

## Testimony to the Senate Education, Energy & Environment Committee SB 0951 Business Regulation – Electric Vehicle Supply Equipment – Regulations for Retail Use Position: Favorable

March 5, 2024

The Honorable Brian J. Feldman, Chair 2 West, Miller Senate Office Building, Annapolis, MD 21401

Honorable Chair Feldman and Members of the Senate Education, Energy, & Environment Committee:

I and my family have been an Electric Vehicle (EV) family since 2011 having experience with five EV makes/models. For over a decade I have been a part of and observing EV adoption in Maryland and across the United States. I have also spent untold hours educating groups and individuals about EVs. The vast majority of charging is done at home but in 2022 we spread our wings to do more road trips.

On the occasions I use EV public charging, I need to be able to count on it being up and running just as a fossil fueled car owner expects the pump to work. Why should Maryland's current and future EV owning citizens and those visiting our state expect anything less?

Just prior to the Covid shutdown, I attended a national gathering of EV enthusiasts where I met Kyle Conner, an earnest, positive messaging YouTuber (over 211,000 subscribers on his Out Of Spec Reviews channel) who first got my attention for his instructional videos about roadtripping in electric vehicles. Over the years, he has crisscrossed the country too many times to count in all kinds of EVs under all kind of conditions.

In December 2022, Kyle posted commentary on the state of public EV Charging expressing grave concern about reliability issues in his video titled, "Unwrapping the Christmas Week From Hell for EV Drivers using CCS" (96,000 views). The whole video is informative, especially for non-EV drivers/owners, and does a deep dive into the state of charging in the US which is much the same today using CCS. Key though is the wrap-up at the end which especially instructive: "...there was not one person we met, probably 50 different people charging at public [CCS] Chargers this trip [Colorado to Florida] and there was not one person that enjoyed their experience charging that we met...". In another more recent video he makes the comment, "When it comes to charging networks, there's Tesla and then there's everybody else", driving home the EV owner observed superior reliability of the Tesla charging network over all the others. I could not agree more with this sentiment. That system continues to improve with dynamic real-time information about the charging location and state of the chargers available to the driver before arrival. And when you get there...They WORK. Just plug & play. This network needs to be a template for all others.

Including more EV owners in the conversation, and in the process for your edification, Kyle posted an additional, very informative video about 6 months prior (August 2022) titled, "System Meltdown! What The Heck Is Going On With DC Fast Charging In America?" (142,737 views). The point of the video is partly introduced by Kyle saying the following:

(14:10) "...I mean this totally seriously, is when you roll up to a charging station from a user standpoint and you have to do anything other than just plugging in the car, right, anything other than that it's a failed session. The problem is in all of the reporting that charging infrastructure companies or charge point operators report is: do you have a successful charging session or not. And half the time you can't even get a charging session to work, and maybe less than half the time I should say I'm just using that as a figure of speech, but sometimes you can't even get a charging session to recognize you're plugged in therefore that



doesn't count as a not working session, right. So, I think the numbers are all skewed here, we need to just ignore the data that's coming at us and rely on customer experience and this is why our out-of-spec motoring channel really exists. It's to roll up to charging stations on road trips and film what happens. We know all the tricks to get the chargers to work. If we're having issues, I know others are as well and that's been my entire feed the last few weeks... we're loading up some posts that have caused us to make this video and then we start talking with experts and heavy users to see what their experience has been."

Not long ago and out of curiousity, I stopped by a recently installed EV Smart Shell Recharge branded 50kW DC Fast Charger in the Lakelands community of Gaithersburg, Maryland. While there, the new owner of a Lexus RZ 450e EV on a roadtrip from New England arrived to charge. She had difficulty downloading the Shell Recharge app and other issues. Long story short, she definitely did not have a 'plug & play' experience and she did not charge successfully.

Reliability cannot be established without user data collection and accountability cannot be required without plans to improve under established metrics. SB 0951 begins to accomplish this.

Thank you for your consideration, and I urge a favorable report on SB 0951.

Respectfully,

Joyce K. Breiner, CC-P®