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August 16, 2018

British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, BC
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Attention: Mr. Patrick Wruck, Commission Secretary and Manager, Regulatory Support

Dear Mr. Wruck:

Re: FortisBC Inc. (FBC)
Project No. 3698820
Self-Generation Policy Stage II Application (the Application)
FBC Final Submission

In accordance with Commission Order G-140-18 setting out the remainder of the Regulatory Timetable for the review of the Application, attached please find FBC's Final Submission.

If further information is required, please contact Corey Sinclair 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 “UCA”)**

and

An Application by FortisBC Inc.

Self-Generation Policy Stage II Application

FINAL SUBMISSIONS OF

FORTISBC INC.

August 16, 2018

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1. This document is the Final Submission of FortisBC Inc. (FBC or the Company) in the above noted process. The submission contains a general discussion of the context of the Self Generation Policy (SGP), with background, including FBC's interpretation and position on a number of the issues that the SGP is intended to address. Following this, FBC summarizes the proposals contained in the SGP Stage II Application (Application) and then discusses a number of matters that, through the regulatory process subsequent to the filing of the Application, have arisen as being of particular interest to interveners and the Commission.

PART One: GENERAL DISCUSSION AND CONTEXT

2. SGP is the general term that captures all of the various policies, tariffs and processes involved in managing how customers with self-generation (SG) interact with FBC as the utility from which the customers would normally receive electrical service (in the absence of SG). The BCUC has described self-generation as, "...electrical power generation facilities that are installed at the same site as the customer's plant, on the customer's side of the point of delivery..."¹

3. The existence of SG on the FBC system is not new. The interconnection of customer-owned generation is facilitated by Section 10 of the FBC Electric Tariff, and the related technical requirements are contained in the *Facility Connection Requirements* document². Similarly, the use of the FBC transmission system is governed by an established set of policy and supplemental tariff documents, including the *Open Access Transmission Tariff (Tariff Supplement No. 7)* and Rate Schedules 100 to 109.

4. In 2015, the BCUC approved Rate Schedule 37 - Large Commercial Service - Stand-by Service, for Large Commercial customers connected at transmission voltage (60,000 volts and above). This is a Back-Up and Maintenance Service intended to provide SG customers with a firm supply of electric power and energy when the customer's generating facilities are not in operation or are operating at less than full rated capability.

¹ Footnote 2, BCUC Decision attached to G-19-14. This is also the exact definition from the template BC Hydro EPA Agreement
(https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/corporate/tariff-filings/electric-tariff/089%20TS_89.pdf)

² The Transmission Services page of the FBC website is located at
<https://www.fortisbc.com/Electricity/CustomerService/TransmissionServices/Pages/default.aspx>

5. FBC has had interconnected SG on its system for decades, has provided transmission services during that time, and has purchased a portion of the output of customers' SG pursuant to various energy purchase agreements, always on a *net-of-load* (NOL) basis.³

6. Given that the existence of interconnected SG is not a new occurrence, it follows that a relatively new imperative to codify related SG policies has driven the current Application. Generally speaking, and as noted in Section 1 of the Application, the policies are intended to provide clarity around how the self-generation output will be treated, in order to facilitate self-generating customers' ability to make investment decisions. A desire for clarity and for the expression of policies within FBC service territory was also reflected in certain of the underlying Commission decisions related to SG.

7. FBC considers that there are two primary issues driving the current Application.

8. The first of these separate, but related, considerations is the opportunity sought by SG customers to sell power that would otherwise be used to serve their load, and the second consideration is the recent Commission requirement that FBC's SG related rates include a recognition of the benefits and costs (in sum, the *Net Benefits*), that the presence of SG brings to the utility system and other FBC customers.

9. With regard to the first issue, it is the case that since 2009, sales of SG output have been permitted only on a NOL basis.⁴ That is, prior to selling any self-generated power to FBC or a third party, the SG customer would first have to direct any available generation output toward meeting the full plant load. If, after the full plant load was served, there remained additional SG power, it could be sold.

10. It is the position of some SG customers that the disposition of SG power should be entirely at the discretion of the generation owner. At one extreme, this could lead to the situation where the SG customer met the entire plant load with power purchased from FBC while selling all its SG output to either FBC or a third party, potentially on an hourly basis. This could be termed "unrestricted sales".

11. Between unrestricted sales and NOL sales, there exist two additional scenarios that have been explored in various regulatory processes. These are the circumstances surrounding the sales of SG

³ Net-of-load means that a SG customer can only sell generation output to a third party after having served all of the plant load that is interconnected with the SG facility and the FBC system.

