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May 13, 2022

British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, BC
V6Z 2N3

Attention: Mr. Patrick Wruck, Commission Secretary

Dear Mr. Wruck:

Re: FortisBC Inc. (FBC

Application for Approval of a Deferral Account for Electric Vehicle Workplace and Fleet Charging Funding

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FBC attaches for review by the British Columbia Utilities Commission (BCUC) FBC's Application for Approval of the Electric Vehicle Workplace and Fleet Charging Funding Deferral Account.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC INC.

Original signed:

Diane Roy

Attachments

cc (email only): Registered Interveners in:

- FBC EV DCFC Charging Service proceeding
- FBC Annual Review of 2022 Rates proceeding

FortisBC Inc.

Application for Approval of the Electric Vehicle Workplace and Fleet Charging Funding Deferral Account

May 13, 2022

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1. PURPOSE OF THE APPLICATION AND APPROVALS SOUGHT

1.1 *DESCRIPTION OF THE FBC ELECTRIC VEHICLE WORKPLACE AND FLEET CHARGING PROGRAM*

1.1.1 Introduction

The FBC Electric Vehicle (EV) Workplace and Fleet Charging Program (Program) will provide funding to organizations to assist in the acquisition and installation of EV charging infrastructure to encourage the use of electric vehicles instead of vehicles that use other sources of energy that produce more greenhouse gas emissions, such as gasoline or diesel fuel. FBC is proposing to offer a one-time, non-repayable contribution towards the purchase and installation of Level 2[1] EV chargers for customer fleet and employee workplace charging. The FBC contribution will be $2,150 per Level 2 EV charger and will be capped at seven chargers per site. Applicants will also be required, for each metered charging site, to generate minimum billing revenues per incented charging station on an annual basis.

EV charging infrastructure for either light-duty[2] fleet vehicle or workplace charging for employees is not yet widely available within FBC's service territory. As EV adoption continues to progress and accelerate, the availability of this infrastructure will become increasingly important. Drivers and fleet operators will be looking for additional charging options and the barriers related to the deployment of infrastructure to support light-duty EV charging for fleets and employee workplace charging will need to be addressed. Transportation currently accounts for 37 percent of the province's greenhouse gas emissions. As a utility with operations throughout the BC Southern Interior, FBC is well positioned to support investment in EV charging infrastructure where challenging economics may discourage private investment.

With the recently released updated CleanBC Roadmap to 2030, and the stated target of 90 percent of all new light-duty vehicle sales being zero emission vehicles (ZEV) by 2030, the need to remove barriers associated with EV charging will become increasingly important to give consumers confidence in the value of their EV investment. The Program will offer contributions that are in addition to funding available through the Zero Emission Vehicle Infrastructure Program (ZEVIP) cost-sharing contribution agreements, and rebates available through the CleanBC Go Electric program. Information on the ZEVIP and CleanBC Go Electric program is provided in Section 2.2 below.

1.1.2 Basis and Assumptions

The Program is designed to be a prescribed undertaking pursuant to section 18 of the *Clean Energy Act* (CEA) by meeting the requirements of the undertaking prescribed in section 4 of the *Greenhouse Gas Reduction (Clean Energy) Regulation* (GGRR).

[1] Level 1 charging uses a common 120-volt household outlet, adding 5-8 km of range per hour to an EV. Level 2 charging is the most commonly used for daily EV charging, adding 20-130 km of range per hour.

[2] Per the Zero-Emission Vehicles Regulation (Order in Council No. 448), "light-duty motor vehicle" means a motor vehicle with a gross vehicle weight rating of 3 856 kg or less.

The FBC contribution of $2,150 per Level 2 EV charger has been set such that, based on reasonable assumptions, the Program satisfies the cost-effective test as required under section 4 of the GGRR. These reasonable assumptions are:

- That each charger will have an annual energy requirement of 2,500 kWh, based on a light-duty EV vehicle driven for 10,000 km annually at 0.25 kWh per km;
- An average of four Level 2 chargers per applicant, based on customer outreach;
- Fifty applicants in year 1 (four chargers per applicant), with annual growth equal to the anticipated growth rate of EV registrations in the FBC service area; and
- The Program will be offered in 2022 through 2025.

FBC consulted five organizations regarding potential deployment of workplace and light-duty fleet Level 2 chargers. All chargers are likely to qualify for ZEVIP and CleanBC funding in addition to funding through the Program. Although firm commitments have not been made, there is a high level of interest in deploying Level 2 charging infrastructure.

1.1.3 Funding Timeline and Total Program Expenditure

The following table summarizes the funds anticipated to be contributed by FBC throughout the duration of the Program, and also shows the anticipated number of applications each year.

Table 1: Funding Timeline and Program Expenditure

Line		Reference	2022	2023	2024	2025	Total
1	New Applications		50	67	86	107	310
2	Number of Chargers per Applicant		4	4	4	4	
3	Incentive Paid Per Charger		$ 2,150	$ 2,150	$ 2,150	$ 2,150	
4	Yearly Program Expenditure	Line 1 x Line 2 x Line 3	$ 430,000	$ 576,200	$ 739,600	$ 920,200	2,666,000

Although it is anticipated that funds will be allocated as shown within these years, the actual funding is dependent on the number of applications received in a given year. FBC forecasts that it will receive 50 applications in year 2022 and that number will grow by the growth rate of EV registrations in the FBC service area. The growth rate of EV registrations in the FBC service area for 2023-2025 used in Table 1 is also the growth rate used in calculating the FBC EV DCFC station rates approved by BCUC Order G-350-21.

