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August 23, 2022

Commercial Energy Consumers Association of British Columbia c/o Owen Bird Law Corporation P.O. Box 49130 Three Bentall Centre 2900 – 595 Burrard Street Vancouver, BC V7X 1J5

Attention: Mr. Christopher P. Weafer

Dear Mr. Weafer:

Re: FortisBC Inc. (FBC)

> Application for Approval of a Deferral Account for Electric Vehicle Workplace and Fleet Charging Funding (the Application)

> Response to the Commercial Energy Consumers Association of British Columbia (CEC) Information Request (IR) No. 1

On May 13, 2022, FBC filed the Application referenced above. In accordance with the regulatory timetable established in British Columbia Utilities Commission Order G-152-22 for the review of the Application, FBC respectfully submits the attached response to CEC IR No. 1.

For convenience and efficiency, FBC has occasionally provided an internet address for referenced reports instead of attaching lengthy documents to its IR responses. FBC intends for the referenced documents to form part of its IR responses and the evidentiary record in this proceeding.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC INC.

Original signed:

Diane Roy

Attachments

**Commission Secretary** cc (email only):

Registered Parties



## FortisBC Inc. (FBC) Application for Approval of a Deferral Account for Electric Vehicle Workplace and Fleet Charging Funding (Application)

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Page 1

## 1. Reference: Exhibit B-1, page 1

## 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<sup>1</sup> 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.

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1.1 Please identify all rate classes to which the Program will be available.

4 5 1.1.1 If the Program is not available to all rate classes, please explain the basis for any excluded classes.

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## Response:

Any qualifying customer may access the Program incentives. The characteristics of the electrical service supplying Level 2 chargers would ordinarily require that the service be billed on RS 21

service supplying Level 2 chargers would ordinarily require that the service be billed on RS 21 (the Commercial rate). This is the only rate that has therefore been used as the revenue determinant in the contribution derivation model.

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1.2 Please provide a general profile as to the types of businesses that FBC expects will utilize the Program and provide any information FBC has as to the extent to which the charging will be used for business purposes vs employee charging.

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## Response:

- The types of businesses that FBC expects to utilize the Program include workplaces with parking spaces who want to support employees with electric vehicles, and businesses with fleets looking to convert to electric vehicles due to lower operating costs, environmental benefits, and/or available incentives. Specifically, owners of localized return-to-base fleets such as last mile delivery trucks, public transit, school buses, and cab companies are well-suited to participate in the Program.
- Chargers installed for fleets must be made available for fleet vehicle usage and are typically installed behind a locked entry gate.



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1.3 To the extent that FBC is intending to encourage the new use of electric vehicles to displace GHG producing vehicles, please discuss any concerns regarding the lack of availability of new EVs. How can FBC be assured that the project contributes to GHG emissions reductions rather than just supporting existing EV owners?

Response:

- While the availability of new EVs is constrained, the Program is intended to persist through the current supply chain issues and will address the significant infrastructure cost issues that create barriers for EV adoption.
- Fleets looking to convert to electric vehicles are faced with significant upfront costs of vehicles and infrastructure. Based on this and FBC's initial discussions, potential Program participants have not already purchased EV fleet vehicles, and therefore "free ridership" is expected to be limited.
  - In addition, workplaces that install chargers will encourage EV adoption by giving their employees a place to charge if they are unable to install a charger at their homes. Having access to a charger at a convenient location is an important factor for people considering converting to an electric vehicle, which is expected to increase overall adoption.



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## 1 2. Reference: Exhibit B-1, page 5

## 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<sup>6</sup>, 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.

2.1 Please clarify if the ZEVIP program is available to an applicant in addition to the FBC funding, or if the FBC prescribed undertaking replaces or otherwise encompasses the ZEVIP funding. Could FBC apply for ZEVIP funding?

## Response:

8 Please refer to the response to BCUC IR1 8.4.

2.2 Please provide the approximate total cost of a Level 2 EV charger, and the expected cost of installation.

## Response:

16 Please refer to the response to CEC IR1 3.4.

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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-infrastructureprogram/zero-emission-vehicle-infrastructure-program/22121.