⁴ Pursuant to Commission Order G-48-09, page 22, "The Commission Panel is persuaded that a rate allowing for the sale of power by self-generators, not in excess of their historical loads, is unjust and unreasonable and therefore contrary to the public interest..."

output deemed to be incremental or previously idle, and the recognition that there may be some amount of SG power that an SG customer may have a right to sell on a non-NOL basis.

12. FBC is also cognizant of the fact that the comprehensive SGP Application that was initiated by Order G-60-14 was meant to result in FBC SG policies in its service territory that are sufficiently developed, articulated and approved by the Commission such that all parties would gain comfort and that in the interest of regulatory efficiency, the restrictions in section 2.5 of FBC's Power Purchase Agreement with BC Hydro (PPA) could be removed.⁵

13. In response to Commission IRs 2.7.1 and 2.7.1.1, the Company has expressed that removal of the section 2.5 restrictions from the PPA would provide the clearest indication that the FBC SGP is sufficiently developed. However, in the view of FBC, approval of the FBC SGP should in any event include a determination that restrictions should not be required on how FBC resources SG customer load that is served in accordance with the SGP.

A. SALES OF INCREMENTAL OR IDLE GENERATION

14. Unused generation capacity may be considered "idle" where a SG customer has an existing generator that is being used at less than its full capability. A SG customer may also consider adding additional generating capacity to that already in service which may be considered "incremental" generation. Customers have long had the ability to sell the output related to either idle or incremental generation provided that such sales did not result in an increase in the amount of energy historically purchased from the utility at embedded cost rates. This principle was established for BC Hydro by Commission Order G-38-01.⁶

15. As stated by FBC in its response to BCUC IR 2.2.1, the Company accepts the definition of idle generation suggested by BC Hydro and included in the preamble to that question. In that IR response, FBC also stated that arriving at a definition for idle generation is not required in the proposed FBC SGP, since the treatment of all SG power is consistent without a distinction for idle or incremental generation being made.

⁵ See pages 97-101 of the G-60-14 Decision.

⁶ The Commission noted in the G-19-14 Decision that, "This 'net of load' methodology is different than the GBL methodology approved for BC Hydro's customers by Order G-38-01."

16. Order G-48-09 envisioned that a determination for each self-generator of the historical baseline load served, or, in the alternative, some means of monitoring, on a dynamic basis, excess self-generation net of load, would be required in order to identify what the amount of historical energy purchases were, or alternately, how much of the SG customer load was normally served from the SG customer's own resources. This measure has come to be known as the *Generation Baseline*, or *GBL*.

17. The GBL denotes that portion of a SG customer's own load that it had served in the past and must continue to serve.

18. In the Stage I SGP Application, the Panel indicated that it supports a GBL construct for FBC to mitigate the risk to other ratepayers. In response, FBC proposed in the Application a construct called the *Self-Supply Obligation (SSO)*. The SSO is conceptually the same as the GBL, but differs in name to avoid confusion with the manner in which the GBL is employed in the BC Hydro service area. The SSO is set in reference to the level of the SG customer's load historically served from the SG customer's own resources.

19. In the view of FBC, the GBL and SSO are substantially equivalent, and both adhere to the principles contained in the G-38-01 Decision. The FBC SSO is, however, subject to further adjustment in consideration of the Net Benefits of self-generation as described later in these submissions.

B. SALES OF POWER THAT IS NOT NET-OF-LOAD

20. To this point, the FBC SGP is unremarkable in the BC context. The default mode of service for a customer without an SSO (or GBL) is NOL, and once service pursuant to an SSO begins, the risk to other customers (that may result from the increased use of embedded cost power by the SG customer while selling SG output that would otherwise serve load) is mitigated. This construct adheres to the G-38-01 principle and is generally consistent with the practice of BC Hydro.

21. While BC Hydro has stated that it does not have customers that have requested the ability to sell SG power to a third party, and has not therefore developed a GBL determination guideline for use in such a case, it has stated a general approach that would apply,

If a customer with self-generation facilities wished to sell self-generation output not in excess of load to a third party (i.e., not BC Hydro), then a GBL similar to a Contracted GBL would be required to identify normal historic self-generation output used for self-supply and incremental self-generation output that might be eligible for sale to third

parties in accordance with BCUC Order No. G-38-01. If BC Hydro and the customer were not able to agree on a GBL in such circumstances, the customer might take its issue to the BCUC.⁷

22. In the language of G-38-01 and subsequent decisions, the circumstance where embedded cost power would be used to serve load while a SG customer was simultaneously exporting power was described as “arbitrage”. In the Stage I Decision, the panel noted that the term, “...seems to be subject to logical errors of both commission and omission related to the equivocal nature of its use by parties. The Panel agrees that the key issue with regard to the purchase and sale of electricity by a customer with self-generation is whether such activities are beneficial, detrimental or neutral as far as their impact on other ratepayers.”⁸ While the term is not therefore used in the FBC SGP, it remains relevant to understanding decisions that followed Order G-38-01 where it was still in use.

