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ORDER NUMBER
G-176-24

IN THE MATTER OF
the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

FortisBC Inc.
Electric Vehicle Direct Current Fast Charging Energy-Based Rate

BEFORE:
M. Jaccard, Panel Chair
W. E. Royle, Commissioner

On June 28, 2024

ORDER

WHEREAS:

A. On December 22, 2023, FortisBC Inc. (FBC) applied to the British Columbia Utilities Commission (BCUC) for approval of its Electric Vehicle (EV) Direct Current Fast Charging Energy-Based Rate Application pursuant to sections 59 to 61 of the *Utilities Commission Act* (UCA) (Application);

B. In the Application, as updated by the evidentiary update dated March 12, 2024, FBC seeks the following:

   i. Approval to amend Rate Schedule (RS) 96 to implement an energy-based EV charging rate of $0.39 per kWh for service at FBC-owned fast charging 50 kW and 100 kW stations, which will replace the existing time-based rates;

   ii. Approval that the energy-based EV charging rate under RS 96 not be subject to general rate increases, unless otherwise directed by the BCUC;

   iii. Approval of an idling charge under RS 96 of $0.40 per minute that begins five minutes after the end of the charging session for service at FBC-owned fast charging 50 kW and 100 kW stations; and

   iv. Approval to establish a new rate base RS 96 Energy-Based Rate Application Cost deferral account to record the costs associated with regulatory review of the Application, with the amortization period of the deferral account to be determined in a future rate-setting proceeding;

C. By Decision and Order G-341-21 dated November 24, 2021 and Order G-350-21 dated November 30, 2021, the BCUC approved RS 96 which sets out time-based charging service rates at FBC-owned EV stations of $0.26 per minute for 50 kW stations and $0.54 per minute at 100 kW stations. By the same decision, the

BCUC directed FBC to apply for a dispensation from the *Electricity and Gas Inspection Act* to have the option to charge energy-based rates;

D. On March 15, 2024, FBC received temporary permission under Measurement Canada's temporary dispensation program to charge energy-based rates at all of its EV fast charging stations listed in the Application;

E. By Order G-17-24, the BCUC established a regulatory timetable for the review of the Application, which included public notice, letters of comment, intervener registration, one round of information requests to FBC and written final and reply arguments;

F. FBC requests that the Excel spreadsheet provided in confidential Exhibit B-4-1 and the Temporary Dispensation certificate granted by Measurement Canada provided in confidential Exhibit B-10-1 be held confidential due to their commercially sensitive nature; and

G. The BCUC has reviewed the Application, evidence and arguments filed in the proceeding and finds that the following determinations are warranted.

NOW THEREFORE pursuant to sections 59 to 61 of the UCA, for the reasons outlined in the decision accompanying this order, the BCUC orders as follows:

1. The energy-based rate of $0.39 per kWh under RS 96 for FBC's public EV fast charging service is approved on a permanent basis and it replaces the existing time-based rates when implemented, as directed by Directive 2 of this order. The approved energy-based public EV fast charging rate will not be subject to general rate changes, unless otherwise directed by the BCUC.

2. FBC is directed to implement the energy-based public EV fast charging rate on or before October 1, 2024.

3. The idling charge of $0.40 per minute that begins five minutes after the end of a charging session is approved to be implemented under RS 96.

4. FBC is directed to file the revised RS 96 tariff reflecting the energy-based public EV fast charging rate with the BCUC for endorsement at least 15 days prior to the effective date.

5. FBC is directed to file the revised RS 96 tariff reflecting the idling charge with the BCUC for endorsement at least 15 days prior to the effective date.

6. FBC is approved to establish the RS 96 Energy-Based Rate Application Cost rate base deferral account, to record the costs associated with the regulatory review of the Application, with the amortization period to be determined in a future rate-setting proceeding.

7. FBC is directed to file a monitoring and evaluation report of RS 96 by September 30, 2028.

8. The Excel spreadsheet and the Temporary Dispensation certificate granted by Measurement Canada to FBC will be held confidential, unless otherwise directed by the BCUC.

DATED at the City of Vancouver, in the Province of British Columbia, this 28th day of June 2024.

BY ORDER

Original signed by:

M. Jaccard
Commissioner

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Executive Summary

On December 22, 2023, FortisBC Inc. (FBC) applied to the British Columbia Utilities Commission (BCUC) for approval of its electric vehicle (EV) fast charging rate (Application). FBC seeks approval to implement an energy-based public EV fast charging rate of $0.39 per kilowatt hour (kWh) for its fast charging service at 50 kilowatt (kW) and 100 kW stations. Additionally, FBC also seeks approval of a $0.40 per minute idling charge and to establish a new deferral account to record the costs associated with the regulatory review of the Application. FBC currently owns 42 EV fast charging stations across 22 sites within its service territory, 34 of which are 50 kW and eight of which are 100 kW.

In 2021, the BCUC approved FBC's existing time-based EV charging rates of $0.26 per minute for 50 kW stations and $0.54 per minute for 100 kW stations, despite having found time-based rates discriminatory and energy-based rates desirable. At the time, meters dispensing electricity based on energy delivered had not yet been approved for use by Measurement Canada. On March 15, 2024, FBC received permission under Measurement Canada's temporary dispensation program to charge energy-based rates at all of its EV fast charging stations listed in the Application.

Six parties registered as interveners in this proceeding and the BCUC received one letter of comment from the public.

The proposed energy-based rate is designed to fully recover FBC's cost of service for its EV fast charging service from inception to 2033, on a levelized basis. Rate design is not a precise exercise, and it is based on assumptions that are subject to uncertainty. The Panel is persuaded that FBC's methodology is reasonable, including its key assumptions around the levelization period, station utilization, cost of electricity forecast, capital expenditures, operating and maintenance expense, and carbon credits. The Panel also finds that FBC's energy-based public EV fast charging rate of $0.39 per kWh is not under-cutting rates offered by comparable service providers in BC.

