

September 28, 2017

VIA EMAIL

Patrick Wruck - Commission Secretary
B.C. Utilities Commission
Sixth Floor, 900 Howe Street
Vancouver, BC Canada V6Z 2N3



Reply to: Leigha Worth
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Dear Mr. Wruck:

Re:

NOTES FOR BCOAPO'S FINAL SUBMISSION

1. APPROVAL SOUGHT

On April 26, 2017 FortisBC Inc. (FBC) filed an Application with the BCUC seeking acceptance of the capital expenditures related to a proposed Community Solar Pilot Project (CSPP) and approval of the associated rate schedules. More specifically, FBC is seeking acceptance of the capital expenditures under section 44.2 of the *Utilities Commission Act*¹.

During the June 1st, 2017 procedural conference FBC acknowledged that while it was not necessary to file a section 44.2 capital expenditure application, it was appropriate to do so given the nature of the project, including the fact the project is a pilot dealing with issues of greenhouse gas emissions and customer interest in solar energy, as well as customer engagement. This view was generally shared by the other participants in the proceeding and the Commission subsequently accepted that, given the nature of the project in terms of it being a pilot program and the public interest considerations, it was appropriate for the Application to be reviewed under section 44.2 of the UCA².

2. PROJECT NEED

Under section 44.2 of the Act, the Commission, when considering whether to accept a capital expenditure schedule must consider³:

- (a) the applicability of British Columbia's energy objectives,
- (b) the most recent long-term resource plan filed by the public utility under section 44.1, if any,
- (c) the extent to which the schedule is consistent with the applicable requirements under sections 6 and 19 of the Clean Energy Act,

¹ Exhibit B-1, Application, page 17.

² Order G-89-17.

³ Section 44.2 (5).

- (d) if the schedule includes expenditures on demand-side measures, whether the demand-side measures are cost-effective within the meaning prescribed by regulation, if any, and
- (e) the interests of persons in British Columbia who receive or may receive service from the public utility.

In its Application FBC asserts⁴ that the project is consistent with the requirements of the *Act*, but does acknowledge that:

- i. It does not consider the CSPP to be a demand-side management activity⁵.
- ii. The CSPP is not included in the recommended resource portfolio contained in the Company's most recent Long-Term Electric Resource Plan⁶. Indeed, FBC considers the CSPP and its LTERP to be unrelated⁷.
- iii. The CSPP is not necessary to for FBC to meet either its own clean energy objectives nor to meet any clean energy objectives put forth by the government. Indeed, the CSPP will have little or no effect on FBC's overall percentage of clean energy⁸.

The main driver for the project is "customer considerations"⁹, principally "customer interest in solar energy"¹⁰. It is FBC's position that there are customers who want solar energy as an option but who do not have the ability or desire to install it themselves and who would, therefore, be interested in participating in a "community solar program"¹¹. The purpose of the CSPP is to gauge customer interest and to gather information on the installation, operation and maintenance of PV systems of the Project's size. This will allow the Company to then decide whether or not to expand the program in the future¹².

FBC acknowledges that while customer desire is a consideration in developing a rate or program it would not generally be sufficient, in itself, to put such a rate or program in place. How, since the CSPP is designed to recover the associated costs from only those customers participating in the Program FBC believes it to be appropriate¹³.

FBC's view that there would be customer interest in such a Program is premised on:

- iv. The increasing participation in FBC's Net Metering Program¹⁴,
- v. The results of two customer surveys undertaken by the Company¹⁵, and

⁴ Exhibit B-1, Application, page 9.

⁵ Exhibit B-2, BCUC IR 1.2.

⁶ Exhibit B-2, BCUC IR 1.2.

⁷ Exhibit B-2, BCUC IR 9.7.

⁸ Exhibit B-2, BCUC IRs 9.3 and 9.4.

⁹ Exhibit B-1, Application, page 1.

¹⁰ Exhibit B-2, BCUC IR 9.1.

¹¹ Exhibit B-2, BCUC IR 9.2.

¹² Exhibit B-1, Application, ES-1.

