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February 25, 2021

Attention: Mr. D.J. Flintoff

Dear Mr. Flintoff:

Re: FortisBC Inc. (FBC)

Project No. 1598940

**Application for Approval of Rate Design and Rates for Electric Vehicle (EV)
Direct Current Fast Charging (DCFC) Service – Revised Application dated
September 30, 2020 (Revised Application)**

Response to D.J. Flintoff (Flintoff) Information Request (IR) No. 2

On September 30, 2020, FBC filed the Revised Application referenced above. In accordance with BCUC Order G-33-21 setting out a further Regulatory Timetable for the review of the Revised Application, FBC respectfully submits the attached response to Flintoff IR No. 2.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC INC.

Original signed:

Diane Roy

Attachments

cc (email only): Commission Secretary
Registered Parties



FortisBC Inc. (FBC or the Company) Application for Approval of Rate Design and Rates for Electric Vehicle (EV) Direct Current Fast Charging (DCFC) Service (Application)	Submission Date: February 25, 2021
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8 **A. RATES**

9 **1.0 Reference: Rates**

10 **Exhibit #B-12, IR #1.1**

11 **Floating vs. Fixed Rates**

12 The risk of a negative or positive rate impact to other customers is offset by the benefit
13 of rate stability to EV charging customers and other rate design considerations as
14 discussed in response to BCUC IR1 7 .1.3.

15 Principle 7: Revenue stability.

16 The levelized EV rate will also help with revenue stability and predictability year over
17 year for FBC as demand will not be negatively impacted by increasing rates that may
18 discourage consumer use of the DCFC stations. The static nature of the EV rate will help
19 stabilize demand and provide improved revenue stability and predictability year over
20 year. [Exhibit B-7, IRI. 7 .1.3]

21 There is very little reason to provide rate stability to EV charging customers who would
22 otherwise be exposed to fluctuating gasoline prices to the disadvantage of other
23 customers, and therefore will most likely not discourage EV consumer use of DCFC
24 stations under Principle 7.

25 1.1 Considering the load profile of DCFC stations as compared to other customers
26 and because they are already metered stations, what are the discouraging
27 disadvantages to a floating rate for the charging energy when compared to
28 gasoline stations?

30 **Response:**

31 FBC disagrees with the premise in the third paragraph of the above preamble. In contrast to
32 gasoline powered vehicles and gas stations which have been well established for decades, EV
33 vehicles and charging are a relatively recent customer option for transportation and there are
34 barriers to their adoption that need to be overcome. The maintenance of a stable rate will
35 encourage use of the EV technology while not negatively impacting other customers over the
36 life of the program.

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1 **B. FLO SERVICES INC. (FLO)**

2 **2.0 Reference: Tier 2 Support**

3 **Exhibit #B-12, IR #3.5**

4 **Support**

5 For issues reported between 8 a.m. to 5 p.m. (Pacific Time) Monday through Friday
6 except for statutory holidays, Tier 1 support is provided within four hours from any
7 reported breakdown or malfunction, with Tier 2 support to be provided within four
8 business days when on-site presence is required. For issues reported from 5 p.m. to 8
9 a.m., all days including statutory holidays and weekends, Tier 1 support is provided
10 within 24 hours, with Tier 2 support provided within four business days.

11 2.1 Considering the DCFC stations may be in remote locations and be a necessary
12 charging station for an EV customer to reach a destination, the Tier 2 support
13 within four business days may not be desirable for those travelling to/from
14 weekend destinations during the winter. How are the EV customers advised
15 that the DCFC charging stations are out of service and the estimated distance to
16 the next operational station?
17

18 **Response:**

19 In the case of an unexpected station outage, Flo is notified over its network and automatically
20 updates the station status to “Unavailable”. This status is broadcast via API to the other
21 commonly used station-finding apps including Plugshare, BC Hydro, Chargepoint, and
22 Greenlots.

23 FBC works with Flo to provide more descriptive messaging (e.g., “out of service”) for the Flo app
24 as the cause and severity of the issue becomes known. However, as the Flo app has limited
25 messaging options regarding station status, FBC also uses the “Manager” feature in the
26 PlugShare app to broadcast out-of-service descriptive messaging during unexpected outage
27 events. The messaging generally includes the cause and estimated duration of the issue (if
28 known) and lists other fast charging stations nearby.

29 In the case of planned outages, FBC broadcasts out-of-service messaging in PlugShare days in
30 advance of the event to give drivers time to plan ahead. During the actual event, the station
31 status and icon are updated to “out of service” through the station status as set by Flo (and
32 broadcast via API).

33



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1 **C. PROVISION FOR LEVEL 4 DCFC**

2 **3.0 Reference: Level 4 DCFC**

3 **100/150/200kW DC Ultra-Fast Chargers**

4 I believe the charging units being provided are the AddEnergie Technologies,
5 SmartDC™ charging system - a direct current fast charger (DCFC) of 50 kilowatts

6 However, as the charger and EV market has evolved, there are now 100kW DC fast
7 chargers and 100/150/200kW DC Ultra-Fast Chargers becoming available. (Ionity EU
8 chargers)

9 3.1 Do the current charging stations have the capacity to be inexpensively converted
10 to 200kW charging without significant changes to the electric service/supply?

