05 July 2021

VIA E-FILING

BCPIAC
Public Interest Advocacy Centre

Reply to: Leigha Worth
ED@bcpiac.org
Ph: 604-687-3034
Our File: 7500.313

Patrick Wruck
Commission Secretary
BC Utilities Commission
6th Floor 900 Howe Street
Vancouver, BC V6Z 2N3

Dear Mr. Wruck:

Re: British Columbia Hydro and Power Authority (BC Hydro) Public Electric Vehicle (EV) Fast Charging Rate Application
BCOAPO Information Request No. 1 to Suncor re Intervener Evidence

We represent the BC Old Age Pensioners' Organization, Active Support Against Poverty, Council of Senior Citizens' Organizations of BC, Disability Alliance BC, Together Against Poverty Society and the Tenant Resource and Advisory Centre, known collectively in this process as "BCOAPO et al.".

Enclosed please find BCOAPO's Information Request No. 1 to Suncor with respect to it's evidence in the above-noted matter.

If you have any questions, please do not hesitate to contact the undersigned.

Sincerely,
BC PUBLIC INTEREST ADVOCACY CENTRE

Original on file signed by:

Leigha Worth
Executive Director | General Counsel

Encl.

REQUESTOR NAME:	**BCOAPO**
INFORMATION REQUEST ROUND NO:	**#1**
TO:	**SUNCOR**
DATE:	**5 JULY 2021**
PROJECT NO:	**1599190**
APPLICATION NAME:	**BCH EV FAST CHARGE RATE APPLICATION**

1.0 Reference: Exhibit C20-4, paragraph 2

Preamble: The Evidence states:

> "As owner of the Petro-Canada brand, Suncor has completed installation of twenty-two (22) EV fast charging stations at twelve (12) different locations in British Columbia ("BC")."

1.1 How many of Suncor's twelve locations are served by BC Hydro?

1.1.1 If all twelve are not served by BC Hydro what other utilities do Suncor's EV charging sites received electricity service from?

1.2 Please provide breakdown of the 22 EV fast charging stations by kW rating.

2.0 Reference: Exhibit C20-4, paragraph 4

Preamble: The Evidence states:

> "Suncor respectfully submits that the BCUC can only approve a proposed rate that accounts for recovery of all BC Hydro's forecasted EV-charging expenses from those EV users."

2.1 Is it Suncor's view that the proposed rate for any year must account for recovery of all of BC Hydro's forecasted EV-charging expenses for that year, or can the rates be designed with the intent that over a set number of years the overall revenues collected will account for the recovery of all of BC Hydro's forecast EV-charging expense for those years? Please explain the basis for the response.

3.0 Reference: Exhibit C20-4, paragraph 9

3.1 Please explain how the BC Hydro Rate Proposal "could result in the stranding of existing investments already made by private investors".

4.0 Reference: Exhibit C20-4, paragraph 11

Preamble: The Evidence states:

> "According to Fleet Carma's nation-wide EV charging study, 72% of all EV charging takes place either at home or the workplace, of which BC Hydro is already the sole supplier due to its natural monopoly."

4.1 Please confirm that BC Hydro is the sole supplier of electricity to all EV charging stations (whether at a home, at the workplace or elsewhere) located in its service territory. If not confirmed, please explain why.

4.2 The Evidence states that 72% of all EV charging takes place either at home or the workplace. However, the cited Report states that "residential charging accounted for 72% of charging energy" (page 7). Please reconcile and revised the percentage charging that occurs at either home or the workplace as required.

5.0 Reference: Exhibit C20-4, paragraph 17

Preamble: The Evidence states:
"Based on current demand charges that fall into BC Hydro's "Large General Service" category, the Rate Proposal would be crippling to the profitability of private EV charging stations that, if forced to adopt a competitive charging rate to that proposed by BC Hydro, would not even be able to recoup their BC Hydro utility charges, before considering maintenance, software, support, and capital recovery."

5.1 Does Suncor consider itself to be in competition with BC Hydro with respect to the EV fast charging market and, if so, why? For example, are Suncor's current or planned future EV fast charging stations sufficiently close to BC Hydro's that EV users can choose between the two?

6.0 Reference: Exhibit C20-4, paragraphs 22 and 24 (Figure 1)

Preamble: The Evidence states:

> "not all energy consumed at an EV charging site is billed to an EV driver – the power draw related to power towers and charging equipment can be up to 2-4x the electricity actually sold to a consumer – this is not specifically identified or adequately considered in BC Hydro's utility cost recovery calculations."

6.1 Please explain more fully the other sources of electricity use at an EV fast charging site over and above that sold/delivered to EV users.

6.2 Please explain more fully what Suncor means when it states that "the power draw related to power towers and charging equipment can be up to 2-4x the electricity actually sold to a consumer". For example, does this mean that the power draw not sold to a consumer can be two to four times the amount actually sold to consumers?