23. From 2009 until 2014, it was generally the position of the Commission that power purchased by FBC from BC Hydro under rate schedule 3808 (PPA Power) was not to be arbitrated. This was in fact a matter settled by Order G-48-09. (The New-PPA Decision G-60-14 contains discussion on whether such a prohibition is still required.)

24. While the G-38-01 Decision contained directives that were specific to BC Hydro, and were relevant only to the specific conditions that existed at the time this Decision was rendered, FBC is generally supportive of the use of a GBL methodology for determining the historical use of SG power in service of the SG customer’s load. Once determined, the GBL can serve as a means of mitigating against the arbitrage, or risk to other rate payers from the use, of embedded cost power, and, as will be discussed later in this document, a major aspect of the FBC SGP is based on setting the SSO of the SG customer in a manner that is consistent with the principles articulated in the G-38-01 Decision.

25. However, there is no general prohibition on the “arbitrage” of the embedded cost power of FBC. This follows from various Commission decisions.

26. In the G-188-11 process, the Commission considered the question of whether FBC’s own generation and other components of its resource stack outside of BC Hydro PPA Power should be identified as resources that should not be arbitrated.

⁷ BC Hydro response to Celgar IR 1.1.2.9, Exhibit B-4, Application to Amend Tariff Supplement No. 74 Customer Baseline Load Determination Guidelines for RS 1823 Customers with Self-Generation Facilities.

⁸ Stage I Decision, page 27

27. Notably, the Commission found as follows:

- ...the Commission Panel finds Celgar is entitled to some amount of FortisBC's non-PPA embedded cost power when selling power. But it is unclear what that level should be.
- Given that Celgar has entitlement to some amount of FortisBC non-PPA embedded cost power, it follows that Celgar would be allowed to sell such power to third parties unless specifically precluded from doing so by contract with FortisBC. That is, such non-PPA power could be exposed to the potential for arbitrage, subject to the terms of an agreement between FortisBC and Celgar which would require Commission approval.

28. As a summary statement, the Panel in the G-188-11 process provided a plainly worded description of the situation:

...FortisBC is precluded from selling BC Hydro PPA Power to Celgar or other self-generators when they are selling power, but it is able to sell power from the components of its resource stack that do not include such power.

29. Therefore, at the time that the G-188-11 Decision was issued, it was the case that FBC could not sell any power purchased under the BC Hydro PPA to a SG customer when that SG customer was selling power, but there was no prohibition on FBC selling embedded cost power that did not include PPA power to a SG customer when that SG customers was selling power.

30. In the years since Order G-188-11 was issued, the Commission has had occasion to re-examine the circumstances of the FBC-BCH PPA and the requirement to include language therein that prohibits FBC from supplying PPA power to its SG customers when they are selling power.

31. As FBC has pointed out in the SGP process, the G-60-14 PPA Decision stated that,

...the Commission Panel determines that under the terms of the New PPA there is no significant material risk of harm to BC Hydro that warrants it reasonable to continue to include the restrictions as originally provided for in sections 2.5(a)(ii), 2.5(a)(iii) and 2.5(b) of the New PPA.

32. In the view of FBC, it would be inappropriate, and unfair to FBC and its customers if the Commission, having determined that FBC should provide service from its embedded cost resources to a SG customer when that customer is selling power, were also to place a limitation on FBC's ability to source the required power in the most cost-effective manner. This point was discussed in the FBC responses to BC Hydro IRs 1.2.4 and 1.2.4.1.

33. While, as discussed in the response to BCUC IR 2.8.3, for the foreseeable future it is unlikely that the PPA would be utilized as a resource to meet any increased SG customer load, it may at some point. However, either providing power that supports the power sales activities of an SG customer is to be considered a Commission approved utility activity or it is not. If the Commission deems it to be so, then that load should be resourced without distinction from any other load served by FBC.

