Electronic Vehicle (EV) Charger Testing

Introduction: Encouraging the Transition to Electric Vehicles (EV) by Increasing the Accessibility and Accuracy of Public EV Chargers

According to opinion polling¹ of American consumers, one of the greatest concerns of those considering purchasing an electric vehicle is access to functioning, accurate, conveniently located, and publicly accessible charging stations, also known as electric vehicle supply equipment (EVSE). These fears are, unfortunately, well-founded. Several studies have found that as many as half of installed public EVSEs examined were not functioning or were functioning incorrectly.

Currently there is no requirement to register EVSE in the Commonwealth so accurate location and status information is not always readily available to consumers and device owners alike. Further, no consumer protection or accessibility requirements are enforced in Massachusetts with respect to EVSEs, which means owners of public devices are not operating on a level playing field for considerations like member subscriptions and payment methods. Finally, public EVSEs across the state are not tested to ensure that required payments for charging sessions accurately reflect the amount of electricity delivered.

This proposed legislation would task the Massachusetts Division of Standards (DOS) with overseeing consumer protection measures such as collecting data from public EVSE owners, testing public EVSEs for functionality, and making such information publicly available.

Additionally, legislative changes and the development of a new regulatory framework will:

Close a Consumer Protection Gap

- Require public EVSE owners to register their devices with DOS and authorize the sharing of data such as device location and status;
- Clarify existing public EVSE testing and operating requirements to ensure consistency across devices;
- Adopt consumer price advertising that shows the total price, including taxes, usage fees, and membership fees;
- Require payment options accessible to the public and prohibit required subscription fees or memberships; and

• Develop regulations specifying technical and consumer signage requirements and other provisions that better inform consumers, such as clearly displaying the volume of electricity provided during each transaction.

Level the Regulatory Playing Field for Businesses

• Clarify the Commonwealth’s current public EVSE testing and reporting requirements and centralize these functions with DOS; and
• Authorize regulations for device registration, inspection frequency and timing, and related requirements, allowing for industry participation and DOS oversight of this quickly evolving and relatively new industry.

Improve Access, Equity, and Inclusion

• An EVSE inspection and registration system will enable the Commonwealth to monitor where chargers are installed and how they are maintained, which will better ensure equitable access to chargers across communities.

A Key Component of the Economic Development Bill

The Healey-Driscoll Administration aims to have one million electric vehicles on Massachusetts roads by 2030. As of August 2023, there are 2,623 publicly accessible charging station locations operating in the state, supporting 6,082 total ports. To meet demand and support expected growth, the Electric Vehicle Infrastructure Coordinating Council has estimated that Massachusetts will need 10,000 Level 3 and 35,000 Level 2 public EVSEs. By giving DOS the necessary tools to regulate this important sector, this legislation will help protect consumers, businesses, industry, and suppliers by creating clear, predictable standards for the installation, operation and use of charging stations.