Community Solar Pilot Project
ICG Information Requests No. 1
June 21, 2017

1. Reference: Exhibit B-1, Section 1, p. 1
Cost Recovery

"To the extent there is less than a full subscription, there will be costs associated with the CSPP that will not be recovered from participants that will be recovered from other customers."

1.1. Please confirm that FBC is not willing to assume any risks related to the CSPP, including risks related to the cost of installation and operations and maintenance, and output and life expectancy?

1.2. Please comment on whether risks to be assumed by customers could be transferred to an alternative supplier that FBC is unwilling to assume, including risks related to the cost of installation and operations and maintenance, and output and life expectancy?

2. Reference: Exhibit B-1, Section 3.1, p. 4
Net Metering Program Participation

"This is further evidenced by the increasing participation rate in the Company's Net Metering Program, which currently has approximately 160 customers."

2.1. Please describe the amount of new customers that have applied for the Net Metering Program Tariff since BCUC Order G-199-16 was issued.

2.2. Please discuss the effect of BCUC Order G-199-16 and FBC's application for reconsideration of that order on the incentive for new customers to apply for the Net Metering Program Tariff.

2.3. Please discuss whether Sentis' survey specifically questioned customers' knowledge and opinion of the Net Metering Program Tariff in the context of adding their own solar generation, and if not, why not?

3. Reference: Exhibit B-1, Section 3.1, p. 4
Utility Supply of Solar PV Generation

"However, even if the cost of solar PV was to fall to the point where it was an economic alternative to utility supply, the reduction would not help those customers that cannot install a typical residential rooftop system. This is one of the main drivers of this Application."

3.1. Please confirm that there are other alternatives to "utility supply" than installation of solar facilities by end-use customers?

3.2. Please comment on whether a person who owns or operates a solar installation similar to that being proposed by FBC in this application is a public utility as defined by the Utilities Commission Act?

3.2.1. If so, please comment on the appropriate scale of regulation for services provided by such a public utility to another public utility, assuming that such services are provided exclusively to the public utility under the terms of a contract approved by the Commission?

3.3. Please comment on whether a competitive market exists for a solar installation similar to that being proposed by FBC in this application?

3.4. Please reference any prior decisions of the Commission relevant to this application? In particular, has the Commission approved the installation and ownership of solar facilities by either BC Hydro or FBC?

3.5. Please comment on whether FBC should be encouraged by the Commission to pursue opportunities to purchase power from solar installations rather than approving the installation and ownership of solar facilities by FBC?

3.6. Please comment on whether the owners and operators of solar facilities that have been built in BC compete in a competitive market?

3.7. Please comment on whether the installation and ownership of solar facilities has been in a competitive market? If so, please comment on whether the FBC proposal maintains competition in that market?

3.8. Please comment on whether the installation and ownership of solar facilities by FBC is likely to harm other entities that install and own solar facilities?

3.9. Please comment on whether customers will be denied the benefits of competition if public utilities install and own solar facilities?

3.10. Please comment on whether ongoing competition related to the installation and ownership of solar facilities is likely to result in the availability of new and innovative options related to solar facilities and/or the supply of power from solar facilities?

3.11. Please comment on whether the installation and ownership by FBC of the solar installation that is the subject of this application is likely to lock customers into a high cost installation if the costs of supply of power from solar facilities is reduced over time due to ongoing competition?

3.12. Please comment on whether FBC is willing to enable a market-based mechanism to determine the eventual supply of power from solar installations to customers, including customers of FBC?

3.13. Please comment on whether FBC's proposal forecloses a market-based mechanism to determine the eventual supply of power from solar installations to customers, including customers of FBC?

3.14. Please comment on whether FBC evaluated the resources in the community of Ellison to determine whether such resources are adequate to build FBC's proposed facilities?

3.15. Please comment on whether FBC is willing to purchase power from solar facilities that are installed and owned by other entities? If so, please identify any mechanisms FBC has established for such purchases?

3.16. Please comment on whether FBC's proposal relies on the Commission to select the most efficient technology and provider of solar power?

3.17. Please comment on whether FBC is of the view that competition provides the best inventive framework for innovation?

3.18. Please comment on whether competition for the installation and ownership of the solar facilities proposed by FBC in this application has occurred?

3.19. Please comment on whether the FBC proposal will increase the barriers to entry of alternative suppliers into the solar power sector in the FBC service area?

