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May 25, 2015

Via Email
Original via Mail

British Columbia Utilities Commission
6th Floor, 900 Howe Street
Vancouver, BC
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Attention: Ms. Erica M. Hamilton, Commission Secretary

Dear Ms. Hamilton:

Re: FortisBC Inc. (FBC)
Self-Generation Policy Application
FBC Submission on the Panel's Issues List

Attached is FBC's submission on the Panel's Issues List attached to the British Columbia Utilities Commission Order G-51-15.

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

Sincerely,

FORTISBC INC.

Original signed by: Corey Sinclair

For: Diane Roy

Attachment

cc (email only): Registered Parties

BRITISH COLUMBIA UTILITIES COMMISSION

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

and

FortisBC Inc.
Self-Generation Policy Application

SUBMISSIONS OF

FORTISBC INC.

MAY 25, 2015

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PART A - INTRODUCTION

1. Set out below are the submissions of FortisBC Inc. (**FBC**) in response to the questions listed in Appendix B to Order G-51-15. To put into context the points made in Part B (**Particular Responses**) of these submissions, FBC reaffirms the high-level policies contained in its Self-Generation Policy Application, Exhibit B-1 at pp. 27 and 36-37, summarized below:

- 1) FBC will not provide embedded cost power to a self-generating customer at any time when that customer is selling self-generated power that is not in excess of its load except where such sales are made pursuant to a Commission-approved generator baseline (**GBL**);
- 2) FBC operates within, and is bound by, the conditions described by the Access Principles Settlement Agreement (**APSA**) as approved by Commission Order G-27-99. Specifically, FBC adheres to the APSA in the situations for which it was intended (the third party supply of power to Eligible Customers) and for the objectives the APSA sought to promote (the development of a competitive generation market). However, APSA is not relevant to FBC's self-generation policy;
- 3) A GBL is used to allow FBC customers with self-generation to export incremental self-generation output to third parties. Incremental self-generation output is power produced above the output normally used for self-supply as represented by a GBL which shall be determined in accordance with the Company's GBL Guidelines and approved by the Commission. FBC anticipates that:
 - (i) the GBL Guidelines will deal with the fact that FBC customers with self-generation should have the ability to sell some of the power they generate to third parties subject to certain constraints (including that FBC will not be required to supply any increased embedded cost of service to a customer selling its self-generation output to market) and related matters; and
 - (ii) the GBL will denote that portion of a self-generating customer's own load which it had served in the past and must continue to serve;

- 4) Where positive net benefits to FBC customers as a whole result from the installation of customer-owned self-generation, those benefits will be shared between the self-generating customer providing the benefit and all customers. The customer providing the net benefit will receive more favourable treatment than otherwise through the stand-by rate, and in particular the determination of contract and billing demand thereunder.
2. FBC's proposed policy has been informed by previous Commission decisions. We discuss the applicability of those decisions under Question 1. We also include, as Appendix A, certain specific extracts from identified past decisions which FBC believes in these respects to be of relevance, and address additional aspects of note from those decisions in our responses to Questions 2-9.

PART B - PARTICULAR RESPONSES

- (1) What, if any, past Commission decisions are applicable in establishing a self-generation policy in the FortisBC service area? If any are applicable, please specify why.**
3. Generally speaking, the manner and extent to which past Commission decisions are applicable in a given situation depends on their subject matter, the nature of the decision, the parties to whom it was directed and the context in which it was made. As to the latter, as the Panel has stated in this proceeding, it "recognizes that many of the past decisions were made in other contexts and at other historical periods of time. The question therefore arises as to the extent to which they apply here": Order G-32-15, Appendix A at p. 9.
 4. In this regard, as a broad overview:
 - 1) FBC must abide by orders of the Commission that FBC undertake certain activity unless or until those orders are set aside or varied (on reconsideration or on appeal) or they otherwise, on their own terms, have been satisfied. Thus there is no doubt, for example, that Order G-60-14 applied so as to direct FBC to file its Self-Generation Policy Application; the Commission found in Order G-32-15 that this obligation had been satisfied. Some orders may expressly provide that they remain in force only until a certain date or until further Commission determination.

If an order of the Commission directs another entity (e.g., BC Hydro) to undertake certain activity, FBC need not do the same unless also ordered to do so.

- 2) The wording of orders is more critical to the issue of compliance than the wording of underlying reasons. Correspondingly, for example, the Commission said it “concur[s] with FortisBC that the wording of Order G-60-14 is the measure of any deficiency in the Application”: Order G-32-15, Appendix A at p. 6.
- 3) The reasons given for an order made in a past proceeding may be instructive in a later proceeding. We agree with what the Commission stated on page 12 of its May 6, 2009 Decision (**2009 BCH PPA Decision**) on BC Hydro’s application to amend s. 2.1 of the Rate Schedule 3808 Power Purchase Agreement (the **1993 PPA**) and on page 64 of its May 6, 2014 Decision (**New PPA Decision**) on BC Hydro’s application (the **New PPA Application**) for approval of the new Power Purchase Agreement (the **New PPA**) and related agreements:

Section 75 of the Act^[1] provides that the Commission is not bound by its prior decisions by way of precedent. However, it is prudent to examine relevant past decisions to assess the historical context of such decisions, the degree of congruence with new factual situations addressed, and whether or not there are good reasons to depart from the policy enunciations that led to the past decisions. In general, it is advantageous both for the Commission and those regulated companies that fall within its jurisdiction, to have a consistent and predictable body of decisions that will support informed decision-making in the future.

5. Against the above backdrop, while we say all of the following decisions are applicable in some way, the way in which they are applicable varies:
 - 1) **Order G-38-01**, issued on April 5, 2001 in the matter of the British Columbia Hydro and Power Authority Obligation to Serve Rate Schedule 1821 Customers with Self-Generation Capability. Paragraph 1 of Order G-38-01 “direct[ed] B.C. Hydro to allow Rate Schedule 1821 customers with idle self-generation capability to sell excess self-generated electricity, provided the self-generating customers do not arbitrage between embedded cost utility service and market prices”, such

that “B.C. Hydro is not required to supply any increased embedded cost of service to a RS 1821 customer selling its self-generation output to market”.² As such, Order G-38-01 did not in itself require FBC to do anything (as it was not the subject of the Order and not a Rate Schedule 1821 customer). However, the Commission stated in later decisions that “the general principles enunciated in Order G-38-01 ought to be extended to customers of FortisBC”: 2009 BCH PPA Decision at p. 22; New PPA Decision at p. 100.³ Notably, the Commission reaffirmed and extended the application of these general principles even after the unusual circumstances⁴ which had been in place when Order G-38-01 was made had ended. We note that Order G-38-01 seems to prohibit arbitrage outright, as Directive 5 of Order G-60-14 seems to do as well, whereas certain other Commission decisions (and, indeed, portions of the New PPA Decision) refer to a concern specifically with arbitrage (or unlabelled activity) that occurs to the detriment of other ratepayers. As returned to later in these submissions, FBC has sought to define “arbitrage” in a way that mitigates the potential for detrimental impact to customers in general.

- 2) **Order G-17-02**, issued on March 14, 2002, in the matter of the extension of the program established by G-38-01. Like Order G-38-01, Order G-17-02 spoke directly to BC Hydro, providing in paragraph 1 that “B.C. Hydro is directed to continue to allow Rate Schedule 1821 customers with idle self-generation capability to sell excess self-generated electricity, provided the self-generating customers do not arbitrage between embedded-cost utility service and market prices”. Paragraph 2 provided that “[t]he conditions established under Order No.

¹ Under the heading “Commission is not bound by precedent”, s. 75 of the *Utilities Commission Act*, R.S.B.C. 1996, c. 473 (**UCA**) provides: “The commission must make its decision on the merits and justice of the case, and is not bound to follow its own decisions”.

² As the Commission later summarized, the issue was “whether or not self-generators who were customers of BC Hydro ought to be allowed to purchase power from BC Hydro to service their respective ‘domestic’ or base load at embedded cost rates, while at the same time selling their **total** self-generated power into the market at whatever negotiated or spot price would accrue to the self-generator as profit”: 2009 BCH PPA Decision at p. 10 (emphasis in original).

³ The New PPA Decision provided at p. 100: “This Panel continues to agree with the Order G-48-09 determination that extended the principles established for BC Hydro’s self-generating customers as articulated in Order G-38-01 to FortisBC”.

⁴ Paragraph 2 of Order G-38-01 referred to “the unique circumstances that currently exist”. As the Commission later described, the situation in 2001 was that “export market pricing made it economic for a power generator to use natural gas to generate power for the export market, even though it might have been uneconomic to run the self-generating capacity to service its own base load”: 2009 BCH PPA Decision at p. 12. Similarly put, the climate in 2001 involved “high export electricity market prices”: Kelowna Decision (as defined below) at p. 6. It was “a very lucrative export market”: BCH 2014 Application to Amend TS No. 74 (GBL) Decision at p. 20.

G-38-01 to prevent such arbitrage are to remain in effect until the Commission determines that future circumstances no longer justify the existence of such a program". Given its close connection to Order G-38-01, Order G-17-02 could fairly be seen as at least implicitly bundled into the Commission's extension of the general principles in Order G-38-01 to FBC. The two orders were, correspondingly, dealt with together in Appendix C to the New PPA Decision.

- 3) **Order G-48-09**, issued on May 6, 2009, and the accompanying **2009 BCH PPA Decision**. Together Order G-48-09 and the 2009 BCH PPA Decision amended the 1993 PPA and thus governed the conduct of both parties to the 1993 PPA: BC Hydro and FBC. While the 1993 PPA itself has expired, the Commission has reaffirmed and expressly recognized the application within FBC service territory of the underlying regulatory principle that "[s]elf-generating customers are not permitted to arbitrage between embedded cost rates and market prices to the detriment of other ratepayers", and "should not" be permitted to do so: New PPA Decision at p. 100.⁵
- 4) **Order G-156-10**, issued on October 19, 2010, in relation to FBC's application for approval of a 2009 rate design and cost of service analysis, and the accompanying Decision (**RDA Decision**). The Commission had occasion in the RDA Decision to consider certain self-generation issues, though the weight to be given to its analysis now that the 1993 PPA has expired is somewhat limited given its acknowledgement that "[i]n reaching the Decision, the Commission Panel considered only the impact of Order G-48-09 on BC Hydro's sales under its PPA with FortisBC and on FortisBC's sales to Celgar. It did not consider whether the findings of the Commission in Order G-48-09 (or in the previous Order G-38-01) had general application or whether they referred to BC Hydro and its customers only": Reasons for Decision dated January 12, 2011 (**2011 Reconsideration Decision**) on the application of Zellstoff Celgar Limited

⁵ The Commission has noted that "[i]n its Reasons for Decision to Order G-48-09 the Commission....determined that self-generating customers in FortisBC's service territory should not be permitted to arbitrage, between FortisBC's embedded rates and market prices, to the detriment of FortisBC's other ratepayers": New PPA Decision at pp. 79-80. See also, for similar wording, p. 11 of the Matching Methodology Decision. It was not always clear that this principle applied within FBC service territory, at least unless agreed as between FBC and the customer. For example, at one point the Commission indicated that Celgar "would be allowed to sell such power to third parties unless specifically precluded from doing so by contract with FortisBC....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

Partnership (**Celgar**) for reconsideration of Order G-156-10 (**Celgar Reconsideration Application**) at p. 10.

- 5) **Order G-3-11**, issued on January 12, 2011, denying the Celgar Reconsideration Application, and the accompanying 2011 Reconsideration Decision. Again, the Commission in these materials considered certain self-generation issues as well as the scope of the analysis in the RDA Decision.
- 6) **Order G-188-11**, issued on November 14, 2011 in relation to Celgar's complaint regarding the failure of FBC and Celgar to complete a general service agreement (**GSA**) and FBC's application of Rate Schedule 31 Demand Charges, and the accompanying Decision of that date (**Celgar Complaint Decision**). These materials contained further Commission analysis of self-generation issues after submissions from both FBC and Celgar.
- 7) **Order G-202-12**, issued on December 27, 2012 in relation to FBC's filing on the guidelines for establishing entitlement to non-PPA embedded cost of power and matching methodology, and the accompanying Decision of that date (**Matching Methodology Decision**). The Commission's review of self-generation issues in that case was undertaken in a fairly specific context, and when the 1993 PPA was still in place. However, the Commission commented generally on self-generation issues after submissions from relevant participants. FBC's submission leading up to the Matching Methodology Decision was made in consideration of the fact that certain portions of the 1999 Access Principles, and in particular the Fair Treatment Principles, seemed to already have been found by the Commission to relate to self-generating customers. This is not FBC's position (as returned to below in the response to Question 2), although it views the principles underpinning the Fair Treatment Principles to be sound rate-making practice with general applicability. It no longer appears that the Commission is of the view on which FBC proceeded in its Matching Methodology submissions (and indeed, even in the Matching Methodology Decision, it appeared that the Commission viewed only certain of the APA principles as applicable to the specific issues

involved⁶). As returned to below, FBC examines the issue on the assumption that these arguments are open to it to advance.

