

February 14, 2019

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

Attention: Patrick Wruck, Commission Secretary and Manager, Regulatory Services

Dear Sirs and Mesdames,

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

This Letter of Comment is being provided on behalf of Technical Safety BC for the purpose of Phase Two of your Inquiry into the Regulation of Electric Vehicle Charging Service (the “Inquiry”).

Phase Two of the Inquiry focuses on eight questions that were originally raised by the Commission in the Phase One Report of the Inquiry dated November 26, 2018. Technical Safety BC’s comments relate only to the following question:

- Is EV charging infrastructure considered “distribution of electrical energy” for the purpose of section 3 (1) of the Electrical Safety Regulation?

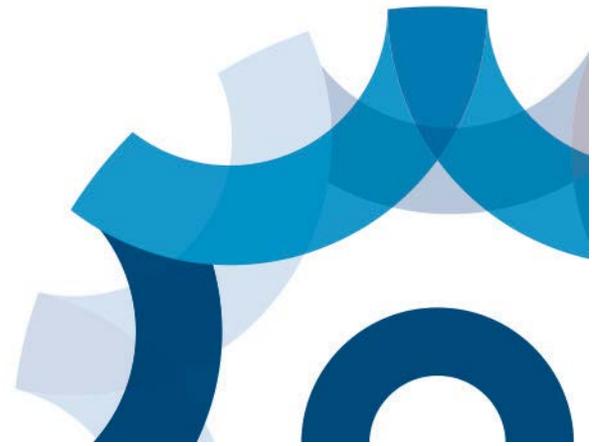
Technical Safety BC does not consider the foregoing question, as worded, to be within the jurisdiction of the Commission as it does not relate to the interpretation or administration of the *Utilities Commission Act*, but seeks only to interpret the Electrical Safety Regulation under the *Safety Standards Act*. Technical Safety BC has therefore declined to participate as an Intervenor during Phase Two of the Inquiry.

The following information is presented for your information and consideration during Phase Two of the Inquiry.

Electric vehicle charging equipment, also known as Electric Vehicle Supply Equipment (EVSE), is the subject matter of section 86 of the Canadian Electrical Code, Part I, Safety Standard for Electrical Installations, Canadian Standards Association Standard C22.1 (CEC). The CEC is adopted in BC under the Electrical Safety Regulation as the BC Electrical Code (BCEC). Technical Safety BC has determined that EVSE is regulated under the Electrical Safety Regulation because EVSE is not “utility distribution equipment” and, therefore, is not exempt from the regulation. EVSE is also not considered utility equipment under the BCEC.

Administration of the Electrical Safety Regulation has been delegated to Technical Safety BC and eight local governments¹. Applying the Electrical Safety Regulation to EVSE, Technical Safety BC has recently engaged with delegated local governments and developed a uniform variance process that will provide an avenue for the application of the Electrical Safety Regulation to EVSE and the safe installation of Electric

¹ See Administration Delegation Regulation: http://www.bclaws.ca/Recon/document/ID/freeside/10_136_2004 . Local governments are Burnaby, Maple Ridge, North Vancouver (City and District), Surrey, Vancouver, Victoria and the District of West Vancouver.





Vehicle Energy Management Systems (EVEMS): <https://www.technicalafetybc.ca/alerts/information-bulletin-electric-vehicle-energy-management-systems> ².

Through the application of the Electrical Safety Regulation:

- all EVSE in BC must be certified by a certification agency (e.g., Canadian Standards Association) or otherwise approved by a provincial safety manager under the *Safety Standards Act*.
- EVSE must only be installed by qualified individuals who work for licensed electrical contractors (or persons who are otherwise authorized).
- All installations of EVSE must be performed under a permit.
- Some EVSE equipment may be installed within the scope of operating permits (e.g., if located in malls or other large complexes where operating permits are required for the electrical system at the site).
- All electrical equipment that is subject to the BCEC is required to be maintained in a safe condition by qualified individuals.

Technical Safety BC administers a risk-based safety oversight system that allocates safety officer resources primarily to areas of higher risk. This means that not all EVSE installations within Technical Safety BC's delegated jurisdiction are physically inspected by Technical Safety BC safety officers. However, all electrical installations performed in BC must be overseen by a Technical Safety BC-certified Field Safety Representative (FSR) who must, on behalf of their employer/contractor, physically inspect each installation and provide a declaration of compliance to Technical Safety BC upon completion of the work. Delegated local government authorities administer physical inspections by their safety officers somewhat differently than Technical Safety BC, but all delegated authorities require physical inspections and declarations by FSRs.

To summarize, through the application of the Electrical Safety Regulation, EVSE is subject to a host of safety requirements under the *Safety Standards Act* ranging from product safety certification and permitting to having the work only being performed and inspected by qualified and authorized persons.

Should you have any questions, Technical Safety BC will be glad to provide you with additional information.

Regards,

Derek Patterson,
Vice President, Regulatory Leadership & Corporate Secretary

cc. **Greg Steves**, Assistant Deputy Minister, Office of Housing and Construction Standards, Ministry of Municipal Affairs and Housing

Les MacLaren, Assistant Deputy Minister, Electricity and Alternative Energy Division, Ministry of Energy, Mines and Petroleum Resources