¹³ Exhibit B-2, BCUC IR 9.2.

¹⁴ Exhibit B-1, Application, page 4.

¹⁵ Exhibit B-1, Application, pages 2-3.

- vi. The 100% subscription to Nelson Hydro’s Nelson Solar Garden¹⁶, a somewhat similar project.

The FBC surveys concluded that reasons customers are likely to consider rooftop solar (which would be used in conjunction with net metering) are saving money on their electric bill, GHG emission reductions, energy independence, resource preservation and energy security. However the surveys also found that residential customers most likely to consider rooftop solar are particularly likely to be motivated by energy security and resource preservation. Commercial customers most likely to consider rooftop solar are particularly likely to be motivated by energy independence¹⁷.

In contrast the primary reasons that customers are likely to participate in a community solar project were the prospect of saving money on electricity, being part of a green community project and GHG emissions reduction¹⁸.

Given that in the case of roof-top solar the customer actually owns (or leases) the installation – which is not the case for CSPP – and that energy security/independence is a key motivator for those most likely to install such facilities, BCOAPO believes that significant weight should not be attached to the increase in net metering customers when determining the need/interest in community solar projects.

BCOAPO also has concerns regarding the use of the survey results to gauge participation. The first concern has to do with what appears to be a disconnect between what customers say would be their motivators for participating in a project such as the CSPP and what the actual results would be. It is clear from the information filed by FBC that participation in the CSPP will not result in customers “saving money on electricity”¹⁹ and customers may believe that participation in a solar project will have greater financial benefit than will be the case²⁰. Similarly, contrary to customers’ apparent expectations, the actual environmental benefit of the CSPP is negligible²¹. FBC has indicated that it does not plan to “market” the program on these grounds²².

However, FBC also notes that it is customer perceptions that will lead to participation in the CSPP²³. In BCOAPO’s view the Program could have negative effects on customer relations/satisfaction if it relies on customer perceptions that FBC knows to be incorrect. Customers look to public utilities to be “honest brokers” when it comes to information regarding energy use and its implications and customers may view themselves as having been misled if they decide to participate based on

¹⁶ Exhibit B-2, BCUC IR 3.9.

¹⁷ Exhibit B-1, Application, page 2.

¹⁸ Resolution 2.2.7 and Exhibit B-9, BCUC IR 19.12.

¹⁹ Resolution #8 and Exhibit B-9, BCUC IR 13.1. Note: BCUC 13.1 shows that it will likely be 17-20 years before the customer’s bill is lower and the customer will start to see a benefit.

²⁰ Exhibit B-4, BCSEA IR 4.2.

²¹ Exhibit B-4, BCSEA IR 4.3.

²² Resolution 1.5

²³ Exhibit B-9, BCUC IR 19.3.

misconceptions that they subsequently believe the utility either failed to correct or (inadvertently) reinforced.

BCOAPO's second concern is that while customers indicated²⁴ that they would be willing to "contribute a small amount on a monthly basis to offset the increased cost of generating solar energy" the surveys provided no indication as to what the price differential was likely to be²⁵. As demonstrated in the IR responses the differential is material – particularly in the initial years²⁶ - and FBC has acknowledged that potential customers are price sensitive²⁷.

In BCOAPO's view the most compelling evidence that the Project will be fully subscribed is the success of the Nelson Hydro solar project which was more aggressive in its requirement for upfront payments²⁸. While this success provides some assurance that the Project will be fully subscribed, BCOAPO does not share FBC's seemingly certain belief that this will be the case²⁹. As a result, BCOAPO does view there to be some risk to other (non-participating) ratepayers – even if the rates are designed to fully recover costs – a result of less than full subscription³⁰.

3. PROJECT DESCRIPTION AND COST

The Project involves the installation of a 240 kW DC solar array comprised of 720 panels at FBC's existing Ellison Substation. Following an RFP process, Skyfire Energy Inc. has been selected as the contractor. FBC notes that of the bids received, Skyfire was both the most experienced and the lowest-cost vendor³¹. Geotechnical investigation of the site has been completed in order to confirm the appropriateness the method of foundations for the racking of the installation³².

