based rates for its self-generation through the application of banked kWhs during the periods specified in the TOU rate schedules.

Appendix B
DISCUSSION OF ALTERNATIVE BILLING METHODOLOGIES

Currently, the language in the *BILLING CALCULATION* Section of RS 95 begins as follows:

> *1. Net metering shall be, for billing purposes, the net consumption at FortisBC's Service meter(s).*

Prior to the introduction of the RCR, determination of net consumption was a simple matter, and the intent at the time of drafting the original RIB Application was that billable consumption would be the net consumption of the two registers contained in the meter as shown in the examples below.

i. Customer is a Net Consumer of Energy from FBC

Register 1: Total kWh received by customer during the billing period	4,000
Register 2: Total kWh delivered to FBC during the billing period	1,200
Net consumption recorded at customer meter	2,800
kWh billed to customer	2,800

ii. Customer is a Net Supplier of Energy to FBC

Register 1: Total kWh received by customer during the billing period	1,200
Register 2: Total kWh delivered to FBC during the billing period	4,000
Net consumption recorded at customer meter	(2,800)
kWh billed to customer	0*

* Under the current tariff, the 2,800 kWh of Net Excess Generation is valued at retail rates and the dollar amount is credited to the customer account.

With a flat rate, the magnitude of either NEG or net consumption had no potential impact on the amount of funds paid either to or by the customer as each kWh had the same value. In example (i) above, at current rates the customer would simply have owed 2,800 kWh x 11.433¢[1] per kWh = $320.12. In example (ii), this same amount would be credited to the customer account.

However, with the introduction of the RCR, 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. 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. The two possibilities are shown in the examples below.

[1] This is the rate that is equivalent to the current RCR as found in RS 3, Exempt Residential Service.

iii. Application of Threshold after Netting the Registers

In this case, which is preferred by the Company and best reflects the intent of the original RS 95 language, the value of both the 2,800 kWh of net consumption (as in example (i)) and net generation (as in example (ii)) would be calculated as follows:

	kWh	Rate	Value ($)
kWh at Tier 1 Rate	1,600	9.845¢ per kWh	157.52
kWh at Tier 2 Rate	1,200	15.198¢ per kWh	182.38
Amount billed to customer in example I or credited to customer in example ii			339.90

However, although not consistent with the intent of the Company when it drafted the original RIB Rate Application, it is possible to interpret the Tariff in a manner that would produce the result shown in example iv below.

iv. Application of Threshold prior to Netting the Registers

In this case, the RCR billing components are applied to meter registers prior to netting. This effectively treats the customer net generation and net consumption as separate transactions. Using the same information from the previous examples, this methodology would appear as follows.

		kWh	Rate	Value ($)
Register 1: Total kWh received by customer during the billing period.	4,000			
Tier 1		1,600	9.845¢ per kWh	157.52
Tier 2		2,400	15.198¢ per kWh	364.75
Subtotal				522.27
Register 2: Total kWh delivered to FBC during the billing period.	1,200			
Tier 1		1,200	9.845¢ per kWh	(118.14)
Subtotal				(118.14)
Total amount billed to customer				404.13

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.

The billing methodology preferred by FBC (scenario iii) will produce a smaller credit for those customers that have Net Excess Generation over the course of a billing period but will also produce a lower bill for those customers that are net consumers of energy. Since most net

metering customers are net consumers, the Company expects most customers to benefit from confirmation that calculating billing after the individual registers are netted is appropriate.

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.

In addition, as described in Section 5 of this Application, since the accumulation of NEG is not expected to be a common occurrence, the isolated impact of this change in billing methodology will be minimized through proper application of the Tariff.

Appendix C
RATE SCHEDULE 95 - BLACKLINED

SCHEDULE 95 - NET METERING

DEFINITION:

Customer-Generator - An electric Service Customer of the Company that also utilizes the output of a Net Metered System.

Net Consumption - Net Consumption occurs at any point in time where the Electricity required to serve the Customer-Generator's load exceeds that being generated by the Customer-Generator's Net Metered System.

Net Generation - Net Generation occurs at any point in time where Electricity supplied by FortisBC to the Customer-Generator is less than that being generated by the Customer-Generator's Net Metering System.

