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Sent via email/eFile

BC HYDRO PUBLIC EV FAST CHARGING RATE APPLICATION EXHIBIT A-19

Ms. Suzanne Goldberg
Director, Public Policy – Canada
ChargePoint
suzanne.goldberg@chargepoint.com

Re: British Columbia Hydro and Power Authority – Public Electric Vehicle Fast Charging Rate Application – Project No. 1599190 – Follow-Up Questions on ChargePoint’s Evidence in Advance of the Streamlined Review Process

Dear Ms. Goldberg,

Further to the above-noted matter, enclosed please find British Columbia Utilities Commission Follow-Up Questions on ChargePoint’s Evidence in Advance of the Streamlined Review Process (SRP) for response at the SRP.

Sincerely,

Original signed by Marija Tresoglavic for:

Patrick Wruck
Commission Secretary

LC/jo
Enclosure



British Columbia Hydro and Power Authority
Public Electric Vehicle Fast Charging Service Rates Application

FOLLOW-UP QUESTIONS ON CHARGEPOINT’S EVIDENCE IN ADVANCE OF THE STREAMLINED REVIEW PROCESS

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A. LEVEL PLAYING FIELD

**5.0 Reference: Level Playing Field
Exhibit C4-5, BCUC IR 1.8.1; Exhibit C20-10, BCUC IR 4.1
British Columbia Hydro and Power Authority’s (BC Hydro) proposed rates**

In response to British Columbia Utilities Commission (BCUC) information request (IR) 1.8.1, ChargePoint stated:

[...] an uneven playing field between exempt and non-exempt utilities and resulting impacts on the competitive nature of the market could impact exempt utilities investment decisions with respect to current and future investments in stations or the number of stations an exempt utility site host invests in.

In response to BCUC IR 4.1 to Suncor Energy Inc. (Suncor), Suncor stated:

BC Hydro is a price setter in the EV charging marketplace (they supply home charging, public charging, workplace charging and on-the-go charging). The rate they charge should be sufficient to enable other operators to recover, at a minimum, the cost of energy (per BC Hydro invoices, including peak demand pricing) and the capital associated with BC Hydro’s Connection Fee. This would help level the playing field.

5.1 Please discuss whether, in ChargePoint’s view, British Columbia Hydro and Power Authority (BC Hydro) rates for electric vehicle (EV) direct current fast charging (DCFC) service that are sufficient to enable other operators to recover at least their cost of energy and the capital associated with BC Hydro’s connection fee would help level the playing field between exempt and non-exempt utilities. Why or why not?

5.1.1 If so, please discuss what BC Hydro’s rates or rate design would have to be to enable other operators to recover at least their cost of energy and the capital associated with BC Hydro’s connection fee.

B. EV CHARGING TECHNOLOGY

**6.0 Reference: EV Charging Technology
Exhibit C4-5, BCUC IR 1.7; Exhibit C20-10, BCUC IR 16.1
50 kW stations**

In response to BCUC IR 1.7, ChargePoint stated:

ChargePoint is a world leading electric vehicle charging network, providing scalable solutions for every charging scenario from home and multifamily to workplace, parking, hospitality, retail and transport fleets of all types. ChargePoint's cloud subscription platform and software-defined charging hardware is designed to enable businesses to support drivers, add the latest software features and expand fleet needs with minimal disruption to overall business. ChargePoint is constantly innovating and growing to respond to the market and to our customers' needs.

In response to BCUC IR 16.1 to Suncor, Suncor stated:

[...] it is our view that 50kW is already outdated and insufficient for on-the-go charging meant to encourage EV adoption to meet BC's climate goals. We believe that the on-road fleet will have a greater percentage of >50kW capable vehicles compared to all previously sold and on-road <50kW capable vehicles by late 2021 early 2022 based on model availability and increased sales quarter-over-quarter.

- 6.1 Please discuss whether ChargePoint agrees with Suncor that 50 kW stations are already outdated and insufficient for on-the-go charging. Why or why not?
- 6.2 In ChargePoint's experience, please explain whether a 50 kW charging station can be upgraded to become a 100 kW charging station. If so, at what cost? If not, would 50 kW charging stations become stranded assets? Could these stations have a residual value in other markets?

**7.0 Reference: EV Charging Technology
Exhibit C4-5, BCUC IR 3.8
Energy-based billing**

In response to BCUC IR 3.8, ChargePoint stated:

Confirmed that all CoV charging fees are per minute. At present, there is no Measurement Canada certification for charging meters and thus \$ per kWh fees are not legal.

- 7.1 To the best of ChargePoint's knowledge, please discuss whether there are any EV charging station service providers in Canada that charges an energy-based fee for EV charging service. If so, please identify and explain how they are able to charge an energy-based fee.
- 7.2 Please discuss whether ChargePoint has billing software that is used in Canada or other parts of the world that enables \$ per kWh billing for EV fast charging services. If so, please identify
- 7.3 If an EV charging station service provider in BC could obtain an exemption to charge \$ per kWh fees, please discuss whether ChargePoint has billing software readily available that could enable energy-based billing (in whole or in part). As part of the response, please provide an estimate of the time frame and cost to an EV charging service provider to obtain billing software to enable energy-based billing.