In the original Application, the cost of the Project (including a 5% contingency) was estimated to be \$960,744³³ with an in-service date prior to the end of 2017. However, the original Application anticipated regulatory approval by June 30, 2017. During the IR process the timing of the in-service date for project was revised to April 2018 and the costs estimate revised to \$968,871³⁴.

Project costs include the cost of connecting the installation to FBC's distribution system³⁵ which are estimated to be \$60,000.

Site Selection

FBC considered a number of possible sites³⁶ and the Ellison was chosen based on its public visibility and level of solar insolation³⁷.

²⁴ Exhibit B-2, BCUC IR's 3.7 and 3.10.

²⁵ Exhibit B-2, BCUC IR 3.6.

²⁶ Exhibit B-2, BCUC IR 13.3.

²⁷ Exhibit B-2, BCUC IR 11.7.

²⁸ Exhibit B-2, BCUC IR 17.1 and Exhibit B-9, BCUC IR 19.8.

²⁹ Exhibit B-2, BCUC IR's 3.7 and 9.6.1; Exhibit B-9, BCUC IR's 19.1 & 19.2 and Resolution 1.8

³⁰ Exhibit B-5, ICG IR 8.1.

³¹ Exhibit B-1, Application, pages 5-6.

³² Exhibit B-5, ICG IR 4.6.

³³ Exhibit B-1, Application, pages 6-7.

³⁴ Exhibit B-4, BCSEA IR 7.1.

³⁵ Exhibit B-3, BCOAPO IR 6.3 and Exhibit B-5, ICG IR 4.5.

FBC has notified residents in close proximity to the Ellison Substation and no concerns have been raised regarding the Project³⁸. FBC will seek approval from NAV Canada as part of the permitting process. However, preliminary discussions with the authorities at the nearby Kelowna Airport have not uncovered any concerns³⁹.

BCOAPO has no issues with the proposed site.

Output Level

The expected output from the CSPP in the first year is expected to be approximately 290,000 kWh, which is expected to then decline at approximately 0.5% per annum⁴⁰.

The 290,000 kWh is based on the proposed Skyfire design and was included in their proposal⁴¹. While FBC did not undertake a detailed analysis to verify the proposed output value, the Company viewed it to be reasonable based on known solar insolation and panel efficiency data⁴².

BCOAPO has no issues with the proposed output level for the installation.

Treatment of Land Costs

In establishing the “cost” of the Project FBC has not attributed any value to portion of the Ellison Substation site being occupied by the CSPP, as there are no incremental land acquisition costs related to the CSPP⁴³.

However, this raised the question whether there are any opportunity costs associated the use of land at the Ellison Substation. In response to information requests, FBC has indicated that it currently has no plans to use the land⁴⁴ for another purpose. In addition, while FBC has the option to sell the property, the current zoning and proximity to the substation would have considerable impact on its commercial value and the site is unlikely to gather much interest from developers.

FBC has suggested⁴⁵ that excluding land costs is consistent with the way existing self-generation PV providers quote prices and savings, i.e., with no account for land costs. While this may be the case, in BCOPAO’s view it is highly likely that customers purchasing such systems attach some “value” to the space required as it will no longer be available for other potential uses.

BCOAPO acknowledges that there is no dollar outlay associated with the land where the CSPP is to be located and therefore, for purposes of determining the expenditure schedule to be approved by the BCUC under section 44.2, there is no need for any allowance to be included. However, for purposes of subsequent

³⁶ Exhibit B-5, ICG IR 4.2 and Exhibit B-4, BCSEA IR 2.1.

³⁷ Exhibit B-5, ICG IR’s 1.4.1 & 1.4.2 and Exhibit B-12, ICG IR 2.8.1.

³⁸ Exhibit B-2, BCUC IR’s 4.1 and 4.1.1.

³⁹ Exhibit B-1, Application, page 5.

⁴⁰ Exhibit B-1, Application, page 7 and Exhibit B-2, BCUC IR 11.1.