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2 2.3 Please explain why FBC only addresses the Level 2 chargers, and does not address any of the Fast Chargers in this application.

Response:

FBC believes that funding Level 2 chargers is the most reasonable approach and consistent with the CleanBC Go Electric program for workplaces. Level 2 chargers will provide sufficient charging for the majority of light-duty fleet and workplace employee applications with lower electrical infrastructure costs than Fast Chargers.

2.4 Does FBC expect to incorporate any other types of chargers in similar programs in the future?

2.4.1 If yes, why are these not incorporated into this application?

Response:

FBC does not currently have plans to incorporate any other types of chargers in similar programs in the future.



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## 3. Reference: Exhibit B-1, page 2 and page 9

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 lightduty 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.

## 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 6296

3.1 Please elaborate on how FBC settled on \$2,150 per Level 2 EV charger as the appropriate contribution to meet the cost effectiveness test, and not some other figure such as \$2,000 or \$2500. Was this backwards calculated based on expected demand? Please provide any calculations related to \$2150/ charger supporting the cost-effectiveness test.

## Response:

As referenced in the preamble above, FBC incorporated a number of reasonable assumptions into its calculation to arrive at the expected Program costs and revenues, which FBC then used to backwards calculate the \$2,150 per charger. Please refer to the response to BCUC IR1 7.2 for further discussion of how FBC determined that the \$2,150 per Level 2 EV charger was reasonable.

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3.2 Please provide the source for the assumptions supporting the annual energy requirement of 2,500 kWh, and why this is appropriate if the program is also for employee workplace charging.

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## Response:

The assumptions used to derive the annual energy requirement of 2,500 kWh were developed as part of FBC's 2021 Long-Term Electric Resource Plan (LTERP). Specifically, the assumption of 0.25 kWh consumed per km for light-duty electric vehicles is a combination of driving and non-driving activities such as climate control<sup>1</sup>. The assumption of 10,000 km is a conservative estimate based on the 2008 Canadian Vehicle Survey<sup>2</sup>, which states that the average annual distance travelled by light-duty vehicles in BC is 13,100 km.

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3.3 Please provide details of the customer outreach that FBC used to determine that there were likely to be an average of four Level 2 chargers per applicant.

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## Response:

19 Please refer to the responses to BCUC IR1 2.1 and 8.1.

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3.4 Please provide an approximate cost-benefit analysis that a business might reasonably consider in order to make the decision to proceed with charging infrastructure investment, and please incorporate any government programs, tax consequences and cost of fuel impacts that they might expect.

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## Response:

- FBC is unable to provide a cost-benefit analysis as businesses have diverse circumstances and the benefits, costs, and reasons to install EV chargers vary widely.
- 31 As a result, there are a number of government programs that exist to support deployment of EV
- 32 charging equipment depending on the use (i.e., workplace or fleet), such as CleanBC Go Electric,
- 33 ZEVIP, and municipal funding. As an ongoing revenue opportunity, businesses are also eligible

FortisBC 2021 LTERP and LT DSM Plan, Exhibit B-1, Page 438: https://docs.bcuc.com/Documents/Proceedings/2021/DOC 63911 B-1-FBC-LTERP-and-LongTerm-DSM-Plan.pdf.

Natural Resources Canada, Canadian Vehicle Survey 2008, Figure 6: http://oee.rncan.gc.ca/Publications/statistics/cvs08/chapter2.cfm?attr=1.



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- 1 to participate in the provincial carbon credit system as part of the Greenhouse Gas Reduction
- 2 (Renewable and Low Carbon Fuel Requirements) Act, as well as the federal carbon credit system
- 3 as part of the Clean Fuel Regulations.



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## 1 4. Reference: Exhibit B-1, Appendix C, 'Inputs'

## FortisBC INC. Inputs Tab

<u>Inputs</u>	
Include Grant	No
Grant \$ Given	\$2,150
Total Incremental Energy (kWh)	2,500
Yearly Admin Cost	\$60,000.00
Number of Meters on Site	1
% of Total Incremental Electricity Revenue Used in Model	100%
Year 1 of Analysis	2022
Number of Chargers per site	4
Incremental KVA	24
Customer Payment Outputs	
Yearly Customer Payment Amount (10 Years)	<u> </u>
Monthly Customer Payment Amount (10 Years)	<u> </u>
Net Present Value	\$21,157

4.1 Please explain the reference to the Include Grant 'No' line.

## Response:

FBC's cost-effectiveness model was built with the functionality that allowed FBC to run the cost-effectiveness test with or without the EV incentive payments to applicants as reflected in the "Include Grant" line.

