## BC Hydro 2017 Rate Design Stakeholder Meeting

Summary

16 June 2017

2:30pm to 3:30pm

BC Hydro - Dunsmuir

TYPE OF MEETING	Stakeholder Meeting
FACILITATOR	Gordon Doyle
PARTICIPANTS	Vancouver Electric Vehicle Association (VEVA) – Bruce Sharpe (President) and Paul Willis
BC HYDRO ATTENDEES	Gordon Doyle, Manager, Regulatory, Allan Chung, Specialist, Regulatory, Jane Christensen, Specialist, Regulatory, and Greg Simmons, Project Manager, Customer Service
AGENDA	<ol> <li>Discuss Residential Voluntary Time of Use (TOU) Rate and EV issues</li> <li>Next Steps</li> </ol>

MEETING MINUTES

ABBREVIATIONS	BCHBC Hydro BCUCBC Utilities Commission CECCommercial Energy Consumers' Association of BC EVElectric Vehicle NRCANNatural Resources Canada TOUTime of Use VEVAVancouver Electric Vehicle Association
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1. Discuss Residential voluntary TOU Rate and EV issues

BC Hydro met with Bruce Sharpe who is President of VEVA and Paul Willis who is a member of VEVA. This is a Non-Profit Organization that promotes the use of Battery Powered Electric Vehicles. Members of VEVA are interested in working with BC Hydro in the development of an optional rate for home-charging of electric vehicles as part of BC Hydro's 2017 Rate Design Application.

Paul attended BC Hydro's March 3, 2017 Workshop #2, after which he met with the VEVA membership to convey the material presented. Paul provided some initial feedback from the membership to BC Hydro at this meeting. This meeting also provided an opportunity for both Bruce and Paul to obtain further clarification on the Time of Use whole home charging rate that was discussed at the March 3 workshop.

The meeting opened with some general discussion on the difference between programs/incentives and rates. BC Hydro can use both to influence customer behavior. The goal of a Time of Use rate is to influence when EV owners charge their vehicles. Bruce indicated that some of the public is sensitive to the impact that EVs have on the grid, and providing a load management rate may help address some of this concern.

The VEVA membership appears to be interested in BC Hydro's optional residential Time of Use pricing, but there were questions regarding some of the details. For example, some wondered whether there was enough time for EV charging during the 11pm-7am period when the lower super off-peak price would apply. Regular charging at 110 volts would require 8-10 hours, while 240 volt charging (level 2) would require 4 hours. BC Hydro noted that the super off-peak period is 8 hours which should provide sufficient time for charging. If more charging time is required, then the EV owner can supplement its use in the off-peak period. Although this period has a higher price, it is still below the current standard RIB Step 1 and Step 2 rates. The membership was also interested in BC Hydro offering the various tools that would help

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the customer to estimate its bills under time of use and to compare them with its bills under the standard RIB rate. BC Hydro indicated that it would provide the customer with such tools to help estimate their bills.

BC Hydro explained in more detail the difference between the one part and the two part rates. Of particular interest was the situation of a customer that has a historical consumption pattern that includes charging their EV during the super off-peak period. This customer would not receive the time of use financial benefit of the lower super-off peak rate, since only changes in behavior are rewarded under the two part rate as a result of the historical consumption being used to calculate the balancing amount. This is in contrast with the one part rate, wherein all customers that charge their EVs during the super off-peak period would receive the benefit of the lower rate, regardless of their historical charging behavior.

There was some discussion of the option of a dedicated EV Time of Use rate, where only EV charging load would be metered and billed. BC Hydro explained that there would be additional metering and wiring costs to allow a garage to be separately metered (in the range of \$2,000) and which likely would have to be borne by the customer. Given these extra costs, it is unlikely that this option would be popular amongst EV owners and this is borne out with utility experience in other jurisdictions.

BC Hydro explained that it will be conducting a survey regarding time of use rate preferences and that it intends to include a survey for EV owners. Bruce and Paul indicated that it may be useful for BC Hydro to explain the survey to its membership during its next meeting in September.

BC Hydro then provided an update on work that it is undertaking on Multi-Unit Residential Buildings (MURBS). There was agreement that providing charging for MURBS is more complicated. BC Hydro is looking at demonstration technology that may allow for individual metering and charging in MURBS.

BC Hydro is also anticipating another 21 DC fast charging stations (DCFC) by March 2018 which it has applied for NRCAN funding.

## 2. Next Steps

BC Hydro will continue to engage with VEVA on the residential voluntary TOU rate and other EV rate related issues. It will work on the TOU survey for EV owners which may be available to VEVA membership in September. Further, BC Hydro requested completion of the feedback form from Workshop #2, which was received on June 30, 2017.