



BCUC REGULATION OF ELECTRIC VEHICLE
CHARGING SERVICE INQUIRY EXHIBIT C3-5

TO:
Owen Bird Law for Commercial Energy
Consumers Association of BC
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From:

Drive Energy
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V8B 0A5

Attention: Christopher P. Weafer - Owen Bird Law Corporation for Commercial Energy
Consumers Association of British Columbia

RE: British Columbia Utilities Commission Inquiry into the Regulation of Electric Vehicle
Charging Service,_, Project No. 1598941 - Request C24-9

Dear M. Weafer,

Thank you for your interest into our request to the British Columbia Utility Commission.

Please see answered questions to your previous request below.

Sincerely,

Maxime Charron
Drive Energy Inc.



1. Reference: Exhibit C3-2, Page 1

III. To summarize, there is no monopoly in the installation part of the EV industry where a company can control the pricing. The market will dictate how much they can charge per hour as EV drivers will simply avoid the most expensive charge stations - similar to ATM machines. However, on a manufacturer level, by not having the ability to have open charge point protocol for payment processing, the client is tied to the manufacturer terms & conditions as well as the payment management/ processing fees and subject to any fee increase (with the industry being at around 12% fees today). This situation would create a monopoly/ oligopoly. Solution: request all smart EV chargers to be open sourced, and have the ability to have open charge point protocol like it is in Europe.

1.1 If the Commission asserts its potential jurisdiction to regulate electricity reselling and could determine whether or not management/processing fees were fair, just and reasonable would that suffice as a solution to the issue raised here?

1.1.1 Yes, however, I would recommend that the commission sets a cap rate per hour or per kwh to avoid collusion especially in remote areas.

1.2 Please identify the method of either regulation or legislation that Europe uses to enable Open Charge Point Protocol.

1.2.1. From my knowledge, Europe does not have a broad OCPP legislation other than being a requirement in RFPs. As there are many more OCPP hardware and software available in Europe, the market does not even consider a proprietary alternative. Luckily, multiple companies are now available in North America as well.

2. Reference: Exhibit C3-2, Page 2

II. “However, the EVSE owner, who are also clients of vendors, are captive of a monopoly/ oligopoly structure in which they are tied to the provider of the hardware (charging station) that they have purchased. As mentioned above, until the smart EVSEs operate on Open Charge Point Protocol like ABB, Easton or Tritium DCFs, all level 2 hardware is tied to the same company to provide payment processing & service and are very vulnerable to uncompetitive monthly fees and payment processing fee hikes.”

2.1 Please provide a broader description of ABB, Easton and Tritium as Open Charge Point Protocol.



2.1.1. There are diverse versions of the OCCP whether it's 1.5, 1.6 or a new upcoming version of a 2.0 OCPP which does not seem to be available in North America just yet. The OCPP is not vendor specific therefore a broader description on each brand is hard to comment on. What is possible however is to have these brands of EV chargers and many more, to be integrated in various EV management software. This allows the clients to choose their own software provider as they all have different payment processing fees as well as annual fees. It would be the same situation as being locked in with cellphone provider T with a \$10 000 cellphone for the next 15 years and not having the flexibility to move over to cellphone provider R if T increases its pricing or offers poor customer service over the years.

2.2 Is there a definitive description of the European Open Charge Point Protocol and could you provide a copy.

2.2.1. At this time, I am not aware of any definitive description of the OCPP in Europe. However, there is this amazing organization that have gathered all the OCPP standards over the years in specific details in downloadable PDFs.

<https://www.openchargealliance.org/>

3. Reference: Exhibit C3-2, Page 3

“It would not be desirable for the BCUC to establish one model for all as every situation is different depending on location and EVSE ownership. With DCFC, it would make sense to have a fee to simply start the DCFC then pay per KWH used and one free hour to avoid people leaving their car behind. Also, since BC Hydro is rolling out with phase 2 of DCFC soon, other private entities will get into the market as well suggesting that BC Hydro's rate design might differ from the private sector.“

3.1 Are there other DCFC stations in BC other than the ones own by BC Hydro and FortisBC and how quickly would you expect the DCFC competition to the BC Hydro and FortisBC DCFC station network?

3.1.1. At this time, I do not have the knowledge of any private DCFC from other organizations other than BC Hydro and Fortis BC. There is the city of Vancouver who have installed a few and there is a partnership between BC Hydro and Loblaws at their Canadian Superstores to install DCFC on their properties. The expectation on the private market rolling out on DCFC will happen when the BCUC regulations rolls out to make it “officially” legal to charge a fee for electricity whether it's per hour, kilowatt or a combination of both. To better understand the partnership between BC Hydro and Loblaws, I would recommend to contact them as I cannot speak on their behalf.

4. Reference: Exhibit C3-2, Page 4



“It is very important to understand that many benefits will come from allowing private organizations to get in to building EV charging infrastructures and charging fees for it. Presently, what drives the building of EV infrastructure is heavily relied on taxpayers money as the ROI from EVSE isn't quite good. However, by allowing the private market to charge a fee for charging services and pay for electricity usage, this will change the way the industry operates. With the fast increase of EV adoption, it will increasingly become heavy on public funding to support the investment needed to build the EVSE infrastructure across the province. Also, there is currently a Federal Government Grant through NRCAN in which one of the requirement is to have payment features, therefore the station cannot be offered for free which does not align with the current gray zone in the BCUC regulations.”

4.1 The current reliance for the development of the EV market on taxpayer funds at local, provincial and national government levels could become a significant tax burden if the pricing remains free. Transition to a private sector market model would be critical to avoiding a significant tax burden if the subsidized models do not phase out. From a policy perspective how do you see that transition taking place and when do you expect that it should take place?

- 4.1.1. Everyone is free to offer free EV charging station services if they wish to do so. BC Hydro is doing it at the moment on certain but not all DCFCs across the province. The reason for that isn't quite clear as all DCFCs on Vancouver Island charge a reasonable fee which is the way it should be. However, it is crucial to understand that no private investment is going to happen if there is a free option within a 30km range (this is an assumption from clients' feedback). Why would someone build a gas station and charge for gas while the existing (government owned) gas station is offering it for free? There is no business model (ROI) in this scenario. The transition will happen when BC Hydro is charging for all DCFC and there is certainty around the legality of charging a fee for EV charging stations services in BC. Also, mentioned in 4.1, NRCAN REQUIRES all awarded grant applicants to charge a fee for DCFC services. Would that be illegal in BC? This is a critical issue that needs to be solved shortly as two legislations / regulations / requirements are in contradiction with one another.