

Date of Hearing: April 30, 2025

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY

Cottie Petrie-Norris, Chair

AB 1423 (Irwin) – As Amended April 10, 2025

**SUBJECT:** Transportation electrification: charging station uptime: regulations: violations

**SUMMARY:** Requires the California Energy Commission (CEC) in consultation with the California Public Utilities Commission (CPUC) to develop uptime recordkeeping and reporting standards for electric vehicle (EV) chargers installed between January 1, 2018 and January 1, 2024. Allows the CEC to establish an enforcement process for violations of these uptime recordkeeping and reporting standards.

Specifically, **this bill:**

- 1) Requires recordkeeping and reporting standards established on January 1, 2024 by the CEC in consultation with CPUC applies to electric vehicle chargers that:
  - a. Are installed on or after January 1, 2024;
  - b. Received an incentive from a state agency or through a charge on ratepayers;
  - c. Was installed with moneys from the consent decrees among the State Air Resources Board, Volkswagen AG, and the United States Department of Justice in *United States v. Volkswagen AG*, No. 16-cv-295-CRB (N.D. Cal.).
- 2) Requires the CEC in consultation with CPUC to develop additional uptime recordkeeping and reporting standards for electric vehicle chargers and charging stations by January 1, 2027. These requirements will apply to electric vehicle chargers and charging stations installed after January 1, 2018, but before January 1, 2024, that meet either of the following criteria:
  - a. Received an incentive from a state agency or through a charge on ratepayers.
  - b. Were installed with moneys from the consent decrees among the State Air Resources Board, Volkswagen AG, and the United States Department of Justice in *United States v. Volkswagen AG*, No. 16-cv-295-CRB (N.D. Cal.).
- 3) These new uptime recordkeeping and reporting standards for electric vehicle chargers must consider:
  - a. The technological capability of the charging station.
  - b. The potential for the standards to result in charging station closure.
  - c. The likelihood of near-term charging station replacement.
  - d. Other factors the commission considers appropriate.
- 4) Exempts charging stations installed at residential real property containing four or fewer dwelling units from Energy Commission standards.

- 5) Allows charging station standards to vary by technology type, power levels, number of chargers per site, site ownership, and the date the charging station was installed.
- 6) Mandates the commission's authority to establish enforcement mechanisms for violations of recordkeeping and reporting standards for electric vehicle chargers. This includes limiting the civil penalty to two thousand five hundred dollars (\$2,500) for each violation.
- 7) Requires the commission to consider the following factors when determining the amount of an administrative penalty:
  - a. The nature and seriousness of the violation.
  - b. The number of violations.
  - c. The persistence of the violation.
  - d. The length of time over which the violation occurred.
  - e. The willfulness of the violation.
  - f. The violator's assets, liabilities, and net worth.
  - g. The harm to consumers and to the state due to the severity of the violation.
  - h. Allows the commission to refer the matter to the Attorney General to petition a court to enjoin the violation.
- 8) Makes these violations subject to judicial review.
- 9) Prevents the commission from initiating an enforcement process for violation of a regulation until both of the following occur:
  - a. No fewer than 60 days have elapsed since the effective date of the regulations.
  - b. No fewer than 30 days have elapsed since the date when the commission provided notice to the violator of the alleged violation.
- 10) Penalties collected will be deposited into the General Fund.
- 11) The executive director of the commission may adjust the maximum penalties specified in this section for inflation based on the California Consumer Price Index.

**EXISTING LAW:**

- 1) Creates the Clean Transportation Program (CTP), administered by the CEC, to provide competitive grants, loans, or other funding to various entities to develop and deploy technologies that transform California's fuel and vehicle types to help attain the state's climate change policies. (Health and Safety Code § 44272)
- 2) Requires the CEC, working with the CARB and the CPUC, to prepare a statewide assessment of EV charging infrastructure needed to support the levels of EV adoption required for the state to meet its goals of putting at least 5 million zero-emission vehicles (ZEVs) on California roads by 2030, and of reducing emission of greenhouse gases (GHGs) to 40% below 1990 levels by 2030. (Public Resources Code § 25229)

