

William J. Andrews

Barrister & Solicitor

Member of the Law Society of British Columbia
70 Talbot Street, Guelph, ON, N1G 2E9
Phone: 604-313-0089, Email: william.j.andrews01@gmail.com

April 26, 2021

Mr. Fred James
Chief Regulatory Officer
Regulatory & Rates Group
British Columbia Hydro and Power Authority
16th Floor – 333 Dunsmuir Street
Vancouver, BC V6B 5R3
By Email: bchydroregulatorygroup@bchydro.com

Dear Sir:

Re: BC Hydro Public Electric Vehicle Fast Charging Rate Application
B.C. Sustainable Energy Association/Vancouver Electric Vehicle Association
Information Request No.1 to BC Hydro

Attached please find BCSEA-VEVA's Information Request No.1 to BC Hydro, pursuant to the regulatory timetable set out in BCUC Order G-89-21 [Exhibit A-2]. A version in Word format will be provided separately. If you have any questions, please do not hesitate to contact me.

Yours truly,
William J. Andrews



Barrister & Solicitor
Encl.

REQUESTOR NAME: **BC Sustainable Energy Association and Vancouver Electric Vehicle Association**

INFORMATION REQUEST ROUND NO: 1

TO: **BC Hydro**

DATE: **April 26, 2021**

PROJECT NO: **1599190**

APPLICATION NAME: **BC Hydro Public Electric Vehicle (EV) Fast Charging Rate Application**

A. Accessibility

1.0 Topic: Accessibility to Persons with Disabilities

Reference: Exhibit B-1, Application

- 1.1 What is BC Hydro's commitment statement regarding the accessibility of its public fast charging sites to persons with disabilities?
- 1.2 Would BC Hydro agree that electric vehicles offer a major new mobility opportunity for persons with disabilities and that full accessibility of public fast charging sites is a necessary prerequisite?
- 1.3 Can BC Hydro say that each of its current and planned public fast charging sites enables everyone, including persons with disabilities, to access and operate the EV charging stations at the site?
- 1.4 Would BC Hydro say that there is room to improve accessibility at some of its public fast charging sites?
- 1.5 Will BC Hydro commit to take all reasonable steps to address any deficiencies in accessibility at its public fast charging sites? Such steps could include, for example, installing curb ramps and associated level landing areas for operating fast chargers, ensuring parking stalls and landings are paved, configuring some accessibility stalls as drive-through to allow full access, installing sufficient area lighting at charging sites, and installing measures to offset the weight of the charging cables.
- 1.6 Would BC Hydro agree that accessibility to persons with disabilities is an important element of service quality when BC Hydro provides public fast-charging service?
- 1.7 Please describe BC Hydro's past and intended future engagement with persons with disabilities regarding the design, implementation and upgrade of BC Hydro's public fast charging sites and stations.
- 1.8 Does BC Hydro have a table or spreadsheet showing compliance with accessibility measures for each of BC Hydro's public fast charging sites? If so, please provide a copy. If not, would BC Hydro agree to develop such a tool for engagement with stakeholders regarding accessibility and for use in the development of the evaluation report proposed to be filed with the BCUC by March 31, 2024?

2.0 Topic: Accessibility

Reference: Exhibit B-1, Application; Exhibit A-3, BCUC staff IR 7.9 to BC Hydro

BCUC IR 7.9 asks: “Do the capital costs include the costs to make the stations wheelchair accessible? Are all current and future stations wheelchair accessible?”

2.1 Further to BC Hydro’s response to BCUC IR 7.9, if all of BC Hydro’s current and future public fast charging sites are not wheelchair accessible, does BC Hydro have a plan and funding to make them wheelchair accessible?

3.0 Topic: Accessibility

Reference: BC Hydro’s “EV Fast Charging: Design & Operational Guidelines For Public DCFC Stations In British Columbia, Version 1.1”¹

BC Hydro’s March 21, 2021 document “EV Fast Charging: Design & Operational Guidelines For Public DCFC Stations In British Columbia” provides the following summary of guidelines to create a barrier-free and accessible station:

“Focus on barrier-free and accessible station design elements

Here is a summary of guidelines to create a barrier-free and accessible station*:

