

11 February 2021

VIA E-FILING

Marija Tresoglavic
Acting Commission Secretary
BC Utilities Commission
6th Floor 900 Howe Street
Vancouver, BC V6Z 2N3



Reply to: Leigha Worth
ED@bcpiac.org
Ph: 604-687-3034
Our File: 7311.310

Dear Ms. Tresoglavic,

**Re: FortisBC Inc. Rate Design and Rates for Electric Vehicle Direct Current Fast Charging Service Application ~ Project No. 1598940
BCOAPO Information Request No. 2 to FortisBC Inc. (FBC)**

We represent the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Council of Senior Citizens' Organizations of BC, Disability Alliance BC, and the Tenant Resource and Advisory Centre, known collectively in this process as "BCOAPO et al."

Enclosed please find the BCOAPO's Information Request No. 2 to FBC with respect to the above-noted matter.

If you have any questions, please do not hesitate to contact the undersigned.

Sincerely,
BC PUBLIC INTEREST ADVOCACY CENTRE

Original on file signed by:

Leigha Worth
Executive Director | General Counsel

Encl.

REQUESTOR NAME: **BCOAPO**
INFORMATION REQUEST ROUND NO: **#2**
TO: **FortisBC Inc. (FBC)**
DATE: **February 11, 2021**
PROJECT NO: **1598940**
APPLICATION NAME: **Rate Design and Rates for Electric Vehicle Direct Current Fast Charging Service**

23.0 Reference: Exhibit B-7, BCUC 1.17.1

Preamble: The response states:

“Keremeos and Princeton will require upgrades to support the installation of a second station at both locations. BC Hydro will be responsible for these costs in recognition of the costs incurred by FBC for provisioning the New Denver and Nakusp locations with capacity to support the addition of second stations at both locations, which supports the “like-for-like” nature of this transaction.”

23.1 Will BC Hydro perform this work itself prior to the transfer taking place or will FortisBC undertake the work (after the transfer) and be reimbursed by BC Hydro?

24.0 Reference: Exhibit B-7, BCUC 1.17.3

24.1 Are the depreciation rates currently used for the Nakusp and New Denver sites the same?

24.2 Will the depreciation rates currently used for the Nakusp and New Denver sites be used for the Keremeos and Princeton sites after the transfer (i.e., will the exchange result in a change to FortisBC’s annual depreciation expense)?

25.0 Reference: Exhibit B-7, BCUC 1.17.7

Preamble: The response indicates that the Keremeos and Princeton sites currently use a \$/kWh fee structure. The footnote in the response states: “FBC is not aware of any municipal exemption from Measurement Canada standards.”

25.1 Does FortisBC have any more insight into how the Keremos and Princeton sites are able to use a \$/kWh fee structure?

25.2 Is there any reason why FortisBC could not continue to use a \$/kWh fee structure at these sites if such a fee was approved by the BCUC?

26.0 Reference: Exhibit B-7, BCUC 1.3.6

Preamble: The response states:

“FBC considers a charging site to be defined by a contiguous area (e.g. a parking lot) for the provision of EV charging services. These sites may overlap multiple parcels of land, and may include multiple metered services for the different charging services available at the site.”

- 26.1 Is this strictly a FortisBC definition or is there a more formal basis/source for this definition?
- 26.2 If FortisBC were to purchase a parcel of land adjacent to an existing charging site and install one or more charging stations would this be considered a new site or part of the existing site?

**27.0 Reference: Exhibit B-7, BCUC 1.3.8.1
Exhibit B-9, BCSEA 1.1.1**

- 27.1 It is acknowledged that “FBC does not currently believe there is a need to deploy additional public charging sites or stations beyond those noted in the Revised Application.” However, should FortisBC decide otherwise at some future point in time, “what type of documentation (e.g. board minutes), if any, would be necessary to demonstrate that FBC has made the “decision” to construct or purchase an eligible charging station” as requested in BCUC 1.3.8.1?