- 8) **Order G-191-13**, which was issued on November 22, 2013 with respect to Phase 2 of FBC's application for a certificate of public convenience and necessity (**CPCN**) for the purchase of the utility assets of the City of Kelowna, and the accompanying Reasons for Decision of that date (**Kelowna Decision**). The application of the Kelowna Decision is limited, however, given that the Commission's analysis in that case was undertaken in relation to a claim of discrimination, and the Commission did not answer all the questions it raised for consideration. **Order G-19-14**, which was issued on February 17, 2014 on BC Hydro's application to amend Tariff Supplement No. 74 customer baseline load determination guidelines for RS 1823 customers with self-generation facilities, and the accompanying Decision of that date (**TS 74 Decision**). Order G-19-14 was not directed to FBC, nor is FBC served under Tariff Supplement No. 74, but the TS 74 Decision provides a useful overview of the BC Hydro framework.
- 9) **Order G-60-14**, which was issued with respect to the New PPA Application on May 6, 2014, and the **New PPA Decision**. These documents are directly relevant, in that in them the Commission directed FBC to file the present application, set out certain requirements that the policy was to address, and sought to synthesize and explain various of its past decisions. Given the efforts that the Commission made in this regard, and the fact the decision was made quite recently, FBC considers that the New PPA Decision should have considerable weight.
- 10) **Order G-67-14**, which was issued on May 26, 2014 in relation to FBC's application for stepped and stand-by rates for transmission voltage customers (the **Stepped and Stand-by Rate Application**), and the accompanying Decision of that date (the **Stepped Rate Decision**). While the Stepped and Stand-by Rate Application did not relate to the setting of GBL guidelines, practically speaking the

⁶ The Commission noted in that decision that "[t]he issue of whether it results in increased costs for all customers must be examined at the time of FortisBC's stepped transmission rate design application in the context of the Fair Treatment principle of the APA" (underlining added). In the 2009 BCH PPA Decision, the Commission noted: "Nevertheless, the Commission Panel considers that the APA remains in effect and that some of the principles established in the APA and found by the Commission to be in the public interest in 1997 might be relevant to these proceedings" (underlining added).

stand-by rate, in particular, has become an important component of how the situations of self-generating customers are addressed; it is thus necessarily a component of self-generation policy. As the Commission noted at p. ii of its Stepped Rate Decision, “[s]tand-by rates are offered to customers with self-generation to ensure that in the event of a planned or unplanned outage of their on-site generator they have the ability to purchase power to replace what would normally be self-generated...” (underlining added). As the Commission further noted in its Stepped Rate Decision at p. 26:

A stand-by rate is a rate paid by a customer whose electric requirements are served in part by its own self-generation and in part by services delivered from the utility. Such customers are sometimes referred to as partial requirements service customers. Stand-by tariffs establish the rates, terms, and conditions of service by which the self-generating customer can secure service under certain circumstances.

Customers with self-generation pay stand-by charges to ensure that, in the event of either a planned or unplanned outage of their on-site generator, the customer has the ability to purchase power to replace what would normally be self-generated. The idea of a stand-by rate is that the utility has to be ready in a ‘stand-by’ mode to deliver the energy whenever the self-generating customer needs it.

- 11) **Order G-46-15**, which was dated March 23, 2015, in relation to Stage II of the Stepped and Stand-by Rate Application, and the accompanying Decision-Stage II dated March 24, 2015 (the **Stage II Decision**). These documents carried on the analysis in the Stepped Rate Decision, and sought to apply it.
6. These Commission Decisions set out certain principles that FBC believes form the context for this proceeding. As the Commission reflected in its Appendix A to Order G-32-15 in this proceeding, “FortisBC has stated that it has absolutely no intent to revisit issues but rather to crystallize and articulate past Commission decisions, or its understanding of those decisions, as a way that could be used as a policy statement to guide customers as directed by the Commission in Order G-60-14” (p. 9). Specific principles that FBC has drawn from past Commission decisions are found in Appendix A and/or set out or returned to in later sections of these submissions.

7. As noted in part above, FBC considers that particular weight should be given to the New PPA Decision (and the accompanying Order G-60-14). It is a relatively recent decision that incorporates consideration of the decisions that preceded it, and contains a discussion of those decisions in its Appendix C. FBC has previously stated the New PPA Decision is significant because it contains directives for both FortisBC and BC Hydro that prompt further examination of Section 2.5 of the New PPA, and it provides the most current Commission determinations with respect to the disposition of FBC embedded cost power and the issue of arbitrage.⁷
 8. FBC expects that participants interested in this process will continue to refer to the specific language of the past decisions in a manner that supports a particular position. However, FBC also believes that the Commission has the opportunity through consideration of the submissions received here, and given its knowledge of the intent of its past decisions, to clarify for the benefit of all involved the parameters of service to and conduct of those customers with self-generation with the ability to export power.
- (2) Should the 1999 Access Principles established in Order G-27-99 (the Access Principles) apply to self-generating customers in the FortisBC service area?**

Situation apart from stand-by rate

9. In FBC's view, its proposed policy makes it unnecessary for the Commission to decide this question. (FBC takes this question to be asking if self-generation should be treated in the same manner as third party supply that the Access Principles were intended to address. There is no question that the Access Principles apply to self-generating customers in the case where the portion of load not served by self-generation is served in whole or in part from a third party source.) By ultimately defining in the GBL Guidelines the amount of self-generation that a customer will have available for export for the life of the GBL (and consequently the supply obligation of the utility), considerations arising from the 1999 Access Principles Application (**APA**) can remain applicable only to the third party supply of load that the APA was originally intended to address, regardless of whether the APA's wording could have been stretched more broadly.⁸ Given the Commission's prohibition on arbitrage, a self-generating customer that partially or fully

⁷ See the discussion beginning at page 3 of Exhibit B-20 in the FBC Stepped and Stand-by Rates for Transmission Voltage Customers process.

⁸ Exhibit B-1 at p. 2.

serves its plant load from self-generation and then wishes to return to embedded cost service in order to simultaneously sell its self-generation output simply cannot do so outside the parameters set by the GBL.⁹

10. Alternatively, however, FBC says that the Commission should conclude that the Access Principles do not apply to self-generating customers in FBC's service territory (interpreting the question, again, in the manner stated in the paragraph above). To be clear, FBC has no issues with the APSA as it relates to the purpose for which it was originally intended. It is clear that the APSA did not contemplate the situation of self-generation exports. Rather, it was arrived at to deal with situations where an "Eligible Customer" had chosen an "alternate supplier" that was, as described by the Commission, a "third party".¹⁰ When discussing the APA in its RDA Decision at page 114, the Commission referred to "an eligible customer that had chosen in 1997 to receive service from a third party and was now looking to 'come back into the fold' and take service from FortisBC in 2010..." (underlining added).
11. By way of background, as FBC set out in its Self-Generation Policy Application, in the mid-1990s power markets in the United States were de-regulating. In September 1995, the Commission released the British Columbia Electricity Market Review (the **Review**) to the Lieutenant Governor in Council. The purpose of the Review as identified in its Terms of Reference was to provide input to the provincial government's ongoing development of electric policies. The specific purpose of the Review was to canvass the public on unbundled transmission services.¹¹
12. The Review proposed restructuring options for the electricity industry in British Columbia that were designed to meet several objectives including customer choice. The Review also recommended that all utilities owning transmission assets submit transmission service tariffs.¹²
13. BC Hydro filed a Wholesale Transmission Services Application (BCH-WTSA) on February 17, 1997. FBC (then West Kootenay Power) filed an unbundled cost of service study in 1997 and then in July 1998, in response to Commission letter L-26-96, filed both

⁹ Exhibit B-1 at p. 20.

¹⁰ Exhibit B-1 at p. 20.

¹¹ Exhibit B-1 at p. 19.

¹² Exhibit B-1 at p. 19.

a Transmission Access Application (**TAA**) seeking approval of wholesale transmission access and retail transmission access for its industrial and municipal customers, and the Access Principles Application (as defined earlier, **APA**).¹³

14. The TAA concerned the terms and conditions of non-discriminatory access to the transmission system, and the pricing of transmission services. The APA related primarily to the treatment of customers, who were then supplied with fully bundled embedded cost electricity service, and might seek access to wholesale transmission service so that all or a portion of a customer's load could be provided by third party generators or marketers.¹⁴
15. In approving the APA and the APSA via Order G-27-99, the Commission reaffirmed that "[t]he goal of the APA was to open the West Kootenay Power (WKP) transmission system to all Eligible Customers to encourage the development of a competitive generation market." The Commission expressly said that "[n]othing in the PSA [Proposed Settlement Agreement] provides a precedent for other utilities or circumstances."¹⁵
16. In the context of the late 1990s, an FBC customer was understood to be an entity taking bundled supply. Other types of customers did not exist and the application and applicability of the APA to the current proceeding must be considered in light of the original intent and the circumstances prevailing at the time. Self-generation was not a consideration before the Commission at the time and no customer has ever chosen to exit embedded cost service using the Access Principles. The development of a competitive generation market as a practical alternative to utility supply, which was the objective of the APSA, has not developed.¹⁶
17. Given all the above, FBC's view is that the 1999 Access Principles were developed for use in circumstances that are fundamentally different than the disposition of a customer's self-generation, and applying the Access Principles to self-generation use is a fundamental misapplication of them under the conditions included by the Commission in Order G-27-99 and accompanying Decision.¹⁷

¹³ Exhibit B-1 at p. 19.

¹⁴ Exhibit B-1 at p. 19.

¹⁵ Exhibit B-1 at p. 19.

¹⁶ Exhibit B-1 at p. 20.

¹⁷ Exhibit B-1 at p. 20.

18. Correspondingly, the Re-Entry Provisions contained in the APSA, which govern a customer's return to bundled utility supply after some period of service by a third party, are clear in applying to "Returning Eligible Customers and new Eligible Customers who initially chose an alternative supplier..." An alternative supplier was never considered to be self-supply, and self-supply does nothing to further the objective of fostering competitive generation market that was the focus of the APA proceeding.¹⁸
19. Some Commission determinations since 2010 seemed to suggest that by virtue of the APSA, FBC may have an obligation to supply at least some embedded cost power to those self-generating customers who also qualify as "Eligible Customers" under the APA, even while they are exporting generation that is not net-of-load, as long as there was no BCH PPA power in the mix.¹⁹ However, the fact that the Commission has raised the question here confirms that this issue was never finally determined. This is also reflected by the Commission's wording, for example, in the 2011 Complaint Decision, where the Commission found that "the Fair Treatment Principles are still in effect. However, clarification is needed as to whether an obligation to serve might be affected by the self-generation by a customer": 2011 Complaint Decision at pp. 37-38 (underlining added). It said in that decision that Celgar's mill load "is served by a combination of: (i) Celgar's own generation; (ii) FortisBC supply at embedded cost rates to the extent determined by the application of the APA principles (the Entitlement); and (iii) additional supply from FortisBC (the Margin)": 2011 Complaint Decision at p. 40 (underlining added).
20. Further, even in contexts where it appeared that the Access Principles might or did apply, the Commission expressed arbitrage-related concerns and sought means of addressing those concerns. That portion of the Fair Treatment principles which provided protection for existing customers other than the self-generating customer seemed to provide particular comfort, though perhaps chiefly through the design of rates. In this regard, "Fair Treatment" was defined in the Proposed Settlement Agreement to mean, for customers who remain with utility supply, that "partial exit or re-entry of Eligible Customers must, at a minimum, make them no worse off than if Eligible Customers had always remained with the Utility". The Proposed Settlement Agreement also noted that "An Eligible Customer may elect to meet any or all of its load requirements from West Kootenay Power. If any Eligible Customer elects to meet part of its load requirements

¹⁸ Exhibit B-1 at p. 21.

from West Kootenay Power, then the rate for partial supply requirements shall be determined so as to ensure that all other customers receive Fair Treatment". The Commission said in the Matching Methodology Decision at pp. 9-10, 12:

In the Commission Panel's view, the Fair Treatment principle mitigates possible detrimental effects of arbitrage to the general FortisBC ratepayer.