34. FBC understands that BC Hydro takes a different view of this particular issue and expects that as part of its review of the FBC SGP, the Commission will provide a determination on the point. The objections of BC Hydro are based on the non-compliance of the FBC SGP with the G-38-01 principle that there should be no increase in the supply of embedded cost power to SG customers that effectively support the sale of power that is not in excess of load. However, the difficulty with this line of reasoning is that Order G-38-01 only applies to BC Hydro and that for FBC, the additional Commission determinations described above effectively enable exactly the types of transactions that G-38-01 sought to avoid in the BC Hydro context, even if one assumes that the same considerations were to be extended to FBC. It appears that, in BC Hydro's view, as expressed in Exhibit C2-2, BC Hydro's customers will be harmed if the FBC SGP results in an increase in the cost of resources BC Hydro uses to supply its customers in general or a decrease in trade income. However, this objection, in addition to being speculative and unsupported by evidence, should also be considered in light of the evidence presented by FBC, and the Commission's sense in the New PPA Decision, that additional SG load will not be resourced from the PPA.

35. To use the old terminology, the Commission has expressly said that some amount of arbitrage of FBC embedded cost power is permitted. Unless this is reversed in some manner, it is difficult to see how the position of BC Hydro can be reconciled with the situation faced by FBC.

36. It is important to note that although these previous Commission decisions have seemingly provided the opportunity for a SG customer to have access to FBC embedded cost power while selling SG power, and expressed that the prohibition on supply to SG customers from the PPA may no longer be required, FBC has not relied upon these determinations in any aspect in the SGP II Application. Rather, the potential outcome of the SGP that may result in sales of below load power comes from the sharing of Net Benefits as described in the next section. The G-188-11 determinations do, however, provide additional context for the inability to dismiss out of hand the practice of selling below load power.

C. NET BENEFITS OF SELF-GENERATION

37. There has been much discussion of what the net-benefits of SG are, and if and how they should be measured and shared between the SG customers that provide them and other FBC customers. Relevant to the discussion are the Commission determinations specific to the Net Benefits of SG. The Stage I SGP Decision included the following determinations:

- (FBC should) Establish a policy that defines how the net benefits of self-generation are measured....
- The Panel supports the policy where the net benefits are recognized and accrue to both the self-generating customer and FortisBC's customers on a shared basis;
- The Panel does not support the position that the sharing of net benefits is best reflected through the Stand-by Rate's SBBD, rather the Panel find that the GBL is the mechanism that reflects a sharing of the net benefits between the ratepayers and the self-generator.

38. It is worth noting that with regard to the sharing of benefits, the Commission regarded the very existence of a GBL as representative of this concept. This was described as follows:

The baseline established in Order G-38-01 was precisely that; a means to share the benefits between the self-generator and the utility. The customer with self-generation was allowed to capitalize on current market opportunities while ensuring that ratepayers were no worse off by requiring the self-generator to continue to off-set a portion of load that would not harm other ratepayers. This allowed the ratepayers to continue to realize the benefit from the utility not having to supply that portion of the self-generator load, which is a benefit to ratepayers.⁹

39. However, where a SG customer does not have idle or incremental generation, such a benefit cannot be realized. It is also unlikely that SG customers will view the existence of a baseline as much of a benefit in light of the understanding that they have a right to export embedded-cost power.

40. FBC has therefore proposed to reflect the sharing of benefits through either an adjustment of the SSO, which effectively allows for additional sales opportunities, or the reduction in the Stand-by Billing Demand (SBBD) as utilized in the billing related to RS 37 service. The latter provides a monetary benefit to customers that are not utilizing an SSO.

41. It is the adjustment to the base SSO level (set with reference to historical generation), which results from the requirement to provide a sharing of Net Benefits, that provides the additional "arbitrage" opportunity, not the original reference point of the SSO itself.

⁹ FortisBC Inc. Self-Generation Policy Application Stage I Decision, page 31.

PART Two: THE FBC SELF-GENERATION POLICIES

42. In light of the background provided in Part 1 of this submission, FBC filed its Application on November 10, 2016. The Application was intended to provide a full discussion of all of the elements that would constitute FBC's policies regarding self-generation in consideration of, and in compliance with, the requirements that were summarized on page 52 of the Stage I Decision and included in Order G-27-16 as constituting "a comprehensive Self-Generation policy and Generator Baseline Guidelines".¹⁰

43. The Application included further background, relevant regulatory and legislative considerations, discussion of related issues (such as the NOL standard), and provided a review of the requirements for the SGP as included in the Stage I Decision.

44. Further, in the Stage I Decision the Panel indicated that it would take into consideration section 59(1)(a) of the *UCA*,¹¹ which prohibits a utility from having a rate that is unjust, unreasonable, unduly discriminatory or unduly preferential.