**28.0 Reference: Exhibit B-7, BCUC 1.6.3
Exhibit B-9, BCSEA 1.6.4**

- 28.1 Please confirm that if the rates were designed so as to increase with either inflation or to change annually based on FortisBC’s annual general rate increase/decrease the charging rates would be lower in the initial years than those proposed.
 - 28.1.1 If not confirmed, please explain why.
 - 28.1.2 If confirmed, please explain why such an outcome would not be more appropriate - particularly from the perspective of encouraging EV purchases and the use of EV charging stations.
- 28.2 How much (i.e. percentage-wise) of the overall forecast cost of service for the EV charging stations over the next ten years is based on the cost of electricity (per RS 21)?
 - 28.2.1 Given the uncertainty associated with FBC’s future rates, if the EV charging rates were designed so as to change annually based on FortisBC’s annual general rate increase/decrease, would they be more likely to recover their required costs, particularly electricity costs, over the next 10 years.

29.0 Reference: Exhibit B-7, BCUC 1.6.6

- 29.1 Would charging rates that were designed so as to increase with either inflation or to change annually based on FortisBC’s annual general rate increase/decrease more closely recover each year’s cost of service from EV charging station users than the proposed levelized rates?

30.0 Reference: Exhibit B-7, BCUC 1.6.7, 1.6.8 and 1.6.9

Preamble: The response to BCUC 1.6.9 states that:
“FBC would consider initiating a review of RS 96 in three scenarios:
1. If there were any material deviations from forecast revenues from existing stations;
2. If there were any material deviations in the cost of new stations as compared to existing stations; or
3. A new rate structure is identified that is preferable to the current RS 96 structure and that is technically possible to implement and legally permissible (e.g. rates based partly on charging speed or kWh).”

30.1 With respect to items 1 and 2, please explain what FortisBC would consider a “material deviation”.

30.2 With respect to item 2, why is it limited to “new” stations? Given that the annual cost for a station includes the cost of electricity, could there not be instances where the cost of electricity for existing stations could vary materially from that used to set the levelized rates?

30.2.1 If yes, would FBC consider initiating a review under such circumstances?

30.3 Would a new rate structure (per item 3) only be considered as part of a COSA proceeding (per BCUC 1.6.7)?

**31.0 Reference: Exhibit B-7, BCUC 1.8.4
Exhibit B-8-1, BCOAPO 1.12.5**

31.1 With respect to BCUC 1.8.4, please provide a schedule that sets out the values used per steps (a) and (b) of the methodology and the resulting calculation as to EV growth over the period concerned.

31.2 Please provide a schedule that sets out how the number of charging events per charging station per day for the 50 kW and 100 kW stations (per BCOAPO 1.12.5) were calculated using the forecast EV growth rate.

31.2.1 With respect to BCOAPO 1.12.5 please explain why the charging events per station per day are the same for both 50 kW and 100 kW stations in all years except 2021 and 2028-2030.

32.0 Reference: Exhibit B-7. BCUC 1.9.1 and 1.9.2

32.1 What is the reason for the variation in the price of carbon credits in each quarter (per BCUC .9.1)?

33.0 Reference: Exhibit B-7, BCUC 1.9.6

33.1 Will FBC have to pay any administrative/transaction charge to FEI if FEI is the party actually selling the credits?

**34.0 Reference: Exhibit B-7, BCUC 1.15.2.1
Exhibit B-10, CEC 1.12.1
Exhibit B-5, page 12 and Appendix E, Schedule 1**

Preamble: CEC 1.12.1 Response states:

“FBC used a 13-year analysis for the 50 kW service rate calculation because of the capital additions in 2018, 2019 and 2020 that had to be reflected into the 50 kW rate, which set the starting year for the financial analysis at 2018.”

34.1 Given that the derivation of the 50 kW charging rate takes into account the costs and revenues for 2018-2020, why is it necessary to establish how and when to recover from ratepayers the actual costs (less revenues) associated with EV charging stations from 2018 to December 31, 2020 (as discussed in BCUC 1.15.2.1)? Wouldn't this lead to a double recovery?

**35.0 Reference: Exhibit B-7, BCUC 1.7.8 and 1.8.1
Exhibit B-8, BCOAPO 1.11.2, 1.11.3, 1.11.4, 1.11.5 and 1.11.6**

Preamble: The responses to BCOAPO 1.11.2 and 1.11.3 explain that there is only one meter per site and that it meters usage by both the charging stations and by ancillary station equipment/display lighting.