- 3) Requires the CEC, in consultation with the CPUC, to develop uptime recordkeeping and reporting standards for EV chargers and charging stations installed on or after January 1, 2024 and received an incentive from a state agency or through a charge on ratepayers, by January 1, 2024. Applies these standards to applicable EV chargers and charging stations for a minimum of six years. (Public Resources Code § 25231.5)
- 4) Requires CEC, in consultation with CARB, as part of the development of the Clean Transportation (CTP) investment plan, to assess whether charging station infrastructure is disproportionately deployed, and, to use CTP funding to more proportionately deploy new charging station infrastructure, unless CEC makes a finding that the disproportionate deployment is reasonable and furthers state energy or environmental policy. (Public Resources Code PRC § 25231)
- 5) Creates the Alternative and Renewable Fuel and Vehicle Technology Fund to be administered by the CEC to implement the CTP. Requires the CEC to include in the biennial integrated energy policy report (IEPR): a list of projects funded, the expected benefit in terms of specified characteristics, the overall contribution of the funded projects towards specified goals, key obstacles and challenges to meeting the goals, and recommendations for future actions. (Public Resources Code § 44273)
- 6) Prohibits the charging of a subscription fee or the conditional requiring of membership in any club, association, or organization, on persons desiring to use an EV charging station. Also requires disclosure to the public of total actual charges for the use of an EV charging station, including any additional network roaming charges for nonmembers, at the point of sale. Requires an EV charging station that requires payment of a fee to allow payment via credit card or mobile technology, or both. (Health and Safety Code § 44268.2)

**FISCAL EFFECT:** Unknown. This bill is keyed fiscal and will be referred to the Assembly Committee on Appropriations for its review.

**CONSUMER COST IMPACTS:** Unknown.

**BACKGROUND:**

*California zero-emission vehicle (ZEV) goals* – California’s transportation sector is currently the largest source of GHG emissions in the state. In the interest of meeting the state’s emissions reduction targets, California has set a goal that 100% of new passenger vehicles sales will be ZEVs by 2035. Meeting the state’s ZEV goals will require a significant increase in the number of light-, medium-, and heavy-duty ZEVs on the road and a drastic increase in the infrastructure to support these vehicles. Cumulative sales of ZEVs, which include EVs, in California reached 1.8 million in the fourth quarter of 2023, with ZEVs accounting for 25% of new car sales. To support the rapid deployment of ZEVs, in 2018, the governor set a goal of having 250,000 chargers, including 10,000 direct current fast chargers (DCFCs), operating in California by 2025. Subsequently, the Legislature enacted AB 2127 (Ting, Chapter 365, Statutes of 2018), requiring the CEC to conduct an assessment every two years of the EV charging infrastructure, and associated workforce, needed to meet California’s ZEV deployment goals. In the most recent report published in 2024, the CEC projects over 1 million public and shared private chargers are

needed to support 7 million light-duty EVs in 2030, and more than 2 million chargers are needed to support 15 million ZEVs anticipated under Executive Order N-79-20.<sup>1</sup> An additional 157,000 chargers are needed to support 180,000 medium- and heavy-duty vehicles anticipated for 2030. At present, California has approximately 105,000 public and shared private chargers, including more than 11,000 DCFCs. This represents an order of magnitude difference between how many chargers are currently operating in California versus how many are needed by 2030.

*Reliability of EV chargers* – More than 2.2 million electric vehicles have been sold in California.<sup>2</sup> As EV adoption has increased and the charging sector has grown, early adopters of EVs have begun to experience frustrations in the charging experience. In their 2023 survey, Plug In America found that, despite EVs scoring well in driver satisfaction, unreliable public chargers have become a major concern or a deal-breaker for drivers who own or are considering owning an EV.<sup>3</sup> Corroborating anecdotal stories from EV owners, a 2022 field study led by UC Berkeley found 28% of public DCFC chargers in the Bay Area were not functional or accessible for a variety of reasons as shown in Table 1.

Table 1. Functional states of 657 DCFC EV chargers in the Bay Area.<sup>4</sup>

	N	%
Functioning		
Charged for 2 minutes	375	57.1%
Occupied by EV and charging	101	15.4%
Total	476	72.5%
Not Functioning		
Connector broken	6	0.9%
Blank or non-responsive screen	23	3.5%
Error message on screen <sup>1</sup>	24	3.7%
Connection error <sup>2</sup>	7	1.1%
Payment system failure <sup>3</sup>	47	7.2%
Charge initiation failure <sup>4</sup>	42	6.4%
Total	149	22.7%
Station Design Failure		
Cable would not reach <sup>5</sup>	32	4.9%

<sup>1</sup> Charger error, unavailable, under maintenance, etc.