3.20. Please comment on whether it is reasonable to expect alternative suppliers will be able to supply from solar facilities the amount of power proposed to be supplied by FBC in the application?

3.21. Please comment on whether FBC proposal limits customer choice and discourages future innovation in solar facilities by circumventing the typical competitive processes that have resulted in the development of solar facilities to date in BC?

3.22. Please comment on whether FBC believes that there are natural monopoly characteristics of solar facilities? If not, please explain why FBC believes that the cost of power from its solar facilities should be determined based on regulatory principles such as cost of service, instead of market-driven mechanisms?

3.23. Please comment on whether FBC recognizes that competitors in a competitive market are more likely to create a dynamic "Green Economy" than are regulated public utilities?

3.24. Please describe the role FBC believes is appropriate for public utilities in a "Green Economy"?

3.25. Please comment on whether the installation and ownership of solar facilities by public utilities in BC is likely to reduce economic opportunities for other entities to supply solar power?

3.26. Please comment on whether the installation and ownership of solar facilities by either BC Hydro or FBC is likely to reduce the growth of the Province's capacity to compete in the green economy?

4. Reference: Exhibit B-1, Section 4.2, p. 6
Project Proposal and Cost Estimate

4.1. Please describe the choice of location with regard to the effect of solar insolation, cloud cover, horizon and other effects on project energy output as compared to other locations in FBC's service territory.

4.2. Please identify the other project locations FBC has considered. Has FBC considered Osoyoos, Grand Forks, Waneta, Castlegar, or Creston, for example, and if not, why not?

4.3. Please provide the model by which FBC has estimated annual energy production. Please also provide the solar insolation database that was used in the model. If FBC has not modeled the energy production, please explain why not and how the annual energy production was estimated.

4.4. Please discuss the inverter technology that is being used for this Project, and the cost of the inverter(s). Does FBC expect the inverter(s) to have a 40 year life expectancy, and if not, please identify where in the project maintenance expenses (Appendix B-2) the cost of inverter(s) replacement has been captured. Please provide a statement confirming 40 year's life expectancy from the manufacturer of the proposed inverter(s).

4.5. Please provide a single line diagram for the project, and describe the method of interconnection to the FBC system and the associated cost of breakers, protection, metering and other equipment required for the interconnection.

4.6. Please describe the method of racking for this Project, and explain what civil investigations have been performed at the proposed site to validate the suitability of the method of foundations for the racking.

5. Reference: Exhibit B-1, Section 6.1, p. 10
Eligibility and Participation

"For this pilot, the Company proposes to allow all customers on a retail electricity rate to enroll in the Program, with the exception of those customers served under Rate Schedule 81 (Radio-Off Advanced Meter Option) and those on a Time-of-Use (TOU) or flat energy charge rate."

5.1. Please further describe the difficulties, complications, and costs associated with offering the Program to Rate Schedule 81 customers.

5.2. Please explain why customer billing cycles must be synchronized on a monthly basis, rather than on an annual or some other basis.

5.3. Please discuss other mechanisms that would allow for the Program to be offered to Rate Schedule 81 customers.

6. Reference: Exhibit B-1, Section 6.3.6, p. 12
FortisBC Virtual Solar Panel Tariff

"Assuming that the rates associated with the Project became permanent, this fee 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."

6.1. Please further describe how program participation and other renewable options would reduce the cost of the Virtual Solar Panel tariff.

6.2. Would greater than estimated project costs (for example, higher actual maintenance costs than the estimate) that trigger a recalculation of the tariff. Please discuss the threshold of increased costs that would trigger such a recalculation.

7. Reference: Exhibit B-1, Section 6.3.7, p. 13
FortisBC Solar Offset Tariff

"The cost per kWh for the Solar First rate was calculated by taking the present value of the incremental revenue requirement divided by the present value of the annual kWh production over 40 years for the life of the array.
$877,490 / 3,793,218 kWh = $0.231 per kWh."

7.1. Please explain why the Solar Offset tariff appears to be a higher cost than the Virtual Solar Panel Tariff ($81/ 400 kWh = $0.2025 per kWh).

7.2. What is the "Solar First" rate?

8. Reference: Exhibit B-1, Section 8, p. 17
Cost Recovery

"FBC is confident in the success of the Program, however, should the Company recommend that the Program not be made permanent, it will, as part of that Application, update the Commission on the amount of energy that will be forecast to be included in the Company's resource portfolio."

8.1. Please identify the costs that may be borne by customers if the Company recommends that the Program not be made permanent?