Net Excess Generation - Net Excess Generation results when over a billing period, Net Generation exceeds Net Consumption.

Net Metering - Net Metering is a metering and billing practice that allows for the flow of Electricity both to and from the Customer through a single, bi-directional meter. With Net Metering, consumers with small, privately-owned generators can efficiently offset part or all of their own electrical requirements by utilizing their own generation.

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

(a) uses as its fuel, a source defined as a clean and renewable resource in the BC Energy Plan;

(b) has a design capacity of not more than 50 kW;

(c) is located on the Customer-Generator's Premises;

(d) operates in parallel with the Company's transmission or distribution facilities; and

(e) is intended to only 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.

APPLICABLE: To FortisBC Customers receiving Service under Rate Schedules 1, 2A, 20, 21, 22, 22 A, 23 A, 60, 61.

SCHEDULE 95 - NET METERING (Cont'd)

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 only 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.

Clean or renewable resources include 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, and shall have a maximum installed generating capacity of no greater than 50 kW.

RATE: A Customer enrolled in the Net Metering Program will be billed as set forth in the rate schedule under which the Customer receives electric Service from the Company and as specified in the Net Metering Billing Calculation section in this schedule.

BILLING CALCULATION:

1. Net metering shall be, for billing purposes, the net consumption at FortisBC's Service meter(s).
2. 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.
3. If in any billing period, the eligible Customer-Generator is a net generator of energy, the Net Excess Generation, as measured in kWh, shall be held in a "kWh Bank" and used in subsequent billing periods to offset net consumption.~~valued at the rates specified in the applicable Rate Schedule and credited to the Customers account.~~
4. For eligible Customers receiving Service under a Time-of-Use (TOU) rate schedule, consumption and generation during On-Peak Hours shall be recorded and netted separately from consumption and generation during Off-Peak Hours and held in separate kWh Banks such that any balance in the respective Banks can be applied in subsequent billing periods in either the On-Peak Hours or Off-Peak Hours as appropriate~~charges or credits applied to the account reflect the appropriate time-dependent value for the energy~~.

SCHEDULE 95 - NET METERING (Cont'd)

5. ~~5.~~ In the event that the operation of a renewable energy generating system results in a credit balance in~~on~~ the Customer-Generator's kWh Bank~~account~~ at the end of a calendar year, the balance~~credit~~ will be reduced to zero. In the case where there is a balance in the kWh Bank at the end of a calendar year, and the balance has been reduced to zero, FortisBC shall be deemed to have purchased that amount of electricity from the Customer, and shall pay the Customer for that electricity at the Energy Price determined in accordance with Clause 6 below.~~purchased by the Company. If such 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.~~
6. Energy Price – The price paid to a Customer Generator for electricity represented by kWh remaining in the kWh Bank at the billing period immediately following March 31 in each year shall be the BC Hydro 3808 Tranche 1 energy rate in effect at the time.

SPECIAL CONDITIONS:

1. Prior to the interconnection of a Net Metering System the Customer-Generator must submit a Net Metering Application for review and execute a written Net Metering Interconnection Agreement with the Company.
2. The Net Metered System and all wiring, equipment and devices forming part of it, shall conform to FortisBC's, "GUIDELINES FOR OPERATING, METERING And PROTECTIVE RELAYING FOR NET METERING SYSTEMS UP TO 50 kW And VOLTAGE BELOW 750 VOLTS" and shall be installed, maintained and operated in accordance with those Requirements.
3. Unless otherwise approved by the Company, the Customer-generator's Service shall be metered with a single, bi-directional meter.
4. The Contract Period for Service under this schedule shall be one (1) year and thereafter shall be renewed for successive one-year periods. After the initial period, the Customer may terminate Service under this Rider by giving at least sixty (60) days previous notice of such Termination in writing to FortisBC.
5. If the Customer-Generator voluntarily terminates the net-metering Service, the Service may not be renewed for a period of 12 months from the date of Termination.
6. The Company maintains the right to inspect the facilities with reasonable prior notice and at a reasonable time of day.
7. The Company maintains the right to disconnect, without liability, the Customer-Generator for issues relating to safety and reliability.
8. ~~Inflows of Electricity from the FortisBC system to the Customer-Generator, and outflows of Electricity from the Customer-Generators Net Metering System to the FortisBC system, will normally be determined by means of a single meter capable of measuring flows of Electricity in both directions.~~
9. ~~Alternatively, if FortisBC determines that flows of Electricity in both directions cannot be reliably determined by a single meter, or that dual metering will be more cost-effective, FortisBC may require that, at the Customers cost, separate meter bases be installed to measure inflows and outflows of Electricity.~~