⁴¹ Exhibit B-2, BCUC IR 7.1; Exhibit B-5, ICG IR 4.3; and Exhibit B-10, BCOAPO IR 21.1.

⁴² Exhibit B-10, BCOAPO IR 21.1.2.

⁴³ Exhibit B-12, ICG IR 2.5.2.

⁴⁴ Exhibit B-10, BCOAPO IR 18.1.

⁴⁵ Exhibit B-4, BCSEA IR 22.2.

revenue requirement evaluations and rate determinations it may be appropriate to attach some (nominal value) the land to recognize that the opportunity cost involved is not zero. It is noted that the book value of the land is \$600,000. In BCOAPO's view it would be reasonable to assign an opportunity cost value to the property based on a small percentage of this (say 5% to 10%) in recognition of the limited commercial value.

Apart from this particular point, BCOAPO has no major issues with the proposed capital cost of the Project.

CSPP RATES

FBC is seeking approval for two rates related to the CSPP. The first is the Virtual Solar Rate (Schedule 85A)⁴⁶.

The Virtual Solar Rate is structured to emulate the circumstance whereby the customer installs a solar photovoltaic system on their premises. Under this rate, a customer may subscribe to the CSPP for a designated number of panels, the projected annual output of which is not to exceed the estimated annual consumption of the associated FBC account. Based on the updated cost estimate, the annual subscription cost per panel would be \$91.00⁴⁷, to be billed as a monthly fee of \$7.58 per subscribed panel.

Once a customer is enrolled in the CSPP, he or she may expect that on a monthly basis⁴⁸:

- a. Their FBC bill will contain a charge equal to the number of subscribed panels times the final subscription rate;
- b. Prior to the calculation of energy charges, their pro-rated share of the output of the Ellison array (equal to the number of subscribed panels divided by 720 and multiplied by the total array output) will be deducted from the total energy consumption at the associated premise.
- c. In the event that a CSPP customer was also enrolled in the Company's Net Metering Program, all net metering related calculations would be completed prior to the CSPP output being applied to the account.
- d. In the event that a customer has subscribed to a sufficient number panels such that the allocated share of the Ellison array exceeds the customer's consumption, the kWh in excess of the consumption would be placed in a bank to be withdrawn and deducted from consumption in a future billing period. If, at March 31, there are kWh remaining in the bank FBC will purchase them from the customer at a rate equal to the BC Hydro 3808 Tranche 1 energy rate in effect at the time.

FBC is also seeking approval for a Solar Offset Rate (Schedule 85B). FBC is not proposing to offer this rate initially, and may not offer the rate in the future unless it is of the opinion that it would lead to an increase in participation in the CSPP where the CSPP could not otherwise be fully subscribed⁴⁹. Even though it may not be implemented FBC is seeking approval for the Solar Offset Rate at this time in the interest of regulatory efficiency, as it is based on the same principles and costs as the Virtual Solar Rate⁵⁰.

Under the FortisBC Solar Offset option (Rate Schedule 85B), customers elect to serve a set percentage of their consumption in each billing period from the Program.

⁴⁶ FBC Final Submission, Attachment 1 a).

⁴⁷ Exhibit B-4, BCSEA IR 1.7.1.

⁴⁸ FBC Final Submission, page 3.

⁴⁹ Exhibit B-1, Application, page 10.

⁵⁰ FBC Final Submission, page 4.

The percentage can range from 10% to 100% in 10% increments. The price of electricity under the Solar Offset Rate would be \$0.248/kWh⁵¹.

Rate Derivation

Both rate options are based on the recovery of the incremental revenue requirements arising from the CSPP solely from the Program participants assuming full subscription⁵². The incremental revenue requirement was established based on⁵³:

- a) The additional costs incurred due to the project, including both capital and annual O&M costs⁵⁴. It is noted that, as a result of the IR process, these costs were revised to include the replacement of communication equipment and inverters during the life of the CSPP⁵⁵.
- b) A 40 year average service life for the solar photovoltaic panels⁵⁶.
- c) An annual inflation rate of 2%.
- d) The BCH PPA as the resource value for any energy displaced due to solar generation⁵⁷.