The annual energy consumption and peak demand per charger are key assumptions that underpin the derivation of the Program funding amount. As such, Program participants will be billed at minimum for the revenue that the assumed consumption and demand per charger would yield on an annual basis. In the case where a charging station yields less than this amount of revenue within a one-year period from the energization date, a one-time charge for the shortfall will be billed. Where a customer has more than one charger served from a common metering point, the fixed obligation will be based on the number of chargers. This minimum revenue requirement is intended to incent the Program participants to encourage the efficient usage of the EV charging infrastructure installed under the Program.

1.2 *APPROVALS SOUGHT*

FBC seeks approval of a non-rate base deferral account (EV Fleet and Workplace Charging Funding Account), attracting allowance for funds used during construction (AFUDC), to capture all costs incurred to implement the undertaking, including the funding itself, as well as administration, and regulatory proceeding costs. This account is to be transferred to rate base, on January 1 of the following year after approval of this Application and will continue to capture the actual funding amounts provided to Program participants in accordance with section 4(3)(a)ii of the GGRR, to be amortized over a 10 year period into the rates of all FBC customers. The deferral account and amortization period are discussed further in Section 3 below.

A draft form of order sought is provided in Appendix A.

1.3 *SUGGESTED REGULATORY PROCESS*

FBC believes that a written hearing process with one round of information requests (IRs) from the BCUC and interveners will provide an appropriate and efficient review of the Application given that the Program meets the requirements to be a prescribed undertaking in accordance with section 4 of the GGRR.

FBC respectfully proposes the following regulatory timetable for the review process.

Table 2: Suggested Review Process

Action	Date (2022)
Intervener and Interested Party Registration	Thursday, June 9
BCUC and Intervener Information Request (IR) No. 1	Wednesday, June 22
FBC Response to IR No. 1	Wednesday, July 27
FBC Written Final Argument	Wednesday, August 10
Intervener Written Final Argument	Wednesday, August 17
FBC Written Reply Argument	Wednesday, August 24

2. BACKGROUND AND CONTEXT

2.1 *PROVINCIAL LEGISLATIVE CONTEXT*

The provincial government has enacted legislation that supports energy efficiency and conservation and the use of clean and renewable energy sources, including the Clean Energy Vehicle (CEV) Program as a component of BC's Climate Leadership Plan.[3] BC's Climate Leadership Plan outlines that the transportation sector accounts for 37 percent of GHG emissions in BC.[4] The Climate Leadership Plan and the CEV Program are intended to encourage and accelerate the adoption of CEVs in BC for their environmental and economic benefits.

On April 18, 2010, the provincial government enacted the CEA. One of the key features of the CEA is the establishment of legislated provincial energy objectives.[5] The CEA states that British Columbia's energy objectives include the reduction in greenhouse gas emissions and, more specifically, encouraging the switching from one kind of energy source or use to another that decreases greenhouse gas emissions.

Another key feature of the CEA is the creation of prescribed undertakings. Section 18(1) of the CEA defines a prescribed undertaking as "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." Further, section 18(2) establishes that the BCUC must set rates that allow for the sufficient recovery of costs incurred by a public utility for a prescribed undertaking, and section 18(3) provides that the BCUC must not exercise its power in a way that would directly or indirectly prevent a public utility from carrying out a prescribed undertaking.

Pursuant to section 35 of the CEA, the Lieutenant Governor in Council (LGIC) enacted the GGRR on May 15, 2012 by Order in Council (OIC) 295/2012 (B.C. Reg. 102/2012). The GGRR describes classes of undertakings which are prescribed undertakings for the purposes of section 18 of the CEA. On March 1, 2017, the LGIC approved OIC 101-2017, amending the GGRR to establish a number of prescribed undertakings for the purpose of section 18 of the CEA with the objective of promoting electrification in several sectors of the provincial economy. Specifically, under section 4 of the GGRR, projects or programs respecting technology that may enable the 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 CEA.

[3] Climate Leadership Plan, August 2016 https://climate.gov.bc.ca/app/uploads/sites/13/2016/10/4030_CLP_Booklet_web.pdf.
[4] Climate Leadership Plan, August 2016, page 18 https://climate.gov.bc.ca/app/uploads/sites/13/2016/10/4030_CLP_Booklet_web.pdf.
[5] *CEA*, s. 2.

2.2 GOVERNMENT INCENTIVE PROGRAMS

2.2.1 Zero Emission Vehicle Infrastructure Program (ZEVIP)

Through the ZEVIP, applicants are eligible to receive funding for up to 50 percent of total project costs[6], to a maximum defined by the type of installation as seen below in Table 3.

Table 3: ZEVIP Funding Maximums

Type of Infrastructure	Output	Maximum Funding
Level 2 (208/240 V)	3.3 kW to 19.2 kW	Up to 50 percent of total project costs, to a maximum of $5,000 per connector
Fast charger	20 kW to 49 kW	Up to 50 percent of total project costs, to a maximum of $15,000 per connector
Fast charger	50 kW to 99 kW	Up to 50 percent of total project costs, to a maximum of $50,000 per connector
Fast charger	100 kW and above	Up to 50 percent of total project costs, to a maximum of $75,000 per connector

Eligible projects include public places, on-street, multi-unit residential buildings, workplaces, and light-duty commercial and public vehicle fleets. Of the infrastructure types listed in Table 3, only the Level 2 (208 / 240 V) chargers are to be funded under the FBC Program proposed in this Application.