<sup>2</sup> Connection, network, communication error, etc.

<sup>3</sup> 12 of these were evaluated with 2 credit cards but not an app or membership card

<sup>4</sup> Short session failure

<sup>5</sup> At 3 EVSEs the space was too small to safely back into

*Electric Vehicle Charging Standards* – In 2022, the Legislature passed AB 2061 (Ting, Chapter 345, Statutes of 2022), directing the CEC to define “uptime” for reliability and develop uptime recordkeeping and reporting standards for EV chargers. Qualifying charging stations would be installed on or after January 1, 2024 have received state or ratepayer funding. Uptime is the percentage of time that a charger is functional. The CEC is in the process of adopting these reliability requirements and has proposed extensive recordkeeping and reporting requirements for EV charger networks. The most recent proposal outlines regulations that would::

<sup>1</sup> California Energy Commission, Assembly Bill 2127 Second Electric Vehicle Charging Infrastructure Assessment: Assessing Charging Needs to Support Zero-Emission Vehicles in 2030 and 2035, March 6, 2024, <https://www.energy.ca.gov/publications/2024/assembly-bill-2127-second-electric-vehicle-charging-infrastructure-assessment>, ii.

<sup>2</sup> California Energy Commission, “New ZEV Sales in California.” <https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics-collection/new-zev>, accessed April 28, 2025

<sup>3</sup> Plug In America; “2023 EV Driver Insights”; <https://pluginamerica.org/survey/2023-ev-driver-survey/>.

<sup>4</sup> Rempel, D., Cullen, C., Matteson Bryan, M., & Vianna Cezar, G. (2024). Reliability of open public electric vehicle direct current fast chargers. *Human Factors*, 66(11), 2528-2538.

- Track the number and location of all chargers.
- Track the usage of all networked chargers.
- Require reliability recordkeeping and reporting for all state- and ratepayer funded chargers installed on or after January 1, 2024, for six years.
- Require all state- and ratepayer-funded chargers installed on or after January 1, 2024, to meet a 97 percent uptime standard for six years.
- Require all publicly available state- and ratepayer-funded chargers installed on or after January 1, 2024, to share real-time data on the availability and accessibility of the chargers.
- Require all state- and ratepayer-funded chargers installed on or after January 1, 2026, to meet a 90 percent successful charge attempt rate standard for six years.

The final version of the CEC's standards has not been released but is anticipated this year.

#### COMMENTS:

- 1) *Author's Statement.* According to the author: "California has set ambitious climate and greenhouse gas reduction goals for the transportation sector. Governor Newsom's Executive Order N-79-20 establishes a goal to transition California away from gas-powered vehicles by 2035. This massive undertaking is lagging behind and will require a rapid and large-scale transition to electric vehicles and a significant investment in charging infrastructure. California has spent over \$1.7 billion on electric vehicle charging infrastructure. To date, only 150,000 of the estimated 2.1 million chargers needed have been deployed. Of publicly available chargers, J.D. Power has found that they are not functioning 20 to 30 percent of the time. Without consumer confidence in public charging infrastructure, California jeopardizes its investment and commitment to transition away from gas-powered vehicles. The California Energy Committee is finalizing regulations to improve charger uptime and the driver experience for chargers installed with state grants after 2024. AB 1423 applies these standards to all public chargers so that drivers can feel confident in their choice to switch to an electric vehicle."
- 2) *Purpose of the Bill.* As discussed above, reliability has been a long standing issue with electric vehicle chargers and an obstacle to achieving Governor Newsom's goal for the state to transition away from gas-powered vehicles by 2035. This bill is one of many recent efforts to address these concerns with the goal of increasing consumer confidence in EVs and EV infrastructure. This bill would extend recordkeeping and reporting standards for electric vehicle infrastructure installed after January 1, 2018, but before January 1, 2024. In addition, this bill would allow the CEC to enact penalties for breaking recordkeeping and reporting standards, no greater than \$2,500 a day. Implementing standards on older chargers may address some of the most problematic chargers that have plagued the current system, however, many of these chargers are likely to be replaced or unimportant in the next five years as the CEC installs 1 million new chargers across the state. In addition, providing some kind of monetary enforcement mechanism at the CEC to ensure compliance with recordkeeping and reporting seems necessary to achieve

compliance. However, opponents argue that these penalties are a disincentive for companies to install chargers in California.

