Sarah Walsh
Director, Regulatory Affairs

Gas Regulatory Affairs Correspondence
Email: gas.regulatory.affairs@fortisbc.com

Electric Regulatory Affairs Correspondence
Email: electricity.regulatory.affairs@fortisbc.com

FortisBC
16705 Fraser Highway
Surrey, B.C. V4N 0E8
Tel: (778) 578-3861
Cell: (604) 230-7874
Fax: (604) 576-7074
www.fortisbc.com

March 12, 2024

Residential Consumer Intervener Association
c/o Midgard Consulting Inc.
Suite 828 – 1130 W Pender Street
Vancouver, B.C.
V6E 4A4

Attention: Peter Helland, Director

Dear Peter Helland

Re: FortisBC Inc. (FBC)

FBC Electric Vehicle (EV) Direct Current Fast Charge (DCFC) Energy-Based Rate Application (Application)

Response to the Residential Consumer Intervener Association (RCIA) Information Request (IR) No. 1

On December 22, 2023, FBC filed the Application referenced above. In accordance with the regulatory timetable established in BCUC Order G-17-24 for the review of the Application, FBC respectfully submits the attached response to RCIA IR No. 1.

For convenience and efficiency, if FBC has provided an internet address for referenced reports instead of attaching the documents to its IR responses, FBC intends for the referenced documents to form part of its IR responses and the evidentiary record in this proceeding.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC INC.

Original signed:

Sarah Walsh

Attachments

cc (email only): Commission Secretary
Registered Interveners

CHAPTER 3: ENERGY-BASED RATE AND RATE DESIGN

1.0 Reference Exhibit B-1, Page 19, .PDF p. 23 of 169

Section 3.2.1.1 Levelization Period

FBC states: "*As such, the proposed energy-based rate is designed to fully recover the cost-of-service of FBC's EV DCFC service since inception to 2033, including past surpluses/deficiencies from 2018 to 2023, and the forecast cost-of-service from 2024 to 2033*."

1.1. Please provide an estimate of the energy-based rate that is required to achieve full cost recovery under the original levelization period ending 2030.

Response:

Please refer to the response to BCUC IR1 3.1.

2.0 Reference Exhibit B-1, Page 19-21, .PDF p. 23-25 of 169 Section 3.2.1.2 Station Utilization Forecast

FBC provides:

	Growth Scenario		
Year	Low	Medium	High
2024	44%	47%	54%
2025	36%	39%	45%
2026	32%	36%	42%
2027	32%	38%	43%
2028	31%	37%	38%
2029	30%	35%	33%
2030	30%	32%	30%
2031	29%	28%	26%
2032	26%	25%	23%
2033	23%	22%	20%
2034	21%	19%	18%
2035	18%	17%	17%
2036	16%	15%	15%
2037	14%	14%	13%
2038	13%	13%	12%
2039	12%	12%	11%
2040	11%	12%	10%

2.1. Please provide a table that shows the forecast utilization (in minutes per year) of 50 kW and 100 kW stations for the years 2024 to 2033 using the three growth scenarios for EV Sales from Table 3-2.

Response:

Please see Table 1 and Table 2 below for the forecast utilization (in minutes per year) of the 50 kW and 100 kW stations, respectively, from 2024 to 2033 using the three growth scenarios from Table 3-2 of the Application.

FBC notes that the utilization of each individual station is capped at a maximum of 54 percent; as such, the growth rates of the charging minutes may differ from the growth rates set out in Table 3-2 of the Application. Please refer to the responses to BCUC IR1 4.1 and 4.2 for further details and the explanation for the 54 percent maximum utilization per station.

Table 1: Forecast Utilization of Growth Scenarios for 50 kW Stations (in Minutes per Year)

	Growth Scenario		
Year	Low	Medium	High
2024	781,954	800,403	836,672
2025	1,062,719	1,112,230	1,214,142
2026	1,402,774	1,513,012	1,723,463
2027	1,853,092	2,089,874	2,460,036
2028	2,418,472	2,856,477	3,305,382
2029	3,110,358	3,684,130	4,214,494
2030	3,871,777	4,683,309	5,248,706
2031	4,817,458	5,672,679	6,141,906
2032	5,733,914	6,440,660	6,786,473
2033	6,461,440	7,099,146	7,421,887

Table 2: Forecast Utilization of Growth Scenarios for 100 kW Stations (in Minutes per Year)

	Growth Scenario		
Year	Low	Medium	High
2024	189,397	193,865	202,650
2025	257,400	269,392	294,076
2026	339,765	366,466	417,439
2027	448,836	506,187	595,844
2028	585,777	691,866	820,929
2029	762,450	934,499	1,071,388
2030	990,766	1,172,632	1,305,001
2031	1,201,602	1,425,216	1,571,378
2032	1,442,823	1,705,290	1,867,266
2033	1,715,023	1,966,948	2,079,203

2.2. Please explain whether FBC considered setting different rates based on time of use. For example, offering a lower rate during the overnight period (between 7pm and 8am) to encourage a higher rate of utilization during that period.