~~10. Except as specifically set forth herein, Service supplied under this schedule is subject to the terms and conditions set forth in the Company's Electric Tariff on file with the British Columbia Utilities Commission.~~

Issued ~~December 20, 2010~~ Accepted for filing _____
FORTISBC INC. BRITISH COLUMBIA UTILITIES COMMISSION

By: Diane Roy~~Dennis Swanson~~ By: _____
Director, Regulatory Services~~Affairs~~ Commission Secretary

EFFECTIVE (applicable to consumption on and after) ~~January 1, 2011 G-156-10~~

SCHEDULE 95 - NET METERING (Cont'd)

SPECIAL CONDITIONS: (Cont'd)

8. Inflows of Electricity from the FortisBC system to the Customer-Generator, and outflows of Electricity from the Customer-Generators Net Metering System to the FortisBC system, will normally be determined by means of a single meter capable of measuring flows of Electricity in both directions.
9. Alternatively, if FortisBC determines that flows of Electricity in both directions cannot be reliably determined by a single meter, or that dual metering will be more cost-effective, FortisBC may require that, at the Customers cost, separate meter bases be installed to measure inflows and outflows of Electricity.
10. Except as specifically set forth herein, Service supplied under this schedule is subject to the terms and conditions set forth in the Company's Electric Tariff on file with the British Columbia Utilities Commission.
11. A Net Metered System used by a Customer-Generator shall meet all applicable safety and performance standards established as set forth in the Company's Rules and Regulations.
12. A Customer-Generator shall, at its expense, provide lockable switching equipment capable of isolating the Net Metered System from the Company's system. Such equipment shall be approved by the Company and shall be accessible by the Company at all times.
13. The Customer-Generator is responsible for all costs associated with the Net Metered System and is also responsible for all costs related to any modifications to the Net Metered System that may be required by the Company including but not limited to safety and reliability.
14. The Customer shall indemnify and hold FortisBC or its agents harmless for any damages resulting to FortisBC or its agents as a result of the Customer's use, ownership, or operation of the Customer's facilities other than damages resulting to FortisBC or its agents directly as a result of FortisBC or its agents own negligence or willful misconduct, including, but not limited to, any consequential damages suffered by FortisBC or its agents. The Customer is solely responsible for ensuring that the Customer's facilities operate and function properly in parallel with FortisBC's system and shall release FortisBC or its agents from any liability resulting to the Customer from the parallel operation of the Customer's facilities with FortisBC's system other than damages resulting to the Customer from the parallel operation of the Customer's facilities with FortisBC's system directly as a result of FortisBC or its agents own negligence or willful misconduct.

Appendix D
SUMMARY OF NET METERING PROGRAMS

Utility	Details	Reference	Bank?	NEG Compensation Rate	Retail Rate Structure
SaskPower	Electricity sent to the grid is banked and applied to your current month's electricity consumption. **Any excess electricity is carried over to the following month and applied against that month's consumption.** A credit appears on your monthly bill showing the net amount of electricity that has been banked. Your excess power should be used within the year; if not, at the end of 12 months on your net metering anniversary date, **any credits you may have for excess electricity sent to the grid will reset to zero.** If you want to produce more power than you consume over the calendar year and sell it to SaskPower, consider the Small Power Producers Program.	http://www.saskpower.com/efficiency-programs-and-tips/generate-your-own-power/self-generation-programs/net-metering-program/	Yes	Zero	Flat 12.623¢
Manitoba Hydro	If plans include producing excess energy to flow back to the utility for a credit on hydro bill or export energy for sale, a Power Purchase Agreement with Manitoba Hydro must also be signed. This agreement will be supplied to customer by Manitoba Hydro at a later date. If a generator produces less than 200 kW, we will purchase excess energy at the standard residential run-off rate.	https://www.hydro.mb.ca/environment/customer_owned_generation/distributed.shtml https://www.hydro.mb.ca/environment/customer_owned_generation/index.shtml	Yes	Retail	Flat 7.672¢
BC Hydro	As a net metering customer with a smart meter, when you generate more electricity than you use, you receive a credit to your account that is applied against your future electricity use. At your anniversary date, if you have an excess generation credit remaining on your account, BC Hydro will pay you at the published rate of 9.99 cents per kWh	http://www.bchydro.com/energy-in-bc/acquiring_power/current_offerings/net_metering.html?WT.mc_id=rd_netmetering	Yes	.0999 $/kWh	Stepped 7.97¢ 11.95¢ +5% DARR