- **Bollards** A distance of about 1.2 metres (4 feet) to 1.7 metres (5.5. feet) between bollards should protect the charger from damage and allow for access to station. Also ensure there is enough space around the charger to be able to manoeuvre a wheelchair, for example.
- **Surface** The parking stall surface and the area around the charger should have a firm, slip-resistant and level surface using concrete or asphalt. Do not use gravel.
- **Concrete pad** When using a precast concrete pad for a fast charger, the pad should be elevated flush with grade so as to not make it difficult to reach the screen or charging cables. If the concrete pad cannot be flush with the grade, consider an access ramp.
- **Signage** All signage and instructions for using the charger should use a clear and easy-to-read font.
- **Accessible stall dimensions** If you have the space, ensure the stall is at least 3.7 metres (12 feet) wide which includes at least 1.5 metres (5 feet) for entering and leaving a vehicle. This will provide adequate space for parking and an access aisle for reaching the charger. Even if your stall is an accessible one, it is not necessary to paint an “accessibility parking space marking” in the stall. This way, the charging stall will remain open to all drivers wanting to charge.

¹ <https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/power-smart/electric-vehicles/BCHydro-EV-Fast-Charging-Guidelines.pdf>

- **Charger Purchase** a charger that meets US ADA [*Americans With Disabilities Act*] requirements of placing the screen, holster and cables at a more accessible height.

* Our list is not an exhaustive one so be sure to take the time to consult any relevant municipal, provincial or federal accessibility codes and guidelines as they are being updated regularly.” [p.16]

- 3.1 Please confirm, or otherwise explain, that BC Hydro applies the *Design & Operational Guidelines* to its own public fast charging sites and stations.
- 3.2 Has BC Hydro conducted an evaluation of the extent to which the design and operation of its own public fast charging sites and stations is consistent with the *Guidelines*? If so, please provide a copy.
- 3.3 Please provide a copy of BC Hydro’s “EV Fast Charging: Design & Operational Guidelines For Public DCFC Stations In British Columbia, Version 1.1”.

B. Existing BC Hydro Public Fast Charging Sites and Stations

- 4.0 **Topic: Existing DCFC Sites and Stations**
Reference: Appendix C, “Electric Vehicle Charging Stations as Prescribed Undertakings,” in the BC Hydro F2022 Revenue Requirement Application, Exhibit B-2-2

Information on BC Hydro’s Fast Charging Stations is set out in table form in Appendix C, “Electric Vehicle Charging Stations as Prescribed Undertakings,” in the BC Hydro F2022 Revenue Requirement Application, Exhibit B-2-2

- 4.1 Please file an updated version of Appendix C, “Electric Vehicle Charging Stations as Prescribed Undertakings.”
- 4.2 Please confirm, or otherwise explain, that unless otherwise indicated, each of the criteria of section 5 of the GRR applies to each charging station at the respective site.
- 4.3 Please confirm, or otherwise explain, that BC Hydro expects that all of its existing and future public fast charging sites and stations will meet the criteria of a prescribed undertaking under section 5 of the GRR and section 18(2) of the *Clean Energy Act*.
- 4.4 Please provide photos of a sampling of BC Hydro’s existing public fast charging sites, to give a sense of the range of situations.

C. BC Hydro Public Fast Charging Planning

5.0 Topic: Planning Process Reference: Exhibit B-1, Application

In November 2018, the BCUC issued its [report on phase one of its inquiry into the regulation of EV charging services](#).

In June 2019, the BCUC issued the [phase two report](#), focused on EV charging service provided by regulated utilities such as BC Hydro and FortisBC (electric). Among other things, the BCUC indicated that a government regulation would be necessary if BC Hydro and FBC were to provide public fast charging service supported financially to any degree by their regular utility customers.

Later in 2019 and in early 2020, the Ministry of Energy, Mines and Petroleum Resources (as it was then called) consulted with the public on how the Government should respond to the BCUC's inquiry reports. The Ministry observed that additional investment in EV charging infrastructure by BC Hydro and FBC would be required in order to achieve the EV sales targets mandated in BC's 2019 [Zero-Emission Vehicles Act](#). The Ministry sought and received feedback on whether and if so how to enable BC Hydro and FBC to expand their public fast charging services with the costs (net of revenue from EV drivers) being backstopped by the utilities' regular customers.