Response:

FBC does not have plans to set time-of-use (TOU) rates at its EV DCFC stations at this time. The only current TOU rates are at Tesla's Lower Mainland stations. All other service providers in BC (i.e., BC Hydro, Shell, Couche Tard/Circle K, and Charger Quest), as well as Tesla stations in FBC's service area, are on fixed rates (not TOU rates). Thus, FBC's fixed rates align with most service providers in BC, and all stations in FBC's service area.

FBC does not have sufficient evidence from its own stations that would suggest TOU rates might reduce congestion or improve efficient use. Due to the remote and rural locations of some of FBC's stations, the chance of increasing overnight charging through TOU rates would be small when compared to large population centers such as the Lower Mainland where Tesla has implemented TOU rates. However, FBC will continue to monitor the use of its stations, customer expectations, and market developments. FBC may consider TOU rates or other alternatives in the future if it determines that such options would help to improve the efficient use of its stations.

3.0 Reference Exhibit B-1, Page 22, .PDF p. 26 of 169

Section 3.2.1.3 Electric Consumption and Cost of Electricity Forecast

FBC states: "*As part of the forecast cost of electricity under FBC's commercial service RS 21, FBC included the approved 2024 rate increase of 6.74 percent39 and assumed a further annual rate increase of 4 percent starting from 2025 onward*."

3.1. Please clarify whether the assumption regarding the annual rate increases of 4% from 2025 onward for the cost of electricity under FBC's commercial service RS21 includes any adjustment for inflation.

Response:

The four percent increase is the assumption regarding FBC's future annual rate increases set during its annual review or revenue requirement proceedings based on recent rate increases. There is no additional inflation adjustment to FBC's annual rate increases. Please refer to the response to BCUC IR1 5.3, which explains the rationale for FBC's assumption of an annual 4 percent rate increase from 2025 onward for the cost of electricity, which is based on FBC's commercial Rate Schedule (RS) 21.

4.0 Reference Exhibit B-1, Page 22, .PDF p. 26 of 169

Section 3.2.1.4 Capital Expenditures and Contributions

FBC states: "*FBC's total capital expenditures (before contributions from third parties) for the 42 EV charging stations (as listed in Table 2-1 in Section 2.1 above) are now estimated to be approximately $7.361 million*."

4.1. Of the EV chargers installed by FBC how many use CHAdeMO connectors and how many use NACS connectors?

4.1.1. For those EV chargers with CHAdeMO connectors please provide details of any plans to retrofit the chargers with NACS chargers along with forecast costs.

4.1.2. Please provide an estimate of the impact of any costs arising in (4.1.1) on the flow-through deferral account

Response:

All 42 stations owned and operated by FBC have CCS/SAE and CHAdeMO connectors today, but none offer NACS connectors. Please refer to the response to BCUC IR1 7.1 for further details.

5.0 Reference Exhibit B-1, Page 26, .PDF p. 30 of 169

Section 3.2.1.6 Inflation Rates

FBC states: "*For 2025 and beyond, FBC used an annual inflation of 2 percent for its analysis.*"

5.1. Please clarify whether the forecast of electricity rates from third-party utilities for the years 2025 and beyond are determined by applying a 4% rate increase as well as a 2% inflation rate?

Response:

For clarity, third-party electricity costs are included as part of the O&M expenses for FBC's EV DCFC service (i.e., not part of the cost of electricity under RS 21). However, as discussed in Section 3.2.1.5 of the Application, FBC assumed an annual rate increase from third-party utilities of four percent, while other direct O&M cost items such as network management, repair and maintenance, inspection fees and FBC labour costs are forecast using an annual escalation of two percent inflation. FBC did not apply an additional two percent on top of the four percent for electricity costs from third-party utilities.

Since the third-party utilities are FBC's wholesale customers, the assumption of four percent annual rate increases from third-party utilities is consistent with the assumption used for FBC's annual rate increases applied to the cost of electricity under RS 21. Please also refer to the response to RCIA IR1 3.1.

6.0 Reference Exhibit B-1, Page 27-28, .PDF p. 31-32 of 169 Section 3.2.1.8 Carbon Credits

FBC states: "*For the purpose of forecasting the carbon credit revenue from 2026 to 2033, FBC assumed a 10 percent annual decline from the $500 per credit level starting in 2026*."

6.1. Please provide an explanation of whether the decline in the market price of carbon credits that FBC forecasts from 2026 to 2033 accounts for the changes to both the Low Carbon Fuel Targets and the Automatic administrative penalty rates that have been introduced with the *Low Carbon Fuels Act*.[1]

Response:

Please refer to the response to BCUC IR1 6.1.

6.2. Please provide an estimate of the impact on the flow-through deferral account if the price of a carbon credit is kept constant at $500 per credit from 2026 to 2033.

Response:

For clarity, the Flow-through deferral account, as referenced in this IR, records the variances between actual and forecast EV-related revenues and costs, including the variances between the forecast carbon credit revenue included in the calculation of the 10-year levelized energy-based RS 96 rate and the actual monetized carbon credits. The reference in the preamble to this IR from the Application is explaining the assumption that FBC has used to forecast the carbon credit revenue over the levelization period, as this forecast assumption (i.e., the 10 percent annual decline from the $500 per credit level starting in 2026) impacts the proposed energy-based RS 96 rate of $0.39 per kWh[2]. The actual costs and revenues related to the EV DCFC service have no impact on the RS 96 energy-based rate.

