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INFORMATION REQUEST TESLA NO. 1

Tesla Motors Canada ULC
BCUC Regulation of Electric Vehicle Charging Services

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A. SCOPE A QUESTIONS

1.0 **Reference: Commission Question 2**
Exhibit C28-2, p. 4
EV Customers Captive or Choice

Tesla states, "…consumers in remote areas of the province have seen less privately funded charging infrastructure developed."

1.1 Does Tesla consider it prudent for consumers in remote areas of BC to purchase an EV considering the lack of DCFC charging infrastructure or would a PHEV be a more reasonable acquistion?

1.2 Considering that less than 2% of all vehicles in BC are EVs, please explain why the ratepayers should provide DCFC charging stations for the EV owners rather than the private or non-regulated business?

2.0 **Reference: Commission Question 3**
Exhibit C28-2, pp. 4-6
Regulation, & Benefits and Detriments

Tesla states, "…Ontario's utility commission, the Ontario Energy Board (OEB), issued a staff guidance bulletin on July 7, 2016, related to EV charging services and the role of the energy regulator in that province."

2.1 Does Tesla agree that the under the BC Utilities Act (the Act), that the Commission has the ability to regulate public utilities or others engaged in providing DCFC charging services and set the rates? If not, please explain.

Tesla states,

> "In those few situations where the competitive market is not providing an adequate supply of EV charging infrastructure (such as in remote communities and multi-unit dwellings) it may be appropriate for regulated utilities to participate more actively in the EV charging market. Unlike competitive charging companies which do not use ratepayer funds, a regulated utility that participates in the EV charging market with ratepayer funds should have their activities overseen by the Commission."

2.2 In the statement above, it appears that Tesla supports public utilities providing DCFC charging

services in remote areas where the competitive market may not deem it profitable.

2.2.1 Why should the ratepayers and not the taxpayers bear this cost/risk? Please explain?

2.2.2 Why do the manufacturers not provide these needed DCFCs?

B. SCOPE B QUESTIONS

3.0 **Reference: Commission Question 5**
Exhibit C28-2, pp. 7-8
Wholesale or Commercial Retail Rate, or Some Other Rate

Tesla states, "Addressing demand charges could be particularly effective in improving the business case to develop privately funded, competitive, charging infrastructure – particularly in seasonal or remote locations."

3.1 If demand charges are required for grid infrastructure improvements since the location may be in a seasonal or remote location, please explain why the cost of these improvements should be borne by the ratepayers instead of the EV industry?

3.2 Does Tesla agree that by lowering the demand charge to the DCFC charging stations that additional cost may be borne by the ratepayers?

4.0 **Reference: Commission Question 6**
Exhibit C28-2, pp. 8-9
Regulated Rate Base or through a Separate Non-Regulated Entity

Tesla states, "it is appropriate for regulated utilities to recover their EV market expenses through their regulated rate base."

4.1 Based on the above statement, can one assume the Tesla supports the full recovery of any costs associated with the provision of energy from the regulated rate base including location considerations, demand charges, infrastructure upgrade costs, power factor and harmonic correction considerations?

Tesla states, "The United States National Renewable Energy Laboratory conducted a survey about consumer perceptions of plug-in vehicles. Only 18% of the respondents were aware of charging stations along routes they frequented…"

4.2 Based on the above statement, can one assume that 82% of the respondents relied on home-based Level 1 or Level 2 charging stations to meet their charging requirements?

5.0 **Reference: Commission Question 7**
Exhibit C28-2, pp. 9-10
Cross Subsidization & Potentially Unduly Discriminatory Rates

7. If public utilities provide EV charging services within their regulated business, is there a risk of cross subsidization from other rate classes to support this new service and if so, is the proposed rate design potentially unduly discriminatory?

Tesla states, "..electric vehicles provide benefits to all ratepayers, including higher revenues for utilities that puts downward pressure on rates…"; "…keep "fueling" revenues in the provincial economy contributing significantly economic development…"; and "…The overall economic and public health benefits to all ratepayers of accelerated EV adoption will far exceed any costs associated with utility investment in charging infrastructure as EV adoption accelerates…".

5.1 As you did not respond directly to the Commission's question, is there cross-subsidization of the utility rates if public utilities provide EV charging services within their regulated business?

5.2 As you did not respond directly to the Commission's question, is the proposed rate design potentially unduly discriminatory if public utilities provide EV charging services within their regulated business?

5.3 As the EV promotion is supported by BC Government policy, why should the taxpayers not be providing the funding for EV charging stations, rather than the ratepayers?

Tesla states, "…the International Institute for Sustainable Development has reported that local air pollution, much of which is caused by mobile emission sources such as cars, resulted in 7,700 premature deaths and as much as $36-billion is lost productivity and health care expenditures in Canada in 2015 alone."

5.4 As the data in the above report is Canada-wide, is there comparable motor vehicle emission data for British Columbia? If so, please provide a reference.

5.4.1 As the airport and ports are also major contributors of air pollution in the lower mainland, is there comparable motor vehicle emission data for the lower mainland and Fraser Valley? If so, please provide a reference.

6.0 **Reference: Commission Question 8**
Exhibit C28-2, p. 10
Other Matters that assist in the Review

Tesla states, "Ontario's utility regulator released a guidance document on July 7, 2016…"

6.1 Please confirm that the above document is an OEB staff Bulletin and the views expressed in this Bulletin are those of OEB staff and are not binding on the OEB.

Tesla states, "It is suggested that the BCUC review time-series data for DC fast charging station expansion in the province on Ontario both before and after the release of the 2016 guidance document."

6.2 Please provide the time-series data for DC fast charging station expansion referred to above

6.3 If the public utilities acquire most of the preferred DCFC locations, will this not present a barrier for other when the private companies attempt to enter the BC DCFC market?