



URBAN DEVELOPMENT INSTITUTE – PACIFIC REGION
#200 – 602 West Hastings Street
Vancouver, British Columbia V6B 1P2 Canada
T. 604.669.9585 F. 604.689.8691
www.udি.bc.ca

March 16, 2018

Commission Secretary
British Columbia Utilities Commission
Suite 410
900 Howe Street
Vancouver, BC Canada V6Z 2N3

Dear Sir/Madam

***Re: Inquiry into the Regulation of Electric Vehicle Charging Service ~
Project No.1598941***

The Urban Development Institute (UDI) Pacific Region is a non-profit association of the development industry and its related professions. With over 750 corporate members, UDI Pacific represents an industry that annually contributes almost \$23 billion in direct GDP and 233,000 jobs to the B.C. economy. Our members build residential, industrial, office, retail, institutional and resort projects throughout the Province.

We are very pleased that the B.C. Utilities Commission (BCUC) is reviewing the regulations regarding Electric Vehicle Charging (EVC) Services. Addressing this issue is important if the Province is going to achieve its carbon emission reduction targets. Transportation accounts for 37% of B.C.'s carbon emissions, and supporting vehicle charging development for zero emission vehicles is a key Action in the Province's *Climate Leadership Plan*.

The Inquiry is also important for our membership who are, for marketing purposes, or because of regulations, providing EVC infrastructure in new developments. At the same time, they are facing several regulatory obstacles, and have numerous questions pertaining to what they are allowed to implement or charge end users for. UDI hopes this BCUC Inquiry can provide clarity to our members, the homebuyers and tenants they serve. The current state of confusion is slowing down the placement of EVC infrastructure in newly constructed and older buildings, which in turn is hindering the adoption of electrical vehicles.

Municipalities are introducing EVC requirements with performance metrics to ensure that a large percentage of parking stalls can accommodate EV charging. However, with varying electric vehicle adoption rates throughout municipalities and seemingly no consensus on the level of growth in electric vehicles over the next couple of decades, it is difficult to determine how significant of an impact there will be on our infrastructure and how much accommodation there should be for electric vehicles. It would be helpful if the Inquiry could provide more information on current and

expected adoption rates, which can be used as a guideline for municipalities, BC Hydro, and other stakeholders to make informed decisions on this matter.

1. BC Hydro Infrastructure Upgrades for Existing Buildings

It is difficult to retrofit existing buildings with EVC infrastructure. Electrical rooms may need to be enlarged; electrical infrastructure within the building may need to be upgraded, and parking stalls will need to be wired (likely to a level 2 standard of 208 to 240 volts).

In addition to this, there may be BC Hydro infrastructure upgrades that need to occur to service the added load to buildings. This has significant cost implications ranging from tens of thousands of dollars to hundreds of thousands of dollars.

We understand that this should not occur often because many buildings are using electricity well below the current capacity of the BC Hydro infrastructure. However, this issue has and will arise, and it is unfair to the residents and tenants of those buildings. It is also an obstacle to the objectives of the Province and municipalities who want to expand EVC infrastructure and adopt low emission vehicles. Strata corporations and landlords are unlikely to accept these added high costs and will defer or forgo providing EVC infrastructure in their buildings.

We ask that the BCUC review this issue, and consider adjusting the BC Hydro Tariff to allow upgrades to BC Hydro infrastructure for EVC services (which would likely rarely occur) to be funded through the general rate base.

2. Reselling of Electricity

It is not clear when and how our members, strata corporations or third parties who they contract with can charge for electricity. Stratas need the ability to charge for actual usage. We have heard of several “*work arounds*” in finding a solution to charge electric vehicle owners for their EV electricity usage such as leasing the EVC spaces at a higher rate to offset the additional costs, charging by time usage, or locking the plug until a strata owner pays a fee(s). However, this confusion is an obstacle to expanding EVC in buildings. In some situations, for example, stratas refuse to pay for the infrastructure, or when it is available, some turn off the hydro to EVC plugs to avoid costs.

Through this Inquiry, UDI asks that the BCUC provide clear authority to building owners or third party companies (who are being contracted to provide EVC infrastructure in new and older buildings) to resell electricity if it is used for the purposes of charging electric vehicles.

3. Metering

If the ability to charge back the hydro used by electrical vehicle owners is clarified, the issue of metering remains and needs to be addressed. Currently, BC Hydro is not allowed to provide metering to each of the stalls in parking garages in residential buildings. Ideally, these meters would be allowed and linked to the hydro bill of the owner of the stall. The administrative costs to BC Hydro could be funded by supplemental costs added to the price of the meters. If this is not possible, we ask

that the BCUC consider alternatives, including a monthly charge based on average usage of hydro for the electrical vehicles in the building.

4. Passing on Additional Costs

In addition to the costs of electricity, there are other costs that UDI hopes the BCUC will allow to be passed onto electrical vehicle owners. There are operating/maintenance/administrative costs and substantial infrastructure costs associated with EVC, such larger electrical rooms and wiring stalls throughout parking garages for level 2 chargers. For Example, the City of Burnaby has estimated the costs to be \$1,200 to \$3,000 per stall.

In some cases, there may be added BC Hydro infrastructure costs because of the additional assumed load from the EVC infrastructure (e.g. a building could now require a unit substation whereas before a transformer would have sufficed). Again, these costs could be as high as \$150,000. Even worse, because these costs are difficult to assess early in the development process, our members may find out about them late in their budgeting process.

As part of the fee mechanism to resell electricity, we ask that the operating, maintenance, and administrative costs be able to be passed onto electrical vehicle owners. Ideally, the infrastructure costs noted above (amortized) could also be included. We hope the BCUC Inquiry will include a review of this matter.

UDI would like to thank the BCUC for establishing this Inquiry into EVC services. We ask that you consider the issues that we have raised above, and look forward to participating in the Inquiry.

Yours sincerely,



Anne McMullin
President and CEO