July 8, 2019

Daniel P. Wolf Executive Secretary Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101

RE: In the Matter of Minnesota Power's Petition for Approval of its Electric Vehicle Commercial Charging Pilot (Docket Number E015/M-19-337)

Dear Daniel P. Wolf:

Tesla, Inc. ("Tesla") hereby submits reply comments pursuant to the State of Minnesota Public Utilities Commission's ("Commission") Notice of Comment Period issued on May 29, 2019 ("Notice"). Tesla thanks the Commission for the opportunity to provide public reply comments on Minnesota Power's ("MN Power") Petition for Approval of its Electric Vehicle Commercial Charging Pilot ("Commercial EV Rate").

The initial comments provided by stakeholders are thoughtful and provide a range of views on whether the proposed MN Power's Commercial EV Rate be approved by the Commission. Several Commenters are cautious of approving a demand charge discount that mitigates the bill impacts of Commercial EV charging stations.¹ Several Commenters also suggest that the Commission seek modifications to MN Power proposal and that MN Power should consider revising its rate design to better align with underlying system costs,² or reduce the pilot term to 2 years.³ Tesla disagrees that MN Power needs to make adjustments to its proposal at this time and maintains its support for MN Power's Commercial EV Rate pilot for the following reasons; first, bill impacts to-date for EV charging operators on current Commercial tariffs require mediation, and second, a simple Commercial EV rate as proposed by MN Power is the most straightforward way to mitigate current bill impacts and ensure that rate designs can be refined and improved over time.

Tesla provided analysis in its initial comments outlining how traditional Commercial and Industrial rate designs have significant bill impacts for Commercial DCFC stations and are an impediment to development. While it is important to develop rates that reflect underlying costs of the system to



¹ The following Commenters recommended some modification to Minnesota Power's Commercial EV Rate; Department of Commerce, Office of the Attorney General, Large Power Interveners, Fresh Energy, et al.

² Department of Commerce Initial Comments, Office of the Attorney General Initial Comments

³ Fresh Energy, et al. Initial Comments. Page 5.

ensure optimal grid utilization, which can avoid long-run marginal costs,⁴ Tesla cautions the Commission and Commenters on making major modifications to MN Power's rate proposal until after the Pilot is complete. MN Power's proposal is intended to help alleviate the volatility of high operating costs while also encouraging DCFC investments, and collecting data for future rate design improvements. The high operating costs for DCFC demonstrated by both MN Power and Tesla show that DCFC station electricity costs are well above the traditional commercial and industrial costs on a volumetric per kWh basis. All parties in this matter stand to gain better understanding of the evolving usage patterns of public charging stations through this pilot, particularly as the makeup of EVs change and EV adoption increases. MN Power's three-year term proposal is sufficient to gain those insights, while two years would likely be too short, as some DCFC development can take upwards of a year and it is likely that MN Power would only be able to leverage a year to 18 months' worth of data to start developing the necessary long-term rate solution by a two year deadline. A year-over-year analysis will be much more informative as it will give enough time to record seasonality patterns and changes that would not be realized without an ability to compare over a specified time-horizon.

Tesla is also principally aligned with MN Power where they state, "EV owners are typically traveling and not likely to "shift" or wait until off-peak hours to utilize public charging."⁵ While many Commenters have significant experience and participation in developing appropriate rate designs for electric tariffs for traditional customer classes with expansive electric service needs, there is limited experience developing rates for Commercial EV charging and EVs, especially as the charging industry is rapidly growing. Even through Tesla's own extensive EV charging network, costs and network needs are evolving. Monitoring the development of Commercial EV charging and collecting its associated data, and gaining experience with different EV rates, are imperative to designing rates for the long term. Therefore, in addition to approving MN Power's Commercial EV Rate as proposed, Tesla also agrees that it would be helpful to adopt more utility reporting metrics, such as those proposed by the Office of the Attorney General,⁶ and finds that more insights are essential for stakeholders.

Tesla thanks the Commission for the opportunity to provide reply comments.

Sincerely,

Katie Bell Senior Policy Advisor ksheldon@tesla.com

⁶ Office of the Attorney General. Initial Comments. Page 8.



⁴ Generally, see Regulatory Assistance Project. Smart Rate design For a Smart Future (July 2015). Pages 23-24. Available at http://www.raponline.org/wp-content/uploads/2016/05/rap-lazar-gonzalez-smart-rate-design-july2015.pdf

⁵ Minnesota Power. Reply Comments. Page 4.