It is noted that costs not included in the financial analysis and determination of the rates include:

- e) Any marketing and administration costs or cost associated with revisions to the billing systems, as FBC expects these costs to be minimal⁵⁸.
- f) Any allowance for the costs of current proceeding.

While these costs may be minimal in terms of FBC's overall revenue requirement, in total they are likely to be material relative to the overall \$933,072 NPV of Project⁵⁹. In terms of marketing and administration BCOAPO notes that FBC will require that each customer wishing to enroll in the CSPP personally contact FBC customer service staff to provide details of their participation⁶⁰. Given that there are 720 panels associated with the project this could result in up to 720 "conversations" between potential participants⁶¹ and FBC staff if all initial contacts lead to participation and even more if some don't.

BCOAPO submits that, if the rates are approved, there should be a nominal mark-up included to recognize and account for such costs. Subject to further input from FBC BCOAPO would suggest a 5% mark-up would not be unreasonable.

Customer Eligibility

⁵¹ Exhibit B-4, BCSEA IR 1.7.1.

⁵² Exhibit B-1, Application, page 11.

⁵³ Exhibit B-1, Application, Page 11.

⁵⁴ Exhibit B-1, Application, page 7.

⁵⁵ Exhibit B-2, BCUC IR 11.5 and Exhibit B-5, ICG IR 4.4.

⁵⁶ Exhibit B-1, page 11; Exhibit B-2, BCUC IR 11.1, and Exhibit B-12, ICG IR's 2.3.1 & 2.3.2

⁵⁷ Exhibit B-2, BCUC IR 14.4.

⁵⁸ Exhibit B-2, BCUC IR's 6.1 & 6.2 and Exhibit B-3, BCOAPO IR 9.3.

⁵⁹ Exhibit B-2, BCUC IR 17.2.

⁶⁰ Exhibit B-2, BCUC IR 6.5.

⁶¹ Assuming, at the extreme, that each potential participant is only interested in subscribing for the output of one panel.

Both rates would be available to all customers of FortisBC with the exception of those being served under Rate Schedule 81 (Radio-Off Advanced Meter Option), on a rate in which energy charges are either time differentiated (such as Time-of Use rates), or do not form a separate component of the rate, (such as with Lighting rates)⁶². In its Application⁶³ and subsequent IR responses FBC has provided the rationale for excluding these three groups of customers⁶⁴.

In response to Scarlet #2, FBC outlined an alternative approach to the Solar Offset Rate that would allow for participation by RS81 (i.e. Radio-Off) customers and customers with non-communicating meters. FBC also suggested that the Commission could implement this approach at the start of the pilot or could wait to gain more experience from the program. Given that FBC does not plan to implement the Solar Offset Rate unless needed to increase participation, it is BCOAPO's view that the approval of this alternative should not be given at this point in time. Consideration of this rate can wait until it is needed, at which time there will be some experience with the program and an opportunity to determine if other "refinements" are required.

Apart from the preceding comment, BCOAPO has no issues with FBC's proposed eligibility criteria.

Rate Term and Guarantee

The CSPP is being proposed as a "pilot program" in order for the Company to obtain information regarding the complexities associated with offering community solar programs, including the level of customer interest⁶⁵. In the Application, FBC has indicated that at the end of the two-year Pilot, it will file with the Commission an Application regarding the ongoing viability of the Program in which it will apply: i) to continue with either one or both of the pricing methodologies, ii) for an amended methodology or iii) to discontinue the Program⁶⁶.

This view of the rates as being temporary was reinforced in the response to BCSEA 15.2:

"The CSPP Application requests that the rates (i.e. Rate Schedules 85A and 85B) be approved on a temporary basis for the 2 year pilot period. The rates would become permanent with a further Application by the Company to continue to offer the output of the Ellison solar array on an ongoing basis. Whether or not the rates look exactly as they do as part of the current Application would depend on the specific approvals sought by FBC and the nature of any determinations made by the Commission in this and the future process".

