

William J. Andrews

Barrister & Solicitor

1958 Parkside Lane, North Vancouver, BC, Canada, V7G 1X5
Phone: 604-924-0921, Fax: 604-924-0918, Email: wjandrews@shaw.ca

May 15, 2018

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

Dear Sir:

Re: BCUC Inquiry into the Regulation of Electric Vehicle Charging Service,
Project No.1598941
BCSEA and SCBC Information Request to BC Hydro

Further to your filing of written evidence in this proceeding, enclosed please find Information Request No. 1 by BC Sustainable Energy Association and Sierra Club BC to BC Hydro. Please file your responses in accordance with the regulatory timetable.

If you have any questions about the meaning of these information requests, please do not hesitate to contact the undersigned.

Yours truly,
William J. Andrews



Barrister & Solicitor
Encl.

REQUESTOR NAME: **BC Sustainable Energy Association and Sierra Club BC**

INFORMATION REQUEST ROUND NO: 1

TO: **BC Hydro (BCH)**

DATE: **May 15, 2018**

PROJECT NO: **1598941**

APPLICATION NAME: **BC Utilities Commission Inquiry into the Regulation of Electric Vehicle Charging Service**

1.0 Topic: AES Inquiry principles

Reference: Exhibit C1-2, pp.4, 16

"With respect to regulated public utilities engaging directly in EV charging services, as noted by the Commission in its Exhibit A-2 letter to stakeholders regarding the establishment of this Inquiry, the Commission's AES Inquiry Report dated December 27, 2012 sets out the regulatory principles applicable to regulated public utilities that provide products and services outside traditional utility activities, such as the provision of alternative vehicle fuels. The Commission indicated in its letter that it intends to adopt the key principles established in the AES Inquiry Report in this Inquiry." [p.1, underline added]

"BC Hydro acknowledges that the principles set out in the AES Inquiry Report appear to be applicable to regulated public utilities providing EV charging products and services and therefore may preclude cost recovery from all ratepayers. Subject then to acceptance of the benefits to all ratepayers of developing the market for EV charging services in B.C., this Inquiry may provide evidence to allow the Commission to consider i) whether the principles that were established in the AES Inquiry ought to be applicable in the emerging marketplace for electric vehicle charging services, or ii) whether Commission recommendations on regulations that may modify those principles should be considered to allow for cost recovery of public utility investments in this market development." [p.4]

- 1.1 Would BC Hydro agree that the context of the EV charging inquiry is somewhat different than the context of the AES inquiry in that the underlying need for EV charging service by EV drivers is very small and is expected to quickly grow substantially, whereas the need for thermal energy services (e.g., space and water heating within buildings) is already a fully developed existing need and what was addressed in the AES Inquiry was new methods of meeting the need?
- 1.2 Would BC Hydro agree that the EV charging inquiry differs from the AES Inquiry in that in the EV charging situation there is arguably a strong public interest in facilitating and encouraging the growth of overall demand for the EV charging services, whereas in the AES Inquiry there was no corresponding public interest objective in increasing the overall demand for, e.g., space and water heating within buildings?
- 1.3 Would BC Hydro agree that the Commission's AES Inquiry Report does not directly address how regulatory principles ought to apply where growing the end use of the energy, e.g., charging EVs, is itself a public

interest objective and there are insufficient existing non-regulated services to meet the need?

2.0 Topic: Future transition

Reference: Exhibit C1-2, p.8

“3.3 Future Involvement by BC Hydro

While in the longer term the private sector is expected to play a much larger role in DCFC charging market, the current financial context likely requires that governments and utilities continue to actively support the deployment of DCFC infrastructure.” [p.8.]

- 2.1 Has BC Hydro considered the options for the future transition between the initial period when governments and public utilities actively support the deployment of DCFC infrastructure and the period in which the private sector plays a much larger role in the DCFC market?
- 2.2 In BC Hydro’s view, would one approach to the transition be for the public utility to play a large(r) role in providing ‘make-ready’ service and the private sector to play a larger role in public-facing component?

3.0 Topic: Basis for DCFC rates

Reference: Exhibit C1-2:

“Taken from the perspective of BC Hydro investing in public fast charging services, generally speaking the use of traditional cost of service to assign the costs of fast charging to a utility class of service comprised of fast charging customers would result in costs to those customers that would be uneconomic and prohibitive to the utilization of the service. In that sense, traditional cost of service may not be a feasible approach when the EV market is still at an early stage and when the DC fast charging stations are not fully utilized.

At this early stage of market development, an objective of rate setting may be to set the rate at a reasonable level to recover costs to the extent possible while not discouraging charging service utilization. Achieving this balance in rate setting may necessarily be an iterative process as data on price and usage is collected...” [p.12, underline added]

- 3.1 Does BC Hydro have in mind developing a utility class of service comprised of fast charging customers?

- 3.1.1 Is BC Hydro able to provide DCFC service in the short term without having a rate schedule or a class of service approved?

- 3.2 Are there other examples of regulated public utility rates for a certain service being determined so as to balance a reasonable level of cost recovery while encouraging, or not discouraging, utilization of the service?

- 3.3 In BC Hydro’s view, should the postage-stamp rate concept apply to the pricing of DCFC services supported by the regulated rate base?

4.0 Topic: Revenue grade DC metering
Reference: Exhibit C1-2, p.13

"...the options to price service to the EV charging customer at a fast charging station do include both energy and time-based rates.

While both forms of pricing are in place across existing fast charging stations in B.C., the measurement of energy for DC applications is outside approved error tolerances and is not approved by Measurement Canada. For sale of electricity, meters must comply with the requirements of the *Electricity and Gas Inspection Act* (EGIA), subject to any dispensation provided pursuant to the EGIA. Currently there are no Measurement Canada certified meters for DC applications; therefore it is not possible to charge for kWh consumption from a DC fast charging station using certified metering. Thus, a time-based charge, similar to what the City of Vancouver, Fortis and Tesla have proposed would be the most appropriate under the current circumstances, even though volumetric rates based on kWh would likely be more fair given differences between the rate of charging and battery capacity of different electric vehicles. It may be possible to differentiate time-based charges to vary based on vehicle capacity to address such fairness issues. Other considerations when the utility can provide a regulated rate is the ability to provide rates that encourage management of load and impact on the system (e.g., curtailable rate or TOU). [p.13, underline added]

- 4.1 If not addressed in BC Hydro's responses to the Commission's questions about the absence of a process for certification of revenue grade DC metering, is there any 'work around' that would enable the operator of a DCFC service in B.C. to charge customers on the basis of kilowatt-hours pending resolution of the issue through Measurement Canada?

5.0 Topic: "Private sector" definition
Reference: Exhibit C1-2, p.3

"With respect to a person who is not otherwise a public utility (generally referred to in this submission as the "private sector"), if such a person owns or operates EV charging equipment or facilities for the provision of electricity to or for the public for compensation, the person will fall within the Utilities Commission Act (UCA) definition of "public utility" subject to the exclusions set out in paragraphs (c) and (d) of the definition and subject to any applicable exemption order." [underline added]

- 5.1 For clarity, please confirm that BC Hydro's definition of "private sector" in the present context includes a municipality or regional district that provides EV charging service, because they are exempt from being defined as a public utility.

6.0 Topic: MURBs
Reference: Exhibit C19-2, MEMPR Evidence, p.10

"...there are well-documented hurdles for residents of multi-unit residential buildings to install and access charging facilities in their buildings."

-
- 6.1 What measures is BC Hydro taking to help overcome the barriers to the provision of EV charging infrastructure in strata corporation buildings and multiple unit rental buildings.