Community Solar Pilot Project
ICG Information Requests No. 2
August 3, 2017

1. Reference: Exhibit B-2, BCUC IR 1.1.2 and BCUC IR 1.9.7; Exhibit B-5, ICG 1.3.1

   "However, due to timing, the CSPP was not included in the recommended resource portfolio contained in the Company's most recent Long-Term Electric Resource Plan (LTERP)."

   "If the CSPP had to be considered within the criteria used in the LTERP to select the optimal set of resources to meet FBC's load, it would not be built."

   "As such the resource evaluation principles of the FBC LTERP do not apply to the pilot project as this is not for general utility supply."

   1.1. Please confirm that FortisBC considered solar energy as a resource option, albeit not in the recommended resource portfolio, at the time the LTERP was filed?

   1.2. If yes, please confirm that at the time the LTERP was filed, FortisBC expected that it would purchase solar energy if solar energy had been in the recommended resource portfolio?

   1.3. Please identify the criteria relevant to the CSPP that were used in the LTERP to select the optimal set of resources?

   1.4. Please explain that in FBC's opinion the criteria used in the LTERP to select the optimal set of resources to meet FBC's load do not apply to the CSPP and would apply to purchases from an identical solar energy facility constructed, operated and installed by a third party??

2. Reference: Exhibit B-2, BCUC IR 1.1.4

   "While a competitive market exists for the construction and operation of generation facilities of all types,…."

   2.1. Please confirm that in FortisBC's opinion a competitive market exists for the construction, operation and ownership of the CSPP?

   2.2. Please comment on whether government policies have in the past determined whether utilities or participants in a competitive market have constructed and operated generation facilities? In particular, have government policies directed that all new generation be constructed and operated by participants in a competitive market and that utilities investments, or at the very least BC Hydro investments, be restricted to upgrades to existing generation facilities?

   2.3. If so, please comment on whether the same government policy would apply to the CSPP?

   2.4. Please comment on whether government policy support for IPPs has been a significant driver of the success of the IPP community in BC?

3. Reference: Exhibit B-2, BCUC IR 1.11.1
http://www.nrel.gov/docs/fy12osti/51664.pdf, pp. 16-17

"The average service life of 40 years for the solar PV panels was determined based on a published research on the degradation rate of photovoltaic modules and system[3] completed by the National Renewable Energy Laboratory (NREL), which is a national laboratory of the US Department of Energy."

"A history of degradation rates using field tests reported in the literature during the last 40 years has been summarized."

"Finally, there may now be cumulative field experience to support long-term warranties, both because there are now products in the field for more than 25 years and because the average degradation rate still allows reasonable performance after 25 years."

3.1. Please identify where, in the referenced report, it states that a 40 year average service life is a reasonable assumption?

3.2. As the referenced report appears to be 5 years old, please provide more current references regarding the expected service life of the project's components.

4. Reference: Exhibit B-2, BCUC IR 1.13.2.1

4.1. Please explain whether FortisBC's solar rate options participate fully in any increased for FortisBC's transmission and distribution system infrastructure for the economic analysis provided in the referenced information request?

5. Reference: Exhibit B-4, BCSEA IR 1.6.6 and BCSEA 1.22.1

"FBC's research suggests typical utility scale non-rooftop solar installations can range from $2-$3 USD per installed watt, or roughly $2.50 to $4.00 CAD per installed watt."

5.1. Please provide sources for such research and any installation specific costs per installed watt? For example, can FBC provide the costs per installed watt for any other solar installations in BC or Alberta? If so, please identify whether such installations are utility or non-utility installations?

5.2. Please explain whether the typical installed costs in the reference include the cost of land? Please obtain and provide a commercial estimate for the value of the land.

6. Reference: Exhibit B-5, ICG IR 1.3.1

"In FBC service territory, FBC is the only entity that provides the fully bundled service described above to FBC's end-use customers. It is not presently feasible, legally or practically, for another third party to do so."

6.1. Please explain whether it is "presently feasible, legally or practically, for another third party" to construct, operate and own solar facilities in the FBC service territory and for FBC to purchase solar energy from the same third party and same facility? If so, could FBC then provide fully bundled service to end-use customers on the similar rate structures as proposed in this Application?

7. Reference: Exhibit B-5, ICG IR 1.3.7

"With respect to specifically the installation of the solar facility proposed in FBC's Application, as described on page 6 of the Application, FBC initiated a Request for Proposals (RFP) process to solicit bids from experienced solar PV contractors for the pilot project. "

7.1. Please provide a copy of FortisBC's RFP.

8. Reference: Exhibit B-5, ICG IR 1.4.2

"These locations were considered but were ultimately rejected for the purposes of the CSPP, largely due to lack of visibility. As discussed in the Application, "being part of a green community project" is a strong motivator among residential and commercial customers. It is improbable that these customers would feel a connection to the CSPP if they were unable to conveniently see the PV solar installation."

8.1. Please provide an estimate of the reduction in annual energy production of the proposed project location as compared to the a) the most favourable location in FortisBC's service territory, and b) on vacant land adjacent to the FortisBC's Kootenay Operations Center in Ooteschenia.

9. Reference: Exhibit B-5, ICG IR 1.4.4

"As the inverters typically have a life 36 ranged from 10 to 20 years, FBC assumed replacement of three inverters for every five years, starting in Year 10 in the revised financial analysis."

9.1. Please confirm the project has 9 inverters in total. Has the cost of the spare inverter been included in the estimate? What other spare components have been included in the project estimate?