4.2 Please confirm that FBC will require only 1 meter for all of the chargers, and that this meter will only read the EV charging energy.

## Response:

16 Please refer to the responses to BCUC IR1 4.1 and 4.1.1.

4.3 At what point would FBC require more than 1 meter?



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## Response:

If the applicant is installing multiple EV chargers on existing electrical panels with no common point to install a meter, a meter would need to be installed upstream of each charging station.

4.4 Please confirm that the separate metering would be done with FBC's AMI meters and that FBC will accordingly be able to fairly precisely understand the demand profile for the charging stations.

## Response:

12 Confirmed. The metering of the EV charging circuits will be done with an AMI meter, which will provide a single demand profile for all connected charging stations.



## FortisBC Inc. (FBC) Application for Approval of a Deferral Account for Electric Vehicle Workplace and Fleet Charging Funding (Application) Response to Commercial Energy Consumers of British Columbia (CEC) Information Page 10

5. Reference: Exhibit B-1, page 8

### 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.

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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.

5.1 Please quantify FBC's reference to 'the long duration of charging sessions'.

## Response:

FBC expects a typical charging session to last three to four hours, which equates to approximately 25-50 percent of additional battery charge.

5.2 Please elaborate on FBC's assumption that 'demand from all incented chargers at a site will be coincident at some point during the billing period'.

## Response:

15 Please refer to the response to BCUC IR1 4.2.

5.3 Please provide FBC's winter and summer demand profile by hour of the day in order to enable assessment of demand impact.

## Response:

FBC provides the requested information below, but notes that it should not be used to assess demand impact. Although FBC expects demand at the chargers to be coincident at some point during a billing month, it is not likely that peaks will occur at the same time as the overall system peak. This is because the overall system peak is driven by residential loads and the subject chargers are not expected to be used in a residential context.



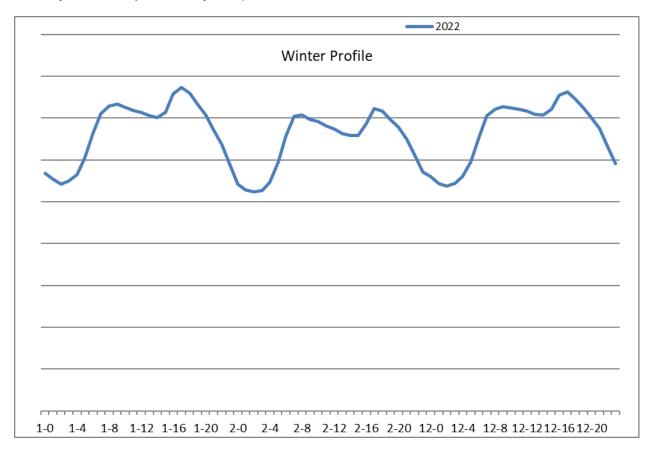
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- 1 The following graphs present the hourly FBC system demand profile forecasts for summer and
- winter 2022. The typical month and hour are listed on the horizontal axis (e.g., 1-0 is midnight in
- 3 January, 5-16 is 4 p.m. in May, etc.).





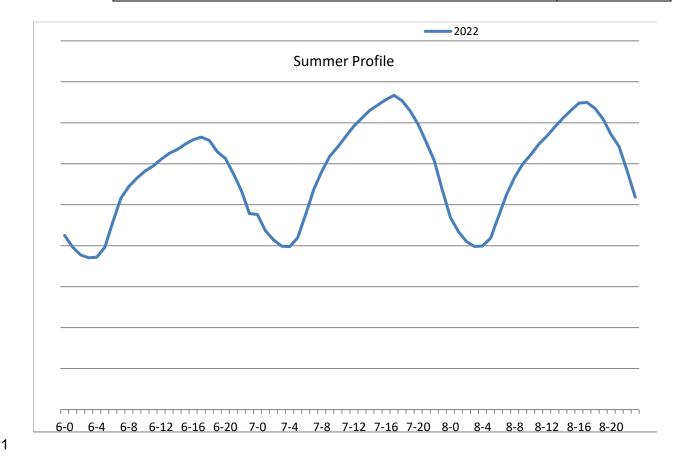
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5.4 Please provide FBC's estimate with respect to when workplace charging would be active throughout a 24-hours profile.