Therefore, the BCUC approves replacing the existing time-based rates with energy-based rates, at a rate of $0.39 per kWh, for FBC's public EV fast charging service. FBC is directed to implement the energy-based public EV fast charging rate on or before October 1, 2024.

The BCUC approves an idling charge of $0.40 per minute as proposed by FBC, with the effective date to be provided by FBC in a compliance filing. The introduction of an idling charge is to encourage efficient use of FBC's public EV fast chargers. FBC is also approved to establish a new deferral account to record the costs associated with the regulatory review of the Application.

1.0 Introduction

1.1 Application and Approvals Sought

On December 22, 2023, FortisBC Inc. (FBC) applied to the British Columbia Utilities Commission (BCUC) for approval of its Electric Vehicle (EV) Direct Current Fast Charging (DCFC) Energy-Based Rate pursuant to sections 59 to 61 of the *Utilities Commission Act* (Application). In the Application, as updated,[1] FBC seeks the following:

i. Approval to amend Rate Schedule (RS) 96 to implement an energy-based EV charging rate of $0.39 per kilowatt hour (kWh) for service at FBC-owned fast charging 50 kilowatt (kW) and 100 kW stations, which will replace the existing time-based rates;

ii. Approval that the energy-based EV charging rate under RS 96 not be subject to general rate increases, unless otherwise directed by the BCUC;

iii. Approval of an idling charge under RS 96 of $0.40 per minute that begins five minutes after the end of the charging session for service at FBC-owned fast charging 50 kW and 100 kW stations; and

iv. Approval to establish a new rate base RS 96 Energy-Based Rate Application Cost deferral account, to record the costs associated with regulatory review of the Application, with the amortization period of the deferral account to be determined in a future rate-setting proceeding.

1.2 Background

FBC currently owns 42 EV fast charging stations across 22 sites within its service territory, 34 of which are 50 kW and eight of which are 100 kW.[2] FBC's first fast charging stations were placed into service in 2018.[3] FBC applied to the BCUC for approval of EV charging rates in its 2017 Application for Approval of Rate Design and Rates for Electric Vehicle Direct Current Fast Charging Service. After approving the interim time-based rates effective January 2018, the BCUC adjourned the review of the 2017 application and conducted an inquiry into the regulation of EV charging service in British Columbia (BC) (EV Inquiry)[4] to canvass the regulatory matters related to EV rate design and rates.

In the EV Inquiry, the BCUC found that the EV charging market is not a monopoly because there is more than one service provider,[5] and while there are opportunities for the participation of non-exempt (i.e. regulated) public utilities[6] in the EV charging service market, regulatory oversight can help to mitigate ratepayer risk and potential impact on exempt public utilities.[7] In June 2020, the BC Government amended the Greenhouse Gas Reduction (Clean Energy) Regulation to define eligible EV charging stations as prescribed undertakings for the purposes of section 18 of the *Clean Energy Act* (CEA). Under the CEA, the BCUC is: i) required to set rates that allow public utilities to collect sufficient revenue to recover the costs incurred for implementing prescribed

[1] Exhibit B-1-1. On March 12, 2024, FBC filed an evidentiary update to reflect the impact of the new *Low Carbon Fuels Act*.
[2] Exhibit B-1, p. 7.
[3] Exhibit B-1, p. 8.
[4] BCUC Inquiry into the Regulation of Electric Vehicle Charging Service. Phase 1 of the EV Inquiry was completed in 2018 and it examined the BC's EV charging services market in general. Phase 2 of the inquiry was completed in 2019 and it reviewed the role of the non-exempt public utilities' participation in the EV charging services market and how they should be regulated, if at all.
[5] BCUC EV Charging Service Inquiry Phase 1 Report dated November 26, 2018, Section 3.5.
[6] EV charging services providers that are also a regulated public utility.
[7] BCUC EV Charging Service Inquiry Phase 2 Report dated June 24, 2019, Section 8.4.

undertakings; and ii) prohibited from exercising a power under the *Utilities Commission Act* in a way that would directly or indirectly prevent a public utility from carrying out a prescribed undertaking.[8]

In 2021, the BCUC approved FBC's current permanent time-based EV charging rates of $0.26 per minute for 50 kW stations and $0.54 per minute for 100 kW stations,[9] despite having found time-based rates discriminatory[10] and energy-based rates desirable.[11] At the time, meters dispensing electricity based on energy delivered had not yet been approved for use by Measurement Canada.

The BCUC directed FBC to apply to Measurement Canada for a dispensation from the *Electricity and Gas Inspection Act* to have the option to charge energy-based rates.[12] The BCUC also directed FBC to file a detailed assessment of the approved Rate Schedule 96, including alternative rate design options, on the earlier of December 31, 2022 or within 6 months of Measurement Canada's approval of energy-based metering for FBC.[13] In the assessment report filed on December 29, 2022, FBC committed to providing an updated assessment report or an application for energy-based rates by December 31, 2023, which is this Application.

In February 2023, Measurement Canada announced its temporary dispensation program for selected commercial EV charging devices to facilitate energy-based metering and billing by the providers.[14]

FBC submits that it received, on March 15, 2024, permission under Measurement Canada's temporary dispensation program to charge energy-based rates at all of its EV fast charging stations listed in the Application. This permission is valid until January 1, 2030, or until the devices are verified in accordance with the *Electricity and Gas Inspection Act* or are removed from service.[15]

1.3 Regulatory Process and Participants

The BCUC's review of the Application included public notice, one round of information requests (IRs), letters of comment and written final and reply arguments.[16] Six parties registered as interveners. The BCUC received one letter of comment from the public in support of the shift to energy-based rates, while discussing the rate level proposed by FBC.