45. No part of the FBC SGP would extend a form of agreement, rule, facility or privilege to any customer that would not be uniformly extended to all customers under substantially similar circumstances within the FBC service area. Neither would the implementation of the proposed SGP result in a circumstance that would fail to yield reasonable compensation for the service provided by the utility, or a fair and reasonable return for FBC. The SGP would also, for the foreseeable future, provide a benefit to the rest of FBC customers.

46. The standalone SGP Document, including the appendices describing the determination of the SSO and RS 37 SBBD, were filed as part of the responses to BCUC IR 1 (Exhibit B-2)

47. The evolution of the SGP at FBC has taken place over a considerable period of time, and has involved a number of separate regulatory processes that have, in some way, touched on topics related to the provision of service to customers connected at transmission voltage, whether for the purpose of serving load or selling SG output to a third party. At this time, the policies for which FBC is seeking Commission approval are those in the standalone SGP included in Exhibit B-2.

¹⁰ BCUC IR 1.1.1

¹¹ Stage I Decision, page 11

48. Despite the lengthy and at times contentious process that has culminated in the proposed FBC SGP, the resulting documents for which approval is sought (“Policies Regarding Self-Generating Customers”, which generally outline the terms and conditions of the SGP; the draft Self-Supply Obligation Guidelines; and the “Calculation of Stand-by Billing Demand”) are relatively brief. In the view of FBC, this is because processes proposed in the SGP are primarily concerned with a small number of issues, namely:

1. The conditions and restrictions under which SG customers of FBC may sell SG power to third parties, where, in the absence of the SGP, that power would otherwise be used to serve the SG customer’s load, and
2. The manner in which the net-benefits of self-generation are recognized and some portion thereof returned to the SG customer that provides them.

49. In the situation envisioned in point number one above, FBC has proposed a mechanism (the Self-Supply Obligation, or SSO) to arrive at the amount of load that the SG customer must continue to serve prior to making any SG output available for sales to third parties. The SSO is based directly on the amount of load that has historically been served by self-generation. This is consistent with the principle established by the Commission in Order G-38-01; is consistent with the Commission’s direction at page 44 of the Stage I Decision that, “The Panel generally supports an incremental approach, based on a historical level of self-supply...”; and is generally consistent with the basis for the establishment of Generator Baselines used by BC Hydro.

50. SG customers that do not intend to sell power that is not in excess of load do not require an SSO.

51. With respect to point number two above, the manner in which the Net Benefits of SG are shared with a SG customer is dependent on whether or not the customer chooses to take service pursuant to an SSO.

52. Where service is taken pursuant to an SSO, the recognition of Net Benefits serves to reduce the SSO by a maximum of 50%. The customer can elect an obligation to continue to meet greater than 50% of its load from self-generation. This would result in a higher SSO and lower notional recognition of Net-Benefits.¹²

¹² See the discussion in the response to BCUC IR 2.20.2.

53. For a SG customer that is not selling power to a third party utilizing an SSO, and is taking service under the Company's Standby Rate (RS 37), the recognition of Net Benefits serves to reduce the SBBB and thereby the amount of fixed charges levied under RS 31.

54. A SG customer utilising neither an SSO nor RS 37 will forego any recognition of the Net Benefits that the SG customer may provide.

55. Within its SGP, FBC does not propose to measure and value the Net Benefits of self-generation in any particular circumstance given the difficulties with doing so set out in the record.

56. FBC has attached to this submission an updated draft of the Self-Supply Obligation Guidelines that reflects a number of revisions made in response to additions and clarifications requested during the information request process.

PART Three: SPECIFIC ISSUES FOR DISCUSSION

57. In the following section, FBC examines and provides a position on particular issues of interest or concern expressed by the Commission and stakeholders, as gleaned from materials filed in this process. To the extent that other issues are raised through the final submissions of interveners at a later date, FBC will address them, as appropriate, in reply.

	Issue	FBC Position	References
1	The provision of an SSO, which may ultimately require FBC to serve an additional load equal to as much as 50% of the load of an SG customer, may result in increased costs that would be borne by other customers.	<ul style="list-style-type: none"> FBC considers that the ability of an SG customer to sell power that is not net-of-load has been granted by the Commission. While the risk to other customers cannot be eliminated, the minimum 50% SSO requirement mitigates this risk. Under current conditions, it is far more likely that the practice of an SG customer to sell power that is not net-of-load will provide rate mitigation for other FBC customers. 	<ul style="list-style-type: none"> BCUC IR 2.4.1.1.2 CEC IR 1.4.4 BC Hydro IR 1.2. BC Hydro IR 1.1.6

