

Date of Hearing: April 26, 2023

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY

Eduardo Garcia, Chair

AB 1349 (Irwin) – As Amended April 19, 2023

SUBJECT: Electric vehicle charging station networks: data fields

SUMMARY: Requires that on and after June 1, 2024, owners or operators of electric vehicle (EV) charging stations for which the owner or operator was awarded a state grant, on or after January 1, 2024, to support the EV charging station, including related infrastructure, shall 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.

EXISTING LAW:

- 1) Creates the Clean Transportation Program (CTP), administered by the California Energy Commission (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 California Air Resources Board (CARB) and the California Public Utilities Commission (CPUC), to prepare a statewide assessment of the 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 California roads by 2030, and of reducing emissions of greenhouse gases (GHG) to 40% below 1990 levels by 2030. (Public Resources Code § 25229)
- 3) Requires the CEC, in consultation with CARB, to assess whether charging station infrastructure is disproportionately deployed by population density, geographical area, or population income level. (Public Resources Code § 25231)
- 4) Requires CEC, in consultation with the CPUC, to develop uptime recordkeeping and reporting standards for EV chargers and charging stations by January 1, 2024. (Public Resources Code § 25231.5)
- 5) Establishes federal standards for the functionality and availability of EV charging stations, as well as sets requirements on the availability of specified data related to EV chargers to third-party software developers. (Code of Federal Regulations, Title 23 § 680.116)

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

BACKGROUND:

ZEverything, ZEverywhere, All At Once? – California's transportation sector is currently the largest source of GHG emissions in the state and, in the interest of meeting the state's emissions

reduction targets, California has set a goal that 100% of new passenger vehicle sales will be ZEVs by 2035.¹ 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 in California reached 1.1 million in the first quarter of 2022, accounting for 16% 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, operating in California by 2025.² As of January 2021, California has installed more than 70,000 public and shared chargers, including nearly 6,000 direct current fast chargers (DCFC). The CEC found that an additional 123,000 are planned, approximately 3,600 of which are fast chargers, which leaves a gap of about 57,000 installations, from the goal of 250,000 chargers.³ By 2030, the CEC projects over 700,000 public and shared private chargers will be needed to support the charging needs of 5 million ZEVs, and nearly 1.2 million chargers would be required to support 8 million ZEVs. An additional 157,000 chargers are needed to support 180,000 medium- and heavy-duty vehicles anticipated for 2030. Statewide, the Clean Transportation Program (CTP) receives \$100 million per year through revenue from various fees, while the Governor's proposed budget for 2023-24 includes about \$2.1 billion for programs that expand affordable and convenient ZEV infrastructure access in low-income communities.⁴

Public Grant Funding For EV Charging Stations – The Clean Transportation Program (CTP), which provides grant funding for EV charging infrastructure, receives \$100 million per year through revenue from various fees. Additionally, the CTP has received in recent state budgets billions in general fund appropriations to support their efforts. For instance, the 2021 Budget Act committed \$3.9 billion towards ZEV acceleration through 2024.⁵ The 2022 budget included an additional \$6.1 billion commitment for one-time expenditures over five years to accelerate the state's transition to ZEVs, with much of the funding dedicated to supporting medium- and heavy-duty fleets and disadvantaged and low-income communities.⁶ The five-year ZEV package is currently pending budget negotiations, and has been proposed by the administration to be slimmed back given the future fiscal outlook.

Through the CTP, the CEC has awarded over \$1 billion in grant funding through competitive solicitations and first-come-first-served projects.⁷ The CEC has provided grant funding for EV infrastructure development, including recently through California Electric Vehicle Infrastructure Project (CALeVIP) 2.0, which provides incentives to developers for the purchase and installation of light-duty public EV chargers.^{8,9}

¹ Executive Order N-79-20

² Executive Order B-48-18

³ CEC; "Electric Vehicle Charging Infrastructure Assessment - AB 2127"; July 2021

⁴ Mobile Source Air Pollution Reduction Review Committee (MSRC); "Clean Transportation Funding Reduced in Proposed 2023-24 State Budget"; March 2023; <http://www.cleantransportationfunding.org/news/2023/clean-transportation-funding-reduced-proposed-2023-24-state-budget>

⁵ SB 129, Skinner, Chapter 69, Statutes of 2021

⁶ Pg. 10, CEC, 2022-2023 *Investment Plan Update for the Clean Transportation Program*, January 2023; CEC-600-2022-062-CMF; <https://efiling.energy.ca.gov/GetDocument.aspx?tn=248494>

⁷ CEC; "National Electric Vehicle Infrastructure Program (NEVI)"; <https://www.energy.ca.gov/programs-and-topics/programs/national-electric-vehicle-infrastructure-program-nevi>

⁸ CEC; "California Electric Vehicle Infrastructure Project (CALeVIP) 2.0"; <https://www.energy.ca.gov/programs-and-topics/programs/california-electric-vehicle-infrastructure-project-calenvip-20>

User Experience with EV Charging – Charging an electric car can be a more complex and less predictable process than refilling a gasoline car. It can take significantly longer to charge an EV than to fill a gas tank, or worse, there may not be a publicly available charger in the area or those available may be nonoperational. In addition, a station may not have the proper connection to charge certain EV models and the price of the electricity, as well as the rate at which it will charge the vehicle, may not be visible to the user. Vandalism of the charger’s interface screen or connector, issues with the electronic components inside the charger, and problems processing payment can all contribute to negative user experiences with EV chargers.¹⁰ To help navigate this landscape, there are a number of dedicated EV charging apps. Most charging provider companies have apps designed to help users locate a charging station within its network. Additionally, some apps aggregate all charging networks, allowing users to search through all the different charging stations in an area, regardless of the network.