2.0 Public EV Fast Charging Rate and Rate Design

2.1 Proposed Energy-Based Rate and Levelization Period

Further to the BCUC's 2021 EV Rates decision described in Section 1.2, FBC proposes to amend its existing RS 96 time-based rates[17] for its service at 50 kW ($0.26 per minute) and 100 kW ($0.54 per minute) EV fast charging stations. FBC proposes to implement a single, energy-based rate of $0.39 per kWh[18] for its service at all of its public EV fast charging stations.

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[8] *Clean Energy Act*, section 18 (2) to (3).
[9] Order G-350-21 dated November 30, 2021.
[10] Decision and Order G-341-21 dated November 24, 2021, p. 10. Due to the varying amount of electricity delivered in a timed charging session to an EV depending on various factors, such as the vehicle's charging capabilities, state-of-charge of the battery and temperature, the BCUC found the time-based EV charging rates discriminatory (although not unduly).
[11] Decision and Order G-341-21, p. 9.
[12] Decision and Order G-341-21, p. 10.
[13] Decision and Order G-341-21, p. 29.
[14] Exhibit B-1, p. 18.
[15] Exhibit B-10, Exhibit B-10-1. The temporary permission will remain valid until January 1, 2030 or until the devices: (i) are verified in accordance with the *Electricity and Gas Inspection Act*, or (ii) are removed from service.
[16] Order G-17-24 dated January 19, 2024.
[17] Decision and Order G-341-21 dated November 24, 2021, p. 24.
[18] Exhibit B-1-1, p. 1, p. 3.

FBC states that the proposed energy-based rate is based on the forecast cost of service for its EV fast charging stations, including actual costs from 2018 to 2023, and projected growth of EV sales in FBC's service area. The rate is set on a 10-year levelized basis to fully recover the forecast cost of service from 2024 to 2033. The original time-based rates were set on a levelized basis from 2018 to 2030 for 50 kW stations and from 2021 to 2030 for 100 kW stations, which mirrored the expected service life of EV fast charging stations of 10 years. Therefore, FBC submits that it is now proposing to reset the rates for its EV DCFC service with a new 10-year levelization period starting from 2024 until 2033.[19]

FBC proposes a common energy-based rate for its 50 kW and 100 kW EV fast charging stations rather than different rates for different power levels. FBC calculates that if rates were set based on the chargers' power levels, they would be $0.39 per kWh and $0.38 per kWh for 50 kW and 100 kW stations, respectively.[20]

FBC requests that the proposed energy-based rate not be subject to general rate increases as the rate is set on a 10-year levelized basis and is designed to fully recover the forecast cost of service.[21] FBC submits that a levelized cost-of-service rate that remains flat is easy to understand and provides rate stability for customers.[22]

FBC also provides a comparison of its proposed energy-based rate to those of other BC service providers, including those in its own service area.[23] In March 2024, the BCUC approved British Columbia Hydro and Power Authority's (BC Hydro) energy-based rates for public EV fast charging service of $0.34 per kWh for all fast charging station power levels.[24]

Positions of the Parties

None of the interveners oppose FBC's proposed transition from time-based rates to energy-based rates.

BCOAPO[25] submits that, if the proposed rate of $0.39 per kWh is fixed for ten years, it could under-cut other EV service providers' rates in the future and recommends the BCUC approve a fixed percentage annual rate increase from 2025 until 2032.[26] BCOAPO also submits that the levelization period should reflect the asset's service life, and should therefore not extend beyond 2032.[27]

Commercial Energy Consumers of BC (the CEC) recommends the proposed energy-based rate be subject to general rate increases as it expects that competitors will increase their rates over the next ten years.[28] Electrify Canada offers rates of $0.60 per kWh to $0.70 per kWh in BC which is higher than FBC's proposed rates. The CEC argues that a competitive EV fast charging rate may be in the range of $0.50 per kWh to $0.61 per kWh and that FBC's proposed rate should not, under any circumstance, be below Tesla's highest rate of $0.42 per kWh in FBC's service area.[29] The CEC also recommends setting a rate that more closely recovers the cost of service during early years to reduce risk to non-EV ratepayers, and that this rate could be reduced toward the end of the levelization period, if necessary. In response to FBC's calculation that the energy-based rate would increase to $0.61 per kWh if the levelization period were reduced to seven years to match the original levelization period

[19] Exhibit B-1, pp. 18–19.
[20] Exhibit B-1-1, pp. 30–31.
[21] Exhibit B-1, p. 4.
[22] Exhibit B-1, p. 29.
[23] Exhibit B-1, Table 2-5, p. 14.
[24] Order G-67-24.
[25] British Columbia Old Age Pensioners' Organization, Council of Senior Citizens' Organizations of BC, Active Support Against Poverty, Disability Alliance BC, and Tenant Resource & Advisory Centre (BCOAPO).
[26] BCOAPO Final Argument, pp. 16–19.
[27] BCOAPO Final Argument, p. 7.
[28] BCOAPO Final Argument, p. 7.
[29] CEC Final Argument, pp. 22–23.

