

British Columbia Utilities Commission
An Inquiry into the Regulation of Electric Vehicle Charging Service
VANCOUVER ELECTRIC VEHICLE ASSOCIATION (VEVA) RESPONSE TO
BC SUSTAINABLE ENERGY ASSOCIATION AND SIERRA CLUB BC (BCSEA)
INFORMATION REQUEST NO. 1

Topic: EV charging station exemption from UCA regulation

Reference: Exhibit C30-2, VEVA Evidence, p.6

“Yes, VEVA believes that charging stations in British Columbia should be exempted or excluded from the definition of a “public utility” in the Utilities Commission Act, [RSBC 1996] CHAPTER 473 (UCA).

The UCA’s definition of a “public utility” significantly predates the development of the technology deployed in current EV charging stations, so it is clear that the drafters of that definition were not in a position to contemplate current circumstances and requirements relating to EV charging.

To facilitate innovation and competition, charging station owners should have the flexibility to charge EV drivers for charging services by hour, session or energy. The services provided by chargers are not equivalent to the traditional sale of electricity as the service provided by the charging station is powering a vehicle’s battery for the specific limited use of providing power to an EV. Charging stations are not extensions of the distribution system and use technologies specific to fueling an EV rather than the equipment to transmit and distribute electricity. In that respect, charging stations are comparable to cell phone charging kiosks, camping propane tanks/canisters, etc.” [underline added]

“EV owners will also benefit from having choices for how their charging is priced: by time, by session or by energy, for example.” [p.5]

1.1. What is VEVA’s response to the view expressed by some that rates for EV charging services should be based exclusively on the amount of energy delivered (kWh), not charging time, because some EVs take longer than others to acquire a charge?

Each approach to setting rates for EV charging services has benefits and drawbacks. Charging for energy delivered (kWh) is more equitable across different vehicles and proportional to the value received. However, there are technical complexities providing such measurements and, at the present time, no certified meters capable of meeting the requirements of Measurement Canada. Energy based rates also don’t help with the congestion problem at chargers, where owners/drivers may finish charging but leave their EV in the spot because there is no cost to do so.

Rates based on charging time may penalize owners/drivers of older or less expensive EVs because their cars charge more slowly and they have to charge for a relatively longer time to achieve a given range. However, rates based on time encourage people to vacate the charger sooner and can reduce or avoid the congestion problem. Such rates are also consistent with rates for a parking spot, so they are easier for the EV owner/driver to understand and for bylaw officials to enforce. Despite the drawbacks of time-based rates, they may be the only option for some circumstances (e.g. high demand locations where congestion is a persistent problem) or for an interim period until Measurement Canada either certifies or exempts energy (kWh) meters.

VEVA submits that neither energy-based (kWh) nor time-based rate methodologies should be required or prohibited. The choice of rate methodology should be up to the charging host. All that should be required is that the rate methodology and cost of charging be sufficiently transparent to EV owners/drivers to enable them to make an informed decision about whether to use a particular charger. As more chargers and charging options become available, VEVA expects that concerns regarding rate methodologies and cost transparency will lessen significantly.

No single rate methodology will be ideal for every EV charging situation and application. Charging hosts should be given the choice to decide what works best for them and for the EV owners/drivers that they serve. For example, a strata corporation may want to set rates based on kWh so that EV owners/drivers are paying for the energy they use (e.g. those with EVs that have bigger batteries will be charged more than those with smaller batteries if they charge for the same amount of time, and strata residents without EVs won't be charged at all). On the other hand, the owner of a store or restaurant may want to charge a small hourly fee or give an hour or two of free parking before charging an hourly fee to attract customers into their establishments.