In June 2020, the BC Government amended the [Greenhouse Gas Reduction \(Clean Energy\) Regulation](#) regarding EV charging service by BC Hydro and FBC, more or less along the lines suggested in the Ministry's consultation process. Briefly, the amendment to the GRR requires the BCUC to allow BC Hydro and FBC to recover their costs of public fast charging investments that meet certain criteria (net of revenue from EV drivers) from regular customers. The GRR does not specify what price BC Hydro or FBC should charge for public fast charging service. Nor does the GRR say how many fast charging sites and chargers the utilities should implement. However, the GRR does put a limit on the number of eligible charging sites in municipalities with a population of 9,000 or more.

BC Hydro is developing an [Electrification Plan](#) to be included in BC Hydro's next Revenue Requirements Application scheduled to be filed with the BCUC in August 2021. The Electrification Plan covers three areas: industry, transportation, and homes/buildings.

At a public on-line [engagement workshop](#) on April 13, 2021, BC Hydro outlined the current status of development of the transportation component of the Electrification Plan. BC Hydro's provision of public fast charging sites and stations is one component of the transportation section of BC Hydro's Electrification Plan.

- 5.1 Please provide any corrections or additions to the preamble.
- 5.2 Please describe how BC Hydro currently plans the development of its public fast charging service.

- 5.3 How does the planning of the deployment of BC Hydro's public fast charging service relate to the BC Hydro Electrification Plan? Is BC Hydro's deployment of public fast charging entirely with the Electrification Plan?
 - 5.4 What is the role of the Ministry of Energy, Mines and Low Carbon Innovation (as it is now called) in the planning of BC Hydro's public fast charging service?
 - 5.4.1 Has there been a change in the Ministry's role, for example following the GRR amendment in 2020?
 - 5.5 What are the opportunities for public engagement in the planning of BC Hydro's public fast charging service?
 - 5.6 Would BC Hydro be willing to expand the opportunities for public engagement in the planning of BC Hydro's public fast charging service if there was interest from EV drivers and other stakeholders?
 - 5.7 Please summarize the legal and policy support for BC Hydro's role in providing public fast charging service. Has BC Hydro's Low Carbon Electrification mandate affected how BC Hydro sees its role in providing public fast charging services?
- 6.0 Topic: Plans for BC Hydro Public Fast Charging**
Reference: Exhibit B-1, Application
- 6.1 What are BC Hydro's plans for deploying additional public fast charging sites beyond those identified in Appendix C of the F2022 Revenue Requirement Application?
 - 6.2 What are BC Hydro's plans for deploying additional fast charging units (charging stations as the GRR calls them) at its existing or future fast charging sites?
 - 6.3 What is BC Hydro's current thinking about a future transition out of its current role of providing public fast charging services in favour of exempt providers of public fast charging services operating in an unregulated market?
 - 6.4 Please confirm, or otherwise explain, that BC Hydro has no plans to implement public Level 2 charging service.
 - 6.5 What criteria or formula does BC Hydro use to determine the locations of its existing or future public fast charging sites, the number of stations (chargers) at each site, and the power of the stations (e.g., 50 kW or 100 kW)?
 - 6.5.1 In planning its public fast charging network, does BC Hydro distinguish the needs of local EV drivers and away-from-home EV drivers? Is there a priority on providing service to one over the other?

- 6.6 Does BC Hydro have a commitment and a plan to position BC Hydro public fast charging sites along all numbered highways in the province, including in remote areas?
- 6.7 In BC Hydro's view, should all numbered highways be treated equally with respect to BC Hydro fast charging stations so EV drivers have access to all regions of the province?
- 6.8 Please describe whether and how BC Hydro's deployment of its public fast charging sites and stations takes into account public fast charging services (existing or potential) operated by entities other than BC Hydro.
- 6.9 In choosing specific locations for its public fast charging sites, how does BC Hydro take into account features such the proximity of highways, shopping malls, washrooms, convenience stores, lighting or other existing or planned public fast charging stations?
- 6.10 What measures does BC Hydro use to evaluate its public fast charging network as a whole?
- 6.11 Does BC Hydro monitor congestion at its public fast charging sites?
 - 6.11.1 Please discuss the options for addressing congestion at BC Hydro's public fast charging sites.
 - 6.11.2 Does BC Hydro consider that it has an adequate supply of information about the use of its public fast charging sites to be able to determine when steps to address congestion are necessary?
- 6.12 Is BC Hydro monitoring its current public fast charging sites with a view to assessing how appropriately they are sited to meet EV drivers' needs?
- 6.13 Does BC Hydro consider that the improving range capabilities of BC's EV fleet over time may render some of its current DCFC sites less than optimally located? If so, does BC Hydro have a way to assess this?
- 6.14 Is it feasible for BC Hydro to relocate one of its DCFC sites if it is not optimally located to serve EV customers?
- 6.15 Please confirm, or otherwise explain, that section 5 of the GGRR would cover more stations and/or more sites than BC Hydro proposes to implement at the present time.