....As stated above, a rate design based on the Fair Treatment principle will provide protection to the general FortisBC ratepayer. As well, the Panel finds later in this Decision that these Guidelines are applicable Eligible Customers who are self generators.

....The Commission has consistently upheld the principle that other utility ratepayers should not be harmed by self-generators' arbitrage of embedded cost power.

....

In the *Celgar Complaint Decision*, the Commission....made the following comment on the potential for arbitrage:

"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 by 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." (p. 49)

For clarity, the potential for arbitrage discussed in the excerpt above (p. 49 of the *Celgar Complaint Decision*) was in the context of the self-generator finding an arrangement where it can arbitrage power while FortisBC still preserves the benefit of its resource stack for all of its customers, or in other words, while FortisBC still applies the Fair Treatment principle.

...

...only rates need be considered when assessing whether other customers are worse off when applying the Fair Treatment provision to a self-generating customer. Reliability need not be considered.

21. Elsewhere in the Matching Decision, the Commission said that "the Fair Treatment provision of the APA..., in the Commission Panel's view, prevents against self-generators arbitraging the NECP to the detriment of other FortisBC ratepayers" and "any rate design

¹⁹ Exhibit B-1 at pp. 21-22.

for self-generators that are Eligible Customers must accord with the Fair Treatment provision of the APA..."²⁰

22. As the Commission said in the RDA Decision at p. 114, with reference to third party supply:

The Commission Panel considers that hypothetically, an eligible customer that had chosen in 1997 to receive service from a third party and was now looking to "come back into the fold" and take service from FortisBC in 2010, would be entitled to receive service at embedded cost, but this must address the Fair Treatment principles to minimize the harm to existing ratepayers.

23. More fundamentally, however, even with these safeguards, the Access Principles should not be applied. The potential impact of extending the APSA to self-generation is to allow a self-generating customer to withdraw or partially withdraw from FBC service for its load requirements through the use of self-generation as though it had done so using a third party for supply. Under the existing APSA, a customer who opted for energy supplied by a third party could return to embedded cost service with the utility after providing two-year notice of their return without regard to the impact its return may have on other customers. As previously mentioned, the intention of the APSA was to allow eligible customers to take advantage of third-party power providers. Those customers returning to utility load were presumed to have load requirements that would not be much different from historical levels, and thus would have minimal impact to other customers.²¹
24. However, where a self-generating customer had historically served less than 100% of its load through self-generation, increased that to a greater percentage and then wished to again take utility supply, it should not have access to embedded cost power in an amount in excess of what it previously took.²² That is, the Commission's ordinary principles in relation to arbitrage should simply be permitted to apply.

Situation in relation to stand-by rates

25. The foregoing discussion centered on the inapplicability of the APSA to the situation of self-generation given the disparity between its original intent and the scenarios under consideration in the Self-Generation Policy Application. However, the recent Stage II

²⁰ Matching Decision at pp. 8-9.

²¹ Exhibit B-1 at p. 22.

Decision (in FBC's Stepped and Stand-By Rate Application process) has provided that the exit from and re-entry to embedded cost service could be adequately addressed within the provisions of FBC's approved Electric Tariff.

26. Prior to the issuance of Order G-46-15, the Contract Demand of a customer was set in consideration of the maximum amount of load that a customer could place on the FBC system. In the case of a self-generating customer, this would be the load placed on the system when its self-generation was not in operation. However, in the Stage II Decision (accompanying Order G-46-15), the Commission determined that unless an alternate arrangement is negotiated, "...the RS 31 Contract Demand should be set at an amount roughly equal to the customers load off-set by the self-generation capacity a customer uses to serve its load."²³ In effect, RS 31 Contract Demand establishes the maximum level of full service that a customer is eligible for under that rate. Therefore, as an example, a customer with a load of 20 MVA that chooses to serve 10 MVA with self-generation would have a Contract Demand for RS31 service of 10 MVA (20 MVA – 10 MVA). If that same customer were to serve its entire load with self-generation it would have a Contract Demand of zero.
27. Where a customer has a given Contract Demand, and FBC has the commensurate service obligation, and that customer wishes to increase that Contract Demand (as in the case where it wishes to return to a higher level of embedded cost service), section 7.1 of the Company's approved Electric Tariff applies. Section 7.1 reads:

A Customer shall give to the Company reasonable written notice of any change in its load requirements to permit the Company to determine whether or not it can meet the requirements without changes to its equipment or system.

Notwithstanding any other provision of these Terms and Conditions, the Company shall not be required to supply to any Customer Electricity in excess of that previously agreed to by the Company.

Customers with a Demand component in the rate schedule who wish to change the Contract Demand or the Demand limit, shall submit to the Company a written request subject to the following provisions.

²² Exhibit B-1 at p. 22.

²³ Stage II Decision at p. 22.

- a. *an increase requested of less than 1,000 kVA shall be submitted not less than three months in advance of the date the increase is intended to become effective; and*
- b. *an increase requested in excess of 1,000 kVA but less than 5,000 kVA shall be submitted not less than one year in advance of the date the increase is intended to become effective; and*
- c. *an increase requested in excess of 5,000 kVA shall be submitted not less than three years in advance of the date the increase is intended to become effective.*
- d. *a decrease requested of up to 10 per cent per year of the existing Contract Demand or Demand limit shall be submitted not less than three months in advance of the date the decrease is intended to become effective. Customers with a Contract Demand in excess of 500 kVA shall provide the Company by January 31 of each year their best estimate of their annual Electricity requirements to allow the Company to forecast future load on its facilities.*

If the Company approves the request in writing, the Contract Demand or the Demand limit may be changed either by amendment to the Customer's contract or by the parties executing a new contract. The Company shall not be required to approve any requested change in the Contract Demand or the Demand limit.

28. Therefore, a customer that wishes to increase or decrease its level of embedded cost service, and therefore its Contract Demand, is required to provide notice in accordance with section 7.1 of the Tariff. This notice is intended to allow FBC to assess its physical infrastructure and adjust its supply portfolio as needed. No consideration of the APSA is required.

(3) What, if any, application does the BC Energy Plan have in establishing a self-generation policy in the FortisBC service area? If applicable, please specify why.

29. FBC accepts that the Commission may be mindful of government policy such as the Energy Plans,²⁴ as is the case in the decisions cited in Appendix B, and FBC itself is aware and supportive of the policies that government has advanced. Where consistent with the interests of its ratepayers, FBC is certainly open to the advancement of those policies through its programs. However:

²⁴ As the Commission has previously noted, “[t]he BC Energy Plan: A Vision for Clean Energy Leadership (2007 Energy Plan) was released by the Provincial Government in February 2007. The 2007 Energy Plan set out a large number of policy actions that placed emphasis on energy conservation, energy efficiency, clean energy and self-sufficiency”: RDA Decision at p. 45.

- 1) in the absence of a specific statutory requirement or Commission order that necessitates those steps be taken, FBC does not consider itself to have the mandate to further those policies where there is the potential for harm to any group of ratepayers. In this regard, FBC does not believe that BC's Energy Plan items, while important, can be effectively incorporated into a methodology that seeks to recognize benefits from a financial perspective. It is not appropriate for a customer to receive a monetary incentive to undertake a project that does not lead to a net reduction to FBC's revenue requirement. This would necessarily lead to a transfer of costs from other customers to the self-generator.²⁵ Where FBC has factored in the Energy Plans (and the Commission decisions that have pointed to their application) is in recognizing, in FBC's stand-by rate, the net benefits to FBC ratepayers of specific self-generation projects. That net benefit would be recognized in the implementation of the rate.
- 2) even apart from the above, it is the case that FBC's own system is substantially consistent with the Energy Plan. This militates against necessarily favouring other interests over those of its ratepayers. Among the themes of the 2007 Energy Plan are clean and renewable energy: "Clean or renewable electricity comes from sources that replenish over a reasonable time or have minimal environmental impacts....Consumers are looking for power that is not only affordable but creates minimal environmental impacts" (p. 14). FBC's own generation is from hydroelectric projects which accord with this description.
- 3) certain other aspects of the Energy Plan are of necessity more likely to be implemented through (or meaningful for) BC Hydro, given its ability to make energy purchases from self-generators, than through FBC. Page 22 of the 2007 Energy Plan, which lists bioenergy as being among the "supply options...for British Columbia", notes that "[a] number of bioenergy facilities operate in British Columbia today. Many of these are 'cogeneration' plants that create both electricity and heat for on-site use and in some cases, sell surplus electricity to BC Hydro" (underlining added). This issue is returned to below with reference to the discussion of self-generation benefits.

²⁵ Exhibit B-1 at p. 35.

- 4) further, the Energy Plan can be advanced through government initiatives that do not necessarily involve either utility.
30. While the Commission may have regard to government policies, they are not in themselves determinative. As the Commission as previously said, in the New PPA Decision at p. 5:

2.2 Provincial Government Energy Policies. The Commission's mandate and jurisdiction is defined by the *UCA*. The Lieutenant Governor in Council may also issue regulations and special directions to the Commission with respect to the exercising of powers and the performance of the duties of the Commission. In addition, the Commission pays attention to Government policies in its deliberations; however, those policies do not directly provide the Commission with a mandate to act. Ultimately the Commission's task is to determine whether the Application is in the public interest within the regulatory framework....

31. In summary, the Energy Plan addresses certain policy positions of the government. They are important matters of which to be mindful, but the entity best suited to carry out those approaches in any given case is not FBC. The existence of the Energy Plan does not translate into a mandate for FortisBC to spend extra money or otherwise to take activities which would be to the detriment of its customers more broadly.

(4) What, if any, application does the *Clean Energy Act* have in establishing a self-generation policy in the FortisBC service area? If any are applicable, please specify why.

32. Similar to the above discussion of the Energy Plan above, FBC is mindful of the objectives in the *Clean Energy Act*, S.B.C. 2010, c. 22, and, to the extent consistent with other mandates, is supportive of them. However, ultimately, FBC does not have a general mandate to advance the *Clean Energy Act*, particularly if to the detriment of other ratepayers.

33. As the Commission has previously noted, the *Clean Energy Act* "received Royal Assent on June 3, 2010 and has given a renewed and heightened importance to energy efficiency, conservation, smart meters and smart grid, especially in sections 2 and 17..."²⁶ Energy objectives listed in s. 2 of the *Clean Energy Act* include

²⁶ RDA Decision at p. 45.

- (a) to achieve electricity self-sufficiency;
- (b) to take demand-side measures and to conserve energy, including the objective of the authority reducing its expected increase in demand for electricity by the year 2020 by at least 66%;
- (c) to generate at least 93% of the electricity in British Columbia from clean or renewable resources and to build the infrastructure necessary to transmit that electricity;
- (d) to use and foster the development in British Columbia of innovative technologies that support energy conservation and efficiency and the use of clean or renewable resources;
- (e) to ensure the authority's ratepayers receive the benefits of the heritage assets and to ensure the benefits of the heritage contract under the BC Hydro Public Power Legacy and Heritage Contract Act continue to accrue to the authority's ratepayers;
- (f) to ensure the authority's rates remain among the most competitive of rates charged by public utilities in North America;
- (g) to reduce BC greenhouse gas emissions...
- (h) to encourage the switching from one kind of energy source or use to another that decreases greenhouse gas emissions in British Columbia;
- (i) to encourage communities to reduce greenhouse gas emissions and use energy efficiently;
- (j) to reduce waste by encouraging the use of waste heat, biogas and biomass;
- (k) to encourage economic development and the creation and retention of jobs;
- (l) to foster the development of first nation and rural communities through the use and development of clean or renewable resources;
- ...
- (o) to achieve British Columbia's energy objectives without the use of nuclear power; ...

