

VANCOUVER ELECTRIC VEHICLE ASSOCIATION (VEVA)

INFORMATION REQUEST NO. 1 TO BC HYDRO

**British Columbia Utilities Commission
An Inquiry into the Regulation of Electric Vehicle Charging Service**

Potential Cross-Subsidization

1.0 References: a. Exhibit C1-2, p. 15

On page 15 of Exhibit C1-2, BC Hydro states:

Including fast charging service in a utility's rate base could result in cross subsidization and unduly discriminatory rates when viewed with a narrow lens. As discussed, BC Hydro raises the possibility that those principles could be revisited on the basis of the evidence gained through this Inquiry, including in respect of the benefits of public utilities such as BC Hydro operating in this market as well as the magnitude of the costs being considered.

**b. Exhibit C35-2, pp. 4, 9–10,
Utility Investment in the Electric Vehicle Charging Grid:
“Key Regulatory Considerations” Report dated November 2017, p. 16
Potential cross-subsidization**

On page 4 of Exhibit C35-2, Victoria Electric Vehicle Association (Victoria EVA) states:

EVs contribute to gross BC Hydro revenues and do not currently present a cross-subsidization issue.

and on pages 9 and 10, Victoria EVA submits two principles based on:

That the original purpose of public utilities was to make energy (electricity and natural gas) available to all the citizens of a province or state recognizing that it was in the general public interest for urban area ratepayers to financially support the higher costs of providing the utility to rural areas.

There is a lower risk of cross subsidization as each EV contributes additional hydro revenues with no immediate additional grid costs. Each block of 10,000 EVs entering service adds as much as \$ 2.3 million per year to gross BC Hydro revenues with minimal cost impacts on the existing electricity grid infrastructure.

c. Transcript, Volume 8, p. 373.

At the Vancouver Community Input Session on April 16, 2018, Toronto Hydro stated:

EV charging decreases -- and I emphasize, decreases -- the rates for all utility customers. The utility bills of EV customers more than offset the costs incurred by the utility to deliver the electricity to charge the vehicles.

d. Exhibit C19-2, p.12.

MEMPR states:

A public utility may be able to demonstrate that the cost of public EV charging infrastructure can appropriately be recovered from revenue obtained through electricity sales at all EV charging stations within their service territories (i.e., through both public and private Level 1, 2 and 3 charging stations combined).

Preamble: The four references quoted above represent a cross-section, but not an exhaustive list, of the views of Interveners regarding potential cross-subsidization of EV owners by utility customers who do not own EVs.

1.1 In light of BC Hydro's mention in Reference (a) of viewing with a narrow lens, does BC Hydro believe that determinations of whether including fast charging service in a utility's rate base could result in cross subsidization and unduly discriminatory rates would be most appropriately viewed through a broad lens, taking account of all relevant trade-offs and offsets?

1.2 Has BC Hydro done an analysis to identify and quantify the net economic costs and benefits to BC Hydro and its customers under different scenarios of EV adoption? If so, what are the results of that analysis?

1.3 If BC Hydro has not completed a net economic cost/benefit analysis, what are the reasons for that decision? Please discuss the expected time and cost that would be required for BC Hydro to complete such a net economic cost/benefit analysis. Include a discussion of the most significant challenges or obstacles to completion of such analysis.

Benefits of EV Fast Charging to Utilities and Customers

2.0 References: Multiple Exhibits

Preamble: Throughout the record of Written Evidence Interveners have identified a number of benefits of EV fast charging for individual electrical utilities and for customers of a utility.

2.1 Please prepare a comprehensive table of the benefits of EV fast charging identified in Interveners’ Written Evidence as well as any other benefits that BC Hydro identifies, describing each benefit and providing a reference in the Intervener evidence if applicable. Please list all such benefits ranked in order of perceived importance to BC Hydro. Please also indicate who (e.g. BC Hydro, all customers, EV-owner customers, customers who are not EV owners, etc.) BC Hydro expects would be the main beneficiaries of each listed benefit.

The Table below provides an example of the suggested format.

Rank of Importance	Description of Benefit	Reference(s) in Evidence	Main Beneficiaries
1	Increase in electricity sales	Exhibit X, p.	All customers
2	Improved opportunities to manage grid loads	Exhibit Y, p.	BC Hydro, all customers
3	Enhanced reliability and range of EV vehicles	Exhibit Z, p.	EV-owner customers

2.2 Please identify any aspects of the Table requested above that BC Hydro would expect to be different if the EV charging infrastructure was owned or operated by a private sector party rather than by a utility regulated by the Commission. Please include a discussion of any changes in the nature of the benefit, the rank of importance to BC Hydro, or the main beneficiaries of the benefit that BC Hydro would expect to arise from a utility investment in EV charging infrastructure vs. private sector investment.

Infrastructure Development and EV-Specific Rates

3.0 Reference: Exhibit C1-2, p. 6

3.1 BC Hydro’s Written Evidence indicates that it has future plans for the deployment of Direct Current Fast Charging (DCFC). Does BC Hydro have any plans to support the deployment of Level 2 charging stations, for example providing support for business and home owners to installing charging station through rebates or otherwise? If so, please explain.

3.2 Does BC Hydro plan to develop programs to support smart charging and load management? If so, please outline the anticipated nature of those programs and the related timeframes for implementation.