However, elsewhere in the Application FBC is making commitments⁶⁷ that "assuming that the rates associated with the Project became permanent, this fee

⁶² FBC Final Submission, Attachments 1 a and 1 b.

⁶³ Exhibit B-1, Application, page 10.

⁶⁴ Exhibit B-4, BCSEA 10.1; Exhibit B-5, ICG IR 1.5.1; and Resolution 1.14

⁶⁵ Resolution 2.1.2

⁶⁶ Exhibit B-1, Application, page 17.

⁶⁷ Exhibit B-1, Application, page 12.

(referring the proposed Virtual Solar Rate) would not increase over time but, subject to periodic review, may need to be reduced in response to changes in Program participation or the competitiveness of the Program with other renewable options such as rooftop solar that may decrease in cost during the life of the Program". This commitment that the rates would not increase was repeated in various IR responses⁶⁸.

BCOAPO has two concerns. The first is that the Company's commitment that the rates (if made permanent) will not increase appears to be at odds with the statement on page 17 of the Application and the response to BCSEA 15.2 which both suggest that the scope of any future application to make the Program permanent could include alternative pricing methodologies. However, the various references may be compatible if the intent is that any Application to make the Program permanent and expand it with additional solar installations would consider the two rates currently proposed as well as alternative pricing methodologies but the rates for the Ellison project's rates would remain as approved. FBC may wish to clarify this point in its reply submissions.

BCOAPO's second concern is somewhat related and is based on the fact that the rate schedules⁶⁹ proposed by FBC make no reference to the fact the CSPP is a pilot project or that approval is being sought/provided on a temporary basis for a two year period. FBC notes that since the CSPP is expected to have low operating costs, it may still seek to have permanent rates established for the Ellison Project participants even if it is not fully subscribed⁷⁰. However, there is no commitment that the Program will not be terminated at the end of the two year period. If the scope of FBC's future Application to the Commission at the end of the two-year pilot includes (potentially) terminating the program then, in BCOAPO's view, any approval granted at this time should clearly signal, in the wording of the rate schedules themselves, the temporary nature of the rate.

Proposed Billing

The wording in the proposed rate schedules indicates that the kWh associated with the Virtual Solar Rates (and the Solar Offset Rate) will be subtracted from the customer's metered consumption prior to the application of FBC's standard rate schedules⁷¹. For FBC's residential customers this would suggest that, to the extent the metered consumption exceed the Tier 1 block, the kWh associated with the CSPP program would serve to reduce the Tier 2 block usage and then the Tier 1 usage once there was no Tier 2 usage.

However, in the illustrative rate calculation provided with the IR responses⁷² all of the solar energy output is deducted from the Tier 1 usage except for the 100%

⁶⁸ Exhibit B-2, BCUC IR 14.5; Exhibit B-4, BCSEA IR 12.4; and Exhibit B-10, BCOAPO IR's 19.1 & 20.2

⁶⁹ FBC Final Submission Attachment 1a and 1b

⁷⁰ Exhibit B-10, BCOAPO IR 20.1.

⁷¹ Resolution 1.13.1 notes that for customers also enrolled in the Net Metering program, the billing related to the net metering installation would be completed prior to the CSPP output being applied to any remaining net consumption.

⁷² Exhibit B-2, BCUC IR 13.2.

consumption scenario under the Solar Offset Rate. In the second round of IR's BCOAPO attempted⁷³ to understand why this was the case. However, that IR response does not clarify when the assumed metered consumption is 11,000 kWh per year (approximately 917 kWh per month) and the Tier 1 block is for the first 800 kWh per month⁷⁴, any solar output wouldn't first be used to reduce Tier 2 usage.

BCOAPO submits that if FBC's intent is to first apply the solar to reduce the Tier 1 usage (which is billed at a lower rate) as indicated in its IR responses, then the wording in the proposed rate schedules needs to be revised accordingly. Otherwise a plain reading of the rate schedule is misleading and implies the rates savings will be greater than how FBC proposes to calculate them.

