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November 5, 2020

Ms. Diane Roy
Vice President, Regulatory Affairs
FortisBC Energy Inc.
16705 Fraser Highway
Surrey, B.C. V4N 0E8
By Email: electric.regulatory.affairs@fortisbc.com

Dear Ms. Roy:

Re: FortisBC Inc. Rate Design and Rates for Electric Vehicle Direct Current Fast Charging Service Application, BCUC Project No. 1598940
B.C. Sustainable Energy Association – Vancouver Electric Vehicle Association
Information Request No. 1 to FBC

Attached please find BCSEA-VEVA's Information Request No. 1 to FBC. A version in Word format will be provided separately. If you have any questions, please do not hesitate to contact me.

Incidentally, in an email to me today, the Commission staff said that "Further to your letter dated November 4, 2020 [Exhibit C4-2], your request to add the Vancouver Electric Vehicle Association as a joint intervener in the FortisBC Inc. Rate Design and Rates for Electric Vehicle Direct Current Fast Charging Service Application proceeding has been accepted."

Yours truly,

William J. Andrews



Barrister & Solicitor

Encl.

REQUESTOR NAME: **BC Sustainable Energy Association and Vancouver Electric Vehicle Association**

INFORMATION REQUEST ROUND NO: 1

TO: **FortisBC Inc.**

DATE: **November 5, 2020**

PROJECT NO: **1598940**

APPLICATION NAME: **FortisBC Inc. Rate Design and Rates for Electric Vehicle Direct Current Fast Charging Service Application**

1.0 Topic: FBC Public DCFC Deployment
Reference: Exhibit B-5, p.10; Table 2-2: FBC DCFC Sites

FBC states, "At this time, FBC does not expect to deploy additional sites beyond those detailed below." Table 2-2: FBC DCFC Sites lists 25 DCFC sites with details corresponding to criteria in section 5 of the GRR.

- 1.1 Does the statement, "FBC does not expect to deploy additional sites beyond those detailed below," include additional stations?
- 1.2 Please describe the process by which FBC determined what DCFC sites and stations it will deploy.
- 1.3 Please provide copies of any documents describing the process or outcome of FBC's DCFC planning.
- 1.4 What criteria or formula does FBC use to determine the locations of DCFC sites, the number of stations, and the size of the stations (e.g., 50 kW or 100 kW)?
- 1.5 Please describe how FBC determines the size of its DCFC stations (e.g., 50 kW or 100 kW). Has FBC considered stations with a capacity larger than 100 kW?
- 1.6 Please describe how FBC's deployment of DCFC sites and stations meets the needs of both local EV drivers and travelling-through EV drivers. Is there a priority on one over the other?
- 1.7 Please describe how FBC's plan for public DCFC sites and stations has been coordinated with BC Hydro's plan for public DCFC sites and stations.
- 1.8 Please describe whether and how FBC's plan for public DCFC sites and stations takes into account DCFC sites and stations (existing or potential public) within FBC's service territory operated by entities other than FBC.
- 1.9 How did FBC determine the 'size of the financial envelope' for its public DCFC sites and stations?
 - 1.9.1 Please confirm, or otherwise explain, that section 5 of the GRR would cover more stations and/or more sites than FBC proposes.

- 1.9.2 What criterion (or criteria) does FBC apply to determine that its public DCFC deployment is adequate and that no additional sites are expected?
- 1.10 Can FBC confirm that all of the public DCFC stations listed in Table 2-2 are scheduled to be in service by the second quarter of 2021 or sooner?
- 1.11 For how many years will the DCFC stations listed in Table 2-2 be adequate to meet the fast-charging needs of EV drivers in FBC's territory, in FBC's view?
- 1.12 Does FBC intend to review its deployment of public DCFC stations at some point in the future? If so, when? If not, why not?
- 1.13 How has FBC chosen the specific sites for DCFC stations?
- 1.13.1 Is there a preference for shopping malls, highways, existing amenities (such as washrooms, convenience stores or lighting)?
- 1.13.2 Has FBC considered the potential future need to increase the number of charging stations at sites?
- 1.14 Please provide photos of several existing DCFC stations, to give a sense of the range of situations.
- 1.15 Please describe any EV charging stations that FBC owns or operates that are outside of the DCFC Program to which the applied-for rates apply. Does FBC currently have any Level 2 EV charging stations (FBC's website refers to two Level-2 charge stations¹)? Does FBC have any EV charging stations that are not available to the public?

2.0 Topic: Accessibility
Reference: Exhibit B-5

- 2.1 Apart from the GGRR, what requirements or guidelines apply to FBC's EV charging stations regarding accessibility?
- 2.2 To what extent do FBC's current and planned EV charging stations comply with these specifications?
- 2.3 Do FBC's current and planned EV charging stations enable everyone, including persons with disabilities, to access and operate the EV charging stations?

3.0 Topic: Depreciation Rate
Reference: Exhibit B-5, 3.2.2.2 Depreciation Rate, p.16

FBC states:

¹ <https://www.fortisbc.com/services/sustainable-energy-options/electric-vehicle-charging/public-electric-vehicle-charging-stations-in-bc>

“FBC is requesting approval to use straight line depreciation for the EV charging stations, at a 10 percent depreciation rate, based on a service life of ten years. FBC’s existing approved depreciation rates have been utilized for the service extension components of the capital expenditures.”

- 3.1 If not already addressed in the response to BCUC IR 11, please provide an estimate of the impact on the proposed rates if the service life of the EV charging stations was five years rather than ten years.

