
March 2, 2023

The Honorable C.T. Wilson
Chair, House Economic Matters Committee
Room 231, House Office Building
Annapolis MD 21401

RE: Letter of Information – House Bill 834 – Electric Vehicle Charging Infrastructure – Requirements (Electric Vehicle Charging Reliability Act)

Dear Chair Wilson and Committee Members:

The Maryland Department of Transportation (MDOT) takes no position on House Bill 834 but offers the following information for the Committee’s consideration.

House Bill 834 requires electric companies operating an Electric Vehicle (EV) charging network to ensure the EV charging stations in that network have an average annual uptime of 97% or greater, as calculated with a methodology codified in the bill. Additionally, House Bill 834 imposes certain reporting requirements on electric companies whether they are using their funding or receiving federal funding to install the chargers. The provisions of House Bill 834 apply to electric companies that install or maintain an EV charging station for public use whether they are participating in the EV Pilot Program established by the Public Service Commission (PSC) or utilizes federal funds.

House Bill 834 defines uptime as the “availability and consistency of an EV charging station in an EV Charging Network to successfully dispense electricity as designed, measured as a percentage of both hours and days of a calendar year”. This definition and method for calculating uptime differs from federal National Electric Vehicle Infrastructure (NEVI) Standards and Requirements released by the United States Department of Transportation. The NEVI Standards and Requirements are expected to apply to any charging infrastructure funded with federal funds, and also address the interoperability of EV charging infrastructure; traffic control devices or on-premise signage acquired, installed, or operated in concert with EV charging infrastructure; data (format and schedule for submission of data); network connectivity of EV charging infrastructure; and information on locations, pricing, real-time availability, and accessibility through mapping applications.

The NEVI Standards and Requirements define uptime as “when hardware and software are both online and available for use, or in use, and the charging power successfully dispenses electricity in accordance with requirements for minimum power level.” Under the NEVI Standards and Requirements, uptime must be calculated per port in minutes, and must exclude the total time from outages that are considered outside the control of the operator, such as scheduled maintenance, vandalism, utility service interruptions, natural disasters, and failure to charge due to the fault of the vehicle.

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It should be noted that the difference in definitions and methodology between House Bill 834 and the NEVI Standards and Requirements may impact efficient and effective deployment of a reliable EV charging network.

The uptime requirements proposed by House Bill 834 would only apply to electric companies however, the EV charging ecosystem includes numerous entities who participate in a complex web of inter-dependencies and interactions, including EV Charging Network companies, equipment manufacturers, data network companies, and public and private site owners. Electric companies would be required to report a certain uptime percentage, while other entities would be subject to a federal standard.

Lastly, work has been underway by the PC44 EV Workgroup, established by the PSC to recommend uptime standards for electric utilities in Maryland. This Workgroup has participation from numerous stakeholders to develop a practical, achievable, and transparent reliability standard that references the federal NEVI Standards appropriately. MDOT supports reliability and uptime standards to be defined through program-level processes such as the PC44 EV Workgroup, which allows for uptime standards to be re-examined and updated as needed.

The Maryland Department of Transportation respectfully requests the Committee consider this information when deliberation House Bill 834.

Respectfully submitted,

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