Utility	Details	Reference	Bank?	NEG Compensation Rate	Retail Rate Structure
Hydro Quebec	The net metering option allows you to inject the surplus of the power you produce into the Hydro-Québec grid. **In exchange, kilowatt hour credits are applied to your bill.** Accumulated credits must be used within 24 months. You may inform us of the expiry date you wish to use; otherwise the default date of March 31 will apply. On that date, any credits banked will be lost, as **the net metering option does not allow monetary payment in exchange for credits.**	http://www.hydroquebec.com/residential/understanding-your-bill/rates/residential-rates/net-metering-option/ http://www.hydroquebec.com/self-generation/docs/depliant-mesurage-net.pdf	Yes	Zero	Stepped 5.68¢ 8.60¢

Utility	Details	Reference	Bank?	NEG Compensation Rate	Retail Rate Structure
NFLD (Provincial Policy 2015)	Key elements in the net metering policy framework include: • Eligibility is limited to small-scale renewable energy sources; • The programs will be available to domestic and general service (commercial) customers; • Individual renewable generation systems will be limited up to a maximum of 100kW and cannot be sized beyond a customer's load; • Meter aggregation is not permitted (only one metering point per account and property); • A customer's net consumption will be billed using retail rates that are consistent with those that apply to a non-net metering customer of the same size, type and location; • After each billing period (ie. monthly), a customer's net excess generation will be credited to the customer's next bill as a kWh credit; • Annually, net excess generation will be settled with a cash payment or bill credit at the retail rates that are used to determine the bill for the customer's net consumption. Whether it is a cash payment or bill credit will be proposed by the utilities and subject to PUB approval; and • The program will have a provincial cap of five megawatts (MW).	http://www.nr.gov.nl.ca/nr/energy/electricity/index.html#netmetering	Yes	Retail	Flat 10.573¢ (NFLD Power)

Utility	Details	Reference	Bank?	NEG Compensation Rate	Retail Rate Structure
NB Power	A special type of meter or "net meter" will be installed replacing your existing meter. This new meter provides readings for the electricity you use from NB Power, and the electricity you produce and send back to our distribution system. We then bill you for the difference or 'net' amount of electricity used. Credits cannot be carried forward beyond March of each year. At that time, any remaining credit not used will be reduced to zero. A net metering agreement must be signed prior to the installation of the net meter	https://www.nbpower.com/en/products-services/net-metering/	Yes	Zero	Flat 10.42¢
Maritime Electric	The credits do not accumulate indefinitely. On October 31, or another month end if the customer so chooses at the time of applying for net metering service, of each year any outstanding credits from the preceding year are eliminated.)	http://www.maritimeelectric.com/documents/environment/Net_Metering_Brochure.pdf	Yes	Zero	Decline Block 13.16¢ 10.38¢
NWT Power	Net Metering participants receive a credit in kilowatt hours equal to the excess energy, calculated at the full retail rate. Customers can use excess generation up until March 31 of each year and use the credit in the winter months when they are most needed. The excess energy credits for each Net Metering customer will be reset to zero at the end of each annual netting period. Customers in Net Metering receive a credit in kilowatt hours equal to the excess energy, calculated at the full retail rate.	http://www.ntpc.com/docs/default-source/default-document-library/ntpc-net-metering-13-08-14.pdf?sfvrsn=2	Yes	Zero	Stepped 29.73¢ 60.83¢