	Issue	FBC Position	References
2	The provision of an SSO, which may ultimately require FBC to serve an additional load equal to as much as 50% of the load of an SG customer, may result in increased costs for BC Hydro and its customers	<ul style="list-style-type: none"> FBC considers any harm to BC Hydro's customers to be remote as is consistent with the Commission's findings in the New PPA Decision (G-60-14) at pages 92 and 98. Even if such risk is present, it is mitigated by the SSO in the same manner that it is mitigated for FBC customers. It is highly unlikely that FBC will utilize its PPA with BC Hydro to meet any increased SG load. 	<ul style="list-style-type: none"> BCUC IR 2.4.1.1
3	The Net Benefits of self-generation are assumed to be positive in all cases of SSO determination, despite the fact that FBC has acknowledged that the presence of self-generation may not provide benefits in some cases.	<ul style="list-style-type: none"> FBC believes that the development of a standard process and metrics by which to evaluate individual installations would be complicated and expensive. Particularly given the likelihood that increased sales to SG customers is likely to provide rate mitigation for the foreseeable future, and that there are so few SG customers, the proposed methodology is reasonable. 	<ul style="list-style-type: none"> CEC 1.8.2
4	The applicability of the SGP to Wholesale customers is unclear, or that it is unclear why the SGP should not apply to Wholesale customers.	<ul style="list-style-type: none"> FBC believes that the SGP has been specified as only applying to non-Wholesale customers. FBC believes that the provision of the SGP has not been adequately considered. 	<ul style="list-style-type: none"> BCUC IR 2.9.1 to 2.9.5
5	Should the sale of below-load FBC embedded cost power be available to third parties?	<ul style="list-style-type: none"> While the New PPA Decision indicated that the FBC SGP should ensure that, "arbitrage is not allowed" (at page 104), there are other decisions that seem at odds with this determination. FBC believes that clarity on this point from the BCUC would be helpful. 	<ul style="list-style-type: none"> BCUC IR 2.1.1 BCUC 4.1.1.2
6	A definition of idle generation is not included in the Application for the setting of the GBL.	<ul style="list-style-type: none"> The SSO is set in reference to the normal historical level for self-supply for idle generation. 	<ul style="list-style-type: none"> BCUC IR 2.2.1 CEC 1.18.1

	Issue	FBC Position	References
7	The SSO methodology does not conform to the principles of Commission Order No. G-38-01 and in particular the principle of not requiring the utility to supply increased embedded cost power to facilitate sales to a third party.	<ul style="list-style-type: none">FBC does not agree. The SSO is set with regard to historical level of generation used to serve load. It is the requirement to recognize the Net Benefits of SG that is new since Order G-38-01 was issued.	
8	There is no principled basis for the proposal to use 50 per cent as the reduction factor that is applied to the SSO in recognition of the net-benefits of SG.	<ul style="list-style-type: none">The 50 percent factor is intended to recognize the assumed presence of Net Benefits of SG, and is applied in an effort to avoid a complicated, lengthy, and potentially contentious process designed to arrive at a defined value for any Net Benefits.	<ul style="list-style-type: none">BCUC IRs 2.21.1 and 2.25.1 to 2.25.3.3.

58. ALL OF WHICH IS RESPECTFULLY SUBMITTED.

Dated: August 16, 2018

[original signed by]
Diane Roy

Attachment 1

UPDATED DRAFT SSOG



TARIFF SUPPLEMENT NO. ##

Self-Supply Obligation Guidelines

Order No.: G-##-##

Issued By: Diane Roy, Vice President, Regulatory Affairs

Effective Date:

BCUC Secretary: _____

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Issued By: Diane Roy, Vice President, Regulatory Affairs

Effective Date:

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Original Page i

BCUC Secretary: _____

1. Applicability

The Self-Supply Obligation (SSO) Guidelines (the Guidelines) apply to Eligible Customers of FortisBC Inc. (FBC or the Company) with clean and renewable generation located on the customer side of the meter, that intend to sell power, not in excess of load, to a Third Party, which may include FBC.

The purpose of the SSO is to establish the amount of electricity that a customer must self-supply. A SSO consequently defines the supply obligation of FBC, but does not create any obligation, or establish any pricing parameters, to purchase any of the output of the customer's self-generation.

Any customer without a Commission-approved SSO, or that has not yet commenced service pursuant to a Commission-approved SSO, will take service on a Net-of-Load (NOL) basis.