The responses to BCOAPO 1.11.4 through 1.11.6 indicate that the kWh usage values provided in the respective responses include only the energy delivered to vehicles during charging events, not the entire energy usage at site.

BCUC 1.8.1 indicates that the electric consumption of 20 kWh per charge event based on average historical kWh volumes per charge session from FBC's experience of 50 kW stations.

BCUC 1.7.8 confirms that the rate at which an EV battery charges is non-linear.

BCOAPO 1.11.2 indicates that the 20 kWh per charging event is for the charging station and does not include usage by ancillary station equipment/display lighting.

35.1 For purposes of the Tables provided in response to BCOAPO 1.11.4 through 1.11.6, please explain how the kWh usage for just the charging stations (i.e., excluding ancillary station equipment/display lighting usage) was determined if there is only a single meter per site that records total usage (i.e., both charging station usage and ancillary station equipment/display lighting usage) and the kWh used by the stations for charging cannot be directly calculated based on the number of charging minutes (per BCUC 1.7.8).

**36.0 Reference: Exhibit B-8, BCOAPO 1.11.1, 1.11.2, 1.11.4, 1.11.5 and 1.11.6
Exhibit B-10, CEC 1.11.6
Exhibit B-5, page 13**

Preamble: The response to CEC 1.11.6 indicates that between January 2018 and October 2020 the actual charges for a charging event ranged from \$0.06 to \$46.88.

Exhibit B-5 states that in establishing the station usage assumptions: "Data from 2020 was not included due to the impact of COVID-19 on EV charging patterns (i.e. fewer customers driving resulting in lower-than-anticipated DCFC usage compared to historical trends)."

36.1 Please provide the values for the lowest, highest, median and average charging minutes per session underpinning the response to CEC 1.11.6.

36.2 Please provide a revised response to CEC 1.11.6 based just on data for 2018 and 2019. As part of the response please also provide values for the lowest, highest, median and average charging minutes per session underpinning the response

36.3 In responding to BCOAPO 1.11.4 through 1.11.6 FortisBC has claimed confidentiality for all of the data requested except: i) the names of the sites, ii) the capacity of the stations at each site and iii) the numbers days each site was in operation. BCOAPO appreciates that the details for the individual sites could be considered confidential. However, given the response provided to CEC 1.11.6, BCOAPO would request that FortisBC provide the following information for each of 2018, 2019 and 2020 or provide a detailed explanation regarding the need for its confidentiality:

36.3.1 The titles for each of the columns for which the data requested is considered confidential. Further, can FortisBC reconcile the fact that there are only 7 columns with redacted information but the original question asked for 9 pieces of information which were not published.

36.3.2 The annual total (across all sites) for the number of charging events, the overall average number of charging events per day (i.e., based on the overall average of the averages for each site), and the minimum and maximum average number of events per site.

36.3.3 The median and average number of charging minutes per event (i.e., based on the overall median/average of the averages for each site), along with the minimum and maximum average site values.

36.3.4 The median and average monthly demands across all sites (i.e., based on the overall median/average of the averages for each site), along with the minimum and maximum averages per site.

36.3.5 The median and average kWh per charging event (i.e., based on the overall median/average of the averages for each site), along with the minimum and maximum averages per site.

36.3.6 The median average number of charging events per day (i.e., based on the overall median/average of the averages for each site), along with the minimum and maximum averages per site

**37.0 Reference: Exhibit B-8-1, BCOAPO 1.12.5 and 1.19.2
Exhibit B-7, BCUC 1.8.4**

Preamble: The following table has been constructed from the data provided in the responses to BCOAPO 1.12.5 and 1.19.2

