DOCKETED	
Docket Number:	24-TRAN-02
Project Title:	Proposed SB 123 Rulemaking
TN #:	256682
Document Title:	Siemens Comments on SB 123 Workshop
Description:	N/A
Filer:	System
Organization:	Chris King
Submitter Role:	Public
Submission Date:	6/4/2024 2:17:56 PM
Docketed Date:	6/4/2024

Comment Received From: Chris King Submitted On: 6/4/2024 Docket Number: 24-TRAN-02

Siemens Comments on SB 123 Workshop

Additional submitted attachment is included below.

SIEMENS

June 4, 2024

California Energy Commission 715 P Street Sacramento, CA 95815

RE: Docket No. 24-TRAN-02 Proposed SB 123 Rulemaking

Dear California Energy Commissioners and Staff,

Siemens appreciates the opportunity to provide our input and support for the California Energy Commission's (CEC) rulemaking regarding payment methods for electric vehicle (EV) chargers and charging stations. Siemens supports consumer-friendly and cost-effective payment standards that will lead to improved consumer experiences and greater EV adoption.

About Siemens eMobility

Siemens has deployed charging stations across every state in the U.S. powered by American ingenuity. Our own EV charging footprint spans several states, including Wendell, North Carolina, where we have continued to expand our manufacturing facility for bus, truck and heavy-duty electric vehicle charging solutions. Siemens has made investments of more than \$500 million in expansions across our U.S. operations including a new Buy American focused AC charger facility in Carrollton, Texas and in Grand Prairie, Texas (IBEW Local 220) and Pomona, California (IBEW Local 1710) manufacturing sites, both of which help provide the electrical infrastructure technologies that support EV charging systems and other critical electrical infrastructure; hundreds of new good-quality and union manufacturing jobs across the U.S to support critical power and EV charging infrastructure; and minority stake investments in a US-based wireless charging company WiTricity and in Electrify America. We have also recently expanded our domestic manufacturing with the acquisition of Heliox a technology leader in DC fast charging solutions, serving eBus and eTruck fleets and passenger vehicles. Finally, we are proud to co-locate our R&D efforts near our manufacturing footprint with our eMobility R&D Headquarters in Peachtree Corners, Georgia, where the team continues to explore cutting edge electric vehicle opportunities to serve the U.S. market.

Siemens Comments

Siemens is commenting on only the last of the Question & Answer Topics given in the workshop presentation on May 22, 2024, namely, "What is the burden of existing payment method requirements for L2 chargers?"

As the Staff presentation notes,

"SB 123 requires... a contactless payment method that accepts major credit and debit cards. For purposes of this clause, "contactless payment method" means a secure method for consumers to purchase services using a debit card, credit card, smartcard, or another payment device, by using radio frequency identification (RFID) technology and near-field communication (NFC). Assembly and Senate

Floor Analysis clarify that "tap card readers" are required."

While the legislative analysis clarifies that "tap card readers" are required, neither the analysis nor the legislation itself defines "tap card reader"; i.e., the legislation does not specify that the payment device in a charger be a tap card reader for a tap credit card. The closest the legislation comes to a definition is that it requires "a debit card, credit card, smart card, or another payment device" (emphasis added). The use of "or" allows for optionality by the charging provider and does not require a specific method, other than it be contactless, be one of the options specified, and use both RFID and NFC. Also important is that "NFC" is not a defined term in the legislation. The National Institute or Standards and Technology (NIST) defines NFC as, "A form of contactless, close proximity, radio communications based on radio-frequency identification (RFID) technology."¹

Today, the vast majority of public L2 chargers use RFID cards, QR codes, or other smart phone methods of authenticating EV drivers prior to authorization of charging. The vast majority do not have a credit card reader of any type; however, payments are normally handled via a credit or debit card number entered into the driver's smart phone app. Also relevant is that a driver's app may be used to meet the display requirements for National Type Evaluation Program certification, which is accepted for use in California. When the app is the display source, the driver must use an app (in which the credit card reader built into the charger. Adding a credit card reader to an L2 charger adds significant expense for the device, added data processing costs, and additional maintenance and service costs.

While the legislative analysis clarifies that "tap card readers" are required, neither the analysis nor the legislation itself defines "tap card reader." An RFID card is a form of tap card and is already widely used for L2 chargers. Given the higher costs of tap card readers for credit cards, the fact that RFID cards are a form of "tap card", the fact that NIST defines "NFC" as RFID, and the lack of a clear definition of "tap card", Siemens respectfully suggests that the Commission adopt a definition of "tap card" that adds clarity and that also would allow RFID cards to qualify as "tap cards."

Beyond the above comments, Siemens reserves the right to conduct additional review and submit additional comments if warranted.

Conclusion

Siemens appreciates the opportunity to comment and would be happy to discuss further any of our suggestions. Siemens looks forward to doing our part to ensure the U.S. becomes a global leader in transportation electrification.

Respectfully yours,

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Chris King Head – Strategic Partnerships and Standards Siemens eMobility

¹ - https://csrc.nist.gov/glossary/term/near_field_communication