34. The legislature has specifically linked aspects of the *Clean Energy Act* to FBC projects and/or decision-making only in the following specified instances:

- 1) long term resource plans, where s. 44.1(8) of the *UCA* requires the Commission to consider, when determining under subsection (6) whether to accept a long-term resource plan, "the applicable of British Columbia's energy objectives"

(which are defined in the *Clean Energy Act*) and “the extent to which the plan is consistent with the applicable requirements under sections 6 and 19 of the *Clean Energy Act*”. (Here and below, given that these are matters the Commission must consider, as a practical matter FBC would likely advance plans and applications which address these issues as appropriate; without that, approval or acceptance might not be possible);

- 2) expenditure schedules, where s. 44.2(5) of the *UCA* requires the Commission to consider, in considering whether to accept an expenditure schedule filed by a public utility other than the authority, “the applicable of British Columbia’s energy objectives” (again, defined in the *Clean Energy Act*) and “the extent to which the schedule is consistent with the applicable requirements under sections 6 and 19 of the *Clean Energy Act*”;²⁷
- 3) CPCNs, where under s. 46(3.1) of the *UCA*, in deciding whether to issue a certificate under subsection (3) applied for by a public utility other than the authority, the Commission must consider “the applicable of British Columbia’s energy objectives” and “the extent to which the application for the certificate is consistent with the applicable requirements under sections 6 and 19 of the *Clean Energy Act*”;²⁸
- 4) energy supply contracts, where under s. 71(2.1) of the *UCA*, in determining under subsection (2) whether an energy supply contract filed by a public utility other than the authority is in the public interest, the Commission must consider “the applicable of British Columbia’s energy objectives” and “the extent to which the energy supply contract is consistent with the applicable requirements under sections 6 and 19 of the *Clean Energy Act*”;²⁹

²⁷ With respect to BC Hydro, s. 44.2(5.1) of the *UCA* requires the Commission to consider and be guided by, in considering whether to accept an expenditure schedule filed by the authority, “British Columbia’s energy objectives”, “an applicable integrated resource plan approved under section 4 of the *Clean Energy Act*” and “the extent to which the schedule is consistent with the requirements under section 19 of the *Clean Energy Act*”.

²⁸ With respect to BC Hydro, under s. 46(3.3), in deciding whether to issue a certificate under subsection (3) to the authority, the Commission must consider and be guided by “British Columbia’s energy objectives”, “an applicable integrated resource plan approved under section 4 of the *Clean Energy Act*” and “the extent to which the application for the certificate is consistent with the requirements under section 19 of the *Clean Energy Act*”.

²⁹ With respect to BC Hydro, under s. 71(2.21), in determining under subsection (2) whether an energy supply contract filed by the authority is in the public interest, the Commission must consider and be guided by “British Columbia’s energy objectives”, “an applicable integrated resource plan approved under section 4 of the *Clean Energy Act*” and “the extent to which the energy supply contract is consistent with the requirements under section 19 of the *Clean Energy Act*”.

- 5) similarly, proposed energy supply contracts, under s. 71(2.5) and (2.51) of the *UCA*.
35. Given that it is expressly set out in the above provisions, a requirement to consider the *Clean Energy Act* in other circumstances should not be implied. As stated by Professor Sullivan in *Sullivan on the Construction of Statutes*, 6th ed. (Markham, Ont.: LexisNexis 2014) at pp. 248, 251-252:

The final maxim to be considered here is *expression unius est exclusion alterius*: to express one thing is to exclude another....

An implied exclusion argument lies whenever there is reason to believe that if the legislature had meant to include a particular thing within its legislation, it would have referred to that thing expressly. Because of this expectation, the legislature's failure to mention the thing becomes grounds for inferring that it was deliberately excluded....

....

....As much as possible, drafters strive for uniform and consistent expression, so that once a pattern of words has been devised to express a particular purpose or meaning, it is presumed that the pattern is used for this purpose or meaning each time the occasion arises. This convention naturally creates expectations that may form the basis for an implied exclusion argument....

Patterns in legislation are assumed to be intended rather than inadvertent. Once a pattern has been established, it becomes the basis for expectations about legislative intent.

36. Further, the Commission has expressly found the *Clean Energy Act* not to be relevant in certain circumstances related to self-generation issues. In the RDA Decision at pp. 113-114, the Commission noted the following:

The Commission Panel has considered Celgar's submissions that the *Clean Energy Act* is relevant to the issue of a utility's obligation to serve in that its objectives include "to use and foster the development of innovative technologies that support energy conservation and efficiency and to maximize the value of resources". In the Commission Panel's view a piece of legislation enacted in 2010 cannot be relevant to a decision taken in 1992 to install a new steam turbine to meet the needs of the modernized and enlarged pulp mill. Accordingly, the Commission Panel rejects Celgar's submissions in this regard.

37. It also appears that in this regard, the Ministry of Energy and Mines (**MEM**) has made a similar conclusion. In a letter to the Commission, MEM stated:

...the Ministry wishes to point out that British Columbia's energy objectives are engaged when the Commission makes decisions about utility plans, expenditure schedules, certificates of public convenience and necessity, and energy supply contracts. While it may be open to the Commission to determine that the energy objectives are relevant, the Ministry takes the position that the Utilities Commission Act does not require that they be considered in this case.³⁰

38. FBC does acknowledge that the Commission noted in the Stepped Rate Decision that the stand-by demand charge should “take into consideration BC’s energy objectives”.³¹ In addition, with reference to BC Hydro, the Commission also referred to incenting self-generation in the context of a demand-side measure as defined in the *Clean Energy Act*. The Commission said in the TS 74 Decision at p. 17:

Although the Panel has the concern expressed above, it also accepts that incenting customers to increase their self-generation does reduce BC Hydro’s overall load requirements, other things being equal, and is therefore consistent with the definition of “demand-side measure” under the CEA which states in part: “demand-side measure means a rate, measure, action or program undertaken...(b) to reduce the energy demand a public utility must serve...” (CEA, s. 1(1))

39. However, specifically as to demand-side measures, if the increase or addition of self-generation did reduce the energy demand that FBC must serve (as opposed to being exported), and this resulted in costs savings, the savings would be shared with the self-generating customer. More generally, taking into consideration BC energy objectives does not require trumping the interests of other FBC ratepayers. FBC’s proposed approach to addressing net benefits of particular self-generation projects through the stand-by rate provides a reasonable solution.

(5) What, if any, are the current and future potential benefits or drawbacks to self-generation in the FortisBC service area?

40. FBC discussed the potential benefits of self-generation in its Self-Generation Policy Application, Exhibit B-1, Section 7.1, and recognized that to the extent that there may

³⁰ FortisBC Inc. Guidelines for Establishing Entitlement to Non-PPA Embedded Cost Power and Matching Methodology (Compliance Filing to Order G-188-11), Exhibit C2-3. References in original omitted.

³¹ Exhibit B-1 at p. 32.

also be drawbacks in some situations, these must be considered as well. To the extent that a particular self-generation project provides net benefits to its other ratepayers, it may be appropriate for FBC itself to recognize that (and, again, FBC has proposed to do so through the stand-by rate; the Commission has directed FBC to file a tariff supplement to the stand-by rate that recognizes the net-benefits of self-generation after this Self-Generation Policy process has concluded).

41. Each instance of self-generation is unique and must be evaluated on its own merits.³² It is appropriate therefore that the Commission has framed the issue in terms of ***potential*** benefits or drawbacks.
42. By way of further background to the considerations discussed in Exhibit B-1, from FBC's perspective the two chief potential benefits of self-generation in its service territory are as follows, though in each case, the reality may well fall short of theoretical expectations:
 - 1) the avoidance of FBC power purchase costs, if the customer uses the generation to offset load and does not export it out of FBCs service area. Whether reduced power purchases resulting from load reduction provides an economic benefit to FBC customers depends on consideration of the revenue associated with the sales to the customer as well as the impact on power purchases and any other opportunities that may arise over the short and long term; and
 - 2) the avoidance of infrastructure costs (sometimes described as "deferred or permanent reduction in the need for utility provided generation, transmission, and distribution capacity"). However, it is unlikely that FBC would be able to avoid infrastructure costs under the current stand-by structure established by the Stepped Rate and Stage II Decisions. The Commission has determined that FortisBC should in effect provide firm and full backup supply. As such, the infrastructure has to be sized to provide as much service as may be called on. Under Rate Schedule 37, FBC cannot downsize its infrastructure; it will achieve no savings.
43. Another potential benefit arises if a self-generating customer is located in an area without much other generation: a diversity of supply is generally beneficial, with an increase in dynamic stability increasing the ability to withstand transient events. However, as

returned to below under Question 5(i), in FBC service territory this benefit would arise particularly if the self-generator were located in the Okanagan (where there is no or little other generation) rather than in the Kootenays (where there are already considerable generation options).

44. Potential benefits of self-generation have also been identified as including:³³

- 1) freeing up of utility power for export if the self-generating customer's load is reduced. However, as FBC is a utility with generation insufficient to meet the aggregate load of its customers, load reduction by a single customer primarily provides an opportunity to reduce power purchases, as addressed above, rather than to increase exports. This is in contrast to BC Hydro's situation, as load reduction may correlate with a greater opportunity for BC Hydro to engage in exports. This benefit falls to BC Hydro even when the self-generator is located in the FBC service area, through a reduction in FBC purchases under the New PPA.³⁴
- 2) electricity self-sufficiency as it relates to the *Clean Energy Act*. As noted in the section dealing with the *Clean Energy Act*, however, such considerations should not be pursued where the impact of doing so increases customer rates.
- 3) reduced greenhouse gas emissions. However, whether greenhouse gas emissions will be reduced depends on the nature of the energy being generated; self-generation is not necessarily of clean or renewable energy, though it may well be. Further, even if the self-generated energy is clean or renewable, whether or not its existence is a benefit depends on the characteristics of the energy that would otherwise have been used.
- 4) a potential reduction in the need for utility-provided network capacity. However, this benefit is difficult to demonstrate for self-generation added after infrastructure is already sized for an existing customer's full load, and similarly difficult to envision given that most self-generators will still require full service in the event of a generation interruption.

³² Exhibit B-1 at p. 30.

³³ Exhibit B-1 at pp. 32-35.

³⁴ Exhibit B-1 at p. 29.

- 5) reduction of transmission losses. However, whether or not this benefit is realized is dependent upon the location of other generating resources in a given area. For example, some portions of the FortisBC system have significantly more generation than connected load at all times. As a result, any additional generation supplied to the FortisBC system in that area always results in increased transmission flows out of this area. This increased export must also increase losses in this area of the system. In this situation, generation results in a technical disadvantage to FortisBC as opposed to the technical benefits usually ascribed to customer- owned generation.
 - 6) reduction of environment impacts. This relates, again, to the nature of the self-generated energy relative to that already being used, and the ability to avoid or reduce infrastructure.
 - 7) improvement in reliability. However, this depends on where the self-generation is located. If in an area with other generation, any improvement is likely to be marginal at best.
 - 8) avoidance or deferral of investments. Again, in FBC's case, given the stand-by rate structure, this is unlikely.
 - 9) relief of transmission congestion. However, if the self-generating customer sells power, there may be more rather than less congestion.
 - 10) replacement or complementing of traditional power generation. However, whether this is a benefit depends on whether what is being replaced is clean or renewable.
45. To the extent that a potential benefit would be realized through purchase by a utility of the self-generator's excess, this benefit will only be realized if a utility can acquire the power in a cost-effective manner, meaning that it compares favourably to other available resource options. It is unlikely that new generation will be able to meet such a test, and unlike in the BC Hydro case, where there are customers with idle generation that may be made available in a cost-effective manner through an EPA or LDA, FBC has no such opportunities of which it is aware.

46. Considerable discussion in terms of the BC Energy Plan, for example, in the BC Hydro service territory, has related to BC Hydro as a potential purchaser. In this regard, the Commission noted the following in its TS 74 Decision at pp. 9-10:

Of the 135 customer sites taking service under RS 1823, 15 have electrical power self-generation facilities that are operational. For these customers, the CBL (determination, adjustments and reset) and the RS 1823 Energy Charges are impacted by self-generation output.

Historically, most transmission customers with self-generation have used their self-generated electricity to serve their own industrial plants to displace electricity they would otherwise have purchased from BC Hydro. Each customer's decision to use its self-generation for self-supply has largely been influenced by the technical requirements of the customer's industrial plant and the cost of self-generation relative to the avoided cost of purchasing electricity from BC Hydro. (Exhibit A2-1, pp. 3-4)

The incremental cost of fuel for self-generation is a particularly important consideration. For example, the cost of fuel for self-generation may be low if the fuel is a by-product of the customer's industrial process. In other cases, the customer may have to go to the market to purchase fuel, which could increase the price significantly. (Exhibit A2-1, p. 4)

...