2.2.2 CleanBC Go Electric program

The CleanBC Go Electric program includes multiple streams for the installation of EV chargers in single-family homes, multi-unit residential buildings, workplaces, and fleets.

Table 4: CleanBC Go Funding Maximums

Stream	Maximum Funding	Eligible Costs
Single-Family Homes	$350	Charging equipment and installation
Workplace	$14,000	Charging equipment and installation, site assessments, design, signage, and network fees
Multi-Unit Residential Buildings	$97,000	EV Ready Plans, infrastructure upgrades, charging equipment, and installation
Fleets	$60,000	Fleet assessments, infrastructure assessments, infrastructure upgrades, and charging equipment and installation

[6] Total project costs are determined from eligible expenditures as per the ZEVIP which can be viewed at the following link: https://www.nrcan.gc.ca/energy-efficiency/transportation-alternative-fuels/zero-emission-vehicle-infrastructure-program/zero-emission-vehicle-infrastructure-program/22121.

Additional funding is available to Indigenous communities and Public Sector Organizations. Further details of the CleanBC Go program are available at the program website.[7]

2.3 *THE FUNDING PROVIDED UNDER THE PROGRAM IS A PRESCRIBED UNDERTAKING UNDER SECTION 4 (3)(A)(II) OF THE GGRR*

2.3.1 Prescribed Undertaking Section 4 (3)(a)(ii)

FBC has designed the Program to meet the requirements of section 4 (3)(a)(ii) of the GGRR. The relevant portions of section 4 of the GGRR are reproduced below. The full text of this section, including the portions not relied upon for the Program can be found in Appendix B to this Application.

> **4** (1) In this section:
>
> "**benefit**", in relation to an undertaking in a class defined in subsection (3) (a) or (b), means all revenues the public utility reasonably expects to earn as a result of implementing the undertaking, less revenues that would have been earned from the supply of undertaking electricity to export markets;
>
> "**cost**", in relation to an undertaking in a class defined in subsection (3) (a) or (b), means costs the public utility reasonably expects to incur to implement the undertaking, including, without limitation, development and administration costs;
>
> "**cost-effective**" means that the present value of the benefits of all of the public utility's undertakings within the classes defined in subsection (3) (a) or (b) exceeds the present value of the costs of all of those undertakings when both are calculated using a discount rate equal to the public utility's weighted average cost of capital over a period that ends no later than a specified year;
>
> "**specified year**", in relation to an undertaking within a class defined in subsection (3), means
>
> (a) a year determined by the minister with respect to an identified public utility, or
>
> (b) if the minister does not make a determination for the purposes of paragraph (a), 2030;
>
> "**undertaking electricity**" means electricity that is provided to customers in British Columbia as a result of an undertaking and is in addition to electricity that would have been provided had the undertaking not been carried out.
>
> (3) Subject to subsection (4), a public utility's undertaking that is in a class defined in one of the following paragraphs is a prescribed undertaking for the purposes of section 18 of the Act:
>
> (a) a program to encourage the public utility's customers, or persons who may become customers of the public utility, to use electricity, instead of

[7] https://goelectricbc.gov.bc.ca/.

> other sources of energy that produce more greenhouse gas emissions, by
>
> > (ii) providing funds to those persons to assist in the acquisition, installation or use of equipment that uses or affects the use of electricity;
>
> (4) An undertaking is within a class of undertakings defined in paragraph (a) or (b) of subsection (3) only if, at the time the public utility decides to carry out the undertaking, the public utility reasonably expects the undertaking to be cost- effective.

As described in Section 1.1 above, the Program will encourage FBC's customers, or persons who may become customers of FBC, to use electricity, instead of other sources of energy that produce more greenhouse gas emissions, by providing funds to these persons to assist in the acquisition, installation, or use of EV charging infrastructure. The Program, therefore, meets the conditions for a prescribed undertaking 4(3)(a)(ii) of the GGRR.

With respect to section 4(4) of the GGRR, FBC reasonably expects that the Program will be cost-effective, as described below.

2.3.2 Cost Effectiveness

"Cost effective" is a defined term within section 4 of the GGRR meaning, "[…] that the present value of the benefits of all of the public utility's undertakings within the classes defined in subsection (3) (a) or (b) exceeds the present value of the costs of all of those undertakings when both are calculated using a discount rate equal to the public utility's weighted average cost of capital over a period that ends no later than a specified year."

With respect to an undertaking in a class defined in GGRR subsection (3) (a) or (b), a "benefit" means all revenues the public utility reasonably expects to earn as a result of implementing the undertaking, less revenues that would have been earned from the supply of undertaking electricity to export markets and "costs" means costs the public utility reasonably expects to incur to implement the undertaking, including, without limitation, development and administration costs.

Finally, a "specified year", in relation to an undertaking within a class defined in subsection (3), means either (a) a year determined by the minister with respect to an identified public utility, or (b) if the minister does not make a determination for the purposes of paragraph (a), 2030.

The minister has made no determination of a specified year for FBC for the purpose of section 4 of the GGRR. Therefore, the specified year to be incorporated into the cost effectiveness test is 2030.

The elements of the cost effectiveness test as applied to the Program are discussed in the subsections below.