2. Definitions

In the Guidelines,

- Annual Generation Used to Serve Load** - is the amount of a customer's self-generation output that over a 365 day period was used to serve a customer's plant load.
- Commission** - means the British Columbia Utilities Commission
- Eligible Customer** - Eligible Customers for the purpose of this Tariff Supplement are those taking service on one of rate schedules 30, 31, 32, and 33 and that have clean and renewable self-generation facilities located on the customer side of the meter which are capable of meeting some or all of the electrical needs of the customer's plant.
- Existing Customer** – an Existing Customer will have at least 12 months of operational history for both the load and generation facilities prior to the date at which a request to determine an SSO is made to the Company.
- Existing Self-Generation Facilities** - Existing Self-Generation Facilities are those self-generation facilities, fueled by clean and renewable resources, that have been in normal operations for a period of at least 12 months prior to the date at which a request to determine an SSO is made to the Company.
- Initial Self-Supply Obligation (Initial SSO)** – The Initial SSO is the result of the first SSO determination requested by the customer.

Commented [TCS1]: Third Party capitalized per the response to BCUC IR 2.29.5.

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Commented [TCS2]: Definition revised per the response to BCUC IR 2.29.4.

Deleted: For an Existing Customer, this will be based upon metering at the customer's facilities and agreed upon between FBC and the customer.

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7. **Net of Load (NOL)** - NOL service is the default service arrangement for customers without a Commission-approved SSO, or that have a Commission-approved SSO but are not taking service pursuant to it. A customer taking service on a NOL basis must, on an hourly dynamic basis, supply 100% of its plant energy and capacity requirements prior to using its self-generation for the purpose of Third Party sales. **Self-Supply Obligation (SSO)** – the SSO demarks the amount of electricity that the customer must generate for self-supply prior to using any self-generation for another purpose.

8. **New Customer** - A customer without at least 12 months of operational load history prior to the date at which a request to determine an SSO is made to the Company.

9. **Subsequent Self-Supply Obligation (Subsequent SSO)** – A Subsequent SSO is any SSO that is determined for the customer after the Initial SSO is no longer in place, unless the Initial SSO has been adjusted in accordance with Section 9.

10. **Third Party** - Third parties may include FBC, British Columbia Hydro and Power Authority (BC Hydro), or another entity within or outside of B.C.

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Commented [TCS4]: Definition of "New Customer" added per the response to BCUC IR 2.29.3.

Commented [TCS5]: Definition of "Third Party" added per the response to BCUC IR 2.29.5.1.

3. Obligation to Purchase

By taking service pursuant to a Commission-approved SSO, the customer agrees that in any hour where plant load exceeds the SSO, it will purchase, and FBC agrees that it will supply, power in an amount equal to the difference between plant load and the SSO. This must occur even where no sale is in place and recognizing that the accounting for third-party sales may be done on an after-the-fact basis. For clarity, in the absence of third-party sales, the customer is not at liberty to increase the amount it self-supplies except in the case where FBC is unable to supply or otherwise mutually agreed to between the Customer and FortisBC.

4. Unit of Measure

The SSO is expressed in megawatts (MW).

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5. Determination of Initial Self-Supply Obligation

The Self-Supply Obligation of any Eligible Customer will be equal to Annual Generation Used to Serve Load, as determined below, then divided by 8760 as the number of hours in 365 days. The result is rounded to the nearest MW and multiplied by a value, as specified by the customer, of between 0% and 50% in recognition of the sharing of the net-benefits of self-generation. The SSO is an hourly MW obligation. ↓

Commented [TCS6]: Updated per the discussion in the response to BCUC IR 2.20.2. If an Eligible Customer wants to commit to self-supply a higher percentage of its load it is free to make this election.

Deleted: Existing Customers

5.1.1. Existing Customer with Existing Self-Generation Facilities

The Initial SSO will be determined using the representative year most recently completed at the time the Initial SSO is being determined, where a representative year is one based on historical data under NOL operation and must reflect normal levels of current generation and load. Any load or generation changes anticipated to occur in the future are not to be considered. If no year is representative, the Company and the customer will agree on what adjustments are required to the actual historical data such that it is representative.

5.1.2. Existing Customer with New Self-Generation Facilities

When an Existing Customer with an established historical load installs self-generation facilities, an assessment of the amount of Annual Generation Used to Serve Load must be made. This figure is to be agreed upon between the customer and the Company with reference to the nameplate capacity of all connected generating facilities and adjusted by a reasonable capacity factor. An SSO so determined will be reviewed by FBC on an ongoing basis for 36 months and may be adjusted upwards should actual annual generation exceed the current Annual Generation that was determined and agreed to during the assessment of either the Initial or Subsequent SSO.

5.1.3. New Customers

For a New Customer with new self-generation facilities, Annual Generation Used to Serve Load will be determined in the same manner as for an Existing Customer with new self-generation facilities.