11
12 **Response:**

13 No, the current 50 kW DCFC stations cannot be converted to a higher kW delivery. To address
14 the need for faster chargers, FBC is currently in the process of deploying six 100 kW DCFC
15 stations.

16

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1 **D. COST OF DCFC CHARGING IN EU**

2 Some EU countries charge 0.79 €/min (or \$1.54 CND/min) for charging at the 350kW
3 charging stations and 0.39€/min (or 60C/min) for charging at the 50kW charging
4 stations. The ½ hour charge rate for the 50kW charging station would be \$18.00CND.

5 Ionity EU has announced its capability to bill by kWh.¹

6 3.2 As the EV market is in its infancy, how does FBC intend to manage these
7 changes and avoid early obsolescent factors that may lead to stranded assets?
8

9 **Response:**

10 After completion of the 2021 DCFC deployments, FBC does not have any additional planned
11 investments in public DC fast charging infrastructure (of any charging capacity).
12 FBC views its role in the EV charging market as an initial provider of infrastructure until such a
13 time as the market will support the entrance of additional private sector participants.
14 Undoubtedly, higher capacity stations will appear in the future; however, FBC believes that
15 vehicles which can only utilize the lower-priced 50 kW and 100 kW stations will be on the road
16 for some time to come. In other words, FBC does not believe there is risk of stranded assets as
17 the stations it operates will remain used and useful over the timeframe covered by the rates in
18 the Application.

19
20

21

22 3.3 Why should the regular customers be exposed to an obsolescent factor² as well
23 as the risk of stranded assets?
24

25 **Response:**

26 Please refer to the response to Flintoff IR2 3.2. FBC does not believe customers will be
27 exposed to an obsolescent factor or the risk of stranded assets as the stations it operates will
28 remain used and useful over the timeframe covered by the rates in the Application.

29

¹ <https://www.electrive.com/2020/01/16/ionity-launches-new-pricing-structure-based-on-kwh/>

² <https://www.transportenvironment.org/sites/te/files/publications/01%202020%20Draft%20TE%20Infrastructure%20Report%20Final.pdf>

1 **E. INFLATION**

2 **4.0 Reference: Inflation Rate**

3 **Exhibit B-1, Section 3.2.7, p. 14**

4 **Near-term Inflation Rate**

5 3.2.7 Inflation

6 Inflation is estimated at 2 percent for the purpose of this analysis. This compares
 7 reasonably with the Conference Board of Canada (CBOC) near-term forecast. Inflation is
 8 applied to O&M, property taxes and power purchase costs. Recently revised rates seem
 9 to indicate an inflation rate of 1.1% going forward.

10 4.1 Please provide updated information on the near-term forecast of inflation rates.

11 4.1.1 Please provide adjusted calculations based on any new or altered rates.

12 **Response:**

13
 14 The referenced preamble - Exhibit B-1, Section 3.2.7, p. 14 - is from FBC's original application
 15 filed in December 2017 and not the revised application filed in September 2020. Further,
 16 Section 3.2.7 of the original application does not include the last sentence of the preamble
 17 above, as FBC did not indicate an inflation rate of 1.1 percent going forward.

18 FBC interprets this information request as suggesting that recent inflation rate trends indicate an
 19 inflation rate of 1.1 percent going forward and asking FBC to provide updated information on the
 20 near-term forecast of inflation rates.

21 Please see the table below for a five-year forecast (2021-2025) of inflation rates (BC CPI) from
 22 the Conference Board of Canada (CBOC) and three Canadian chartered banks. Note that most
 23 publicly available BC CPI forecasts from Canadian chartered banks are up to and including
 24 2022 only. The five-year average of the 2021-2025 CBOC forecast is 2.08 percent and is
 25 generally in line with the 2 percent inflation forecast used by FBC in the EV charging rates. As
 26 such, FBC considers it appropriate to continue to use inflation of two percent annually for the
 27 financial analysis completed for the EV charging rates.

	2021F	2022F	2023F	2024F	2025F
Conference Board of Canada (CBOC)	1.8%	2.5%	2.1%	2.0%	2.0%
Royal Bank Canada	0.8%	1.8%	n/a	n/a	n/a
Scotiabank	1.5%	2.2%	n/a	n/a	n/a
BMO	1.6%	2.0%	n/a	n/a	n/a
Average	1.4%	2.1%	2.1%	2.0%	2.0%

28
 29 References:

- 30 • CBOC – <https://www.conferenceboard.ca/e-data/browsedirectories.aspx?did=21> (Available only
 31 with subscription)



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- 1 • Royal Bank Canada – [http://www.rbc.com/economics/economic-reports/pdf/provincial-](http://www.rbc.com/economics/economic-reports/pdf/provincial-forecasts/bc.pdf)
- 2 [forecasts/bc.pdf](http://www.rbc.com/economics/economic-reports/pdf/provincial-forecasts/bc.pdf)
- 3 • Scotiabank – [https://www.scotiabank.com/ca/en/about/economics/economics-](https://www.scotiabank.com/ca/en/about/economics/economics-publications/post.other-publications.the-provinces.british-columbia--october-15--2020-.html)
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- 5 • BMO – [https://economics.bmo.com/media/filer_public/a6/fd/a6fd81f1-71a6-4ecd-9fe7-](https://economics.bmo.com/media/filer_public/a6/fd/a6fd81f1-71a6-4ecd-9fe7-5e315121a778/outlookprovincial.pdf)
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