C. COST RECOVERY

**8.0 Reference: Cost Recovery
Exhibit C4-5, BCUC IR 1.6, 3.4.1; Strata Plan VR 2673 IR 5
Depreciation expense**

In response to BCUC IR 1.6, ChargePoint stated:

Depreciation data were not available from the CoV [City of Vancouver]. However, based on the total costs over a 10-year period, present average revenues would recover approximately 20% of capital plus operating costs.

In response to BCUC IR 3.4.1, ChargePoint stated:

Based on the data available to ChargePoint, assuming utilization at the CoV's sites remain at present levels, and assuming a 10-year amortization period, the revenues required to recover all costs would likely need to increase by a multiple of approximately 3.75 times, on average (depending on capital cost at a given site). However, this analysis does not consider the future impacts of increasing EV adoption on utilization, nor the impact of fee changes on utilization; both which are likely to have a large impact on estimated cost recovery over a 10-year period.

In response to Strata Plan VR 2673 IR 5, ChargePoint confirmed that the capital costs in Table 1 of ChargePoint's evidence are not net of the funding received from other levels of government.

8.1 Please confirm, or explain otherwise, that the 20 percent recovery of capital and operating costs is based on the CoV's capital costs before funding received from other levels of governments.

8.1.1 If confirmed, to the best of ChargePoint's ability, please provide the percentage of average costs (i.e. depreciation plus operating costs) that the CoV's EV charging revenue would recover based on the CoV's capital costs net of funding from other levels of government.

8.1.2 If confirmed, to the best of ChargePoint's ability, please provide the rates per minute necessary to recover, on average, 100 percent of the CoV's operating costs including depreciation expense based on the CoV's capital costs net of funding from other levels of government. Please provide the supporting calculations.

**9.0 Reference: Cost Recovery
Exhibit B-4, BCUC IR 7.2.1
Carbon credits**

In response to BCUC IR 7.2.1, BC Hydro stated:

BC Hydro has considered credit revenues from the sale of credits it receives as a result of electricity sold through its fleet of EV fast charging stations under the Renewable & Low Carbon Fuel Requirements Regulation.

The value of any credits depends on the ongoing demand for, and supply of, credits. Future revenues are uncertain as supply and demand may fluctuate year-to-year, and there may be changes in the low carbon fuels program. Because of these uncertainties, BC Hydro has not included any related revenues in the rate analyses presented in the Application.

9.1 To the best of ChargePoint's knowledge, please confirm that the potential revenues generated

from the sale of carbon credits are factored into CoV's EV fast charging rates. If not confirmed, please explain whether CoV utilizes carbon credits generated from its EV fast charging business in other lines of business.

**10.0 Reference: Cost Recovery
Exhibit C4-5, BCUC IR 4.1, 4.4, 4.5
Demand charges for EV service providers**

In response to BCUC IR 4.5, ChargePoint stated:

ChargePoint submits that a discussion of demand charges is relevant to this proceeding as demand charges are a key factor in cost recovery calculations and in discussions related to competitiveness impacts.

A review of BC Hydro's Large and Medium General Service Rates within the context of BC Hydro and the province's goals of encouraging EV adoption would be more appropriate in a separate proceeding.

- 10.1 Please clarify whether ChargePoint is proposing to review the demand charges in BC Hydro's Large and Medium General Service rate schedules as part of this proceeding or in a separate proceeding. Please explain why.

In response to BCUC IR 4.1, ChargePoint stated:

In ChargePoint's experience, the demand transition rate is a short-term solution that may or may not alleviate investment barriers for site hosts in the medium- to long-term; it will depend on the use case. ChargePoint recommends, for future potential rate design, that rather than implementing short-term temporary rate designs, such as a demand charge holiday, the rates designed to encourage EV charging investment seek to establish long-term stable alternatives to existing demand-based rates for medium and large general service commercial customers. Such rates could be designed to balance utility costs, with the goals of encouraging EV charging investment and EV adoption, and the benefits of increased demand for electricity resulting from increased EV adoption.

In response to BCUC IR 4.4, ChargePoint stated:

ChargePoint is not able to complete a comprehensive analysis of all rates presented in its submission but does note the utilities listed in its evidence have taken a diversity of approaches to address barriers associated with demand-based charges. ChargePoint notes that, given the diversity of use cases for EV charging, there is no "one-size-fits-all" alternative to traditional demand-based rates, and utilities should have flexibility in developing alternative solutions for its customers. Further, across this diversity of use cases, utilities have developed sustainable solutions to adapt demand charge rate structures that scale with utilization.

- 10.2 Of the utilities provided in ChargePoint's evidence, please discuss whether any of the EV-specific demand charge rates that have been designed by these utilities would be suitable for BC Hydro to implement as a longer-term solution to encourage EV fast charging investment. If so, please identify and explain why.