

D.J. FLINTOFF
INFORMATION REQUEST **FortisBC Inc.** No. 1

FortisBC Inc. (FBC)
BCUC Regulation of Electric Vehicle Charging Services

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A. EVIDENCE

1.0 **Reference: FBC EVIDENCE**
Exhibit #C12-2, Section #2.6, p. #8-10
CURRENT REGULATORY 1 FRAMEWORK IN BC

1.1 Does FBC agree that all parties except municipalities and regional districts would be defined as public utilities if they wish to sell or operate DCFC charging stations?

FBC states, “In March 2017, amendments to the Greenhouse Gas Reduction (Clean Energy) Regulation (GGRR) **OIC 101-2017** established a number of prescribed undertakings pertaining to electrification in various sectors of the provincial economy, including the transportation sector.” [FBC C12-2, p.9]

1.2 Does FBC believe the Clean Energy Act is applicable in this instance – DCFC charging stations?

1.2.1 If not, then from where does FortisBC derive its mandate to provide DC fast charging services that have a financial risk for its ratepayers, but not for its investors? Please elaborate and explain.

1.3 Please provide a written legal opinion as to how the Clean Energy Act and its amendment applies in this instance, especially section 18 of the Clean Energy Act and sections 3 & 4 of the amendment (OIC 101).

FBC states,

“Section 4 of the GGRR (the electrification section) establishes a number of measures to promote the use of electricity for the purposes of reducing greenhouse gas (GHG) emissions. Projects or programs respecting technology that may enable a utility’s customers to use electricity instead of other sources of energy that produce more greenhouse gas emissions are considered to be a prescribed undertaking for the purposes of section 18 of the Clean Energy Act. Specifically, section 4(3) of the GGRR establishes several prescribed undertakings in subsections (a) through (e). Subsections (c) and (e) as follows, are those most pertinent to the EV Charging Service Inquiry...” [FBC C12-2, p.9]

1.4 Does FBC believe that providing DCFC charging stations are a prescribed undertaking?

1.5 If the DCFC charging stations are a prescribed undertaking, what is the role of the Commission related to the prescribed undertaking?

1.5.1 Please elaborate on the scope of the Commission’s involvement if it is a prescribed undertaking?

- 1.6 If the provision of DCFCs is determined to be a prescribed undertaking:
 - 1.6.1 What is the impact on the ratepayers?
 - 1.6.2 What are the costs of risks to the ratepayer for:
 - 1.6.2.1 Grid reinforcement?
 - 1.6.2.2 Cross-subsidization?
 - 1.6.2.3 Load shape and load demand changes?
- 1.7 What is the impact on the non-regulated businesses that may have provided the DCFC charging stations after obtaining an exemption from regulation?
- 1.8 Does FBC have a business case for the installation of DCFCs in their service area?
- 1.9 Has or will FBC provided a business case for the installation of DCFCs in their service area?
- 1.10 What is the estimated installation cost of a DCFC charging station in FBC's service area?
- 1.11 Other than the prescribed undertaking is there an urgent need for DCFC charging stations in its service area?
- 1.12 Currently, how many PHEVs and BEVs are estimated to be in FBC's service area?
- 1.13 How many DCFCs does FBC plan on installing or operating within its service area?
- 1.14 Does FBC believe that these stations can be operated at a profit or breakeven costs?

2.0 **Reference: CURRENT REGULATORY 1 FRAMEWORK IN BC
Exhibit C12-2, Section #, p. #
Municipal Exemption**

The exemption for municipalities and regional districts in item (c) above enables these entities to offer EV charging service at municipally-owned facilities, either free of charge or for compensation without Commission oversight of the rates or terms and conditions of service.[Exhibit C12-2, p.9]

- 2.1 In FBC's opinion, is a municipality still exempt from the UCA if it owns or operates a DCFC station through its municipal corporation or wholly owned government business enterprise (GBE)?

B. SCOPE A QUESTIONS

3.0 **Reference: Commission Question 1
Exhibit C12-2, pp. 11- 13
Competitive Environment**

FBC believes that the main barriers to the mass adoption of EVs for personal transportation are: concern by prospective EV buyers that they might not be able to make it to where they want to go or that they might not have charging infrastructure close by when needed, and the current number of EV owners (buyers) and estimated demand for EV Level 3 charging service does not support recovery of the infrastructure and service costs, particularly in the earlier years. [FBC C12-2, p. 12]

- 3.1 In what year does FBC believe mass adoption of EVs for personal transportation will occur within its service area?
- 3.2 In what year does FBC believe a 15% adoption rate for EVs for personal transportation will occur within its service area?
- 3.3 As location matters, will the non-regulated businesses be disadvantaged since all the preferred locations have been taken by the public utilities and therefore they may be even less likely to provide DCFCs with FBC's service area?
- 3.4 Provide Table 3.1 Station Ownership in BC populated with actual numbers instead of percentages.

4.0 **Reference: Commission Question 2
Exhibit C12-2, p. 13
EV Customers Captive or Choice**

- 4.1 Please explain why, from a cost/risk perspective, FBC believes the cost of EV charging service should be regulated and the related costs should be included in its utility rate base and cost of service.
- 4.2 Would FBC consider supplying the DCFC charging stations using its non-regulated business?
 - 4.2.1 If no, please explain why not?