4.0 Topic: Cost of Service
Reference: Exhibit B-5, 3.2.2.3 Cost of Electricity, p.16

FBC states:

“FBC has modelled the cost of power based on the DCFC stations taking metered electric service at FBC’s existing rates for commercial service under RS 219. The model assumes a typical half hour charge session will deliver 20 kWh of energy, with thirty-four individual 50 kW stations contributing 54 kW of demand and six 100 kW station contributing 108 kW of demand to each individually metered DCFC site. These assumed utility charges (energy use, billing demand, and customer charge), based on RS 21, are an input to the cost of service model that is used to determine the EV charging rates applied for in this Application.”

- 4.1 Please clarify how FBC includes peak demand in modeling the cost of power. Can FBC’s approach be described as an aggregation of the 50 kW stations (and separately of the 100 kW stations), as distinct from assigning the equivalent of a demand charge to each station?

5.0 Topic: Time-based versus Energy-based Rates
Reference: Exhibit B-5, p.12

FBC says, “Rates based partly or wholly on energy use (kWh) cannot currently be implemented by FBC due to the lack of Measurement Canada-approved metering.”

- 5.1 Will FBC revisit the possibility of rates based partly or wholly on energy use (kWh) if and when Measurement Canada approves DCFC energy metering for revenue purposes?
- 5.2 Would the charging station hardware that FBC uses require a retrofit (or replacement) to be capable of billing by energy use?

6.0 Topic: Rate Design
Reference: Exhibit B-5, p.1

FBC’s proposed rates are \$0.27 per minute for 50 kW DCFC service and \$0.54 per minute for 100 kW DCFC service.

- 6.1 Is it intentional that the proposed rate for 100 kW service (\$0.54/min) is double the proposed rate for 50 kW service (\$0.27/min)? Please specify

the rationale for not basing the two rates on the difference in the cost of service.

- 6.2 Do the charging rates apply for the entire time a vehicle is plugged into a charging station, or only while the vehicle is actively charging?
- 6.3 Does FBC consider that electric vehicles occupying charging stations while they are not actively charging is a problem? Has FBC considered ways to address this, such as idling fees?

On page 18 of the Application, FBC explains that it chose a flat rate over the analysis period to “allow customers to have stability and consistent rates as opposed to having rates that vary each year with the cost of service and forecast usage.”

- 6.4 Did FBC consider a rate that escalates at the rate of inflation, rather than one which, considering inflation, will effectively decline over the analysis period?

In section 3.4 of the Application (page 20), FBC states:

“Due to the levelized nature of the rate, there will be some (early) years where the EV charging revenue will be less than the cost of service. In these years, all other FBC customers will bear the costs in excess of revenues. Conversely, in years where the charging revenue is greater than the cost of service, all other FBC customers will benefit from the excess of revenues.” [Exhibit B-5, Application, page 20]

- 6.5 Please confirm that the proposed rate is intended to cover all costs of FBC’s DCFC service over the analysis period, such that apart from the temporary cross-subsidy due to the different times when costs are incurred and revenues received, there will be no cross-subsidy from FBC’s regular customers. If not confirmed, please explain.

Table 3-4 on page 20 gives Rate Impact Sensitivity figures in percentages for higher and lower rates of EV usage over the analysis period.

- 6.6 Please provide dollar per minute figures for the gross amounts corresponding to the percentages in Table 3-4.

7.0 Topic: Payment Method
Reference: Exhibit B-5, p.8

FBC states:

“Drivers using FBC DCFC stations for EV recharging purposes will have two options for payment transactions with FBC:

1. Creating a membership with the FLO network and linking an appropriate means of payment (credit card, bank account) to that membership; or

2. Scanning a Quick Response Code (QR code) on the station with their mobile phone which will take the customer to a payment portal where they can enter their credit card details which will allow the station to be activated. Customers may also contact FLO's telephone customer support to establish a single use credit card transaction. The customer's credit card will be charged the appropriate amount once the charging session is complete."

- 7.1 Are the two options for payment transactions a continuation of the options in place currently? If not, please describe the changes.
- 7.2 In FBC's view, are the current payment options satisfactory? Has FBC received complaints? What improvements, if any, are required?

8.0 Topic: Leased Land
Reference: Exhibit B-5, p.17

FBC says the land for the DCFC stations will be leased.

- 8.1 Please describe the terms and conditions of the leases for the land for the DCFC stations. Please indicate if there are different models. What is the range of the term of the leases? Do the leases cover only the footprint of the DCFC charging equipment, or also space for vehicles to charge and space for vehicle access?
- 8.2 Does FBC consider that the leases are at commercial prices? Or could the leases be described as concessionary, such as where the landlord wishes to support the adoption of EVs over fossil-fuel vehicles?

9.0 Topic: Carbon Credits
Reference: Exhibit B-5, 3.2.1.4 Carbon Credits, p.13

FBC states:

"FBC's DCFC stations will allow FBC to monetize carbon credits as a supplier of low carbon fuels. FBC has forecast an average value for the carbon credits as described in this section to be factored into the calculation of the EV rate, while actual revenue realized from the sale of carbon credits, net of administration costs, will be returned to all customers through FBC's revenue requirements in the year subsequent to monetization of the carbon credits, through a forecast (and subsequent true-up to actuals) included in Other Revenue."

- 9.1 For greater certainty, please confirm that the proposed DCFC rates (\$0.27/min for 50 kW and \$0.54/min for 100 kW) take into account net revenue from carbon credits.
- 9.2 Did FBC consider a model in which net revenue from the sale of carbon credits goes toward reducing the rates for DCFC service? If so, why did FBC reject that approach?