4. REGULATORY TREATMENT UNDER PBR

In the Application⁷⁵ and in response⁷⁶ to various IRs FBC has indicated how it anticipated the CSPP would be treated under its 2014-2019 Performance-Based Rate Making Plan.

FBC has recently filed its Annual Review for 2018 Rates Application and, as part of the Application, indicated that it expects the capital spending for 2017 to be in excess of the dead band for that year⁷⁷. If the proposed spending on the CSPP is viewed as incremental to FBC's other capital expenditures then for purposes of the PBR plan:

- The 2017 spending would be part of the excess capital excluded from the earnings sharing calculations for 2017.
- The 2017 spending would be part of the "excess spending" that would be added to the rate base for 2018.

However, given the project delay revised April 2018 in-service date it is not clear how much of the \$968,871 in capital costs will actually be incurred in 2017 and therefore recognized in 2017 as opposed to 2018⁷⁸. This is an issue that should be addressed in the Annual Review for 2018 Rates.

5. REPORTING

In the Application⁷⁹ FBC indicates that it will file with the Commission (and post to its website) quarterly reports information regarding

- Project energy production;
- Operating and Maintenance work and costs;
- Program subscription rates by billing option (if applicable);
- Program wait list status.

⁷³ Exhibit B-10, BCOAPO IR 14.2.

⁷⁴ Exhibit B-3, BCOAPO IR 3.1.

⁷⁵ Page 8

⁷⁶ Exhibit B-2, BCUC IR's 8.1-8.4; Exhibit B-3, BCOAPO IR's 7.1-7.2; and Exhibit B-4, BCSEA IR 8.1-8.3

⁷⁷ Exhibit B-2, BCUC IR 8.1.

⁷⁸ Exhibit B-4, BCSEA IR's 8.1 & 8.2

⁷⁹ Page 16

FBC has also indicated⁸⁰ that at the end of the pilot period it will file an Application with the Commission regarding the ongoing viability of the Program and provide in its IR responses some of the criteria that will be considered in the evaluation⁸¹.

In BCOAPO's view it would also be appropriate for FBC to file a report with the Commission after the construction has been completed and before it starts to solicit subscriptions regarding the actual capital cost of the project and whether or not there is a need to update the rates accordingly. In order to help expedite the implementation of the Program the Commission should also set a dead band around the current cost estimate (say 5%) within which the current rates would be accepted as appropriate without further submissions from FBC (apart from the reporting of actual capital costs).

6. IMPACT ON NON-PARTICIPANTS

Given that the CSPP is premised on the desire of (some) customers to have solar energy as an option, FBC has acknowledged the need to recover the associated costs from only those customers that participate in the Program (i.e., other customers who receive not benefit should not be impacted by the Program)⁸². Accordingly, FBC has designed its proposed rates to fully recover the incremental revenue requirement (over the life of the Project) assuming full subscription⁸³.

However, there are still four ways in which non-participants could be impacted by the CSPP:

- First, if the program is not fully subscribed to then the portion of the program's cost that are not recovered from participants will be recovered from FBC's general customers. In response to BCUC 16.1 FBC has noted that at the extreme where there are no subscriptions the levelized rate impact of the Project over 40 years would be a 0.017 percent increase.
- Second, if the calculation of the revenue requirement has not captured all of the incremental/opportunity costs associated with the project. In the preceding sections BCOAPO as noted a couple of additional items which it submits need to be included in the financial analysis and rate determination.
- Third, while FBC has committed to updating the rates if the initial capital costs are higher than currently estimated⁸⁴, a significant portion of the NPV value is determined by assumptions regarding the costs/benefits after the project is installed and operating.⁸⁵ As a result, the actual future costs associated with the annual O&M expense and the future replacement of communication equipment and inverters along with the benefit attributable to the BCH's PPA

⁸⁰ Exhibit B-1, Application, page 18.

⁸¹ Exhibit B-11, BCSEA IR 20.1.

⁸² Exhibit B-2, BCUC IR 9.2.

⁸³ Exhibit B-1, Application, pages ES-1 – ES-2.