BC Hydro states that customers are not using their idle self-generation capacity primarily because (in the absence of a contract to sell that energy) the incremental costs such as fuel and maintenance are greater than RS 1823 rates. Similarly, customers may choose not to invest in upgrades to the existing generation or invest in new generation when the avoided costs (RS 1823 rates) are insufficient to justify the investment. (Exhibit A2-1, p. 5) As a result, BC Hydro is of the view that it and its customers are not realizing the full benefits of cost effective energy and capacity supplied from customer self-generation. BC Hydro argues that incremental energy generated at a customer's industrial site is often an attractive, cost effective resource for BC Hydro. For example, self-generation may track the customer's load profile, particularly if it is linked to the customer's production process. Further, BC Hydro may avoid infrastructure costs and transmission losses incurred to transmit electricity to the customer's site. Moreover, incremental electricity generated from idle capacity can be brought on-line quickly and may have dispatch capability. (Exhibit A2-1, p. 19) [underlining added]

47. In this regard, the Commission further noted the following in its TS 74 Decision at p. 11:

BC Hydro advises that over the past decade, projected energy and capacity load-resource gaps have made it necessary for BC Hydro to pursue a variety of resource options including RS 1823 customer self-

generation. BC Hydro states that the acquisition of these self-generating customers' resources is consistent with the following laws and policies:

- BC's mandate to achieve electricity self-sufficiency by 2016 by holding the rights to electricity that is generated in BC from clean or renewable resources⁶ sufficient to meet BC Hydro's domestic needs. (*Clean Energy Act* [CEA], S.B.C. 2010, c. 22], section 6; Special Direction No. 10 to the [Commission])
- CEA energy objectives including:
 - o The implementation of Demand Side Measures such as load displacement. (Objective 2(b))
 - o Generation of at least 93 percent of electricity in BC from clean or renewable resources. (Objective 2(c))
 - o Reduction in BC Greenhouse Gas (GHG) emissions. (Objectives 2(g) and (i))
 - o Reduction in waste by encouraging the use of biomass. (Objective 2(j))
- Net zero GHG emissions from new electricity generation projects. (2007 BC Energy Plan, Policy Action 18)
- At least 90 percent of total generation from clean or renewable sources. (2007 BC Energy Plan, Policy Action 21)
- The implementation of a bioenergy strategy. (2007 BC Energy Plan, Policy Action 21)
- The implementation of a bioenergy call for power. (2007 BC Energy Plan, Policy Action 21)
- BC Bioenergy Strategy

[underlining added]

48. Again, while the above purchase-related considerations may apply directly to BC Hydro, FBC would consider the purchase of the output from a self-generator situated in its service area only where it compared favourably to other power supply options that were available.

49. Further, even if FBC has the ability to advance certain of the benefits outlined above, as discussed in relation to the BC Energy Plan and *Clean Energy Act*, it is not the case that FBC should do so, unless there is a net benefit to its other ratepayers. As well, whether

FBC action in a particular case vis-a-vis a self-generating customer would create benefit depends on the specific customer and its situation. For example, Celgar has had self-generation installed at its plant, capable of serving its entire load, since the early 1990's. It has installed since 2010 additional generation capability for the purpose of exporting power. The discouragement of on-site generation that is fully economical and cost-effective cannot properly be a consideration for Celgar, where generation is in place and has been for a considerable number of years. The Government's objective of promoting self-generation is similarly unaffected by the presence of the existing self-generation at the Celgar plant. Similarly, there is no opportunity for FBC realize any saving related to infrastructure it already has in place to serve Celgar.

50. In addition, there are various drawbacks to self-generation:

- 1) There may be a loss of revenue from service to the customer. Whether this is outweighed by savings depends on the particular situation, and in particular on power purchase costs (as infrastructure-related savings do not arise under the Commission's contemplated Rate Schedule 37).
- 2) Self-generation may also lead to a certain loss in efficiency, as already built resources are not being fully used.
- 3) Under the rate structure that the Commission has framed in the Stepped Rate Decision and the Stage II Decision, FBC will need to provide service to self-generating customers for which it does not fully or even substantially recover its costs.

(i) How does a self-generator's location impact the assessment of current and future benefits?

51. The Commission referred in its Stepped Rate Decision to the fact that utilities "argue that the theoretical benefits for self-generation are insubstantial if located in an unsuitable area..."

52. As noted earlier in these submissions, notionally a diversity of supply is good: an increase in dynamic stability increases the ability to withstand transient events. However, this would particularly be so in FBC's service territory if the self-generation were in the Okanagan. In the Kootenays, there are already many generators, and the addition of an additional generating asset is unlikely to make a difference.

(ii) How, if at all, should the relative benefits or drawbacks of any particular self-generator be reflected in determining a GBL?

53. The relative benefits or drawbacks of any particular self-generator should not be reflected in determining a GBL. While FBC has yet to develop a set of GBL Guidelines, it expects to do so as an outcome of this process, and further expects that consistent with previous Commission decisions, a GBL will fundamentally be a number that is historically based and set such that it represents the amount of self-generation that must be used in the service of customer load prior to any self-generation being available for export.
54. Rather than being addressed in the GBL context, the relative benefits and drawbacks should be reflected in the stand-by rate which self-generating customers may use. Though not saying it was only in this form that net benefits could be recognized, the Commission described the context as follows in its Stepped Rate Decision at p. 27:³⁵

Advocates for self-generation seek minimal stand-by rates based on the premise that self-generation provides benefits in the form of deferred or permanent reduction in the need for utility provided generation, transmission, and distribution capacity.

Utilities, on the other hand, argue that the theoretical benefits for self-generation are insubstantial if located in an unsuitable area or operate erratically, and low stand-by rates can result in self-generating customers avoiding infrastructure costs associated with back-up generation and wires services.

55. As the Commission said, in commenting on the stand-by rate for transmission customers in its Stepped Rate Decision at p. 56:

The resultant RS 37 stand-by Contract Demand should ultimately reflect both the costs and the benefits distributed generation provides to BC, and provide a level of price certainty regarding network charges for stand-by service to customers considering making self-generation investments.

By way of example, the Panel considers that the following principles could be a reasonable starting point in the development of principles used to determine Stand-by Contract Demand for future customers:

³⁵ See also p. iii of the Stepped Rate Decision: "The Panel notes that it is not unusual for stand-by rates to be contentious. Advocates for self-generation seek minimal stand-by rates based on the premise that self-generation provides overall benefits while utilities often argue that low stand-by rates can result in the avoidance of infrastructure costs. This contention is reflected by the two very divergent concepts introduced by FortisBC and Celgar". The Commission also noted in the Stage II Decision: "As discussed in the Stage I Decision, advocates for self-generation seek minimal Stand-by rates while utilities argue for the higher rates" (p. 20).

1. Economic efficiency: stand-by wires charges should not discourage on-site generation that is fully economical and cost-effective but for the inclusion of stand-by charges. Specifically, stand-by charges should not be (i) so low as to promote uneconomic bypass of the grid or inefficient maintenance of customer owned generation assets, or (ii) so high as to discourage the growth of cost effective self-generation. ...^[36]

56. In this regard, the Commission has related recognition of the benefits of self-generation to Stand-by Rate Contract Demand. Specifically, in the Stepped Rate Decision, the Commission said at p. iii:

Nevertheless, the Panel is persuaded by FortisBC's argument that it should not be required to offer non-firm service given the cost of providing such service is the same as providing firm service. The Panel also agrees with FortisBC that demand charges should apply during periods of stand-by service as these customers should make a fair contribution to the sunk costs of the network. The Panel considers that the key focus in determining the appropriate stand-by demand charge should instead be to ensure that it does not discourage on-site generation that is fully economical and cost-effective but for the inclusion of stand-by charges. Further, the stand-by demand charge should also take into consideration BC energy objectives.

As these considerations can vary by customer and over time, the Panel finds that FortisBC's proposed one size fits all method of recovering these costs as laid out in Special Provision 2 is unnecessarily restrictive. As a solution, the Panel suggests that 'Stand-by Contract Demand' should be established between the customer and the utility at an amount somewhere between zero and 100 percent of the Contract Demand established in the underlying rate. Determining the appropriate Stand-by Contract Demand should take into consideration the potential benefits of self-generation, such as electricity self-sufficiency, reduced greenhouse gas emissions, or a reduction in the need for utility-provided network capacity. [underlining added]

57. The Commission has also suggested factoring potential costs and benefits into the stand-by rate billing demand. As the Commission said in the Stage II Decision at pp. 23-24:

Stand-by Billing Demand for future customers should ultimately reflect both the costs and the benefits distributed generation provides to BC, and

³⁶ The Commission also stated in its Stepped Rate Decision that it "considers that stand-by wires charges should be set such that they do not inadvertently either restrict the growth of cost-effective distributed generation, or promote uneconomic bypass. Wires charges should also result in a fair contribution to the sunk costs of the utility's network, although the Panel notes the difficulty in determining the fairness of a Wires Demand Charge from a cost causation perspective" (p. 54).

provide a level of price certainty regarding network charges for Stand-by Service to customers considering making self-generation investments. Any considerations in setting the SBB for future customers must be consistent with the directions provided in Section 3.8.5 of the Stage I Decision for SBCD, and must reflect the benefits/detriments of self-generation. Specifically, SBB for future customers must be based on a set of Commission-approved principles attached to the Stand-by Rate as a Tariff Supplement (TS). The Commission provided examples of some principles that could be included in the TS in the Stage I Decision which it still considers to be relevant. [underlining added]

58. While the Commission referred in the passage above to the costs and benefits “to BC”, in the context of a rate developed for a specific utility, FBC believes that the relevant consideration is the cost and benefit to that utility’s ratepayers. In FBC’s view, consideration should only be given to benefits that can be demonstrated and valued as having a positive impact on rates within a defined time frame.³⁷
59. For a new transmission customer with self-generation, or an existing transmission customer with new self-generation, as a practical matter such generation would be considered incremental and would result in a GBL of zero. This renders Question 5(ii), regarding the determination of GBLs, moot in those circumstances.
60. More broadly, since new generation would lead to a GBL of zero, and any existing customer with self-generation that chooses to take service utilizing the stand-by rate would receive consideration of the net benefits of self-generation in determining the Stand-by Billing Demand, the only situation left to consider is where an existing self-generating customer chooses to take service without using the stand-by rate. The only customer in a position to make this choice is Celgar, which has expressed a desire for stand-by service. FBC is of the opinion that it is appropriate to leave the consideration of net benefits to the determination of Stand-by Billing Demand as contemplated by the Stage II Decision.
61. The discussion above has focused on transmission customers, as the Commission limited the application of Rate Schedule 37 to such customers.³⁸ However, FBC expects that recognition of net benefits could also be achieved in the rate applicable to distribution-level self-generating customers if a rate schedule is developed for them as well.

³⁷ Exhibit B-1 at p. 33.

(6) Should FortisBC's self-generation policy incent self-generation? If yes, under what circumstances?

62. As stated on page 11 of its application, FBC supports the principle that the decision by a customer to install self-generation should be made by the customer based on the merits of the project. In general, it is not the role of the utility to either encourage or discourage the installation of customer owned generation by any customer. Rather, customers should be free to make strategic investment decisions appropriate to their circumstances which may include consideration of the benefit that the self-generation provides to FBC customers as a whole, including the self-generating customer.
63. In those situations where a self-generation project will provide a net benefit to FBC customers as a whole, including the self-generating customer in terms of reduced infrastructure costs, lower power purchase expenses or other benefits that will have a positive rate impact over the life of the project, it would be appropriate for FBC to recognize the net benefit. The Commission has directed FBC to file a tariff supplement to RS37 that provides such recognition in the determination of the Stand-by Billing Demand.
64. FBC believes this approach to be generally consistent with the BC Hydro position in which it confirms that "...economic barriers identified may be removed through appropriate financial incentives or payments, assuming it is cost-effective for BC Hydro to do so relative to other resource options and for the customer to do so under the terms of the contract offered by BC Hydro" (underlining added).³⁹
65. Since the opportunities to use FBC's proposed method are anticipated to be infrequent due the small number and unique nature of potential self-generation customers, and need to be developed in consideration of each specific circumstance, FBC believes that the most reasonable approach is to bring each case, with all relevant supporting documentation, to the Commission for approval on a case by case basis.⁴⁰

³⁸ Exhibit B-1 at p. 6.

³⁹ BC Hydro Application for Approval of Contracted Generator Baseline Guidelines and Reconsideration and Variance of Order No. G-19-14, Response to BCOAPO Information Request 1.1.3.

⁴⁰ Exhibit B-1 at p. 2.

(7) What should the definition of arbitrage be in the current and future FortisBC service area environment?

66. If a single definition of arbitrage is to be determined during this process, FBC suggests that it mirror language already presented in its Self-Generation Policy Application which in turn directly incorporated a previous determination made by the Commission. Such a proposed definition would read:

Arbitrage occurs whenever a utility (or FBC) provides embedded cost power to a self-generating customer at any time when that customer is selling self-generated power that is not in excess of its load except where such sales are made above the level of a Commission approved GBL.

67. The above definition is consistent with the **2009 BCH PPA Decision**. There, after the Panel had discussed at length the market conditions that existed at the time and considered the opportunities for profit, as well as whether a definition of arbitrage added any clarity to the conversation, it framed its determination broadly in terms of the activity at issue:⁴¹

What will not be permitted is the supply of embedded cost power to service the domestic load, at any time when the self-generator is selling power into the market.

