

COMMERCIAL ENERGY CONSUMERS ASSOCIATION OF BRITISH COLUMBIA ("CEC")

INFORMATION REQUEST NO. 1 TO COMMUNITY ENERGY ASSOCIATION

British Columbia Utilities Commission - Inquiry into the Regulation of Electric Vehicle Charging Service -  
Project No. 1598941

May 15, 2018

1. Reference: Exhibit C34-2, Page 1 & 6

Utilities are valued partners of small communities across BC. Small communities need utilities to own and operate DCFC Infrastructure in their jurisdictions in order to achieve community energy and emissions reduction targets and economic development. Small communities can find the capital for DCFC but need utilities for ongoing ownership and operation. The utility operation of DCFC must provide high availability and high visibility in order to achieve the community objectives leading to DCFC deployment.

**Conclusion:** Currently DCFC can operate in a quasi-competitive environment in larger urban centers (local governments and utilities as owner/operators). However in small communities, DCFC is currently operating as a regional monopoly for utilities given their unique cost and capability advantages.

1.1 If the small communities across BC can provide the capital for EV charging stations and particularly DCFC stations, why would they not own the stations?

**CEA Response:** Initial capital cost is a barrier to entry that can be addressed for local governments as we have seen with regional collaboration and partners such as Community Energy Association working together to access grants for the capital cost of DCFC stations but ongoing costs of ownership and operation remain a significant challenge for small local governments. CEA has outlined a Level 3 Charging Station Business Model that demonstrates the costs for a small local government to own and operate DCFC are approximately five times the costs of a utility to own and operate the same infrastructure. A significant example of this is asset renewal which, on a DCFC with a 10-year life, requires local governments to contribute approximately \$3,500 per year toward their Asset Renewal Fund, a cost that would significantly burden the budgets of smaller local governments. Lastly, many of BC's municipalities face limited capacity, often with less than 5 staff providing the full scope of municipal services. These communities are not in a position to provide the support services, in particular onsite repairs and maintenance, as owners and operators of DCFC equipment. 85 of BC 162 municipalities are under 5,000 population with 32 of those being under 1,000.

1.2 If the operating costs for the charging station in the small communities require the utilities by way of operation of the DCFC infrastructure because they can subsidize the DCFC charging from all ratepayers would it be the case that a third party private sector could provide the same service in small communities if it also had access to the same subsidy as it is assumed the utility will have?

**CEA Response:** the owner / operator, regardless of if they are a utility or not, will require sufficient revenue streams to cover costs and, in some cases, a reasonable profit. CEA recognizes there are many possible approaches to creating an attractive business model for DCFC for utilities or others.

2. Reference: Exhibit C34-2, Page 9

c. Non-utilities: Non-utility DCFC owner/operators currently have high demand charges for DCFC equipment (typically 50kWh systems) that utilities do not appear to account for in their internal costs for DCFC. If BCUC wishes to increase the diversity of owner/operators to ensure that customers are not captive, addressing the demand charge costs could be a way to make DCFC ownership and operation more attractive to private and public sector owner/operators. We expect that this would be most applicable to large urban areas over the next decade where EV and charging density provides the volume of charge events required for a positive business case. We do not expect a positive business case for private sector DCFC owners in small communities in the immediate future.

2.1 If one of the Commissions roles is to protect rate payers from discriminatory practices why would the Commission exempt one group of end users of the electric system from responsibility for costs that they are causing unless it is justified such as in a time of use charge?

CEA Response: While CEA cannot speak for why the commission or why it would make certain decisions, CEA recognizes there are many complex balances that should be addressed through the inquiry, this being one of them. One rationale for reduced or eliminated demand charges would be to reduce the economic barriers to entry during the market transformation phase of EV's until such time as there are sufficient charge events and net revenue to support a gradual re-introduction of demand charges.

2.2 Is the objective of this suggestion just to make sure that the DCFC stations can run economically with the subsidy in the early stages while there is too little demand for the EV charging services?

CEA Response: the business model for DCFC has many parts and economic viability depends on all the parts, not just one. Demand charges are one factor, that if addressed, would contribute to accelerate the economic viability of DCFC.