(i.e. 2024 to 2030), the CEC states that this does not raise the risk of under-utilization of FBC's EV fast charging stations as "the requirements for charging service will increase over time."[30]

Donald Flintoff (Flintoff) also submits that the energy-based rate be subject to general rate increases.[31]

BC Sustainable Energy Association and Vancouver Electric Vehicle Association (BCSEA-VEVA) support FBC's proposal to reset the levelization period from 2024 to 2033.[32]

In reply to BCOAPO, the CEC and Flintoff, FBC reiterates that escalation factors are already embedded in the levelized rate and therefore, the energy-based rate should not be subject to general rate increases. FBC submits that this approach is consistent with the 2021 EV Rates Decision and enables a levelized rate that is easy for EV ratepayers to understand.[33]

In terms of the levelization period, FBC argues that if this were reduced to seven years, the increased rate of $0.61 per kWh would significantly raise the risk of under-utilization of its EV fast charging stations since other providers in FBC's service area would offer lower rates along with higher power stations.[34] In reply to BCOAPO, FBC argues that rates must be set so as to recover forecast costs, regardless of the levelization period.[35]

In reply to BCOAPO's concerns regarding under-cutting of rates, FBC submits that aside from BC Hydro's rate, there is no evidence available on whether rates of other service providers will increase, decrease or remain unchanged in the future.[36] Further, in reply to the CEC regarding Electrify Canada's rates, FBC submits the BCUC should disregard this new evidence as it was not previously presented on the record. FBC also points out that contrary to the CEC's view, FBC is not a price leader as it is still offering time-based rates at this time while competitors have switched to energy-based rates.[37]

Panel Determinations

The Panel approves FBC's request to replace the existing time-based rates with energy-based rates for FBC's public EV fast charging service.

The Panel accepts the levelization period of ten years, from 2024 to 2033, for all FBC's EV fast charging stations. The Panel accepts that the proposed energy-based public EV fast charging rate is designed to fully recover the cost of service of FBC's EV fast charging service from inception to 2033, including past surpluses or deficits from 2018 to 2023, and the forecast cost of service from 2024 to 2033. We find that there is no compelling evidence to suggest that resetting the levelization period to ten years is unreasonable or is inferior to other alternatives.

The Panel orders that the approved energy-based public EV fast charging rate will not be subject to general rate changes, unless otherwise directed by the BCUC. Some interveners propose that the levelized rate should be subject to general rate increases. Although parties focused on future general rate increases, any future general rate decrease should equally be considered. We note that the BCUC previously approved FBC's levelized approach for time-based rates with no general rate changes. This is because FBC already included escalation factors in the financial model for its rate calculation. FBC has applied the same method for the proposed the

[30] CEC Final Argument, pp. 9–11.
[31] Flintoff Final Argument, p. 4.
[32] BCSEA-VEVA Final Argument, p. 3.
[33] FBC Reply Argument, pp. 16–17.
[34] FBC Reply Argument, p. 7.
[35] FBC Reply Argument, p. 8.
[36] FBC Reply Argument, p. 6.
[37] FBC Reply Argument, pp. 3–4.

energy-based rate in this Application. Thus, we are not convinced that a change in methodology is warranted at this time.

Further, we are satisfied that FBC's energy-based public EV fast charging rate of $0.39 per kWh is not under-cutting rates offered by comparable service providers. FBC's rate is above BC Hydro's rate for fast charging service ($0.34 per kWh) and comparable to rates offered in FBC's service area by Charger Quest ($0.40 to $0.45 per kWh) and Tesla ($0.26 to $0.42 per kWh).

2.2 Cost of Electricity Forecast

FBC states that in order to forecast the cost of electricity in its cost-of-service models, it included the approved 2024 rate increase of 6.74 percent[38] and assumed further annual rate increases of 4 percent from 2025 to 2033.[39] FBC explains that if it assumed an annual rate increase of 2 percent (i.e. the assumption used in FBC's RS 96 Assessment Report[40]), the energy-based rate would decrease to $0.36 per kWh. However, FBC submits that based on its most recently approved rate increases, a 4 percent annual increase for the cost of electricity is appropriate.[41]

Positions of the Parties

The CEC considers that FBC's assumption of a 4 percent rate increase is only based on three years' data and there could be significant uncertainty related to this assumption over a 10-year levelization period. The CEC recommends the BCUC direct FBC to base its cost of electricity projections on "best information" that FBC can produce.[42]

In reply to the CEC, FBC acknowledges that there may be uncertainty related to this assumption over the 10-year levelization period, however, it states that it has based this assumption on the best information that it can produce (i.e. its most recently approved rate increases).[43]

Panel Determination

The Panel accepts FBC's proposal to apply a 4 percent rate increase to the cost of electricity in its cost-of-service models from 2025 to 2033 because it is based on the best information that FBC can produce, being its most recently approved rate increases.

2.3 Station Utilization Forecast

In the Application, FBC explains that consistent with the approach used to set the current time-based rates, the forecast of station utilization (i.e. number of minutes per year that customers use stations to charge their EVs) is based on the historical charging minutes in each station escalated by the growth rates of EV sales from 2024 to 2033. In order to develop growth rates of FBC's EV fast charging stations, FBC engaged Dunsky Energy + Climate Advisors (Dunsky) which provided a forecast of EV sales from 2023 to 2040 based on three scenarios: low growth, medium growth and high growth. FBC states that it applied the medium scenario growth rates in its rate model.[44] If the high growth scenario were adopted, the energy-based rate would decrease to $0.35 per kWh.[45]

[38] Decision and Order G-340-23 dated December 12, 2023.
[39] Decision and Order G-340-23 dated December 12, 2023.
[40] Compliance Filing submitted by FBC on December 29, 2022, in response to Order G-341-21 dated November 24, 2021.
[41] Exhibit B-4, BCUC IR 5.3.
[42] CEC Final Argument, pp. 15–16.
[43] FBC Reply Argument, pp. 13–14.
[44] Exhibit B-1, pp. 19–21.
[45] Exhibit B-7, CEC IR 6.2.