2.3.2.1 *Benefits of the Program*

For the purpose of determining cost-effectiveness under section 4 of the GGRR, benefits in relation to an undertaking in a class defined in subsection (3) (a) or (b) means all revenues the public utility reasonably expects to earn as a result of implementing the undertaking, less revenues that would have been earned from the supply of undertaking electricity to export markets. FBC does not generally have surplus energy to export. As such, FBC does not have revenues that would have been earned from the supply of undertaking electricity to export markets that would need to be accounted for as a deduction from the revenues it expects to earn as a result of the Program.

To calculate the benefits in the cost effectiveness test, FBC has used the revenues derived from the sale of energy to Program participants under the existing commercial rate (Rate Schedule (RS) 21) that would normally apply to load of this size. FBC has assumed, due to the long duration of charging sessions, that demand from all incented chargers at a site will be coincident at some point during the billing period. Therefore, the assumed demand revenue is the based on the sum of the maximum demand from each incented charging station.

2.3.2.2 *Cost of the Program*

For the purpose of determining cost-effectiveness under section 4 of the GGRR, costs in relation to an undertaking in a class defined in GGRR subsection (3) (a) or (b), means costs the public utility reasonably expects to incur to implement the undertaking, including, without limitation, development and administration costs.

Costs that FBC considers in the evaluation of cost-effectiveness include the cost of the incremental power required to meet the load associated with the Program, administration, and costs related the regulatory process associated with approval of this Application.

As a proxy for the Program's incremental power purchase costs, FBC has used the British Columbia Hydro and Power Authority (BC Hydro) 3808 Tranche 1 rate and the monthly demand charge associated with purchases that FBC makes under its Power Purchase Agreement (PPA) with BC Hydro. To reflect the fact that a portion of Program load will be non-coincident with the time at which the peak demand is set for the BC Hydro PPA, FBC has incorporated a coincidence factor of 73.5 percent to the PPA demand costs. This coincidence factor is consistent with the results of FBC's most recent *Cost of Service Analysis* filed with the BCUC. The power purchase costs also incorporate the deferred capital expenditure charge of $51/kW-Year[8] from the FBC 2021 LTERP, which is the incremental cost for FBC to take on new capacity.

Annual administration related to customer account maintenance and review and any billing adjustments is estimated to be $60 thousand in year 1, and then increases yearly by an annual inflation factor of 2 percent. The annual administration cost represents half of a full-time equivalent position to help administer the Program. FBC estimates that the regulatory process associated

[8] FortisBC Inc. 2021 Long-Term Electric Resource Plan, Appendix A, 2021 Conservation Potential Review Report, Table 1, Page 10.

with approval of this Application, if disposed of through the written process suggested in Table 2, to be approximately $10 thousand.

2.3.2.3 *Discount Rate*

FBC has used its most recently approved capital structure from its 2022 FBC Annual Review for Rates approved by Order G-374-21 for the discount rate in its cost effectiveness calculation. The discount rate is equal to FBC's after-tax weighted average cost of capital (WACC) of 5.62 percent.

2.3.2.4 *Demonstration of Cost Effectiveness*

FBC has determined the contribution amount at a level that provides, at the time it decided to carry out the undertaking, a Program that is cost-effective over a period that ends no later than 2030, as specified in the GGRR. The design ensures that FBC will collect sufficient net revenue in each fiscal year to enable it to recover the costs incurred with respect to the prescribed undertaking. Line 7 of Table 5 demonstrates cost-effectiveness of the life of the Program (the net present value from 2022 to 2030 is positive at $21,157).

Table 5: Cost-Effectiveness ($000's)

Line	Particulars	Reference	2022	2023	2024	2025	2026	2027	2028	2029	2030
1	Tariff Revenue	Application, Section 2.3.2.1	233	565	1,015	1,581	1,613	1,645	1,678	1,711	1,746
2	Cost of Energy	Application, Section 2.3.2.2	(163)	(388)	(687)	(1,070)	(1,092)	(1,114)	(1,136)	(1,159)	(1,182)
3	Incentive Cost	Application, Table 1-2	(430)	(576)	(740)	(920)	-	-	-	-	-
4	Program Costs	Application, Section 2.3.2.2	(61)	(62)	(63)	(64)	(66)	(67)	(68)	(70)	(71)
5	Total Costs & Benefits	Sum of Lines 1 through 4	(420)	(461)	(475)	(474)	455	464	474	483	493
6	PV Total Costs & Benefits	Line 5 / (1 + Line 8)^Yr	(398)	(413)	(403)	(381)	346	334	323	312	301
7	Sum of PV	Sum of Line 6	21								
8	Annual Discount Rate (After-Tax WACC)	Application, Section 2.3.2.3	5.62%	5.62%	5.62%	5.62%	5.62%	5.62%	5.62%	5.62%	5.62%

2.4 *REPORTING REQUIREMENTS*

As set out in sections 18 (4) and (5) of the CEA, a utility must report on the prescribed undertakings to the Minister of Energy and Mines (Minister). The Minister establishes the reporting requirements, both in terms of timing and the information required. It is expected that the Minister will require regular reporting on the programs being offered to review the results and determine if any changes are required.

In addition to this statutory requirement, FBC intends to provide information on the Program to the BCUC as part of its Annual Reviews for Rates. As the expenditures for the Program are a prescribed undertaking under section 18 of the CEA, this information will be provided for information purposes, and not for approval.