68. In Order G-60-14 and the New PPA Decision, the Commission appeared to suggest that in its self-generation policy, FBC should ensure that there is no arbitrage (not simply that it should ensure there is no arbitrage detrimental to other ratepayers, which is a condition that had been explicitly included in other decisions) in its service territory. In this regard, Order G-60-14 provided:

5. FortisBC Inc. is directed to initiate a concurrent consultation process in its service territory to address or ensure:

- (i) the potential benefits of self-generation;
- (ii) the 1999 Access Principles in the context of self-generating customers;
- (iii) if the GBL methodology is proposed, GBL Guidelines for both idle historic self-generation and new self-generation; and

⁴¹ 2009 BCH PPA Decision at p. 29.

(iv) arbitrage is not allowed.

FortisBC Inc. is further directed to file a resultant Self-Generation Policy application with the Commission by December 31, 2014, that establishes high level principles for its service territory. [underlining added]

69. Correspondingly, the Commission wrote in the New PPA Decision at pp. 103-104:

Although FortisBC would have the discretion and judgment in determining the scope of the consultation process and the resultant application the Commission would want to ensure that (i) FortisBC determines for existing self-generating customers, how much generation must be used for self-supply, and (ii) all FortisBC's customers with idle self-generation capability are able to sell excess self-generated electricity, provided the self-generating customers do not arbitrage between embedded cost utility service and market prices....

....FortisBC must establish Self-Generating customer polices for current and future customers at distribution and transmission voltage and to address the following:

....

4. ensure, arbitrage is not allowed.

Accordingly, FortisBC is directed to initiate a consultation process in its service territory to address or ensure:

(i) The potential benefits of self-generation;

(ii) The 1999 Access Principles in the context of self-generating customers;

(iii) If the GBL methodology is proposed, GBL Guidelines for both idle historic self-generation and new-self-generation; and

(iv) Arbitrage is not allowed.

FortisBC is further directed to file a resultant Self-Generation Policy application with the Commission by December 31, 2014 that establishes high level principles for its service territory.

[underlining added; bold in the original]

70. FBC has sought to address Question 7 in a manner that respects the Commission's instruction in Directive 5 of Order G-60-14 and the New PPA Decision (to ensure arbitrage is not allowed) while also being consistent with:

- 1) the Commission's recognition that the public interest is to be assessed. As the Commission said at p. 10 of its 2009 BCH PPA Decision, "it is neither important, nor necessary, to qualify such actions [a self-generator purchasing power to service domestic or base load at embedded cost rates, while selling their total self-generated power into the market at whatever negotiated or spot price would accrue to the self-generator as profit] under any definition of arbitrage. Nothing turns on any such characterization...What the Commission Panel must determine is whether such an arrangement is in the public interest..."⁴²; and
 - 2) the Commission's recognition that establishment of a GBL can address arbitrage-related concerns (see, in this regard, the discussion in Appendix A).
71. In some decisions, the Commission has suggested a ratepayer impact test which could suggest that there is a distinction between "acceptable" or "unacceptable" arbitrage. For example, the Commission has said:
- Arbitrage is not, by definition alone, a negative concept. In the utility context, it is arbitrage to the detriment of other ratepayers that the Commission has consistently protected against. The Commission has consistently upheld the principle that other utility ratepayers **should not be harmed by self-generators' arbitrage of embedded cost power.**⁴³
72. However, from a practical perspective, the only means by which the Commission can ensure that a self-generator does not arbitrage between embedded cost utility service

⁴² The Commission also turned to the underlying issue rather than determining whether or not certain activity qualified as "arbitrage" in the RDA Decision at pp. 102-103, though in that case in somewhat of a different context (the Commission was required to measure simply whether the activity would be off-side the amendment to s. 2.1 of the 1993 PPA for which Order G-48-09 had provided):

The Commission Panel has considered the submissions on the issue of RS 3808 and Order G-48-09. The Commission Panel is of the view that the Commission's determination at page 31 of Order G-48-09 is clear, and sets out to prevent exactly what Celgar is proposing to do.

Accordingly, the Commission Panel considers that defining what is precisely meant by "arbitrage" is irrelevant. It is clear from Exhibits B-35 and B-37 that the effect of Celgar's proposal that it be allowed to purchase the full mill load at embedded rates from FortisBC will require FortisBC to purchase an additional \$8.9 million of power from BC Hydro under RS 3808 at embedded (heritage) rates.

While FortisBC might be indifferent financially to this proposal, it is clear that BC Hydro and its ratepayers would not be indifferent as it would oblige BC Hydro to pay incremental prices for the power or lose export opportunities. The Commission Panel considers that this would not be in the public interest. [underlining added]

⁴³ Order No. G-202-12 Reasons for Decision at page 10 (emphasis added).

and market prices (or any other means of acquiring power) to the detriment of other customers is to set in place a policy such as suggested by FBC, or maintain the net-of-load standard. In FBC's estimation, there is little chance that a self-generator could avail itself of an opportunity to sell power while purchasing embedded cost utility supply that would not result in negative impacts to other customers, simply because the conditions that would need to exist in order for arbitrage to be profitable for a self-generator would increase the cost to FBC of providing the replacement power. Any mechanisms put in place to determine whether in a particular case harm exists, and to what extent, would likely be cumbersome and contentious; it is best to retain and follow a general principle without requiring further particular investigation on specific facts.

73. In the Kelowna Decision, the Commission noted that "[t]rue arbitrage in fact" is something that "can only occur where a customer purchases more energy than is required to service its load at any moment in time. It is only at that moment when energy purchased will necessarily be used for the purpose of resale and not for the purpose of servicing load". However, in order for this distinction to impact the treatment of a self-generator, one has to subscribe to the notion that it is possible to differentiate the electrons that are being generated for export from the electrons coming from the utility to serve plant load. The practical reality is that if the sum of utility purchases and customer self-generation is greater than plant load at any given time, there is a concern unless in accordance with a GBL.

74. Given all these factors, the bottom line in terms of FBC's proposed policy is that, as stated in FBC's application, FBC will not provide embedded cost power to a self-generating customer at any time when that customer is selling self-generated power that is not in excess of its load except where such sales are made above the level of a Commission-approved GBL.⁴⁴

(8) Is there a role for the net-of-load concept in the FortisBC service area if the GBL methodology is accepted? If yes, what is that role?

75. As a result of previous Commission determinations, primarily the 2009 BCH PPA Decision, all self-generating customers in FBC service territory currently take service on a "net-of-load" basis. This means that prior to being able to sell any portion of the output

⁴⁴ Exhibit B-1 at p. 13.

of its generation facilities, the customer must first meet its own load on a dynamic hourly basis using its self-generation output. Customers are not permitted to serve any portion of load with power purchased from FBC at any time that they are also selling power.⁴⁵

76. In FBC's view, there would continue to be a role for the net-of-load concept in the FBC service area even if the GBL methodology is approved. This is so in two circumstances.
77. First, the "net-of-load" approach would remain the default unless or until a particular number is agreed on as a GBL between the utility and customer or in the case where the customer generation was not operating at a level sufficient to meet its GBL obligation. "Net of load" reflects the way in which meters work.
78. Second, certain customers may prefer not to arrive at a GBL even with GBL Guidelines in place and may, instead, wish to continue on the "net-of-load" approach indefinitely. In this regard, as noted in FBC's application, Tolko favors the "net-of-load" method currently employed over the GBL approach. Tolko is of the view that any generation that is net-of-load, at any time, should be eligible for sale using access to FBC transmission.⁴⁶
79. FBC recognizes that, as the Commission has noted, "BC Hydro believes the net-of-load approach does not strike the right balance because it is inflexible and can have unintended consequences if a FortisBC customer has an Electricity Purchase Agreement (EPA) with BC Hydro. BC Hydro further submits the net-of-load approach may also be an impediment to the development of cost-effective incremental generation in the FortisBC service area because FortisBC is not permitted to access RS 3808 power for the purpose of serving a customer that wishes to sell any electricity not in excess of load, including new incremental generation": New PPA Decision at pp. 66-67. However, FBC believes that these concerns are addressed through the offering of a GBL option, and does not believe the concerns detract from the default role that "net of load" is to serve in the three circumstances noted above.

⁴⁵ Exhibit B-1 at p. 7.

⁴⁶ Tolko believes that in the absence of the net-of-load requirement, a self-generator's GBL is set when generation capacity is added for the purpose of electricity sale and that the GBL should be set at the historic level of self-generation used to serve its own load. Therefore, Tolko believes that this GBL would remain constant unless the self-generator's load drops below the GBL, at which point net-of-load sales would be eligible: Exhibit B-1 at p. 24.

(9) How should the GBL be defined in the context of both idle historic self-generation and current idle self-generation?

80. By way of background in addressing this question, a key issue in applying the GBL concept is to determine what self-generation is “incremental” (or “new”). In this regard, as the Commission has previously said, “it has been accepted that incremental generation put in place by a self-generator after the time period relevant to the status quo being preserved would be fully available for export sales. Such incremental generation would not increase the load the utility was required to serve at the particular point in time which was used as the reference point. Hence, arbitrage, as the concept was developed, would not occur, even if some load continued to be consistently served by the utility at the same time the self-generator was selling the incremental energy”: Kelowna Decision at p. 18.⁴⁷ The Commission further commented in the New PPA Decision at p. 101:

BCMEU states that it is in the interest of its members and, the entire Province, to encourage self-generators to add new generation and to encourage non-generators to add generation. BCMEU points out the current economic incentive to invest in new generation on a net of load basis is very low, at best, the self-generating customers are avoiding power purchases at embedded cost rates. The Panel notes that this is recognized by most parties, and therefore, the concept of incremental generation is used to differentiate from native generation.

81. This appears to be consistent with the approach taken in BC Hydro service territory. As FBC noted in its application:⁴⁸

BCH mitigates against arbitrage between its embedded cost utility rates and market prices by setting a GBL for self-generators and supplying them with embedded cost power only in excess of that GBL. The basic premise of a GBL is that it demarks the amount of electricity that the customer must generate for self-supply prior to using any self-generation for another purpose, such as export. Electricity generated in excess of the GBL is considered to be incremental or new electricity, and the sale of electricity generated in excess of the GBL is not considered arbitrage.

This GBL is set with reference to the amount of load historically served by the self-generator, allowing for truly incremental generation to be disposed of at the discretion of the self-generator customer. FBC agrees with this approach.

⁴⁷ As well, “increases in load from the expansion of production of a self-generator would be eligible for service from the utility, as incremental load as this would also not affect the status quo”: Kelowna Decision at p. 18.

⁴⁸ Exhibit B-1 at p. 23.

82. Correspondingly, FBC's proposed policy includes the principle that "FBC customers with self-generation are able to export incremental self-generation output to third parties where incremental self-generation output is power produced above the output normally used for self-supply as represented by a Generator Baseline (GBL). The GBL shall be determined in accordance with the Company's GBL Guidelines and approved by the Commission".⁴⁹
83. By definition, generation that is "new" or "incremental" has not historically been used to serve load and would not be restricted. In FBC's opinion, a customer that installs new generation, or begins to use idle generation that has not served load previously, should be free to dispose of its generation as it wishes.⁵⁰ FBC is of the general opinion that customers should have discretion whether to use such self-generation to displace their own load consumption or for export without restrictions on generator type, size and/or location.⁵¹ However, FBC also notes that terms such as "new", "incremental", and "idle" with respect customer generation do not yet have universally agreed upon meaning and future Commission decisions may impact how this general view evolves.
84. FBC is also of the opinion that if a customer at some point decides to use that new or incremental generation to serve load, it should not create an ongoing obligation to continue to use the generation in that manner.⁵²
85. While additional electricity generated from upgrades to existing generation capacity or the installation of new generation capacity can easily be considered "incremental" energy, defining incremental energy in other circumstances is more difficult.⁵³
86. In those cases where a customer wishes to repurpose generation output, or where generation has been idle for some amount of time and then becomes reactivated, a means for determining how much generation is incremental is required.
87. FBC's understanding is that in the case of BC Hydro, electricity in excess of the Contracted GBL is recognized as incremental or new electricity. In effect, this means that the establishment of a GBL according to a set GBL guideline will determine the amount

⁴⁹ Exhibit B-1 at p. 24.

⁵⁰ Exhibit B-1 at p. 29.

⁵¹ Exhibit B-1 at p. 29.

⁵² Exhibit B-1 at p. 29.