FBC also assumes the maximum utilization that its EV stations can reach is 54 percent, based on its analysis of historical average usage over a 24-hour period at its EV fast charging stations from 2018 to 2023. This is due to limited usage of its stations during overnight hours. Further, based on FBC's analysis, peak charging hours are between 8 AM and 7 PM.[46]

Positions of the Parties

BCOAPO submits that use of forecast increase in total EV registrations is a better measure to predict change in EV fast charging station usage, as opposed to FBC's use of forecast increase in EV sales. Further, BCOAPO does not agree with FBC's assumption that growth in EV fast charging station utilization will match growth in EV sales as it expects FBC's market share to decline in the future. BCOAPO also views FBC's use of 54 percent as the maximum utilization rate for its EV fast charging stations as "overly optimistic".[47]

The CEC views Dunsky's high growth scenario as more reflective of current EV adoption trends given the federal government's mandate for all new vehicles to be zero-emission by 2035, and recommends the BCUC direct FBC to adopt the high growth scenario for its cost-of-service analysis.[48]

In reply to BCOAPO's concern about using EV registrations versus EV sales for predicting EV fast charging station usage, FBC argues that there is no impact on the station utilization forecast as it is based on historical charging minutes escalated by growth rates of EV sales. BCOAPO's prediction that FBC's market share will decline in the future is not supported by any evidence. The maximum utilization rate of 54 percent is based on actual historical data.[49]

In reply to the CEC, FBC states that it considered both the medium and high growth scenarios. While it could have adopted the high growth scenario for setting its energy-based rate, it adopted the medium growth scenario as it makes less aggressive assumptions about the growth of EVs.[50]

Panel Determinations

The Panel accepts the medium growth scenario adopted by FBC as a reasonable assumption in setting the energy-based public EV fast charging rate. We accept FBC's medium growth assumption because it is largely based on current incentives and regulations. If policies related to EV adoption change, we expect FBC to assess them and align with those changes in future monitoring and evaluation.

The Panel acknowledges that there are alternatives to forecast charging station utilization, and there may be other contributing factors beyond forecast EV sales or EV registrations. However, the Panel finds no evidence to reasonably refute FBC's assumption. Therefore, we accept FBC's method of using forecast increase in EV sales as a method of estimating EV fast charging station usage.

2.4 Carbon Credit Revenue

In the Application, FBC uses a market price of $500 per credit for carbon credits related to EV stations until 2025. From 2026 until 2033, FBC assumes and applies a 10-percent downward adjustment to this market price. As of November 2023, the market price is $496.83 per credit.[51] FBC explains that it does not believe that the market

[46] Exhibit B-1, pp. 20–21.; Exhibit B-4, BCUC IR 4.2.
[47] BCOAPO Final Argument, pp. 8–12.
[48] CEC Final Argument, pp. 12–14.
[49] FBC Reply Argument, pp. 11–13.
[50] FBC Reply Argument, pp. 10–11.
[51] Exhibit B-1, p. 27.

price of carbon credits will remain close to the $500 per credit level over the next ten years as greenhouse gas emission reduction targets will reduce the demand of these credits. As part of the 2024 Annual Review, FBC states that it monetized a total of 1,337 credits related to its EV fast charging service in 2022 at a price of $450 per credit.[52] Effective January 1, 2023, the penalty for non-compliance is $600 per credit.[53]

FBC provides the following analysis in relation to the sensitivity of the energy-based rate to the carbon credit price assumption:

Table 1: Energy-Based Rate Sensitivity to Carbon Credit Price[54]

Scenario	Energy-Based Rate
$500 per credit and 10% annual decline from 2026 to 2033	$0.39 per kWh (proposed)
$500 per credit	$0.10 per kWh
$600 per credit	$0.00 per kWh (free)
$200 per credit	$0.53 per kWh

Positions of the Parties

BCOAPO submits that the total carbon credit revenue should be reduced as only the carbon credit revenue generated by FBC-owned EV fast charging stations (and not those generated by stations owned by other parties) should be included in the calculation of the historical cumulative surplus/deficit associated with EV fast charging stations. Per BCOAPO's calculation, the carbon credit revenue in 2022 of $743,947 would be reduced to $139,145.[55]

Residential Consumer Intervener Association (RCIA) notes that FBC has not provided a strong rationale for the carbon credit price path in its cost-of-service model, and submits that routine monitoring of cost recovery is necessary to prevent cross-subsidization by other FBC customers.[56]

The CEC submits that it is satisfied with FBC's assessment of carbon credits and its impact on the cost of service.

In reply to BCOAPO, FBC argues that its approach of including all carbon credit revenue (i.e. not limited to FBC-owned EV fast charging stations) is consistent with the 2021 Decision, and states that BCOAPO's suggestion to alter the cumulative surplus or deficit would result in an inaccurate calculation. FBC submits that from 2022 onward, the carbon credit revenue is from its own charging stations only, which makes this a historical issue.[57]

In reply to the RCIA's concerns around monitoring of cost recovery and cross-subsidization, FBC states that these concerns can be addressed through monitoring and evaluation. (see Section 2.7).

Panel Determinations

[52] FBC Reply Argument, pp. 10–11.
[53] Exhibit B-4, BCUC IR 6.1.; Order in Council No. 689/2022 dated December 20, 2022; Order in Council No. 699/2023 dated December 11, 2023.
[54] Exhibit B-7, CEC IR 11.1. Table prepared by BCUC Staff.
[55] BCOAPO Final Argument, p. 15.
[56] RCIA Final Argument, p. 6.
[57] FBC Reply Argument, pp. 14–15.

The Panel accepts FBC's input assumption for the carbon credit price, specifically, $500 per carbon credit until 2025 and a 10 percent annual downward adjustment to this price from 2026 until 2033.