3. PROPOSED TREATMENT OF PRESCRIBED UNDERTAKING COSTS AND RECOVERY RATES

In this section FBC sets out its proposed treatment for costs incurred in respect of the prescribed undertaking and the recovery of this prescribed undertaking in FBC's revenue requirements and rates. FBC is seeking approval of the rate recovery mechanism described below rather than specific year-to-year expenditure amounts allocated under the prescribed undertaking. The reasons for this approach are that the prescribed undertaking is optional for a public utility, and there is some latitude within the scope of this prescribed undertaking to move expenditures between years and among categories. This flexibility is essential, as the Program is a new offering, and FBC needs to be able to respond to the changes and developments in the market.

As a result, FBC is only seeking approval of the regulatory accounting and rate recovery treatment for these expenditures.

3.1 *RATE RECOVERY CONSIDERATIONS*

As set out in Sections 2.1 and 2.3 above, the legal framework for this Application is section 18 (2) of the CEA, which requires the BCUC to "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". Section 18(3) of the CEA is also relevant, as it provides that "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 section (2) from carrying out a prescribed undertaking".

FBC interprets section 18(2) of the CEA to mean that rates must be set in such a way that the utility is not only allowed to recover its costs, but also that rates are to be established so that there is fair and reasonable compensation for the utility including a return on its investments in rate base. A fair return on rate base is required under section 59 of the *Utilities Commission Act*.

The costs incurred by FBC under the Program will be incremental expenditures to the levels of deferral, capital, and operating and maintenance expenses included in FBC's 2022 Annual Review for Rates approved by Order G-374-21.

3.2 *RATE BASE TREATMENT OF PROGRAM COSTS*

The proposed prescribed undertaking is made up of contributions to FBC fleet customers to construct Level 2 electric vehicle chargers. FBC has included administrative expenses needed to oversee the contribution Program as incremental expenses within this prescribed undertaking. The regulatory cost of this proceeding will also be included as an administrative expense to this prescribed undertaking.

FBC's proposed treatment for all expenditures under this prescribed undertaking is to include them in a rate base deferral account and amortize the expenditures in delivery rates of all customers over a ten-year period. This methodology was approved and used for the Natural Gas

for Transportation (NGT) Incentive Program[9] expenditures for FortisBC Energy Inc., and remains appropriate for the FBC EV contribution expenditures. Similar to the rationale that supported the deferral account treatment in the NGT Incentive Program, FBC believes that it is appropriate to recover the costs of the EV Program from all customers, because all customers will benefit directly from the additional revenue derived from the EV Program load as well as the societal benefit of a reduction in GHG emissions and air contaminants. This is consistent with the reasoning to which the BCUC found that the proposed method of accounting for the GGRR grants and program costs through the use of deferral accounts to be a reasonable mechanism to capture costs until the next revenue requirement where all costs could be forecast and included in the cost of service through rate base deferral accounts for the next test period. The BCUC described this approach as consistent with established practice.[10] While the rate base deferral and ten-year amortization discussed below are the key principles, there are several circumstances that require minor or temporary adjustments to this treatment, as also discussed below.

3.3 *DEFERRAL ACCOUNT AND ACCOUNTING TREATMENT*

The 2022 revenue requirement approved by Order G-374-21 does not include any forecast of expenditures related to this prescribed undertaking or their recoveries. FBC proposes that all costs, including the regulatory proceeding costs, related to the prescribed undertaking be captured in a non-rate base deferral account, named the "EV Fleet and Workplace Charging Funding Account", attracting AFUDC until the end of the year in which this application is approved. The deferral account, and the accumulated balance on a net of tax basis within it, would then be transferred to rate base on January 1 of the following year, and amortized over a ten-year period into the rates of all customers. Once transferred to rate base, this account will continue to capture the ongoing incentives and Program costs as additions to the account, on a net of tax basis, and amortize them over a subsequent ten-year period into the rates of all customers.

Once this application is approved, for future revenue requirement applications, FBC will include a forecast of the deferral account (opening balance, new expenditures, and amortization) and the related cost-of service impacts within the financial schedules used to determine its annual revenue requirements.

3.4 *AMORTIZATION PERIOD*

FBC considers a ten-year amortization period to be an appropriate time frame for amortization as this approximates the expected useful life of the Level 2 EV charger as well as the period over which the benefits of the program will be experienced. This meets the ratemaking and accounting objective of matching costs and benefits and in turn addresses the concept of intergenerational equity. The costs of programs should be matched against the benefits that are derived which would not be the case if the costs of this Program are simply expensed in a single year. In that scenario, current customers would bear the expense and future customers would reap the benefits. In addition to matching costs and benefits, the proposed approach also avoids the rate

[9] Approved by decision and Order G-161-2
[10] Appendix A to Order G-56-13 Page 14.

volatility that would occur with an expensing approach and is consistent with the amortization approved by the BCUC for GGRR incentives for FEI.

3.5 *BCUC REGULATORY ACCOUNT FILING CHECKLIST*

On May 3, 2017, the BCUC issued its Regulatory Account Filing Checklist.[11] The stated purpose of the checklist is to assist regulated entities when filing regulatory account requests and to facilitate an efficient review by the BCUC.

The checklist classifies deferral accounts as one of: (a) forecast variance account; (b) rate smoothing account; (c) benefit matching (capital-like) account; (d) retroactive expense account; or (e) other. The requested EV Fleet and Workplace Charging Funding Account is requested under the classification (c) a benefits matching account.

Table 6 below addresses the considerations identified in the Regulatory Account Filing Checklist, as they pertain to the request for the EV Fleet and Workplace Charging Funding Account deferral account.