7.0 Topic: Impact on Other EV Charging
Reference: Exhibit B-1, Application, page 10

BC Hydro says that "fast charging stations in urban and suburban locations provide alternatives for electric vehicle drivers who do not have access to charging stations at home or work." [p.10]

- 7.1 What information does BC Hydro have on whether its fast charging stations in urban and suburban locations inhibit the development of EV charging infrastructure in homes, MURBs or workplaces?
- 7.2 In BC Hydro's view, will pricing BC Hydro's public fast charging service at the low end of the 20 to 30 cents/minute range for 50 kW charging inhibit the development of charging infrastructure in homes, MURBs and workplaces?

BC Hydro says that "Fast charging stations along highway corridors make inter-city travel in an electric vehicle possible..."

- 7.3 In BC Hydro's view, do other entities already provide adequate public fast charging service along highway corridors in BC? Are they on track to do so in the future?

8.0 Topic: "nowhere else to charge"
Reference: Exhibit B-1, Application, pages 14-19; Appendix D, "Electric Vehicle Charging Stations Survey – Section B Results," pfd p.68

BC Hydro provides Leger's results of a survey questionnaire focused on users of BC Hydro's public fast charging sites. The survey was undertaken in August and September of 2020, when BC Hydro's public fast charging service was free. Leger reports that "One-third (34 per cent) indicate public charging service is critical to them and they have nowhere else to charge." [p.15]

- 8.1 Can BC Hydro provide any further insight into the circumstances of the users of BC Hydro's public fast charging sites who indicate that "public charging service is critical to them and they have nowhere else to charge"?

9.0 Topic: 100 kW Charging Station
Reference: Exhibit B-1, Application, page 11

"BC Hydro currently has one 100 kW charging station, which is undergoing a period of testing before it is deployed to a site. Plans for deploying more 100 kW fast charging stations have not been finalized and will be subject to availability of government funding and suitability for potential sites." [p.11]

- 9.1 Please discuss the role of 100 kW or greater charging stations in BC Hydro's public fast charging deployment plan.
- 9.2 If government funding and suitable sites were available would BC Hydro deploy additional 100 kW fast charging stations?
- 9.3 Would the 100 kW fast charging stations be allocated to sites that particularly serve inter-city highway travelers?
- 9.4 As other providers of public fast charging service implement more 100 kW chargers and chargers even higher than 100 kW, does BC Hydro see itself adopting a similar trend?

D. Rate Design

10.0 Topic: \$/minute v. \$/kWh

Reference: Exhibit B-1, Application, pages 11-12.

“The Proposed Rates are time based. Each charging station has a built-in timing device, which will measure the charging time by the second. The total time for each charging session will be displayed in minutes and seconds shown on the billing receipt at the end of each charging session.

Although customer and stakeholder support for an electricity-based or a combination electricity-and-time-based rate was expressed during BC Hydro’s public and stakeholder consultations as discussed in section 3 below, only a time-based rate is possible at this time due to the lack of a Measurement Canadian approved standard to measure direct current (DC) power. While the electricity provided to the fast charging station, including the charging equipment, lighting and ancillary equipment (e.g., heating and cooling), can be metered with current Measurement Canada approved revenue metering equipment, there is no Measurement Canada approved solution measuring the electricity dispensed from the station to the battery of the electric vehicle.” [underline added]

- 10.1 Can it be said that the nub of the problem is that while the fast charging equipment can provide the driver with an estimate of the number of kW-hours delivered in a charging session this estimate has not been shown to Measurement Canada’s satisfaction to be sufficiently accurate for billing purposes?
- 10.2 For greater certainty, please confirm that it would not be legal for BC Hydro to charge EV drivers on a \$/kWh basis at its public fast charging sites at the present time.