As shown in Table 1 above, the energy-based public EV fast charging rate is very sensitive to the carbon credit market price assumption. However, since the carbon credit revenue is eventually a flow-through to all ratepayers in future rate proceedings, the Panel does not consider it necessary at this time to make any adjustments to FBC's input assumption for the carbon credit price. While it is difficult to forecast the trajectory of carbon credit market prices, we acknowledge that FBC's assumption incorporates current market pricing of $500 per credit as a starting point. We are also satisfied that FBC will routinely monitor cost recovery for its EV fast charging stations (see discussion in Section 2.7), in response to concerns about cross-subsidization.

BCOAPO submits that the carbon credit revenue included in the calculation of the historical cumulative surplus or deficit associated with these charging stations should be significantly lower. However, we are satisfied that FBC's calculation is consistent with the 2021 EV Rates Decision, and note that from 2022 onward, FBC's carbon credit revenue pertains to FBC-owned stations only.

2.5 Implementation of Energy-Based Rate

FBC states that its network service provider, FLO Services Inc. (FLO), requires approximately four weeks to transition FBC's charging stations to an energy-based rate. FBC would then be able to implement the energy-based rate, if approved, on the first day of the month following completion of FLO's work. FBC submits that it will file a compliance filing with the BCUC at least 15 days prior to the effective date for energy-based rate for RS 96 tariff endorsement.[58] None of the interveners specifically commented on this issue in their submissions.

Panel Determination

The Panel finds FBC's proposed timeframe to implement the energy-based public EV fast charging rate reasonable and directs FBC to implement the rate on or before October 1, 2024.

2.6 Idling Charge

In addition to the energy-based rate, FBC proposes introducing an idling charge of $0.40 per minute after a 5-minute grace period. The purpose of an idling charge is to ensure efficient use of EV charging stations by encouraging customers to move their vehicle after the end of a charging session[59] to avoid congestion at the charging station.[60] FBC expects the issue of congestion to become more prevalent with increasing adoption of EVs and subsequent increased utilization of its charging stations.[61] FBC expects the idling charge to generate limited revenue that will be captured as a flow-through in FBC's revenue requirements.[62]

FBC submits that its proposed idling charge is consistent with other service providers in BC that have also implemented an idling charge, including BC Hydro.[63] FBC submits that due to system limitations, FLO has indicated that the idling charge cannot be implemented until the system upgrades needed to move to an energy-based rate are in place.[64] The idling charge is not expected to be implemented until late 2024.[65] As such,

[58] FBC Final Argument, pp. 10–11.
[59] FBC defines the end of a charging session as "when electricity stops being delivered to the electric vehicle by the FortisBC-owned DCFC station." (Exhibit B-4, BCUC IR 9.1)
[60] Exhibit B-1, p. 14.
[61] Ibid.
[62] Ibid.
[63] Exhibit B-1, p. 33; Decision and Order G-67-24, p. 24.
[64] Exhibit B-1, p. 33.
[65] Exhibit B-1, pp. 4 and 33.

FBC is not seeking approval of an effective date to implement the proposed idling charge and will file a compliance filing with a revised RS 96 tariff for BCUC endorsement, at least 15 days prior to the effective date.[66]

Positions of the Parties

The CEC, BCOAPO and BCSEA-VEVA support the FBC idling charge design in their arguments.

Flintoff emphasizes the importance of ensuring availability at charging stations and endorses the implementation of measures to address potential congestion and promote charger turnover.[67] He submits the idling charge should be a step-rate starting at $0.40 after a 5-minute grace period, doubling every half-hour after the grace period with the possibility of towing after 2 hours.[68]

In reply, FBC states Flintoff's proposal is out of step with the idling charges currently in effect in BC[69] and notes there is no evidence to suggest that its proposed idling charge will be ineffective in reducing potential future congestion.[70] FBC may seek adjustments to the idling charge in the future as appropriate.[71]

Panel Determinations

The Panel approves an idling charge of $0.40 per minute that begins five minutes after the end of a charging session. FBC is directed to file revised RS 96 tariff reflecting the idling charge with the BCUC for endorsement at least 15 days prior to the effective date. The Panel accepts that an idling charge could encourage efficient use of FBC's public EV fast chargers. We are also persuaded that it is not worthwhile to forecast idling charge revenue in FBC's rate model at this time, given the uncertainty around forecasting this revenue. Further, if implemented successfully, any idling charge revenue should be minimal and will be flowed through to offset costs in future rate proceedings.

2.7 Monitoring and Evaluation

In the Application, FBC states that for future reporting of its energy-based rate, it will include an evaluation of any additional EV charging stations, and discussions on utilization in terms of charging minutes, revenue, carbon credits, and operation and maintenance (O&M) and capital expenditure forecasts in its rate setting proceedings.[72] FBC also submits that it will discuss adjustments, if necessary, to its proposed energy-based rate prior to the end of the 10-year levelization period[73] as part of its annual reviews or revenue requirement proceedings.

Positions of the Parties

BCOAPO submits that in addition to FBC's proposals on future reporting, FBC should a) identify any changes that could impact revenues or costs in future years and b) regularly report on comparative rates being charged by competitors in its service area.[74] RCIA recommends that FBC regularly monitor the proposed rate to ensure cost recovery remains consistent.[75]

[66] Exhibit B-1, p. 5.
[67] Flintoff Final Argument p. 3.
[68] Ibid.
[69] FBC Reply Argument, p. 19.
[70] Ibid., pp. 19–20.
[71] FBC Reply Argument, p. 20.
[72] Exhibit B-1, p. 36.
[73] Exhibit B-9, RCIA IR 7.1, 7.2.
[74] BCOAPO Final Argument, p. 22.
[75] RCIA Final Argument, pp. 6–7.

In reply, FBC submits that it agrees with the BCOAPO's recommendations for future reporting and argues that its future reporting proposals satisfy RCIA's concerns.[76]

Panel Determination

FBC is directed to file a monitoring and evaluation report of RS 96 by September 30, 2028, which must include the items specified in Appendix A to this decision.