Table 6: Deferral Account Filing Considerations

Item	Consideration	Determination
I.	Indicate if the request is: (a) for a modification or a change in scope to an existing Commission approved regulatory account; or (b) to establish a new regulatory account.	FBC requests the establishment of this new deferral accounts to capture all costs incurred to implement the prescribed undertaking, including the funding itself, as well as administration, and regulatory proceeding costs.
a)	If the request is for a modification or change in scope to an existing regulatory account, explain why the existing regulatory account is an appropriate account to use (specifically addressing the existing account's intended and approved purpose, mechanism for recovery, timeline for recovery and carrying costs).	N/A
b)	If the request is for approval of a new regulatory account, state the purpose of the regulatory account and explain its intended use.	The requested account is to capture all costs incurred to implement the prescribed undertaking, including the funding itself, as well as administration, and regulatory proceeding costs.
II.	Propose a term (i.e., length of time) that the regulatory account should be approved for and explain why that term is appropriate.	The term to capture new additions to the account will be from 2022 to the GGRR specified year of 2030.[12]

[11] Log No. 53608, Appendix B.
[12] GGRR, page 9

Item	Consideration	Determination
III.	Identify any alternate treatments that were considered, including an overview of what the accounting treatment would be in the absence of approval of the request to establish a regulatory account, and explain why these alternate treatments may not be appropriate.	In the absence of a deferral account, the costs would have to be forecast as an O&M expense (outside of the MRP index-based O&M since these costs are not included in Base O&M Expense) and trued up annually by way of the Flow-Through deferral account. FBC considers this to be a more cumbersome and less efficient means of accounting for these costs. It is accepted regulatory practice to defer these costs, consistent with the treatment of FEI GGRR Incentive costs
IV a)	Address: whether, or to what extent, the item is outside of management's control;	While the amounts set out in this Application are generally within management's control, the uptake of the Program and the amount of applications for incentives received, as well as the regulatory process determined by the BCUC and the degree of involvement of interveners are not within the utility's control.
b)	the degree of forecast uncertainty associated with the item;	Refer to IV. a). FBC forecasts additions to the deferral accounts based on the amount of incentives expected to be provided, the Program costs and the costs for this proceeding. Actual costs are recorded in the account so that actual, not forecast, costs are recovered in rates.
c)	the materiality of the costs	The forecasted overall costs are immaterial when the related recoveries outside of the deferral are factored in. See Section 2.3.2.4.
d)	any impact on intergenerational equity	Generally, FBC recovers the costs of regulatory proceedings over the period of time related to the Application, which serves to match the costs and benefits. See Section 3.4. There are no intergenerational inequities inherent in this practice.
V.	Classify the regulatory account as either: (a) forecast variance account; (b) rate smoothing account; (c) benefit matching account; (d) retroactive expense account; or (e) other.	FBC classifies this account as a benefit matching account. See Section 3.4.
VI.	Identify if the regulatory account is a cash or non-cash account.	This account is a cash account.

Item	Consideration	Determination
VII.	Specify what additions to the regulatory account are being requested (i.e., type and amount of additions), including whether the account is intended to capture additions for a specific period of time or on an ongoing basis.	Eligible costs include: • Incentives paid for EV chargers as described in Section 1.1.3; • Program administration costs as described in Section 2.3.2.2; and • BCUC's direct costs and other costs that may be applicable including notice publication, fees for consultants or experts, external legal counsel fees, courier and miscellaneous administrative costs, and participant assistance cost awards incurred in the preparation, filing and regulatory review of the Applications as described in Section 2.3.2.2. See Item II for the period of time the account is intended to capture additions.
VIII.	Propose a mechanism for recovery (e.g. how the balance in the regulatory account will be recovered or refunded to ratepayers) and explain why it is appropriate.	Costs are recovered in revenue requirements by way of amortization expense. See Section 3.4.
IX.	Propose a timeline for recovery (e.g. the period over which the regulatory account balance is either collected or refunded; also referred to as the amortization period) and explain why it is appropriate.	FBC is proposing to amortize the deferral additions over 10 years. See Section 3.4.
X.	Propose a carrying cost for the balance in the regulatory account and explain why it is appropriate.	FBC is requesting carrying costs based on its weighted average cost of capital (WACC) both while the account is in non-rate base, via an AFUDC return, and after it is transferred to rate base. Rate base deferral accounts are included in rate base and therefore implicitly financed using the WACC.
XI.	Outline a recommended regulatory process for the Commission's review of the application.	The proposed deferral account can be reviewed as part of the present proceeding.

3.6 *SUMMARY*

In summary, the proposed approach allows FBC to earn a fair return on its investments in carrying out a prescribed undertaking under the GGRR, appropriately matches costs and benefits, and avoids rate volatility for customers. The proposed Program is a prescribed undertaking under

section 4 (3)(a)(ii) of the GGRR and FBC reasonably expects the undertaking to be cost-effective at the time it has decided to carry out the undertaking. Thus, FBC believes that it is in the public interest for the BCUC to grant an order approving the deferral account treatment for the Program.