6. Use of the Initial SSO

Once an Initial SSO has been approved by the Commission, the customer will have 60 months (the Initial Period) to begin taking service pursuant to its SSO.

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7. Determination of a Subsequent SSO

In the event that the Initial SSO is no longer in effect, and a new or "Subsequent SSO" is required, the Subsequent SSO will be determined in the same manner as the Initial SSO.

8. Use of any Subsequently Approved SSO

If applicable, once any Subsequent SSO has been approved by the Commission, the customer will have 24 months to begin taking service pursuant to this Subsequent SSO.

9. Adjustments to an SSO

If material changes, which shall not include DSM initiatives either partially or fully funded by the Company, arise in a customer's plant or generator operations such that either FBC or the customer believe the SSO that is currently in effect (either the Initial SSO or a Subsequent SSO) requires an adjustment, the parties agree to enter into negotiations to agree on an adjusted SSO. Notwithstanding the foregoing, each party has the right, in its sole discretion, to refuse to agree to any adjustment of the SSO then in effect. Such adjustments to a SSO are distinct from any determination of Subsequent SSO. Where the SSO is adjusted according to this clause is the Initial SSO, it would still be considered to be the Initial SSO after the adjustment.

10. SSO Persistence

Once a customer has received a Commission-approved SSO (whether the Initial SSO or any Subsequent SSO), that SSO will persist unchanged unless:

- a. A new SSO is agreed to by the parties as described in Section 8 above; or
- b. For an Initial SSO, service does not commence within the 60 month Initial Period; or
- c. Service utilizing an SSO does not commence within 24 months of the determination of any Subsequent SSO; or
- d. The customer ceases to utilize its Initial or Subsequent SSO and returns to NOL service for a period in excess of 3 months.

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In the case of any of b., c. and d. above, the SSO will cease to be effective and the customer must request a Subsequent SSO to be determined as described in Section 7. For greater clarity, point d. does not apply within the notice periods that the SSO will be utilized in the future, but only after the SSO has been utilized and then ceases to be utilized.

11. Minimum Commitment

The minimum time period to take service pursuant to any SSO is 5 years. The customer can at any time provide a minimum 3 year notice to cease to take service pursuant to the SSO. The customer may revoke such notice provided that it does so at least 12 months prior to the expiration of the existing 5 year term as contained in any current SSO agreement between the Company and the Customer. Such notice shall begin a new 5-year minimum time to take service pursuant to any SSO from the date of the notice.

Commented [TCS8]: Clarification added as per the response to BCUC IR 2.33.4.

12. Notification:

Notification requirements regarding the initiation of service pursuant to SSO are as follows:

12.1 Initial SSO

Any customer that, for the first time, intends to begin taking service pursuant to a Commission-approved SSO, is required to provide 6 months' written notice to the Company. Service pursuant to a Commission-approved SSO cannot commence sooner than 6 months after an SSO is approved by the Commission. For greater certainty, it does not commence 6 months from the time that a customer first requests the determination of an SSO with FBC.

12.2 Subsequent SSO

The customer shall provide at least 12 months' notice to FBC that service pursuant to a Subsequent SSO will commence.

12.3 Termination

The customer shall provide at least 36 months' notice to FBC that service pursuant to the Initial or a Subsequent SSO will cease.

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13. Net-Benefits of Self-Generation

By agreeing to a SSO, the customer and Company agree that all of the Net-Benefits of Self-Generation to the customer and Company are recognized in the maximum 50% factor applied to the Annual Generation used to Serve Load as used in the determination of the SSO.

The customer further agrees not to claim the existence of any additional Net-Benefits of Generation over and above those that are recognized in accordance with the above paragraph in the Initial or Subsequent SSO except where additional self-generation may be added.

Commented [TCS9]: Updated per the discussion in the response to BCUC IR 2.20.2. If an Eligible Customer wants to commit to self-supply a higher percentage of its load it is free to make this election.

14. Commission Approval

The Initial SSO, the Subsequent SSO, and any adjustments, require the approval of the Commission.

15. Transmittal of Power (Wheeling)

None of the agreement between the Company and the customer, or subsequent Commission approval of an Initial or Subsequent SSO, provides any rights to the customer for the use of the Company's Transmission Voltage or Distribution Voltage assets for the transmission of power. Any such use must be applied for separately and will be subject to the charges contained in the relevant Tariffs governing such use.

16. Interconnection Requirements

All interconnection facilities must comply with *FBC's Facility Connection Requirements* as may be updated from time to time.

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