2.8 Overall Determination

The Panel approves the proposed energy-based public EV fast charging rate of $0.39 per kWh under RS 96 for FBC's public EV fast charging service, on a permanent basis. FBC is directed to file the revised RS 96 tariff reflecting the energy-based public EV fast charging rate with the BCUC for endorsement at least 15 days prior to the effective date. The approved energy-based rate replaces the existing time-based rates when implemented, as directed in Section 2.5 of this decision.

The Panel finds that FBC has adopted an appropriate rate design and has developed an energy-based rate that is designed to fully recover the forecast cost of service. We recognize that rate design is not a precise exercise, and that it is based on assumptions that are subject to uncertainty. We are persuaded that FBC's methodology is reasonable, including its key assumptions around the levelization period, station utilization, cost of electricity forecast, capital expenditures, O&M expense, and carbon credits. It is appropriate for FBC to set the energy-based public EV fast charging rate on a levelized basis, which provides customers stability in their EV charging costs. Further, we are satisfied that FBC's energy-based public EV fast charging rate of $0.39 per kWh is not under-cutting rates offered by comparable service providers.

3.0 Other Matters

3.1 RS 96 Energy-Based Rate Application Cost Deferral Account

FBC is seeking approval to establish the RS 96 Energy-Based Rate Application Cost rate base deferral account, to capture approximately $150,000 in costs associated with regulatory review of the Application (including BCUC costs, Participant Cost Award funding and external legal fees). FBC proposes that the amortization period for this deferral account be determined in a future rate-setting application.[77] In terms of recovery, FBC proposes that these costs be recovered from its other (non-EV) customers, to mitigate the potential for non-EV customers to bear costs of under-recoveries. FBC submits that this approach is consistent with its previous EV fast charging service applications.[78]

Positions of the Parties

None of the interveners objected to FBC's proposed deferral account and amortization plan. However, of the parties that commented on this issue, two opposed FBC's proposed method of cost recovery and one expressed support. The CEC[79] and Flintoff[80] submit that regulatory costs pertaining to the Application should be recovered from FBC's EV customers because non-EV customers should not bear costs associated with the EV charging rate, and recommend that the BCUC direct FBC to include these costs in the cost-of-service analysis. Further, the CEC supports the establishment of the proposed deferral account but only to the extent that the costs are recovered

[76] FBC Reply Argument, p. 18.
[77] Exhibit B-1, pp. 4–5.
[78] Exhibit B-5, BCOAPO IR 3.2.1.
[79] CEC Final Argument, p. 17.
[80] Flintoff Final Argument, p. 4.

from EV ratepayers.[81] BCSEA-VEVA, however, agree with FBC that it is reasonable and consistent to recover regulatory proceeding costs for this Application through rates from all FBC's customers.[82]

In reply, FBC argues that the CEC and Flintoff's suggestions do not match the BCUC-approved approach in past proceedings and submits that these costs should be recovered from non-EV customers since all customers have an interest in the proceeding.[83]

Panel Determinations

The Panel approves the RS 96 Energy-Based Rate Application Cost rate base deferral account, to record costs associated with regulatory review of the Application, with the amortization period to be determined in a future rate-setting proceeding. We accept that the proposed deferral account provides consistent treatment with FBC's other regulatory proceeding cost deferral accounts and that it is appropriate for FBC to recover regulatory costs from all FBC customers.

3.2 Confidentiality

FBC requests that the Excel spreadsheet provided in confidential Exhibit B-4-1 and the Temporary Dispensation certificate granted by Measurement Canada provided in confidential Exhibit B-10-1 be held confidential pursuant to section 18 of the BCUC's Rules of Practice and Procedure.[84] FBC submits the Excel spreadsheet includes commercially sensitive information regarding performance and utilization of FBC's EV fast charging service for each individual station, which, if published, could jeopardize the market competitiveness of each individual station.[85] The Temporary Dispensation certificate contains commercially sensitive information and if disclosed publicly, poses a risk of unauthorized replication or use.[86]

Panel Determinations

The Panel accepts that publication of the Excel spreadsheet in Exhibit B-4-1 could jeopardize the market competitiveness of FBC's charging stations. The Temporary Dispensation certificate in Exhibit B-10-1 contains commercially sensitive information which may be harmful to FBC if publicly released. **Therefore, unless otherwise directed by the BCUC, the Panel orders the Excel spreadsheet and the Temporary Dispensation certificate granted by Measurement Canada be held confidential.**

DATED at the City of Vancouver, in the Province of British Columbia, this 28th day of June 2024.

Original signed by:

_____

M. Jaccard
Panel Chair/Commissioner

Original signed by:

_____

[81] CEC Final Argument, p. 20.
[82] BCSEA-VEVA Final Argument, pp. 6–7.
[83] FBC Reply Argument, p. 20.
[84] Order G-72-23 dated April 3, 2023.
[85] Exhibit B-4, p. 1.
[86] Exhibit B-10, p. 1.

W. E. Royle
Commissioner

FortisBC Inc.
Electric Vehicle Direct Current Fast Charging Energy-Based Rate

ITEMS TO BE INCLUDED IN THE RATE SCHEDULE 96 MONITORING AND EVALUATION REPORT

The monitoring and evaluation report of Rate Schedule 96 which FortisBC Inc. (FBC) is directed to file with the British Columbia Utilities Commission by September 30, 2028, in accordance with Directive 7 of Order G-176-24, must include the following:

1. Assessment on whether and how the existing public electric vehicle (EV) fast charging rate is ensuring recovery of FBC's cost of service, and whether any rate adjustments is necessary prior to end of the 10-year levelization period.
2. Assessment on actual versus forecast for key assumptions, including station utilization and factors affecting utilization, energy costs, carbon credit revenue, actual service life of fast charging stations.
3. Discussion on how the existing FBC public EV fast charging rate compares relative to the market, including information on the rates being charged by other service providers in FBC's service area.
4. Evaluation of the idling charge.
5. Assessment of technological changes, such as the adoption of the North American Charging Standard (NACS) connectors and cost impact of retrofitting FBC's charging stations.
6. Discussion on FBC's plans for additional EV charging stations, with consideration for location, design, and costs to comply with applicable accessibility guidelines or standards.