As RCIA has requested the impact on the Flow-through deferral account of keeping the price of carbon credits constant at $500 per credit from 2026 to 2033, and in consideration of FBC's clarification regarding how the Flow-through deferral account works, FBC interprets this IR as asking for the impact based on the assumption that the levelized energy-based rate is calculated with a forecast of $500 per credit from 2026 to 2033. If FBC revises the forecast for carbon credits in its levelized rate calculation to remain constant at $500, the RS 96 energy-based rate would decrease to only $0.10 per kWh. However, FBC expects that actual carbon credit revenue will

[1] Government of BC, Order in Council 699/2023. Link: https://www.bclaws.gov.bc.ca/civix/document/id/oic/oic_cur/0699_2023.

[2] FBC has filed an Evidentiary Update concurrently with these IR responses which updates the proposed energy-based rate from $0.42 per kWh to $0.39 per kWh. Please refer to the Evidentiary Update for further details.

decline similar to FBC's assumption in the Application, i.e., there will be a 10 percent decline annually beginning in 2026. The impact therefore of charging an energy-based rate to EV customers of $0.10 per kWh when the actual carbon revenue declines based on FBC's assumptions in the Application will be an annual deficiency, which would be captured in the Flow-through deferral account and would be recovered from all other customers through rates.

Table 1 below shows the estimated annual deficiency captured in the Flow-through deferral account in this scenario. As shown below, the deficiency captured in the Flow-through deferral account could grow to $2.29 million by 2033 if the actual market price declines by 10 percent per year (as FBC expects) but the energy-based rate charged to EV customers is only $0.10 per kWh due to FBC revising its assumption of the forecast carbon credit revenue to keep the forecast revenue constant at $500 per credit (as suggested by the RCIA in this IR).

Table 1: Annual Deficiency Captured in Flow-through Deferral Account if Forecast Based on $500 per Credit from 2026 to 2033 but Actuals Declines 10 percent per year

	2026	2027	2028	2029	2030	2031	2032	2033
Annual Deficiency ($000s)	54	127	228	368	1,562	1,184	2,046	2,290

FBC notes that if the IR is alternatively suggesting that the actual market price would remain at $500 per credit while the energy-based rate continues to be set based on FBC's assumption, (i.e., a 10 percent decline from 2026 to 2033), then the impact to the Flow-through deferral account would be the opposite of what is shown in Table 1 above. There would be an annual credit captured in the Flow-through deferral account and the credit would grow to approximately $2.29 million by 2033.

CHAPTER 4: ENERGY-BASED RATE AND RATE DESIGN

7.0 Reference Exhibit B-1, Page 27-28, .PDF p. 31-32 of 169

Section 4.2 Reporting of FBC's RS 96 EV DCFC Service

FBC states: "*Currently, FBC has been providing annual updates to its RS 96 EV DCFC service as part of FBC's annual review process, including discussions on utilization in terms of charging minutes, revenue, carbon credits, and O&M and capital expenditure forecasts. FBC proposes to continue this reporting in its rate setting proceedings*."

7.1. Please explain whether FBC will initiate some form of course-correction with respect to energy- based rates if the annual update deviates from the forecast.

7.2. Please provide an indication of the types and magnitude of deviations that might trigger an application to change energy-based rates.

Response:

As stated in the Application, FBC will continue to provide updates to its RS 96 EV DCFC service as part of its annual review or revenue requirement proceedings. If FBC determines the energy-based rate needs to be adjusted prior to the end of the 10-year levelization period, FBC will propose the changes as part of its rate-setting processes.

However, FBC notes that variances between actual and forecast amounts are expected to occur and since the rates are set on a levelized basis, FBC expects that the DCFC service will be in a deficiency position in the early years of the levelization period, with the service moving to a surplus position towards the end of the period.

FBC does not consider it necessary to define or set parameters on the magnitude of variances/deviations from forecast that would trigger a change to the energy-based rate as part of this proceeding. First, the impact of annual variances should be considered in the context of the overall cumulative deficiency, the timing of revenues and costs, and the resulting rate impact to FBC's other customers. For example, as shown in Table 2-3 of the Evidentiary Update, there have been both debit and credit variances throughout the years between 2018 and 2023 under the current time-based rates, and the cumulative deficiency remained relatively small at $580 thousand. Further, this deficiency was primarily due to the delay in credit validation in 2023 which FBC is now expecting to monetize in mid-2024 (please see the response to BCOAPO IR1 6.1). Factoring in the expected carbon credits that are delayed to 2024, the cumulative deficiency would be approximately $36 thousand, and the equivalent rate impact would be negligible at $0.007 percent. Second, as stated above, FBC will continue to report the performance of its EV DCFC service as part of its annual review or revenue requirement processes, which will provide the opportunity to review the annual forecast versus actual results and assess whether any adjustments are needed.