BC Hydro states on page 12 of the Application:

“The American National Standards Institute (ANSI) metering working group is currently developing a DC metering standard (ANSI C12.32), which will establish acceptable performance criteria for revenue grade DC kWh energy and kW demand meters. BC Hydro has been monitoring the development of the new DC metering standard. The new standard is currently under review by various North American utilities and equipment manufactures for formal approval.

In addition to the standards development process, BC Hydro will also participate in the Measurement Canada initiated public consultation process that will start in early 2021. This process is expected to develop performance-based standards that would allow existing and new electric vehicle charging stations that meet established technical standards to charge based on kilowatt-hours (kWh) consumed. The expected timeline for this public consultation process is over the next 18 months.” [underline added]

- 10.3 Please describe how the ANSI metering working group's development of a DC metering standard relates to Measurement Canada's public consultation process.
- 10.4 Does the 18-month expected timeline for the Measurement Canada public consultation process mean that at the end of 18 months Measurement Canada will approve standards for revenue metering for DC EV charging equipment? Or is there an expectation that following the 18-month public consultation period there will be an additional period of time for Measurement Canada to go through the approval process and to actually approve standards for revenue metering for DC EV charging equipment in Canada?
- 10.5 Does BC Hydro expect that after Measurement Canada approves standards for revenue metering for DC EV charging equipment in Canada there will be an additional period of time for the providers of DC EV charging equipment to obtain certification that their fast charging equipment meets the Measurement Canada standard for revenue metering, or to develop and obtain certification of such equipment?
- 10.6 Does BC Hydro have any insight into whether its existing and soon-to-be-installed DC EV charging equipment will meet future Measurement Canada standards for revenue metering? Does BC Hydro expect that after Measurement Canada eventually approves standards for revenue metering in fast charging equipment BC Hydro would need to implement new fast charging equipment that meets the new standards before BC Hydro would be allowed to charge on a \$/kWh basis for its public fast charging service?
- 10.6.1 Put another way, does BC Hydro expect that its existing and soon-to-be-installed fast charging equipment will meet the revenue metering standards when the standards are eventually adopted?
- 10.7 Does BC Hydro expect that there will be clarity about revenue metering standards for DCFC in Canada by the time BC Hydro prepares the evaluation report it proposed to file with the BCUC by March 31, 2024 [Application, p.34]?

11.0 Topic: Postage Stamp Rate Approach
Reference: Exhibit B-1, Application

- 11.1 The rates for which BC Hydro seeks approval are the same at each of the public fast charging sites throughout BC Hydro's service territory. Can this be described as an application of the postage stamp rate approach?
- 11.2 Did BC Hydro consider having different rates for public fast charging in different areas with BC Hydro's service territory? (Not suggesting necessarily, just asking.) If not, why not? If BC Hydro did consider the possibility of different rates in different areas, why did BC Hydro reject the idea?

12.0 Topic: Peak/Off-Peak Rates
Reference: Exhibit B-1, Application

- 12.1 The rates for which BC Hydro seeks approval are the same at all times of day and at all days of the year. Did BC Hydro consider having different rates during peak and off-peak periods? If not, why not? If BC Hydro did consider the possibility of peak/off-peak rates for its public fast charging service, why did BC Hydro reject the idea?
- 12.2 Would BC Hydro agree that peak/off-peak rates for BC Hydro's public fast charging service would help spread out the use of the stations and reduce congestion at peak times?
- 12.3 Will BC Hydro examine the merits of peak/off-peak rates in the evaluation report proposed to be filed with the BCUC by March 31, 2024?

13.0 Topic: Alternative Rate Designs
Reference: Exhibit B-1, Application

A VEVA member says it might be possible to adjust the \$/minute billing rate to correspond to the amount of power (kW) being dispensed during a charging session rather than basing the \$/minute rate on the charger's nameplate power rating (e.g., 50 kW or 100 kW). They are interested in this approach as a work-around until Measurement Canada approves standards for a DC energy revenue meter and fast charging can be billed on a \$/kWh basis.

- 13.1 Has BC Hydro considered a rate design in which the price per minute varies according to the power (kW) being dispensed during the charging session utilizing software within the DCFC unit?

E. Rates

14.0 Topic: Need for BC Hydro Public Fast Charging Rates
Reference: Exhibit B-1, Application, page 2

In the Application, BC Hydro states:

"As shown in the F2022 RRA, BC Hydro will have approximately 96 fast charging stations in operation by the end of fiscal 2021 (i.e., March 31, 2021). However, there is currently no rate in effect for the fast charging service provided through those stations. BC Hydro files the Application seeking BCUC approval of the Proposed Rates for the fast charging service, for the main reasons discussed below.

