Batch 56683

bcuc
British Columbia
Utilities Commission

Electric Vehicle Charging Service Inquiry
Phase One Report

November 2018

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About the BCUC

The BCUC is an independent regulatory agency of the Government of British Columbia that is responsible for regulating BC's energy utilities, the Insurance Corporation of BC's compulsory automobile insurance rates, intra-provincial pipelines, and the reliability of the electrical transmission grid. Our jurisdiction and authority are legislated under the *Utilities Commission Act* (UCA) and the *Clean Energy Act*. In particular we have responsibility to ensure that British Columbians get value from their utilities with safe, reliable energy services and fair energy and basic auto insurance rates, while ensuring the entities we regulate have the opportunity to earn a fair return on their capital investments. The BCUC is established as the sole independent regulator for energy services in the province of BC.

Definition of a Public Utility

The definition of "public utility" in the UCA broadly includes many forms of energy services, if provided for compensation. In particular, a relevant excerpt from the UCA states that:

"public utility" means a person, ... who owns or operates in British Columbia, equipment or facilities for

> (a) the production, generation, storage, transmission, sale, delivery or provision of electricity, natural gas, steam or any other agent for the production of light, heat, cold or power to or for the public or a corporation for compensation, ...

but does not include

> (c) a municipality or regional district in respect of services provided by the municipality or regional district within its own boundaries,
>
> (d) a person not otherwise a public utility who provides the service or commodity only to the person or the person's employees or tenants, if the service or commodity is not resold to or used by others,...

About the EV Inquiry

The BCUC established an Inquiry in January 2018, to review the regulation of electric vehicle charging service in British Columbia after receiving numerous queries with regards to the scale and scope of the regulation of EV charging service in British Columbia.

The BCUC found that there were merits for a general inquiry to explore the potential regulatory issues in the EV charging service market which could have broader stakeholder impacts. The rates and rate design for EV charging, including the services provided by EV charging stations, are currently in an early development stage in BC and other entities may emerge over time.

The Inquiry aims to explore:

- The potential regulatory issues, including the level of regulation necessary in the EV charging service market
- The rates for EV charging service
- Any other matters that should be considered by the BCUC, as the regulator of energy service providers in BC

Scope

The inquiry is being undertaken in a phased approach. The first phase addresses the following issues:

- Does a person who does not expressly require customers to pay for EV charging services but instead recovers the cost from other services, meet the definition of a "public utility"?
- Should there be any regulation of persons that provide EV charging services if they are not already a regulated utility such as FortisBC or BC Hydro?

Lastly, further clarity is needed on whether public utilities such as BC Hydro and FortisBC are permitted to invest in EV charging stations as a "prescribed undertaking" under section 18 of the *Clean Energy Act* and section 4 of the Greenhouse Gas Reduction Regulation.

Submissions on these issues were sought from participants.

Key Panel Findings

Market Monopoly	• The public EV charging market, including landlords and strata corporations, does not exhibit monopoly characteristics.
Public Utility Status	• The broad definition of "compensation" in the *Utilities Commission Act* (UCA) encompasses many forms of direct and indirect compensation rendering most EV charging stations to be public utilities.
Economic Regulation	• Economic regulation of any aspect of the EV market is not required to protect consumers from potential abuse of monopoly power. This means there is no need to regulate price and terms of service. We recommend an exemption from BCUC regulation. • This recommendation also applies to landlords and/or strata corporations.

Recommendation to Government

Based on Panel Findings

Exemption

We recommend that the Minister of Energy, Mines and Petroleum Resources issue an exemption with respect to BCUC's regulation of EV charging services but retain oversight on safety.

Regulatory Framework

Existing	• **Municipalities** • **Regional Districts** • **Employers** • **Some landlords**	• A municipality or regional district that provides utility services within its own boundaries; • An employer, not otherwise a public utility that provides utility services to its employees; • A landlord, not otherwise a public utility that provide utility services to a tenant with a lease of not more than 5 years.	• Already excluded from the definition of public utility.
Recommended*	• **Strata corporations** • **Other landlords**	• Strata corporations and all landlords not included above that provide EV charging services for compensation.	• Report recommends exemption from BCUC regulation.
	• **Others, including: Tesla, Chargepoint, Parkades, etc.**	• Any persons not otherwise a public utility that provide EV charging services for compensation.	• Report recommends exemption from BCUC regulation.

