

## BC Hydro 2015 Rate Design Module 2 Stakeholder Meeting

Summary 28 February 2017 11:00am to 12:00pm BC Hydro - Dunsmuir

<b>TYPE OF MEETING</b>	Stakeholder Meeting
<b>FACILITATOR</b>	Gordon Doyle
<b>PARTICIPANTS</b>	Vancouver Electric Vehicle Association (VEVA) – Paul Willis
<b>BC HYDRO ATTENDEES</b>	Gordon Doyle, Manager, Regulatory, Allan Chung, Specialist, Regulatory, Greg Simmons, Project Manager, Customer Service
<b>AGENDA</b>	<ol style="list-style-type: none"> <li>1. Discuss Residential Optional Time of Use (TOU) Rate and EV issues</li> <li>2. Next Steps</li> </ol>

MEETING MINUTES	
<b>ABBREVIATIONS</b>	<p>BCH ..... BC Hydro          BCUC..... BC Utilities Commission          CEC..... Commercial Energy Consumers' Association of BC          EV..... Electric Vehicle          MURBS ..... Multi Unit Residential Buildings          NRCAN ..... Natural Resources Canada          TOU ..... Time of Use          VEVA..... Vancouver Electric Vehicle Association</p>

### 1. Discuss Residential optional TOU Rate and EV issues

BC Hydro met with 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 Module 2 of BC Hydro's 2015 Rate Design Application.

BC Hydro explained at a high level the residential optional TOU rate concept that it has been developing and the options under consideration. BC Hydro indicated that it would present these residential TOU rate options at a March 3 stakeholder engagement workshop on optional rates for residential and general service customers.

The residential optional TOU rate would be available to EV owners if the whole house load is included with the EV load. This approach may not require additional metering and could work with the existing meter. BC Hydro provided parameters of what a TOU rate could look like and indicated that this is a starting point that will be informed by stakeholder engagement. The TOU rate presented would include a 5 hour peak period (4pm-9pm) during the winter (Nov-Feb) weekdays (excluding BC statutory holidays). The peak rate would be approximately three times higher than the off-peak rate. There will also be a "super off-peak" rate during the overnight period (11pm-7am) with a lower price than the off-peak rate, which would encourage EV owners to charge their vehicles overnight. In the non-winter months, only the off-peak and super off-peak rates would apply, which would still provide a price incentive to EV owners to charge their vehicles over-night.

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BC Hydro indicated that the optional TOU rate could provide load management benefits by encouraging residential customers to shift load from peak to off-peak periods in the winter. In terms of EV charging, this could be a significant benefit since EV charging can represent the single largest load in a household.

Paul Willis indicated that he would put together some questions and slides for VEVA membership at a meeting to be scheduled towards the end of May to seek feedback on the proposed residential TOU rate options.

Some of the barriers facing EV owners were discussed.

BC Hydro indicated that it wanted to know if there was a need for an EV specific TOU rate. This rate would apply to EV load only and would require a separate dedicated meter. However, it was noted that a big barrier limiting the demand for such a rate is the high cost of obtaining electric service for the garage. This often requires additional costs (approximately \$500 for 100 amp service and \$2,000 for wiring) to be borne by the EV owner.

There is a low carbon fuel credit under BC regulation that fuel suppliers including BC Hydro may be eligible to acquire. These are credits that BC Hydro may apply for based on it selling low carbon electricity for transportation. However to claim these credits, BC Hydro may need to prove the amount of electricity that it has sold to charge EV's. This would be possible if there was a rate applicable to EV load only and which required that the EV be separately metered.

Another issue that was discussed was EV charging and MURBS. Currently the City of Vancouver requires a proportion of parking stalls in new residential buildings be equipped with EV charging. However, lack of EV charging infrastructure is an issue with existing residential buildings.

BC Hydro is currently working with NRCAN on MURBS Level 2 charging infrastructure and has also applied for NRCAN funding for additional fast charging stations. A third party may operate these stations and it may need an exemption as a public utility for the purposes of resale of electricity. Currently, only municipalities are exempt from requiring public utility status for the purposes of resale of electricity. A separate rate for public fast charging may be needed by BC Hydro for these stations if it is the provider of the electricity charging service.

### 2. Next Steps

BC Hydro will assist VEVA with any information requirements for its proposed meeting in May to seek membership feedback on proposed residential optional TOU rates.

BC Hydro will engage with VEVA further on the residential optional TOU rate and other EV rate related issues after the VEVA membership meeting in May.