Utility	Details	Reference	Bank?	NEG Compensation Rate	Retail Rate Structure
Nova Scotia Power	If you generate more electricity than you can use, these surplus kilowatt-hours (kWh) will be "banked" and applied to your next bill to offset any electricity drawn from the grid. If any surplus kilowatt-hours remain on the account at the end of a 12 month cycle, you will be paid for that energy at the same rate you pay for electricity from the grid. Your renewable energy generator must be sized to meet your electricity consumption. Put another way, the generation capacity of your wind turbine or other equipment must be comparable to the amount of electricity used by your home, business, or other accounts, and cannot be capable of producing more than one megawatt (MW) of electricity. One MW is equal to 1000 kilowatts (kW).	http://www.nspower.ca/en/home/for-my-home/make-your-own-energy/enhanced-net-metering/frequently-asked-questions.aspx http://www.nspower.ca/en/home/for-my-home/make-your-own-energy/enhanced-net-metering/default.aspx	Yes	Retail	Flat 14.800¢
Ontario – North Bay Hydro	• Net metering measures the quantity of electricity you use against the quantity of electricity you generate resulting in a "net" total from which your bill is calculated. • Under our Net Metering Agreement, excess generation credits can be carried forward for up to 12 months to offset future electricity costs. • North Bay Hydro does not pay you for any excess generation.	http://www.northbayhydro.com/pdf/Net_Metering_Fact_Sheet.pdf	Yes	Zero	TOU 8.3¢ 12.8¢ 17.5¢ Off Mid On (winter)

Utility	Details	Reference	Bank?	NEG Compensation Rate	Retail Rate Structure
Alberta	Small MGs will be paid for their exported electrical energy based on the same price of the electrical energy that they are purchasing from their energy retailer. For example, if the retailer's retail energy rate is 10 cents per kWh, the MG owner will be compensated for 10 cents for each kWh generated. Note that this price does not include the price of delivering the electrical energy to the MG owner's site. The WSP will provide you with either a bidirectional cumulative meter (in most cases) or two one-way meters that will measure how much you import into your site and separately measure how much you export onto the electrical distribution system.	http://www.auc.ab.ca/involving-albertans/micro-generation/Documents/MicroGeneratorApplication_Version1-3_20130705%20.pdf			Varies

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Appendix E
DRAFT ORDER

British Columbia Utilities Commission

Sixth floor, 900 Howe Street
Vancouver, BC Canada V6Z 2N3
TEL: (604) 660-4700
BC Toll Free: 1-800-663-1385
FAX: (604) 660-1102

ORDER NUMBER
G-xx-xx

IN THE MATTER OF
the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

FortisBC Inc.
2016 Net Metering Update Application Changes

BEFORE:
Panel Chair/Commissioner
Commissioner
Commissioner

on Date

ORDER

WHEREAS:

A. On July 29, 2009, the British Columbia Utilities Commission (Commission) approved, by way of Order G-92-09, the FortisBC Inc. (FBC or the Company) Net Metering Tariff (Rate Schedule 95);

B. On April 15, 2016, FortisBC Inc. (FBC or the Company) filed for approval of certain changes to the Net Metering Program (Application);

C. In the Application, FBC requests approval to:

   1. Changes to RS 95 to clarify the intent of the Net Metering Program as described in Section 4 of the Application and reflected in the revised RS 95 tariff contained in Appendix C.

   1. Use of a kWh Bank as described in Section 5 of the Application to carry forward Net Excess Generation for an annual period with compensation at the end of that annual period.

   2. Compensation for any positive kWh balance remaining at the end of the annual period using the BC Hydro RS3808 Tranche 1 rate, including the resulting RS 95 Tariff changes.

D. FBC also requests Commission acceptance of the Company's approach to the billing calculation methodology to remove the potential for misunderstanding about the application of the Net Metering Tariff schedule;

E. The Commission has reviewed and considered the Application and determines that the requested changes as outlined in the Application should be approved.

NOW THEREFORE pursuant to section 64.01 of the *Utilities Commission Act*, the British Columbia Utilities Commission orders as follows:

1. The changes to the FortisBC Inc. (FBC) Net Metering Program (Program), as proposed by FBC, are approved.

2. The changes to the billing calculation methodology, as proposed by FBC, are accepted.

DATED at the City of Vancouver, in the Province of British Columbia, this (XX) day of (Month Year).

BY ORDER

(X. X. last name)
Commissioner