However, news reports reveal driver frustration with current app solutions, with drivers lamenting the lack of an effective, comprehensive app to help EV owners prepare for extended road trips. The current EV charging app ecosystem may require drivers to download multiple applications on their phone to find a charging station, with documented instances of drivers downloading more than eight apps to effectively navigate the EV charging network.¹¹ This deluge of apps not only clutters a driver’s phone, but certain applications also require an account and outstanding balance to use, raising further barriers to the convenient and reliable access to EV charging.

COMMENTS:

- 1) *Author’s Statement.* According to the author, “While California continues to lead the nation in its investments and adoption of electric vehicles (EVs), we won’t make it very far if our charging infrastructure is not operational and accessible for drivers. Despite seeing an increase of EVs on the road, charging infrastructure is currently failing to meet the demand, with drivers experiencing difficulties when needing to charge. In particular, drivers report frustrations in locating functioning chargers, often needing to download multiple apps and create new accounts for a single charge. In an effort to address these common frustrations, AB 1349 will require owners and operators of electric vehicle charging stations that use state dollars for their infrastructure to report live data on their charging stations, including a charging station’s price, its availability, and most importantly, if the station is in operation- creating a reliable and seamless experience for EV drivers.”
- 2) *Grants and Requirements.* This bill requires the owners or operators of EV charging stations which received state grant funding to make specified information available to third-part software developers, free of charge. However, a lack of clarity on what qualifies as a state grant may introduce ambiguity into which entities are required to share data. For example, the Charging and Fueling Infrastructure Discretionary Grant Program

⁹ CALeVIP; “General Eligibility & Requirements”; <https://calevip.org/general-eligibility-requirements>

¹⁰ Politico; “Why America’s EV chargers keep breaking”; April 2023;

<https://www.politico.com/news/2023/04/12/america-ev-chargers-keep-breaking-heres-why-00089181>

¹¹ ABC News. Electric vehicle drivers get candid about charging: ‘Logistical nightmare’ February 26, 2023.

is a \$2.5 billion discretionary grant program created under the federal bipartisan Infrastructure Investment and Jobs Act (IIJA). The program, and all grant funding associated with it, is slated to be administered by the Federal Highway Administration. Whether these funds, which will be dispersed by a federal entity along a framework determined by state agencies, would qualify as “state grants”, and therefore whether the grant recipients would be subject to the data collection requirements of this bill, is unclear. Similarly, it is unclear whether ratepayer funding used for utility-owned and maintained chargers and associated infrastructure count as a “state grant.” For the electric investor-owned utilities, the CPUC has recently authorized approximately \$1 billion over five years to support charging investments in specified communities.¹² A general reader may assume such funding does not qualify as a “grant,” but the lack of definition of what is a state grant furthers this uncertainty. The author may wish to consider amending this bill to add specificity around which funding sources qualify as “state grants.”

- 3) *The Utility of Specificity.* All of the consumer-facing applications that may eventually result from this bill will only be as strong as the data they are provided. This makes the data reporting requirements, and the specificity of which entities are subject to those requirements, a critical aspect of this bill. It is not specified in the bill whether a utility could be included as the “owner and operator” of an EV charging station; however the author has expressed her intent for their inclusion, should they be recipients of state grants. *As such, the author and committee may wish to consider an amendment clarifying that utilities qualify as EV charging station owners or operators and would therefore be subject to the information reporting requirements outlined in this bill, should the utilities be recipients of state ZEV grants.*

- 4) *Related Legislation.*

AB 1626 (McCarty) would require the CEC to gather aggregated information that would allow relevant state agencies to estimate the total anticipated hydrogen fueling capacity demand at the fleet locations of specified entities and require the CEC to share the aggregated data with developers of publicly available hydrogen fueling stations, while prohibiting developers from disclosing that data to third parties. Status: *pending hearing* in the Assembly Committee on Transportation following passage in this committee on April 12, 2023 by a 15-0-0 vote.

- 5) *Prior Legislation.*

AB 2061 (Ting) requires the CEC, in consultation with the CPUC, to develop uptime recordkeeping and reporting standards for electric vehicle chargers and charging stations, and states that the uptime recordkeeping and reporting standards only apply to electric vehicle chargers and charging stations that received an incentive from a state agency or

¹² D. 22-11-040, CPUC, *Decision on Transportation Electrification Policy and Investment*, R. 18-12-006, November 21, 2022.

through a charge on ratepayers, as well as requires the CEC, in consultation with the PUC, to hold a public workshop to discuss and identify industry best practices and charger technology capabilities that are demonstrated to increase reliability. Status: Chapter 345, Statutes of 2022.

AB 2700 (McCarty) requires the CEC, in collaboration with CARB and the CPUC, to annually gather from state agencies specified entities' fleet data on medium- and heavy-duty vehicles and share that data with electrical corporations and POUs to help inform electrical grid planning efforts to support the state's anticipated demand for electric vehicle charging. Status: Chapter 354, Statutes of 2022.

- 6) *Double Referral*. This bill was previously heard in the Assembly Committee on Transportation on April 17, 2023, where it passed with a 15-0-0 vote.

REGISTERED SUPPORT / OPPOSITION:

Support

None on file.

Opposition

None on file.

Other

Electric Vehicle Charging Association
Flo Services USA

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