Appendix A
DRAFT ORDER

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Utilities Commission

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ORDER NUMBER
G-xx-xx

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

and

FortisBC Inc.
Application for Approval of the Electric Vehicle Fleet Charging Funding Deferral Account
BEFORE:
[Panel Chair]
Commissioner
Commissioner

on Date

ORDER

WHEREAS:

A. On May 13, 2022, FortisBC Inc. (FBC) filed an Application with the British Columbia Utilities Commission (BCUC), pursuant to sections 59 to 61 of the *Utilities Commission Act* (UCA), for the approval of a new non-rate base deferral account for the Electric Vehicle (EV) Fleet Charging Funding Program (Program) entitled EV Fleet and Workplace Charging Funding Account, to implement FBC's EV Fleet Charging Program (Program), pursuant to section 18 of the *Clean Energy Act*, as a prescribed undertaking under the Province's *Greenhouse Gas Reduction (Clean Energy) Regulation* (GGRR) (Application);

B. The Program will provide funding to organizations to assist in the acquisition and installation of EV charging infrastructure to encourage the use of electric vehicles to reduce greenhouse gas emissions. FBC proposes a one-time, non-repayable contribution of $2,150 per Level 2 EV charger, capped at seven chargers per site;

C. The Application seeks approval of a non-rate base deferral account, entitled the EV Fleet and Workplace Charging Funding Account, attracting Allowance for Funds Used During Construction (AFUDC) until the end of the year in which this Application is approved. The EV Fleet and Workplace Charging Funding Account will capture all costs incurred to implement the Program, including development, administration, and Application costs. FBC proposes that the EV Fleet and Workplace Charging Funding Account, and the accumulated balance on a net of tax basis within it, would be transferred to rate base on January 1 of the year following approval, and be amortized over a ten-year period into the rates of all customers. Once transferred to rate base, this account will continue to capture the ongoing incentives and Program costs as additions to the accounts, on a net of tax basis, and amortize them over a subsequent ten-year period into the rates of all customers;

D. By Order G-XX-22, the BCUC established a regulatory timetable for review of the Application.

E. The BCUC has reviewed the Application and considers that approval is warranted.

NOW THEREFORE pursuant to sections 59 to 61 of the UCA, the BCUC orders as follows:

1. FBC is approved to establish a new non-rate base deferral account, entitled the EV Fleet and Workplace Charging Funding Account, attracting AFUDC, to capture all costs incurred to implement FBC's EV Fleet Charging Program as a prescribed undertaking under the GGRR, including development, administration, and Application costs.
2. FBC is approved to transfer the EV Fleet and Workplace Charging Funding Account, and the accumulated balance on a net of tax basis within it, to rate base on January 1 of 2023, and amortized over a ten-year period into the rates of all customers.
3. Once transferred to rate base, FBC is approved to continue to capture in the EV Fleet and Workplace Charging Funding Account the ongoing incentives and Program costs in the accounts, on a net of tax basis, and amortize them over a subsequent ten-year period into the rates of all customers.

DATED at the City of Vancouver, in the Province of British Columbia, this (XX) day of (Month Year).

BY ORDER

(X. X. last name)
Commissioner

Appendix B
RELEVANT SECTIONS OF THE GGRR

BRITISH COLUMBIA

Clean Energy Act

GREENHOUSE GAS REDUCTION (CLEAN ENERGY) REGULATION

B.C. Reg. 102/2012

Deposited and effective May 15, 2012
Last amended May 25, 2021 by B.C. Reg. 134/2021

Consolidated Regulations of British Columbia

This is an unofficial consolidation.

Consolidation current to September 28, 2021

(3.9) The volume referred to in subsection (3.8) (b) does not include renewable natural gas acquired by the public utility that the public utility provides to a customer in accordance with a rate under which the full cost of the following is recovered from the customer:

(a) the acquisition of the renewable natural gas;

(b) the service related to the provision of the renewable natural gas.

(4) In subsections (1), (2), (3), (3.1), (3.2) and (3.4), **"expenditures"** includes, except with respect to expenditures on administration and marketing, binding commitments to incur expenditures in the future.

[am. B.C. Regs. 235/2013, s. 2; 98/2015, s. 2; 214/2016, ss. 2 to 8; 114/2017, ss. 2 to 8; 84/2018, s. 2; 134/2021, s. 2.]

3 Repealed. [B.C. Reg. 235/2013, s. 3.]

Prescribed undertaking – electrification

4 (1) In this section:

"benefit", in relation to an undertaking in a class defined in subsection (3) (a) or (b), means all revenues the public utility reasonably expects to earn as a result of implementing the undertaking, less revenues that would have been earned from the supply of undertaking electricity to export markets;

"cost", in relation to an undertaking in a class defined in subsection (3) (a) or (b), means costs the public utility reasonably expects to incur to implement the undertaking, including, without limitation, development and administration costs;

"cost-effective" means that the present value of the benefits of all of the public utility's undertakings within the classes defined in subsection (3) (a) or (b) exceeds the present value of the costs of all of those undertakings when both are calculated using a discount rate equal to the public utility's weighted average cost of capital over a period that ends no later than a specified year;

"natural gas processing plant" means a facility for processing natural gas by removing from it natural gas liquids, sulphur or other substances;

"specified year", in relation to an undertaking within a class defined in subsection (3), means

(a) a year determined by the minister with respect to an identified public utility, or

(b) if the minister does not make a determination for the purposes of paragraph (a), 2030;

"undertaking electricity" means electricity that is provided to customers in British Columbia as a result of an undertaking and is in addition to electricity that would have been provided had the undertaking not been carried out.

(2) A public utility's undertaking that is in a class defined as follows is a prescribed undertaking for the purposes of section 18 of the Act:

(a) for the purpose of reducing greenhouse gas emissions in British Columbia, the public utility constructs or operates an electricity transmission or distribution facility, or provides for temporary generation until the completion of the construction of the facility, in northeast British Columbia primarily to provide electricity from the authority to

(i) a producer, as defined in section 1 (1) of the Petroleum and Natural Gas Royalty and Freehold Production Tax Regulation, B.C. Reg. 495/92, or

(ii) an owner or operator of a natural gas processing plant;

(b) the public utility reasonably expects, on the date the public utility decides to carry out the undertaking, that the facility will have an in-service date no later than December 31, 2022.