FortisBC Inc.
Electric Vehicle Direct Current Fast Charging Energy-Based Rate

LIST OF ACRONYMS

Acronym	Description
BC Hydro	British Columbia Hydro and Power Authority
BCOAPO	British Columbia Old Age Pensioners' Organization, Council of Senior Citizens' Organizations of BC, Active Support Against Poverty, Disability Alliance BC, and Tenant Resource & Advisory Centre
BCSEA-VEVA	BC Sustainable Energy Association and Vancouver Electric Vehicle Association
BCUC	British Columbia Utilities Commission
CEA	*Clean Energy Act*
The CEC	Commercial Energy Consumers of BC
DCFC	direct current fast charging
Dunsky	Dunsky Energy + Climate Advisors
EV	electric vehicle
FBC	FortisBC Inc.
Flintoff	Donald Flintoff
FLO	FLO Services Inc.
NACS	North American Charging Standard
O&M	operation and maintenance
RCIA	Residential Consumer Intervener Association
RS	rate schedule

FortisBC Inc.
Electric Vehicle Direct Current Fast Charging Energy-Based Rate

EXHIBIT LIST

Exhibit No. **Description**

COMMISSION DOCUMENTS

A-1	Letter dated January 4, 2024 - Appointing the Panel for the review of FortisBC Inc. Electric Vehicle Direct Current Fast Charging Energy-Based Rate Application
A-2	Letter dated January 19, 2024 - BCUC Order G-17-24 establishing a regulatory timetable
A-3	Letter dated February 13, 2024 – BCUC Information Request No. 1 to FBC

APPLICANT DOCUMENTS

B-1	**FORTISBC INC. (FBC)** - Electric Vehicle (EV) Direct Current Fast Charging (DCFC) Energy-Based Rate Application dated December 22, 2023
B-1-1	Letter dated March 12, 2024 – FBC submitting Evidentiary Update to the Application
B-2	Letter dated January 29, 2024 – FBC submitting Public Notice confirmation in compliance with Order G-17-24
B-3	Letter dated February 12, 2024 – FBC submitting Public Notice confirmation in compliance with Order G-17-24
B-4	Letter dated March 12, 2024 – FBC submitting responses to BCUC Information Request No. 1
B-4-1	**CONFIDENTIAL** - Letter dated March 12, 2024 – FBC submitting confidential attachment to responses to BCUC Information Request No. 1
B-5	Letter dated March 12, 2024 – FBC submitting responses to BCOAPO Information Request No. 1
B-6	Letter dated March 12, 2024 – FBC submitting responses to BCSEA-VEVA Information Request No. 1

B-7	Letter dated March 12, 2024 – FBC submitting responses to CEC Information Request No. 1
B-8	Letter dated March 12, 2024 – FBC submitting responses to Flintoff Information Request No. 1
B-9	Letter dated March 12, 2024 – FBC submitting responses to RCIA Information Request No. 1
B-10	**PUBLIC -** March 18, 2024 – FBC submitting confirmation of MCs granting of Temporary Dispensation
B-10-1	**CONFIDENTIAL -** March 18, 2024 – FBC submitting confirmation of MCs granting of Temporary Dispensation

INTERVENER DOCUMENTS

C1-1	**BRITISH COLUMBIA OLD AGE PENSIONERS' ORGANIZATION, COUNCIL OF SENIOR CITIZENS' ORGANIZATIONS OF BC, ACTIVE SUPPORT AGAINST POVERTY, DISABILITY ALLIANCE BC, AND TENANT RESOURCE AND ADVISORY CENTRE (BCOAPO**) – Letter dated January 25, 2024 submitting request to intervene by Irina Mis
C1-2	Letter dated February 20, 2024 – BCOAPO submitting Information Request No. 1 to FBC
C2-1	**BRITISH COLUMBIA HYDRO AND POWER AUTHORITY (BC HYDRO)** – Letter dated January 29, 2024 submitting request to intervene by Chris Sandve
C3-1	**BC SUSTAINABLE ENERGY ASSOCIATION AND VANCOUVER ELECTRIC VEHICLE ASSOCIATION (BCSEA-VEVA)** - Letter dated February 6, 2024 submitting request to intervene by Thomas Hackney
C3-2	Letter dated February 20, 2024 – BCSEA-VEVA submitting Information Request No. 1 to FBC
C4-1	**RESIDENTIAL CONSUMER INTERVENER ASSOCIATION (RCIA) –** Letter dated February 7, 2024 submitting request to intervene by Abdulrahman Abomazid
C4-2	Letter dated February 20, 2024 – RCIA submitting Information Request No. 1 to FBC
C5-1	**FLINTOFF, DONALD (FLINTOFF) –** Letter dated February 9, 2024 submitting request to intervene

C5-2	Letter dated February 20, 2024 – Flintoff submitting Information Request No. 1 to FBC
C6-1	**COMMERCIAL ENERGY CONSUMERS OF BC (CEC) –** Letter dated February 9, 2024 submitting request to intervene by David Craig
C6-2	Letter dated February 20, 2024 – CEC submitting Information Request No. 1 to FBC

LETTERS OF COMMENT

D-1	VAN WIJK, M. (VAN WIJK) – Letter of Comment dated January 23, 2024