First, in absence of the approved Proposed Rates, BC Hydro cannot collect any revenue from users of the fast charging service as a BCUC approved rate is required in order for BC Hydro to charge for the fast charging service. This means that absent BCUC approved rates for fast charging service, the entire cost for providing the fast charging service is recovered from all ratepayers. ..." [p.2, underline added]

- 14.1 What has BC Hydro said to EV drivers in the past regarding whether the free service at BC Hydro's public fast charging stations would be temporary or permanent? Has BC Hydro led customers to believe that its public fast charging service would be free indefinitely?
- 14.2 Please specify the reasons why BC Hydro rejects continuation of the *status quo* in which "the entire cost for providing the fast charging service is recovered from all ratepayers."
- 14.3 BC Hydro says that about half of the EV drivers surveyed indicated they would stop using the BC Hydro public fast charging service if a rate is introduced [p.14]. Why does BC Hydro apparently not consider that a sufficient reason to continue with free service?
- 14.4 What is BC Hydro's response to suggestions that its public fast charging service should be free in order to promote EV sales and use in BC?
- 14.5 Has BC Hydro considered a phased approach to introducing pricing for its public fast charging service, such as a very low price initially followed by one or more increases at scheduled intervals? (Not suggesting necessarily, just asking.)
- 14.6 Why has BC Hydro chosen not to delay its application for approval of rates for its public fast charging service due to the current COVID-19 pandemic? (Not suggesting necessarily, just asking.)

15.0 Topic: Rate Setting Objective

Reference: Exhibit B-1, Application, pages 3, 25-26

BC Hydro states:

"The Proposed Rates, will allow BC Hydro to collect revenue to recover as much as practical of the cost of providing the fast charging service from users of the service, which will reduce costs that must be recovered from all ratepayers." [p.3, underline added]

- 15.1 Does this imply that the size of the proposed rates is aimed at maximizing the net revenue from EV drivers (i.e., revenue net of variable costs)?

BC Hydro states:

"BC Hydro's longer-term rate design objective is for the fast charging service rates to collect sufficient revenues from the users of the service to recover its full costs including electricity (Energy and Demand), as well as the fast charging station maintenance and capital costs, on a portfolio (or all station) basis.

However, achieving this objective will require station utilization levels to be higher than what can be expected over the near term. To encourage station utilization while maintaining a level playing field with other fast charging station operators, the Proposed Rates are designed to align with prices of other operators, to fall within the range of prices that research

indicates customers are willing to pay, and to collect sufficient revenue to recover at least the cost of electricity based on BC Hydro's General Service rate schedules as further described below. Higher rates would reduce initial station utilization and BC Hydro expects this would reduce revenue recovery." [pp.25-26]

- 15.2 What is BC Hydro's estimate of the station utilization rates at which fast charging service rates would collect sufficient revenues from the users of the service to recover the full costs of service?
- 15.3 Does BC Hydro have an estimate of how long it will be until these station utilization rates are achieved?

16.0 Topic: Price Point
Reference: Exhibit B-1, Application, page 23.

BC Hydro says that typical rates for a 50 kW fast charging station service are between 20 to 30 cents per minute. BC Hydro proposes a price of 21 cents/minute for 50 kW fast charging service.

- 16.1 Is it fair to say that BC Hydro's proposed price point is at the low end of the range?
- 16.2 In proposing a rate of 21 cents/minute for 50 kW service, does BC Hydro anticipate drawing customers away from other providers of public fast charging service? If so, please reconcile this with the level playing field objective articulated by the BCUC in its Phase Two Report of the Inquiry into the Regulation of EV Charging Service. If not, why not?
- 16.3 Is BC Hydro concerned that a price point at the low end of the range will exacerbate congestion at times of peak usage of its public fast charging sites?

17.0 Topic: 100 kW Price
Reference: Exhibit B-1, Application, page 1

BC Hydro seeks approval of a final rate of 27 cents per minute for 100 kW service. FortisBC (electric) has applied to the Commission for approval of a final rate of 54 cents per minute for 100 kW service (decision pending at the time of writing).