⁵³ Exhibit B-1 at p. 16.

of generation that is considered to be incremental. In other words, GBL guidelines will define how much generation must be used for self-supply, with any power generated above that eligible for export without being considered arbitrage. As such, as a high level policy, FBC considers it appropriate to define incremental generation through a set of established guidelines.⁵⁴

88. The circumstances that would define what constitutes “idle” generation have not to the knowledge of FBC been approved by the Commission.
89. In the Staff Report attached as Appendix A to Order G-38-01, the matter of defining idle generation was discussed, but opinions among intervenors differed and no conclusion was reached. The fact that the matter is unresolved is evidenced by the Commission’s Direction in the Decision accompanying Order G-19-14 that BC Hydro include in its Contracted GBL Application, “Definitions for Incremental Generation and Idle Generation”. FBC’s understanding is that no such definition has been offered. In any case, it is possible that the fact that a Contracted GBL for BC Hydro relates directly to an EPA or LDA with BC Hydro means that a definition offered by BC Hydro may not have general applicability.⁵⁵ The use of a GBL for FBC, which may include facilitating export sales to a third party, is different.
90. One possible definition is that idle generation is any generation that is above normal historical levels.⁵⁶ This interpretation would not require a distinction between current and historic idle generation and would also provide that idle generation and incremental generation are equivalent. As a practical matter, only the determination of what constitutes normal historical levels and how the reference point in time is selected are of any import.
91. It is the view of FBC that the process that is put in place to deal with an application for approval of GBL Guidelines for FBC would be the appropriate venue for discussion of

⁵⁴ Exhibit B-1 at pp. 17-18.

⁵⁵ In response to a Commission information request asking for a definition of idle generation, BC Hydro has said, “There is no need for the Contracted GBL Guidelines to include definitions of “new”, “incremental” and/or “idle generation”. The Contracted GBL Guidelines are not intended to and do not determine the amount of new, incremental or idle generation. Including definitions for these terms would be redundant and confusing.” - Response to BCUC IR 1.16.1 in the Contracted GBL process.

⁵⁶ In Appendix A to Order G-38-01 at p. 1 of 5, Staff noted that, “B.C. Hydro also accepted that the sale of truly “idle” generation into the market may not harm other ratepayers, as long as increased takes of RS 1821 electricity were not above normal historical levels, to produce the current “idle” capacity.” (underlining added)

these issues. Against that backdrop, there is no need to define a GBL in the context of both idle historic self-generation and current idle self-generation.

PART C - CONCLUSION

92. In all the circumstances, FBC reaffirms that the high-level principles set out in its application.
93. ALL OF WHICH IS RESPECTFULLY SUBMITTED.

Dated: May 25, 2015

original signed by
Corey Sinclair

APPENDIX A: Background Information

Set out below are particular excerpts from past Commission decisions that FBC considers inform its policy and provide the context for it. Certain additional elements of those decisions are referred to in FBC's responses to Questions 2 – 9.

Definitions

- 1) **Embedded cost of service** “is the weighted average cost of existing sources of power in a utility’s resource stack”: Kelowna Decision at p. 6.
- 2) **Embedded cost power** “can be defined as the weighted average cost of power supplied from all sources available to the utility”: New PPA Decision at p. 13.
With respect to particular utilities:
 - (i) “in the case of BC Hydro, embedded cost power refers to the cost of ‘Heritage Energy’, along with the cost of energy procured from ‘Non-heritage’ sources including Independent Power Producers (IPPs), BC Hydro’s self-generating customers, and market import purchases”: New PPA Decision at p. 13.
 - (ii) FBC’s embedded cost power is power from all of the following sources: BC Hydro’s embedded cost power accessed through RS 3808, power generated by FBC’s own generation assets, power from the Power Purchase Agreement with the Columbia Power Corporation for power generated from the Brilliant Dam (Brilliant PPA), and FBC’s purchases from IPPs and from market imports: New PPA Decision at pp. 13-14.⁵⁷
- 3) **“Self-generation facilities”** means electrical power generation facilities that are installed at the same site as the customer’s plant, on the customer’s side of the

⁵⁷ Correspondingly, FBC’s Self-Generation Policy Application, Exhibit B-1 says at p. 16: FBC defines embedded cost power to be the weighted average cost of power supplied from all these sources available to FBC. Specifically:

- FBC generation assets;
- the Power Purchase Agreement with the Columbia Power Corporation for power generated from the Brilliant Dam (Brilliant PPA);
- purchases from independent power producers (IPPs);
- purchases from market imports; and
- BCH’s embedded cost power through RS 3808.

point of delivery, and that are used to supply a portion of the customer's load": TS 74 Decision at p. 1 (here and below, bolding of terms added).

Arbitrage

- 4) "Self-generating customers are not permitted to arbitrage between embedded cost rates and market prices to the detriment of other ratepayers", and "should not" be permitted to do so": New PPA Decision at p. 100. The Commission has described the "Self-Generation Policy Issue" as "being that other utility ratepayers should not be harmed by self-generating customers' arbitrage of embedded cost power", and has further said that "ensuring the Self-Generation Policy Issue is carried out in the FortisBC territory is of utmost importance".⁵⁸
- 5) "**Arbitrage is not, by definition alone, a negative concept.**"^{59]} In the utility context, it is arbitrage to the detriment of other ratepayers that the Commission has consistently protected against. The Commission has consistently upheld the principle that other utility ratepayers should not be harmed by self-generators' arbitrage of embedded cost power": Matching Methodology Decision at p. 10.⁶⁰ Correspondingly, the policy principles spelled out in Order G-38-01 come into play once there is some material anticipated loss: 2009 BCH PPA Decision at p. 27.
- 6) "**True arbitrage in fact**" is something that "can only occur where a customer purchases more energy than is required to service its load at any moment in time. It is only at that moment when energy purchased will necessarily be used for the purpose of resale and not for the purpose of servicing load": Kelowna Decision at pp. 3, 22. (See, however, FBC's discussion of this concept, and the only parameters under which it would hold, in its response to Question 7 in the text of these submissions.)
- 7) More broadly, arbitrage has traditionally been regarded in terms of a self-generating customer's purchase of more energy than was historically required to

⁵⁸ New PPA Decision at pp 79-81.

⁵⁹ Correspondingly, the Commission noted in its 2009 BCH PPA Decision that "in any commercial context, the concept of arbitrage is not illegal nor does it carry any pejorative implication. Rather, it is simply a market mechanism to discipline price variations among separate markets..." (p. 9).

⁶⁰ In this regard, "...other utility rate payers should not be harmed by self-generating customers' arbitrage of embedded cost power": New PPA Decision at p. 81.

service its load; restrictions on arbitrage (e.g., through the GBL concept used in Order G-38-01) were oriented to the “preservation of the status quo”. Summarizing Orders G-38-01 and G-17-02 in Appendix C to the New PPA Decision, the Commission observed that “the notion of ‘arbitrage’, as used in relation to GBLs, was the preservation of the ‘status quo’, such that BC Hydro’s obligation to serve was limited to the load served at a particular time, and self-generating customers were required to continue to serve that portion of their own load which they had served in the past” (Appendix C at p. 2).

- 8) The Commission has noted that the status quo is changing for utilities in other respects as well, through other projects that may draw on large amounts of power: “there are currently a large number of opportunities for economic development in the Province, many of which involve very large projects, the supply of power to which will undoubtedly raise rates, at least to some extent, for all electricity customers of whatever utility supplies the increased energy. In this context, self-generators would appear to be being treated less favourably than other potential customers”: Kelowna Decision at p. 22. However, the Commission has subsequently reaffirmed the prohibition on arbitrage (or arbitrage harmful to other ratepayers) despite this possibility, e.g. in Directive 5 of Order G-60-14.
- 9) The Commission “has applied **different mechanisms**” to ensure “**that self-generators should not arbitrage power to the detriment of other ratepayers**” in different circumstances. The mechanisms **have included the GBL approach** (Order G-38-01 and G-17-02), **the net-of-load approach** (Order G-48-09), and “entitlement with appropriate rate design”: Matching Methodology Decision at p. 11.
- 10) Self-generating customers are presently unlikely to engage in arbitrage given:
 - (i) “low market conditions (market price lower than RS 3808 rate)”, under which there “would be little risk that self-generating customers would have the opportunity to arbitrage”: New PPA Decision at p. 86.
 - (ii) “relatively low spot markets”, which “do not incent FortisBC’s self-generating customer to arbitrage between embedded costs rates and market rates”: New PPA Decision at p. 92.

- (iii) “capacity charges in the underlying rates”, which “would be a disincentive for a self-generating customer to participate in hour-by-hour markets for its below-load energy”: New PPA Decision at p. 88.

GBLs

- 11) As noted above, GBLs are among the “**mechanisms**” that the Commission has applied in certain circumstances **to ensure “that self-generators should not arbitrage power to the detriment of other ratepayers”**. Orders G-38-01 and G-17-02 are examples of the GBL mechanism being used by the Commission in this regard: Matching Methodology Decision at p. 11. While in the Kelowna Decision, the Commission appeared to distinguish between “arbitrage in fact” and arbitrage in relation to the status quo, it suggested that GBLs addressed both situations:⁶¹
 - (i) GBLs are one “means to prevent arbitrage in fact” (p. 22); but also
 - (ii) “GBLs came into being as a means to preserve a status quo of self-generation, such that the load which BC Hydro had the duty to serve would not increase as a result of self-generators increasing sales of their energy, rather than using it to serve their own load. If such sales occurred and BC Hydro’s other ratepayers were required to pay more than they otherwise would have been required to pay, either because BC Hydro’s more lucrative export sales were reduced, or because it was required to find additional supply at increased cost, arbitrage was considered to result” (p. 18). In this regard, a utility’s “obligation to serve was limited to the load served at a particular time, and self-generators were required to continue to serve that portion of their own load which they had served in the past” (p. 7).
- 12) **A GBL is “in essence...the number which represents the amount of load a self-generating customer must serve from its self-generation”**: Kelowna Decision at pp. 4, 16, 20. Similarly put, “GBLs determine the amount of self-

⁶¹ Certainly as well, “[a]ll generation which is beneath a GBL is, by the very concept of a GBL, used to serve own load when required and thus, not available for sale such that, by any definition of arbitrage in use in the regulatory arena, concerns as to arbitrage could not arise for such generation”: Kelowna Decision at p. 19.

generation output required, before self-generators can rely on the utility to serve its required additional load”: New PPA Decision at p. 66.

- 13) **A GBL “should be tied to an agreement with the utility”**: Kelowna Decision at pp. 4, 20.⁶² The Commission has left some flexibility to FBC and self-generating customers in this regard, as it “leaves it open to FortisBC and self-generating customers to agree on the load FortisBC will serve. In this Panel’s view, that load would be somewhere between zero, where the self-generator serves its entire load, up to the amount of the actual load, at any given time”: Kelowna Decision at p. 22. This said, the Commission has suggested that it:

- (i) can intervene in the setting of a GBL: “[a]ll the parties agree that the [s. 7(1)(f)]⁶³ *Clean Energy Act* exemption does not apply to agreements relating to the provision of service between FortisBC and Celgar. The Commission therefore concludes that it has the authority to determine the contract terms between FortisBC and its pulp mill customers, including terms related to GBLs”: 2011 Complaint Decision at p. 23 (emphasis omitted).
- (ii) but will intervene in the setting of a specific number as the GBL only on the basis of approved guidelines which to date have not existed in FBC service territory. The Commission said in the Matching Methodology Decision at p. 11:

...GBLs exist between BC Hydro and its self-generating customers because they have been able to reach agreement on their GBLs. FortisBC and Celgar have been unable to reach such an agreement, notwithstanding the repeated encouragement by the Commission to do so. There is currently no basis upon which the Commission is

⁶² The Commission has also said that “[t]ypically, historical GBLs are contractually agreed to by a utility and its self-generator customer” New PPA Decision at p. 66. It is not clear whether there has been an atypical circumstance of a historical GBL that has not been contractually agreed to. The Commission noted at pp. 9-10 of Appendix C to the New PPA Decision, when discussing Order G-191-13, that “the Commission Panel found that a GBL, viewed as the load a self-generator is required to serve, should be tied to an agreement between the self-generating customer and the utility”.

⁶³ Section 7(1)(f) provides: “The authority is exempt from sections 45 to 47 and 71 of the *Utilities Commission Act* to the extent applicable, and from any other sections of that Act that the minister may specify by regulation, with respect to the following projects, programs, contracts and expenditures of the authority, as they may be further described by regulation...one or more agreements with pulp and paper customers eligible for funding under Canada’s Green Transformation Program under which agreement or agreements the authority acquires, in aggregate, up to 1 200 gigawatt hours per year of electricity”.

able to force such an agreement or dictate what a GBL should be. While BC Hydro has recently provided an Information Report on Transmission Service Rate GBLs that could act as a useful guideline for the determination of GBLs, the Report was for information only and has not been adopted by the Commission as a guideline.