- 3) *The VW “Dieselgate” consent decree and settlement.* This bill would apply recordkeeping and reporting standards to chargers installed by Electrify America under the consent decree between the California Air Resources Board (CARB), Volkswagen, and the federal Department of Justice. The consent decree between CARB and Electrify America governs the expenditures of VW settlement funds and limits the extent to which agencies other than CARB can conduct oversight for Electrify America charger installations. This bill may be in conflict with the consent decree.

- 4) *Related Legislation.*

SB 314 (Padilla, 2025) makes changes to the inspection requirements for electric vehicle service equipment, under the jurisdiction of weights and measures laws. Status: Pending hearing in the Senate Committee on Business, Professions and Economic Development

SB 533 (Richardson, 2025) allows an electric vehicle EV charging station to require customers to use an internet-based application to gain admission to the charging station premises and pay for charging services. Status: In the Assembly after passing through the Senate.

- 5) *Previous legislation.*

AB 2453 (Villapudua) exempts electric vehicle service equipment from the requirement it is to be retested or placed into service by a service agency or sealer before the electric vehicle service equipment is used after receiving maintenance, as specified, until January 1, 2028. Status: Chapter 399, Statutes of 2024

AB 2697 (Irwin) Requires the California Energy Commission (CEC) to develop network roaming requirements for state-funded electric vehicle (EV) chargers and charging station networks by January 1, 2026. Status: Chapter 735, statutes of 2024

AB 126 (Reyes and Gonzalez) reauthorized fees that fund the Air Quality Improvement Program, the Clean Transportation Program, and the Enhanced Fleet Modernization Program. Among other changes, required the CEC to adopt tools to increase uptime and recordkeeping and to set standards for how those stations shall notify customers about their availability and accessibility. Status: Chapter 319, Statutes of 2023

AB 1349 (Irwin, 2023) required owners or operators of EV charging stations to make available specified data on the owners’ or operators’ entire network of EV charging stations in California, free of charge, to third-party software developers. Status: Held in Senate Committee on Energy, Utilities, and Communications

AB 126 (Reyes) required the CEC to set standards for how EV charging stations notify customers about the availability and accessibility of publicly available charging infrastructure, and required the CEC to adopt tools to increase uptime at charging stations. Status: Chapter 319, Statutes of 2023

SB 123 (Committee on Budget and Fiscal Review) required EV chargers that are newly installed and publicly available to offer specified payment methods. Authorized the CEC to modify those requirements in consideration of changing technologies, and vested authority to the CEC to implement and enforce those requirements. Status: Chapter 52, Statutes of 2023

SB 454 (Corbett) prohibited charging a subscription fee on persons desiring to use an EV charging station and required the total actual charges for the use of an EV charging station to be disclosed to the public at the point of sale. Status: Chapter 418, Statutes of 2023

AB 2061 (Ting and Reyes) required the CEC to develop uptime recordkeeping and reporting standards for EVCS that received state funding or ratepayer money and are installed on or after January 1, 2024. Status: Chapter 345, Statutes of 2022

AB 2127 (Ting) required the CEC to conduct a statewide assessment every two years of EV charging infrastructure needed to support the levels of EV adoption required for the state to meet its goals of putting at least five million zero-emission vehicles (ZEVs) on the road and reducing greenhouse gas (GHG) emissions 40% below 1990 levels by 2030. Status: Chapter 364, Statutes of 2018

**REGISTERED SUPPORT / OPPOSITION:****Support**

AAA Northern California, Nevada & Utah  
American Automobile Association of Northern California, Nevada & Utah  
Automobile Club of Southern California  
California Center for Sustainable Energy  
Tri County Chamber Alliance  
Union of Concerned Scientists

**Support If Amended**

Plug in America

**Opposition**

Chargepoint, INC  
Electric Vehicle Charging Association  
Electrify America, LLC

**Oppose Unless Amended**

California Electric Transportation Coalition  
Tesla INC.

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