*Subject to Government Approval

Phase Two

Non-Exempt Public Utilities
Examples include: BC Hydro, FortisBC

- Phase Two of the Electric Vehicle Charging Service Inquiry will focus on the regulatory framework for EV charging service providers that are otherwise public utilities and have not been recommended for exemption (e.g. BC Hydro and FortisBC).
- Phase Two topics include:
  - How can exempt and non-exempt public utilities co-exist in the EV charging services market?
  - What role do non-exempt public utilities have in kick-starting the EV charging services market?
  - Should a public utility create a separate non-regulated business entity to provide EV charging services?
  - Who should pay for the cost of any stranded assets?
  - What are the justifications for non-exempt public utility ratepayers (and potentially non-EV customers) to subsidize the costs of EV charging services?
  - What is a non-exempt public utility's obligation to serve EV charging customers?
  - How should wholesale electricity rates be designed for EV charging services?
  - Is EV charging infrastructure considered "distribution of electrical energy" for the purpose of section 3(1) of the Electrical Safety Regulation?

The EV Charging Market

We are in the early stages of the Electric Vehicle charging market.

3 **Types of EV charging**

There are currently three types of EV charging service that offer different amounts of power for charging EVs.

Level 1 - Slower charging speed (120 volt), common for residences.

Level 2 - Mid level charging speed (240 volt), common in municipal locations, office buildings and shopping malls.

Direct Current Fast Charging (DCFC) - Fastest charging speed, common on highway corridors.

80%

EV charging occurs at home

Generally 80% of EV charging occurs at home or at work using Level 1 and Level 2 charging. Public EV charging stations are generally used by drivers to "top up" on short trips or fully recharge vehicles on long distance trips. Because of slow charging speeds, Level 1 charging is best suited to overnight or long-term parking use.

80%

Charge in approx. 30 minutes

DCFC stations can deliver an 80 percent charge in approximately 30 minutes. DCFC stations have installation costs of between $50,000 and $100,000.

663

Public Level 2 charging stations

There are approximately 663 public Level 2 charging stations and 76 public DCFC stations.

Mix of municipal, private and public utility investment

Existing public EV charging stations in BC are generally a mix of municipal, private and public utility investments. The EV charging marketplace is expected to grow and evolve as the number of EVs increases and therefore demand for charging services increases in the province.

Public Participation

The BCUC held a series of Community Input Sessions throughout the province which provided an opportunity for the public to speak directly to the Panel in the Inquiry. The BCUC invited the public to voice their comments on the issues raised in the Inquiry and the BCUC gathered further input for consideration on matters within the scope of the Inquiry. The BCUC also invited submissions on any other matters that would assist the Panel.

10

Community Input Sessions

The BCUC held 10 Community Input Sessions at 8 different locations

84

Registered Interveners (33) and Interested Parties (51)

Who either actively participated or expressed interest in the inquiry process

20

Letters of Comment

20 letters of comment were received

1,939

Pages of Evidence

Submitted for review by more than 20 interveners and in response to BCUC information requests

Process

January 12, 2018
Inquiry Established

January 23, 2018
Initial Scope Proposed and BCUC Panel Appointed

March 5 – April 16, 2018
Community Input Sessions, Evidence and Information Requests

June 15, 2018
Phase One Scope Defined

November 2018
Phase One Report: Proposed Regulatory Framework

Early 2019
Launch of Phase Two

Disclaimer

This document is a summary of the Electric Vehicle Charging Service Inquiry Phase One Report. If there are any discrepancies or differences between this summary and the Final Report, the Final Report shall prevail.

For more information about the Inquiry or to review the Final Report, please visit **www.bcuc.com/ApplicationView.aspx?ApplicationId=613**.

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