## Response:

FBC assumes that most businesses who install workplace chargers for their employees operate on an 8 a.m. to 4 p.m. business day. It is estimated that employees will charge when they first arrive at work and an average charge event will last between three hours to four hours, depending on the type of EV chargers installed and the employee's EV State of Charge (SOC) upon arrival to the workplace. FBC estimates that the majority of charging would be active between the hours of 8 a.m. and 12 p.m.

15 It is more difficult to predict when fleet customers may charge as this will be driven by their 16 operational requirements. Fleets may need to charge throughout the work day or outside of 17 regular work hours or both.



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## 6. Reference: Exhibit B-1, page 8

### 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<sup>8</sup> 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

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

6.1 Please identify any other sources of power that FBC could potentially use to meet the expected incremental demand, and please provide the cost of those sources.

## Response:

7 Please refer to the response to BCSEA-VEVA IR1 7.2.

6.2 Please elaborate on why FBC selected the BC Hydro 3808 Tranche 1 rate and monthly demand charge as a proxy.

6.2.1 If there are other sources of power that FBC could potentially use, did FBC consider using a weighted average of the cost of power? Please explain why or why not.

### Response:

- 18 FBC did not consider other sources of power for the reasons stated in the response to BCSEA-
- 19 VEVA IR1 7.2.



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## 7. Reference: Exhibit B-1, Appendix C, 'Admin' tab

	2022	2023	2024	2025	2026	2027	2028	2029	2030	0
Incremental Admin	\$ 60,000	\$ 61,200	\$ 62,424	\$ 63,672	\$ 64,946	\$ 66,245	\$ 67,570	\$ 68,921	\$ 70,300	\$ 71,706
Inflation Forecast		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%

7.1 Please confirm or otherwise explain that the Inflation rate will likely exceed 2% over the next several years.

 7.1.1 If confirmed, please provide FBC's best estimate of inflation going forward through to 2030, and adjust the contribution calculation accordingly.

## Response:

FBC is unable to predict with certainty what the inflation rates will be out to 2030; however, FBC considers 2 percent to be a reasonable assumption for the purposes of this analysis as over the longer term it is likely that inflation will return to levels approximating 2 percent.

 7.2 Please show the number of EV charging stations which are expected to be supported by year in the analysis above and add this information as a line item along with a calculation of a statistic – Administrative Cost/# of EV charging stations.

## Response:

Please see the table below for the requested analysis. The administrative cost per number of EV Charging Stations is higher in the earlier years as there will be more work required to implement the Program. These costs will level out in 2025 as the administrative work shifts more towards ensuring customers are meeting the required minimum billing revenues per incented charger.

Line	Particulars	Reference	202	2	2023	2024	2	2025	2026		2027		2028	2029		2	2030
1	Administrative Cost	Application, Section 2.3.2.2	\$ 60,	000	\$ 61,200	\$ 62,424	\$	63,672	\$	64,946	\$ 66,245	\$	67,570	\$ 6	68,921	\$	70,300
2	New Applications	Application, Table 1, Line 1		50	67	86		107									
3	Total Number of EV Sites	Cumulative Sum of Line 2		50	117	203		310		310	310		310		310		310
4	Number of Chargers per Applicant	Application, Table 1, Line 2		4	4	4		4		4	4		4		4		4
5	Total Number of EV Charging Stations	Line 3 x Line 4		200	468	812		1,240		1,240	1,240		1,240		1,240		1,240
6	Administrative Cost/ Number of EV Charging Stations	Line 1/ Line 5	\$	300	\$ 131	\$ 77	\$	51	\$	52	\$ 53	\$	54	\$	56	\$	57



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8. Reference: Exhibit B-1, page 2

## 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	100000		50		67		86		107	310
2	Number of Chargers per Applica	nt		4		4		4		4	
3	Incentive Paid Per Charger		\$	2,150	\$	2,150	\$	2,150	\$	2,150	
4	Yearly Program Expenditure	Une 1 x Line 2 x Line 3	5	430,000	5	576,200	s	739,600	S	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.