6.3 With respect to Figure 1 and the 50 kW column, please explain how the 50.4 kWh of no load power from operations vs. 746.7 kWh sold to customers was determined and how this relates to the no load power being 2-4x energy sold comment.

6.4 With respect to Figure 1, please explain why there is no incremental demand (i.e., kW) attributed to the no load power from operations (i.e., the load not sold to EV users).

7.0 Reference: Exhibit C20-4, paragraph 24 (Figure 1) and paragraph 33
Exhibit B-4, BCUC 1.7.2 (Attached Excel Spreadsheet)

Preamble: Figure 1 from the Suncor Evidence appears to use the assumptions made by BC Hydro in support of its Proposed Rates per BCUC 1.7.2 as set out below:

50 kW		
Fiscal 2022 Medium General Service Rate	Value	Units
Demand Charge	5.39	$ per kW
Energy Charge	9.63	cents per kWh
Fiscal 2020 BC Hydro EV Fast Charging Station Data	Value	Units
Peak Demand	50	kW
Average Electricity Consumption per Charging Session	13.10	kWh
Average Charging Session Length	28.60	minutes

100 kW		
Fiscal 2022 Medium General Service Rate	Value	Units
Demand Charge	5.39	$ per kW
Energy Charge	9.63	cents per kWh
Fiscal 2020 BC Hydro EV Fast Charging Station Data	Value	Units
Peak Demand	100	kW
Average Electricity Consumption per Charging Session	13.10	kWh
Average Charging Session Length	28.60	minutes

At paragraph 33 the Evidence states: "At BC Hydro's proposed 50kW charging rate, it takes over 72 minutes to get full charge, with a 100kW charger helping to reduce charging time to 36 minutes."

7.1 It is noted that for the 50 kW and 100 kW stations both the time per charge (28.6 minutes) and the energy per session (13.1 kWh) are the same. Does Suncor consider this to be reasonable when its comments in paragraph 33 suggest the rate of charging will be much higher for the 100 kW station than for the 50 kW station and the time per session shorter?

7.1.1 If yes, please explain why.

7.1.2 If not, please re-do Figure 1 based on Suncor's view as to a reasonable set of assumptions for the 100 kW station – given the assumed values for the 50 kW station.

7.2 If Suncor has any 50 kW stations, please provide the following for the 50 kW stations based on the most recent 12 month of data available:

a) The average energy per charging session

b) The average duration of a charging session, and

c) The average number of charging sessions per month.

7.3 If Suncor has any 100 kW stations, please provide the following for the 100 kW stations based on the most recent 12 month of data available:

a) The average energy per charging session

b) The average duration of a charging session, and

c) The average number of charging sessions per month.

7.4 Has Suncor noticed a material change in the use of its charging stations since the start of the pandemic?

7.4.1 If yes, please provide responses to questions 7.2 and 7.3 based on 2019 data.

8.0 Reference: Exhibit C20-4, paragraphs 4 and 27

8.1 In paragraph 4 Suncor asserts that "BCUC can only approve a proposed rate that accounts for recovery of all BC Hydro's forecasted EV-charging expenses from those EV users." Should this same principle be applied to the rates BC Hydro charges 3rd party EV station owners (such as Suncor) for the electricity the EV stations use?

8.1.1 If not, why not?

8.1.2 If yes, what is Suncor's understanding as to whether or not BC Hydro's "Demand Transition Rate" satisfies this principle?

9.0 Reference: Exhibit C20-4, paragraph 32

9.1 Please explain how Figures 2 through 8 support Suncor's claim that "the existing on-the-road fleet of EV's are capable of a rate of charge well beyond what is proposed by BC Hydro's EV Charging network."

10.0 Reference: Exhibit C20-4, paragraph 33

10.1 Please explain what the abbreviations PHEV and BEV mean.

11.0 Reference: Exhibit C20-4, paragraph 36

Preamble: The Evidence states:

> "In this regard, Suncor submits that the BCUC can only approve a proposed rate that accounts for recovery of all BC Hydro's forecasted EV-charging expenses from those EV users in order to ensure an even playing field with private sector investors and an appropriate level of risk for ratepayers."

11.1 What, in Suncor's view, would be the appropriate rates for the BCUC to approve for BC Hydro's 50 kW and 100 kW EV fast charging stations, based on the cost data BC Hydro has provided in its Application? Please provide the supporting calculations.

11.2 If, in Suncor's view, there is insufficient information available from BC Hydro's Application to calculate the appropriate rates, please indicate what additional information Suncor believes is required.

11.2.1 Based on Suncor's own experience is it able to make reasonable assumptions regarding the missing information and, if so, please outline what they are and what the resulting rates would be.