In Exhibit B-4 FortisBC has provided a possible GBL for Celgar. It has also indicated that use of a GBL as opposed to the entitlement to NECP and the matching methodology it has proposed would remove the need for a separate stepped transmission rate designed specifically for exporting self-generating customers. The Commission Panel rejects these submissions. There is no approved basis for the establishment of the GBL proposed, nor has there been any consultation to vet the proposal. Furthermore the introduction of a stepped transmission rate has energy conservation objectives to be satisfied that would not be met if FortisBC was not to proceed with its pursuit of the stepped transmission rate for self-generating customers as has been directed by the Commission.[underlining added]

- 14) **A utility and a self-generating customer need not establish a GBL: “a GBL is not a necessary component of a GSA....**while a GBL may be incorporated into a GSA between FortisBC and Celgar, [the Commission] leaves the issue of whether to incorporate such a GBL into a GSA up to the parties”: 2011 Complaint Decision at p. 28. Similarly, as the Commission said in the RDA Decision at p. 115 (though recognizing its analysis there was oriented around Order G-48-09):

....The parties are at liberty to establish their own GBL and, should they desire, to incorporate it into a general service agreement and submit it to the Commission for approval....
[underlining added]

- 15) In the BC Hydro context:
- (i) “A **Non-Contracted GBL** basically represents the annual generation output of a customer’s self-generation facility which is not the subject of a contract with BC Hydro. This self-generation output is used solely for the purpose of servicing the customer’s own load”: TS 74 Decision at p. ii.⁶⁴

⁶⁴ In this regard, the Commission has noted that “[w]ith a Non-Contracted GBL, all of the generating unit’s output is used by the customer for self-supply, displacing the equivalent volume of RS 1823 energy purchases which would otherwise have been made. There is no sale of self-generated electricity”: TS 74 Decision at p. 19.

- (ii) “A **Contracted GBL** represents the generation output of a customer’s self-generating unit, which must be used for self-supply, where the unit and/or its output is the subject of a contract between the customer and BC Hydro, either a Load Displacement Agreement (LDA), where BC Hydro has paid an incentive to the customer to invest in the self-generation, or an Energy Purchase Agreement (EPA), where BC Hydro has agreed to purchase all or a portion of the output of the self-generation unit”: TS 74 Decision at p. ii.

Net of load

- 16) The net of load approach is another of the “**mechanisms**” that in certain circumstances the Commission has applied **to ensure “that self-generators should not arbitrage power to the detriment of other ratepayers”**: Matching Methodology Decision at p. 11.
- 17) **Selling on a net of load basis is acceptable**: “self-generators should be permitted to sell any self-generated power that is in excess of the self-generator’s own ‘domestic’ load and to do so on a dynamic basis”: 2009 BCH PPA Decision at p. 30
- 18) Order G-48-09 is an example of the Commission’s application of the net of load mechanism: Matching Methodology Decision at p. 11. In this regard, “[t]he practical effect of the [2009 BCH PPA Decision] was to require FortisBC customers to service 100 percent of their load from self-generation, prior to engaging in export sales, to the extent that their load would otherwise be served indirectly by BC Hydro under the RS 3808 PPA”: Kelowna Decision at p. 8; TS 74 Decision at p. 21. That load would have been indirectly served by RS 3808 absent application of another mechanism.

Difference between GBLs and net of load

- 19) The “‘net of load’ methodology [in Order G-48-09] is different than the GBL methodology approved for BC Hydro’s customers by Order G-38-01”: TS 74 Decision at p. 21.

- 20) “The net-of-load construct differs from a GBL construct in that the net-of-load construct unequivocally prohibits a self-generating customer from buying electricity at the same time as it is selling electricity, whereas the GBL construct does not”: New PPA Decision at p. 66.
- 21) “[S]elling self-generation on the basis of a GBL which is less than load, is not equivalent to selling self-generation on a net of load basis....a GBL which is less than a customer’s load, other things equal, is not equivalent to the concept of net of load on a dynamic basis. The concept of net of load on a dynamic basis does not envision sales of energy which could be used to serve load at any time...the ability to sell self-generation on a net of load basis and the ability to sell self-generation pursuant to a GBL are not equivalent in terms of the treatment of a utility’s customer”: Kelowna Decision at pp. 3, 18, 22.

Other

- 22) **The Commission has not found “an unconditional obligation on a utility to provide service to all persons at embedded costs....section 39(i) of the UCA gives the Commission the power to establish rates for service to FortisBC’s customers, and that sections 60-61 give the Commission the power to set rates that may not necessarily be based on embedded costs”:** RDA Decision at pp. 113-116 (underlining in original).
- 23) **A utility has an “interest...in serving a predictable load”:** Kelowna Decision, Executive Summary at p. 3. A utility interest is “to have a predictable customer load, for its system planning purposes”: Kelowna Decision at p. 6. A utility has a “need to accurately forecast the load it must serve...An electric utility needs to be in a position to serve what it forecasts to be its maximum or peak load at any given time. Planning horizons are necessarily long, particularly where increased generation is required and must be constructed. The capital outlays involved with supplying additional capacity are significant. A variety of methods may be employed by a utility in its attempt to manage peak loads as well as loads generally to match its supply obligations. For example, to the extent that self-generators supply their own loads, the load the utility must serve is reduced by the equivalent amount. Self-generators with ‘excess’ generation, also offer an alternate source of supply to for the utility. Hence a utility may enter energy

supply agreements and/or load displacement agreements with its self-generating customers. It may also take other measures such as offering interruptible or non-firm service to certain customers, or assisting customers to use less energy to accomplish the same task. It may also use variable pricing to attempt to shift loads from periods of high demand to lower demand”: Kelowna Decision at pp. 18-19.

Of course, while citing various Commission decisions in these submissions, FBC is also mindful that not all of them have appeared to be entirely consistent or certain, and indeed the Commission has said that it “accepts that past Commission rulings may have contributed to the current predicament [that is, issues regarding the treatment of self-generated power within the FBC service area]”: New PPA Decision at p. iii. As FBC noted in its application, FBC acknowledges that this is likely due to the fact that the decisions occurred at different times, in different processes, and considered different matters, and appreciates the Commission’s clarification of the situation in the New PPA Decision.⁶⁵ As noted in the submissions, the New PPA Decision (and Order G-60-14) are particularly important in FBC’s view. They formed the impetus for the filing of the Self-Generation Policy Application, are relatively recent, and sought to explain and synthesize various earlier decisions.

⁶⁵ Exhibit B-1 at p. 14.

APPENDIX B:

Certain decisions taking the BC Energy Plans into consideration

As explained in the text of the submissions, FBC considers that much of the historical discussion before the Commission on the subject of the BC Energy Plans may have limited applicability to FBC. However, for completeness, FBC does flag the following instances in which the Commission has referred to the Energy Plans in the context of the Commission decisions otherwise under review in this process. .

The Commission has noted the 2002 Energy Plan in relation to the question of incenting self-generation in BC Hydro service territory. It wrote as follows in its TS 74 Decision at pp. 17-18:

The Panel also accepts that incenting self-generation is consistent with the following policy actions of the 2002 Energy Plan:

“Policy Action #14 (new): Under new rate structures, large electricity consumers will be able to choose a supplier other than the local distributor. New stepped pricing will provide an incentive for large industrial or transmission rate customers to purchase from IPPs, or to self-generate, when they can do so less expensively than the utility’s cost of new supply. These larger customers will be able to meet all or a portion of their consumption from private generation. This policy change introduces retail competition for large BC Hydro customers.”

“Policy Action #21 (new): New rate structures will provide better price signals to large electricity consumers for conservation and energy efficiency.

....As a principle, for stepped rates, the last block of energy consumed should reflect the cost of new supply. This will encourage these customers to meet part of their electricity needs through conservation and energy efficiency, or from other sources (self-generation or IPP purchases), where they can do so cost-effectively.”

Further, the Commission has been guided by both the 2002 and 2007 Energy Plans in relation to the development of the stand-by rate in FBC service territory. It said in the Stepped Rate Decision at pp. 44-45 (dealing in part as well with the application of the *Clean Energy Act*, which is returned to under Question 4 below):

The *Clean Energy Act* received Royal Assent on June 3, 2010. It advances 16 specific energy objectives to help achieve British Columbia's energy vision, including new measures to promote electricity efficiency and conservation. Efficiency and conservation objectives are, broadly speaking, to "foster the development in British Columbia of innovative technologies that support energy conservation and efficiency and the use of clean and renewable resources" and "to reduce waste by encouraging the use of waste heat, biogas, and biomass."

Prior to the introduction of the CEA, the provincial government's emphasis on the promotion of energy efficiency was articulated in both the 2002 and 2007 Energy Plans. Within the 2007 Energy Plan, are two relevant policies: Policy Action #4: Explore with BC utilities new rate structures that encourage energy efficiency and conservation, and Policy Action #21: Ensure clean or renewable electricity generation continues to account for at least 90 percent of total generation.

The 2007 Energy Plan also states: "Government's goal is to encourage a diverse mix of resources that represent a variety of technologies;" and "To close [the] electricity gap will require an innovative electricity industry and the real commitment of all British Columbian's to conservation and energy efficiency." (2007 Energy Plan, pp. 9, 26)

The Celgar pulp mill utilizes wood waste, forest-based biomass and organic material to generate clean Bioenergy. Minister of Energy Bill Bennett is quoted: "I believe that renewable energy like this, its generation and the technology and knowledge around it, is a key to a prosperous future for British Columbia." (BC Hydro News Release, November 12, 2010)

Commission Panel Discussion

The Panel acknowledges that the Government's objective is the promotion of energy conservation and efficiency, including self-generation in the entire Province.

Therefore, the Panel considers that the Stand-by Rate should result in efficient customer investment and consumption decisions – specifically, efficient investment in, and operation of, distributed generation by utility customers and efficient investment in, and operation of, assets required to support the stand-by service by the utility. The Panel also considers that the Stand-by Rate should promote innovation over time. The Panel will be mindful of this in its deliberations.

The Commission further stated in its Stepped Rate Decision at p. 56:

The resultant RS 37 stand-by Contract Demand should ultimately reflect both the costs and the benefits distributed generation provides to BC, and provide a level of price certainty regarding network charges for stand-by service to customers considering making self-generation investments.

By way of example, the Panel considers that the following principles could be a reasonable starting point in the development of principles used to determine Stand-by Contract Demand for future customers:

....

3. Consideration of BC Energy Policy: the stand-by wires charge should take into consideration whether stand-by rates should be adjusted higher or lower to support BC energy objectives.

The Commission stated as well in its Stepped Rate Decision at p. 59:

In addressing the appropriate level of Stand-by Contract Demand for Celgar, consideration should be given to the following.

(i) Consideration of applicable principle proposed for future customers as set out in Section 3.8.5.1 including;

...

3. Consideration of BC Energy Policy;

The Commission continued with this analysis in its Stage II Decision, summarizing at p. 6 the framework provided in the Stepped Rates Decision, including as follows:

- Government policy: The Panel acknowledges that the Government's objective is the promotion of energy conservation and efficiency, including self-generation throughout the entire Province. Therefore, the Panel considers that the Stand-by Rate should result in efficient customer investment and consumption decisions – specifically, efficient investment in, and operation of, distributed generation by utility customers and efficient investment in, and operation of, distributed generation by utility customers and efficient investment in, and operation of, assets required to support the stand-by service by the utility. The Panel also considers that the Stand-by Rate should promote innovation over time.

It also appears that the Commission has been mindful of the 2002 Energy Plan, or at least that it is coincident with other Commission concerns, in relation to the potential arbitrage of embedded cost power. The Commission noted at p. 43 of the New PPA Decision that “[t]he 2002 BC Energy Plan specifies that the benefits of BC’s low cost generation assets belong to all British Columbians. In the Panel’s view this includes the ratepayers of BC Hydro and FortisBC, as well as all British Columbians in general”. The 2007 Energy Plan likewise notes at p. 14:

....We are fortunate that historic investments in hydroelectric assets provide electricity that is readily available, reliable, clean and inexpensive. By ensuring public ownership of BC Hydro, the heritage assets and the

BC Transmission Corporation and confirming the heritage contract in perpetuity, we will ensure that ratepayers continue to receive the benefits of this low cost generation....