5.0 **Reference: Commission Question 3
Exhibit C12-2, pp13-16
Regulation, & Benefits and Detriments**

The CPUC in its recent decisions has directed California's electric utilities to include EV charging infrastructure in their rate base and has allowed rate recovery from all ratepayers of any revenue shortfalls from these activities (or the refunding of surpluses when revenues exceed costs).[FBC C12-2, p. 15]

- 5.1 As per section 18(2) of the Clean Energy Act, can FBC collect sufficient revenue from its interim rate of \$9/hr to enable it to recover its costs in each fiscal year with respect to the prescribed undertaking?
 - 5.1.1 If not, what rate should the Commission establish so that FBC can recover its costs in each fiscal year with respect to the prescribed undertaking?
 - 5.1.2 Has the minister requested a report on the prescribed undertaking?

- 5.2 Is FBC aware of a recent Application #17-01-021¹ (Filed January 20, 2017) before the Public Utilities Commission of the State Of California by the Joint Response of the Alliance of Automobile Manufacturers and General Motors to Southern California Edison’s SB 350 Transportation Electrification Application?

In the Application, it states,

“The Alliance commissioned Crossborder Energy (CE) to study residential utility prices last year. The CE study found that Californians with flat-rate electricity rates (over 90% of Californians) would often pay more to charge their PEVs than they would pay to fuel a similar 40-mile per gallon gasoline vehicle. In fact, for every case but one, driving electric cost significantly more than driving one of many high-mileage gasoline cars.”

- 5.3 How does FBC propose the Commission set rates that are fair and just to the ratepayers if this situation occurs in BC?

C. SCOPE B QUESTIONS

- 6.0 **Reference: Commission Question 4
Exhibit C12-2, pp. 17-19
Traditional Cost of Service Model**

FBC states, “However, the rate itself needs to consider a reasonable recovery of the cost of service itself;...” [FBC C12-2, p.18]

- 6.1 If the prescribed undertaking requires cost recovery within each fiscal year, what does FBC mean by the term “reasonable recovery of the cost of service”?

In consideration of these factors, in the early years of implementation, it will be necessary for some recovery of costs to come from general ratepayers. Strict adherence to a cost-of-service model on a year-by-year basis may result in prohibitively high EV charging rates in the early years that would discourage EV customers from using the charging stations. [FBC C12-2, p.17]

and

Clean Energy Act: Greenhouse Gas Reduction

18 (1) In this section, "**prescribed undertaking**" means a project, program, contract or expenditure that is in a class of projects, programs, contracts or expenditures prescribed for the purpose of reducing greenhouse gas emissions in British Columbia.

¹ <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M179/K240/179240342.PDF>

(2) In setting rates under the *Utilities Commission Act* for a public utility carrying out a prescribed undertaking, the commission must set rates that allow the public utility to collect sufficient revenue in each fiscal year to enable it to recover its costs incurred with respect to the prescribed undertaking.

(3) The commission must not exercise a power under the *Utilities Commission Act* in a way that would directly or indirectly prevent a public utility referred to in subsection (2) from carrying out a prescribed undertaking.

(4) A public utility referred to in subsection (2) must submit to the minister, on the minister's request, a report respecting the prescribed undertaking.

(5) A report to be submitted under subsection (4) must include the information the minister specifies and be submitted in the form and by the time the minister specifies.

6.2 How does FBC propose the Commission create a rate (fair and just) that does not comply with section 18(2) of the Clean Energy Act?

6.3 How could FBC, through its non-regulated arm and Commission approved rates, provide these DCFCs to assist in the early years of implementation and avoid section 18(2) of the Clean Energy Act?

7.0 **Reference: Commission Question 5
Exhibit C12-2, p. 19
Existing Wholesale, Commercial Retail Rate or Some Other Rate**

FBC states, "This suggests using the same utility rate for electricity supply to the EV charging station whether there is utility or third party ownership of the station. The common rate would be for the cost of electricity in the EV charging service (i.e. an input cost). [FBC C12-2, p.19]

7.1 Is FBC proposing of capturing the following energy input costs to the DCFC stations:

7.1.1 kVA.hrs (includes Power Factor and Demand charges)?

7.1.2 harmonic correction?

7.1.3 grid reinforcement?

7.1.4 Connection costs?

8.0 **Reference: Commission Question 7
Exhibit C12-2, pp. 20-21
Cross Subsidization & Potentially Unduly Discriminatory Rates**

Depending on how demand materializes over the coming years, there is the potential for some cross-subsidization from other rate classes to support this new service. This needs to be balanced against the need to develop the EV market, to support government policy, and the potential for net benefits to be provided to other rate classes. . [FBC C12-2, p.20]

As discussed above, FBC's proposed rate to recover the capital and operating costs of its EV charging station service is based on the cost of service of stations, net of contributions in aid of construction received from other parties. It is likely that in early years of operation, costs will exceed revenues and could result in small deficits based on the conventional components of cost of service analysis. However, as the demand grows over the coming years, the service may generate a net benefit to general ratepayers over time. And when considering the potential for low carbon fuel credits, this could occur even in the early years. [FBC C12-2, p.20]

8.1 As the Clean Energy Act does not allow for this type of cost recovery, cost exceeding revenues, how does FBC propose to comply with the Clean Energy Act?

8.2 In what year does FBC envision, the service may generate a net profit to its general ratepayers? Because of this, FBC believes that the potential for significant cross-subsidization from other ratepayers is small. [FBC C12-2, p.20]

8.3 Based on the number of stations envisioned, what is the estimated amount in dollars referred to as being "small"?