8.1 Will FBC include a yearly or Program cap on applications? Please explain.

## Response:

No, FBC believes a yearly or Program cap on applications is not required. The potential long-term benefits of the Program increase with increasing Program participation.

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## 1 9. Reference: Exhibit B-1, pages 9 and 10

## 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.

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<sup>9</sup> 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.<sup>10</sup> 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.

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9.1 Please identify and quantify, to the extent possible, exactly which costs if any will be excluded from the rate base deferral account.

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## Response:

Please refer to the responses to BCUC IR1 9.1, 9.2 and 9.3.

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9.2 Would it be fair and reasonable for the Utility to recover administrative and regulatory proceeding costs relating to the Prescribed Undertaking as O&M

instead of being treated in rate base? Please explain.

## **Response:**

While it would be possible to designate administrative and regulatory proceeding costs relating to the prescribed undertaking as O&M, these costs are directly related to the Program and necessary to generate the benefits of the Program and are therefore appropriately treated in the same way as the Program funding. Further, the standard treatment for regulatory proceeding costs is to record these costs in a deferral account and, consistent with recent approvals of FBC's application cost deferral accounts (i.e., all application cost deferral accounts approved in the 2020-2021 Annual Review and in the 2022 Annual Review), these deferral accounts are treated as rate base deferrals. Finally, the costs included in the cost-effectiveness test in the GGRR are defined to include all costs the public utility reasonably expects to incur to implement the undertaking, including, without limitation, development and administration costs. FBC believes that it has appropriately categorized all Program costs. Please also refer to the response to BCUC IR1 9.3.

- 9.3 Is it typical for administrative and regulatory proceeding costs relating to Prescribed Undertakings to be captured in rate base deferral accounts as proposed by FBC?
  - 9.3.1 If yes, please provide examples of where this has occurred.
    - 9.3.2 If not, please explain why it is appropriate in this instance.

## Response:

FBC's proposed treatment is modelled on and consistent with the treatment of the cost of FEI's Natural Gas for Transportation (NGT) Incentive Program, as approved by Order G-56-13. In FEI's Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation, FEI proposed that all of its costs of the NGT Incentive Program under the GGRR be deferred and amortized into rates as per Order G-56-13.



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## 1 10. Reference: Exhibit B-1, page 11

## 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

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10.1 Please confirm the CEC's understanding that the Deferral account will continue through to 2035, based on the Program finishing in 2025.

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## Response:

FBC notes the Program incentives will be offered until 2025, therefore with the proposed 10-year amortization period, all incentive amounts will be fully amortized by 2035. Also noted in the response to BCUC IR1 6.1, FBC will continue to incur administration costs related to the Program until 2030. Given the expected relatively small administration costs, FBC may propose a different treatment of the deferral account in a future revenue requirement application once the incentive portions are fully amortized.

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10.2 In Section 3.4 FBC states that the Amortization Period of 10 years is based on the expected useful life of the chargers, but that the ongoing additions will include ongoing incentive and Program costs to be amortized over subsequent 10 year



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periods. Please explain why the subsequent 10 years is the appropriate term for amortizing the ongoing incentive and Program costs. Response: Please refer to the response to BCUC IR1 6.5. Please explain how FBC determined that 10 years is the expected useful life of the 10.3 Level 2EV chargers. Response: Please refer to the response to BCUC IR1 7.4. 10.4 Does FBC's expected useful life consider the implications of technological evolution? Please explain. Response:

FBC expects Level 2 charging hardware and associated charging protocols to be supported for the useful life of the product. Most manufacturers are able to update chargers remotely, ensuring payment systems and other software features are available through a charger's lifetime. For example, AddEnergie, manufacturer of FLO EV chargers, supports all deployed chargers to date with software and firmware updates, payment systems, and more.