50 kW Station							
		<u># Events</u> <u>/Station</u> <u>/Day</u>	<u>Number</u> <u>of</u> <u>Stations</u>	<u>Number</u> <u>of Days</u>	<u>Total</u> <u>Number of</u> <u>50 kW</u> <u>Events</u>	<u>Total</u> <u>Electricity</u> <u>Use (kWh)</u>	<u>Average</u> <u>Use /</u> <u>Event</u>
		A	B	C	D	E	F
	2021	2.04	34	365.25	25,333.7	723,951	28.58
	2024	4.69	34	365.25	58,242.8	1,381,446	23.72
	2027	9.49	34	365.25	117,851.6	2,574,458	21.84
	2030	12	34	365.25	149,022.0	2,801,086	18.80
Sources:		1) A, B & C- Exhibit B-8-1, BCOAPO 1.12.5 (i)					
		2) D = A x B x C					
		3) E - Exhibit B-8-1, BCOAPO 1.19.2 (line 43)					
		4) F = E/D					

37.1 Please confirm that the data set out in the above table is correct.

37.1.1 If not, please provide a corrected version and the reasons for any changes.

37.2 Please confirm that the total kWh values provided in the response to BCOAPO 1.19.2 (line 43) are for total site usage including ancillary station equipment/display lighting usage.

37.2.1 If not confirmed, does the calculation of the cost of electricity need to be revised to include this usage?

37.3 With respect to BCOAPO 1.19.2, please confirm that the electricity usage values (line 43) for 2018 and 2019 are actual values.

37.4 With respect to BCOAPO 1.19.2, please explain how the total electricity use for each of the years 2020 through to 2030 was determined. In doing so, please address the following:

37.4.1 How was the usage for ancillary station equipment/display lighting was established and accounted for?

37.4.2 Given that the assumed charging station usage per event is 20 kWh (per Exhibit B-5, page 13 and BCOAPO 1.11.2), why are the average kWh

values per event less than 20 kWh by 2030? One would have expected the values to all be more than 20 kWh in order to account for the incremental usage due to for ancillary station equipment/display lighting.

- 37.5 Please provide similar information to that requested in BCOAPO 1.19.2 but for the 100 kW stations and the resulting kWh per charging event for each year.
- 37.6 Do any of the responses to the preceding questions result in the need to revise the cost of electricity as used in Exhibit B-5, Appendix E, page Schedules 1 and 2 (for 50 kW and 100 kW stations respectively)?

**38.0 Reference: Exhibit B-8-1, BCOAPO 1.15.5.1 and 1.15.5.2
Exhibit B-5, Appendix E, Schedule 1 (line 23) and
Schedule 2 (line 23)**

Preamble: The response to BCOAPO 1.15.5.1 & 1.15.5.2 states:

“FBC did not include an additional allocation for administrative and general costs in O&M in Appendix E because these expenses are already included elsewhere in other cost line items, including the costs related to the 0.5 FTE which will directly supporting the FBC charging program. FBC allocates administrative and general costs when it determines the electricity rates for RS 21, which is reflected in the proposed EV rates through the cost of electricity. The increase in power purchases from the EV stations is sufficient to cover the portion of administrative and general costs related to the EV network management services being provided by FBC”.

The response to BCOAPO 1.15.4 identifies four categories of non-labour O&M: i) Maintenance, ii) Travel, iii) Repairs (outside of warranty) and iv) FBC Network Management Expenses.

- 38.1 Do the labour costs reported in Appendix E (per line 23 of Schedules 1 and 2) represent the cost of the 0.5 FTE? If not, please explain what else is included in/excluded from the reported labour costs.
- 38.1.1 Please provide the derivation of the cost for the 0.5 FTE included in the cost of service analysis in sufficient detail to demonstrate that it includes an allocation of FBC’s Administrative and General costs.
- 38.2 BCOAPO’s reading of the response to BCOAPO 1.15.5.1 & 1.15.5.2 as quoted in the Preamble is that the A&G costs included in the RS 21 rates are sufficient to cover not only the A&G costs associated with RS 21 service but the A&G costs attributable to the costs for FBC’s Network Management Services (as set out in BCOAPO 1.15.4). Please confirm if BCOAPO has interpreted the response correctly.
- 38.2.1 If yes, please explain why this is the case when the cost of FBC’s Network Management Services is incremental to the cost for electricity service to the charging sites.

38.2.2 If no, where and how are the A&G costs attributable to the FBC's Network Management Services included in the cost of service analysis?

38.3 The response does not address where/how A&G costs attributable to Maintenance, Travel and Repairs (outside of warranty) have been incorporated into the cost of service analysis. Please explain.