(3) Subject to subsection (4), a public utility's undertaking that is in a class defined in one of the following paragraphs is a prescribed undertaking for the purposes of section 18 of the Act:

(a) a program to encourage the public utility's customers, or persons who may become customers of the public utility, to use electricity, instead of other sources of energy that produce more greenhouse gas emissions, by

(i) educating or training those customers respecting energy use and greenhouse gas emissions, carrying out public awareness campaigns respecting those matters, or providing energy management and audit services, or

(ii) providing funds to those persons to assist in the acquisition, installation or use of equipment that uses or affects the use of electricity;

(b) a program to encourage the public utility's customers, or persons who may become customers of the public utility, to use electricity instead of other sources of energy that produce more greenhouse gas emissions, by

(i) educating, training, providing energy management and audit services to, or carrying out awareness campaigns respecting energy use and greenhouse gas emissions for, or

(ii) providing funds to

persons who

(iii) design, manufacture, sell, install or, in the course of operating a business, provide advice respecting equipment that uses or affects the use of electricity,

(iv) design, construct, manage or, in the course of operating a business, provide advice respecting energy systems in buildings or facilities, or

(v) design, construct or manage district energy systems;

(c) a project, program, contract or expenditure for research and development of technology, or for conducting a pilot project respecting technology, that may enable the public utility's customers to use electricity instead of other sources of energy that produce more greenhouse gas emissions;

(d) a project, program, contract or expenditure supporting a standards-making body in its development of standards respecting

(i) technologies that use electricity instead of other sources of energy that produce more greenhouse gas emissions, or

(ii) technologies that affect the use of electricity by other technologies that use electricity instead of other sources of energy that produce more greenhouse gas emissions;

(e) a project for the construction, acquisition or extension of a plant or system, that the public utility reasonably expects is necessary to meet the public utility's incremental load-serving obligations arising as a result of an undertaking defined in paragraph (a), (b), (c) or (d), if the public utility reasonably expects any one such project to cost no more than $20 million.

(4) An undertaking is within a class of undertakings defined in paragraph (a) or (b) of subsection (3) only if, at the time the public utility decides to carry out the undertaking, the public utility reasonably expects the undertaking to be cost-effective.

[en. B.C. Reg. 76/2017.]

Prescribed undertaking – electric vehicle charging stations

5 (1) In this section:

"eligible charging site" means a site where one or more eligible charging stations are located;

"eligible charging station" means a fast charging station that

(a) is available for use 24 hours a day by any member of the public,

(b) does not require users to be members of a charging network, and

(c) is capable of charging electric vehicles of more than one make;

"fast charging station" means a fixed device capable of charging an electric vehicle using a direct current;

"limited municipality" means a municipality with a population of 9 000 or more;

"site limit", in relation to a limited municipality, means the number calculated by

(a) dividing the population of the municipality by 9 000, and

(b) if applicable, rounding the quotient up to the nearest whole number.

(2) A public utility's undertaking that is in a class defined as follows is a prescribed undertaking for the purposes of section 18 of the Act:

(a) the public utility constructs and operates, or purchases and operates, an eligible charging station;

(b) the public utility reasonably expects, on the date the public utility decides to construct or purchase an eligible charging station, that

(i) the station will come into operation by December 31, 2025, and

(ii) if the station will be located in a limited municipality, the number of eligible charging sites in the municipality on the date the station will come into operation will not exceed the site limit for the municipality on that date;

(c) if an eligible charging station comes into operation on or after January 1, 2022, the station uses or is configured to use the Open Charge Point Protocol.

[en. B.C. Reg. 139/2020.]

Prescribed undertaking – hydrogen

6 A public utility's undertaking that is in a class defined as follows is a prescribed undertaking for the purposes of section 18 of the Act:

(a) the public utility

(i) produces or purchases hydrogen that is distributed through the natural gas distribution system in British Columbia to the customers of that public utility or of another public utility, or

(ii) purchases hydrogen that is provided to a customer of the public utility other than through the natural gas distribution system in British Columbia and that is to be used by that customer to replace, at least in part, natural gas derived from fossil fuels;

(b) the hydrogen referred to in paragraph (a)

(i) is derived from water using electricity that is generated primarily from clean or renewable resources, or

(ii) is waste hydrogen, as defined in the Clean or Renewable Resource Regulation, purchased by the public utility;

(c) the costs incurred by the public utility in producing or purchasing the hydrogen referred to in paragraph (a) meet the following criteria, as applicable:

(i) if the public utility produces hydrogen, the levelized cost of production reasonably expected by the public utility does not exceed the maximum amount, determined in accordance with section 9, in effect in the fiscal year in which the public utility decides to construct or purchase the production facility;

(ii) if the public utility purchases hydrogen

(A) that is distributed through the natural gas distribution system in British Columbia, the price of the hydrogen does not exceed the maximum amount, determined in accordance with section 9, in effect in the fiscal year in which the contract for purchase is signed;

Appendix C

FBC CONTRIBUTION CALCULATION

REFER TO LIVE SPREADSHEET MODEL

Provided in electronic format only

(accessible by opening the Attachments Tab in Adobe)