⁸⁴ Exhibit B-4, BCSEA IR 12.4.

⁸⁵ For example, the present value of the avoided power purchases is \$276,000 (BCOPAO 16.2) and is based on a forecast of future BCH PPA rates.

rates will have a material effect on the overall incremental revenue requirement ultimately attributable to the project.

- Finally, basing the rates on the incremental revenue requirement does not account for the fact that the Program reduces the kWhs that will be used in applying FBC's current rates schedules that would otherwise be applicable to these customers. This will lead to either slightly higher rates (if the load forecast used in setting rates is adjusted accordingly) or a slight increase in the amounts subsequently recorded the flow-through deferral accounts for future recovery from customers. However, BCOAPO acknowledges that the 290,000 kWh associated with the CSPP is negligible when compared to FBC's overall load forecast.

During the IR process⁸⁶ BCUC staff identified two possible ways to mitigate the risk that CSPP costs will be passed on to all ratepayers. The first was to require a minimum subscription requirement prior to starting construction and the second was to extend the term of subscription from a minimum of 12 months to 5 years. BCOAPO does not consider either of these alternatives as materially mitigating the risk as there are problems with both. In terms of the minimum subscription, customers are unlikely to guarantee their participation unless they know the "price" and fixing the rate prior to construction would not allow FBC to adjust the rate if actual construction costs turn out higher than currently estimated – as it currently proposes to do. Requiring a 5-year subscription period is likely to affect (i.e., reduce the number of customers willing to participate) and is inconsistent with the premise that the CSPP is a pilot and that at the end of the two-year period an assessment will be made as to whether or not to continue the program.

7. CONCLUSIONS

There is no small amount of difficulty associated with determining whether to support this proposed Project or not. While BCOAPO does, in principal, support environmentally sustainable energy, there seems to be little real benefit to this project. It is not displacing GHG-generated energy or fulfilling FBC's clean energy goals or generation needs. Instead, this green energy pilot project has been designed and is proposed to be implemented solely to fulfil what FBC perceives as its customer preferences. Without a clear, demonstrable need it is difficult, if not impossible to question the prudence of a project where the risk of under subscription lies with FBC's non-participating ratepayers as described in part 7 above and not its project subscribers or shareholders. While it is tempting to dismiss that cost risk as minimal, and admittedly at first, it is, the fact remains that the risk and impacts will grow if there is not a major change in the pricing methodology should the Program be expanded at the end of the pilot with more community solar projects being installed. This is not, however the only cause for concern. As BCOAPO discussed in Part 2, the mismatch between what customers seem to believe will be the results of their participation, particularly their belief that participation will result in lower electricity bills and cleaner energy, and the reality is significant. Their bills are not going to be

⁸⁶ Exhibit B-2, BCUC IR 17.3.

significantly impacted and even a cursory investigation will reveal that this energy is not displacing GHG-generated energy whatsoever. It begs the question whether FBC should offer a Program that relies on those customer misconceptions to encourage participation even if the utility is not actively disseminating or promoting them. That being said, FBC has presented evidence in the form of surveys and the success of the Nelson project showing that there does appear to be some interest amongst its customers.

In the end, BCOAPO is not convinced, based on the record that there is sufficient demonstrable need for this project, nor has FBC put in place sufficient protections to insulate its non-participating ratepayers. As a result, the organisations urge this Commission Panel to reject FBC's application barring any alternate proposal in FBC's Reply which addresses BCOAPO's various concerns. An acceptable proposal must adequately address the following issues:

- It must revise the costs used in the financial evaluation and rate determination to recognize: i) the opportunity cost associated with the land that will be used and ii) the marketing, administration and regulatory costs that will also be associated with the Project;
- It must require FBC to file a report after construction of the Project has been completed in order to confirm whether or not the rates need to be "updated";
- The Rate Schedules must make it clear that the rates are for a 2-year pilot project which will subsequently be subject to review by the BCUC; and
- There must be clarification on how solar energy is to be treated for billing purposes.

All of which is respectfully submitted.

The British Columbia Public Interest Advocacy Centre

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