- 17.1 Does BC Hydro see a problem with having a final rate of 27 cents per minute for 100 kW service if the FBC rate is substantially higher at 54 cents per minute for 100 kW service?

18.0 Topic: Labour costs for EV Infrastructure
Reference: Exhibit B-1, Application, page 30; Exhibit A-3, BCUC IR 7.5

BC Hydro refers to labour costs of approximately \$800,000 per year associated with electric vehicle infrastructure that are not included in station maintenance and capital costs for the costs analysis. BCUC asks why the \$800,000 per year is not included in the calculation of the full cost of service.

- 18.1 Please explain the labour costs of approximately \$800,000 per year associated with electric vehicle infrastructure. Does this relate to EV infrastructure more broadly than BC Hydro's own public fast charging service?

F. Regulatory Context

19.0 Topic: Regulatory Context
Reference: Exhibit B-1, Application

- 19.1 If BC Hydro's public fast charging sites and stations meet the criteria in section 5 of the GGRR, in BC Hydro's view does the BCUC have the authority to reject the proposed rates in light of section 18(2) of the *Clean Energy Act*?

G. Marketing

20.0 Topic: Advertising DCFC services
Reference: Exhibit B-1, Application, page 31.

BC Hydro indicates that improving the recovery of its costs of providing public fast charging service depends on increased utilization rates, but that it lacks information to estimate expected utilization rates at this time. BC Hydro states:

"In all cases, the rate goes down as utilization increases and fixed costs such as the station capital costs and the MGS Demand Charge are spread across more station users. As noted above, BC Hydro does not have enough information on which to estimate station utilization at this time. However, based on a market study, we believe that the range of 3 to 5 per cent utilization is a reasonable estimate at this time for the 50 kW station." [footnote removed]

- 20.1 What is BC Hydro doing to advertise its public fast charging services and to otherwise promote utilization of its stations?

H. Evaluation Report

21.0 Topic: Evaluation Report
Reference: Exhibit B-1, Application, pages 32-33, 36

BC Hydro states:

"We propose to file the evaluation report and, if warranted, an application to propose new rate(s) for fast charging service, by March 31, 2024. This timeline will allow for the collection and analysis of two full fiscal years of utilization and financial data (fiscal 2022 and fiscal 2023) as well as the completion of customer and stakeholder engagement informed by the results of the evaluation."

- 21.1 Order G-89-21 approves the interim rates for BC Hydro's public fast charging service effective May 1, 2021. Please confirm, or otherwise explain, that the interim rates were implemented on May 1, 2021.
- 21.2 In BC Hydro's view, does missing one month of data (April) from F2022 affect the proposed timing of filing the evaluation report by March 31, 2024?
- 21.3 Please confirm, or otherwise explain, that apart from general rate increases the final rates for which BC Hydro requests approval would remain in effect unless and until changed by the BCUC. In other words, filing the evaluation report by March 31, 2024 would not automatically cause a change in the rates for BC Hydro's public fast charging service.

BC Hydro elaborates about the evaluation report on page 36 of the Application, as follows:

"BC Hydro proposes to monitor several aspects of the fast charging service, including station utilization (at different power levels), revenue collected under the applicable Rate Schedules, costs incurred, and customer feedback, and provide to the BCUC by March 31, 2024 an evaluation report and recommendations for fast charging service rates going forward.

The March 2024 report will include the evaluation of the following:

- Station utilization at different power level stations and factors that impact it;
- Customer satisfaction and experience;
- Implementation effectiveness including billing, payments and special conditions;
- Comparison of BC Hydro fast charging service rates with other operators;
- Collection of data on the electricity use characteristics (e.g., load profile, load factor, and peak demand) of the fast charging service and determination of whether General Service remains appropriate or a new rate class should be developed specific to electric vehicle fast charging service;
- Technological advancements in metering and billing for fast charging services;
- Customer and stakeholder engagement on the results of the evaluation report and industry developments; and
- The potential need for repricing or redesign of the rates."

- 21.4 Would BC Hydro agree to including accessibility to persons with disabilities within the evaluation report?
- 21.5 For greater certainty, will BC Hydro include an assessment of peak/off-peak pricing in the evaluation report?
- 21.6 Will BC Hydro include in the evaluation report an examination of the impact of the public fast charging rates on the development and use of

other types of EV charging (i.e., other than fast charging) such as charging service in multiple unit residential buildings (MURBs)?