

Date of Hearing: April 26, 2023

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY

Eduardo Garcia, Chair

AB 1580 (Juan Carrillo) – As Introduced February 17, 2023

SUBJECT: Air pollution: electric vehicle infrastructure

SUMMARY: Requires the California Energy Commission (CEC) and the Department of Transportation (Caltrans) to develop a State Electric Vehicle Infrastructure Deployment Plan on or before June 30, 2024.

Specifically, **this bill:**

- 1) Requires CEC and Caltrans to jointly develop a State Electric Vehicle Infrastructure Deployment Plan and update the plan each January.
- 2) Requires the plan to be consistent with federal requirements and guidance provided by the federal National Electric Vehicle Infrastructure (NEVI) Formula Program established under the federal Infrastructure Investment and Jobs Act of 2021.
- 3) Authorizes CEC and Caltrans to submit the updates to the plan in conjunction with, or as a part of, the Clean Transportation Program (CTP) investment plan.
- 4) Requires CEC to notify the Secretary of State of exhaustion of funding from the federal NEVI Formula Program.

EXISTING LAW:

- 1) Creates CTP, administered by CEC, to provide competitive grants, revolving loans, loan guarantees, or loans to various entities to develop and deploy innovative technologies that transform California's fuel and vehicle types to help attain the state's climate change policies. The fees that fund CTP sunset January 1, 2024. (Health and Safety Code § 44272)
- 2) Requires CEC to develop and adopt an investment plan, in consultation with an advisory body and through a public process, to determine priorities for investment of funds and technologies to achieve the goals of the CTP. (Health and Safety Code § 44272.5)
- 3) Requires CEC to submit to the Legislature a yearly update to the investment plan. (Health and Safety Code § 44272.7)
- 4) Requires CEC, working with the California Air Resources Board (CARB) and the Public Utilities Commission (CPUC), to prepare a statewide assessment of the electric vehicle (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 (ZEV) on California roads by 2030, and of reducing greenhouse gas (GHG) emissions to 40% below 1990 levels by 2030. (Public Resources Code § 25229)

- 5) 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)

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

Never say NEVI: The National Electric Vehicle Infrastructure Program – On November 15, 2021, President Biden signed into law the Infrastructure Investment and Jobs Act (IIJA). The IIJA authorized a new NEVI Program, which includes a total of up to \$7.5 billion in dedicated funding (\$5 billion in formula funds and \$2.5 in discretionary competitive funds) to help make EV chargers accessible to all Americans for local to long-distance trips.⁵ The stated purpose of the NEVI Formula Program is to provide funding to states to strategically deploy EV charging infrastructure and to establish an interconnected network to facilitate data collection, access, and

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 The White House; “Biden-Harris Administration Announces New Standards and Major Progress for a Made-in-America National Network of Electric Vehicle Chargers”; February 2023; <https://www.whitehouse.gov/briefing-room/statements-releases/2023/02/15/fact-sheet-biden-harris-administration-announces-new-standards-and-major-progress-for-a-made-in-america-national-network-of-electric-vehicle-chargers/>

reliability, with the ultimate goal of creating a convenient, affordable, reliable, and equitable network of chargers throughout the U.S.⁶

Under the NEVI Program, each state is required to submit an initial EV Infrastructure Deployment Plan (plan) that describes how the state intends to use its apportioned NEVI Formula Program funds for review by the Federal Highway Administration (FHWA). Federal guidance for developing a statewide NEVI plan describes a desired focus on how the funding will support a convenient, affordable, reliable, and equitable statewide and national EV network.⁷ Each state must provide 5-year goals for the duration of the program that includes at least one outcome-oriented goal with a quantitative target. This section of the plan should also identify the overall vision and goals specific to the geography, demographics, and network of the state as consistent with the NEVI Formula Program. The state plans should be updated on an annual basis to reflect the state funding plans for that fiscal year.⁸

The federal NEVI funding comes with rules, set by the Federal Highway Administration (FHWA) and U.S. Department of Transportation (DOT), which place a wide variety of requirements on states receiving NEVI funding. These requirements range from a set of customer-facing operational practices for EV charging stations, including specific guidance on payment methods, display of price to charge, speed and power of chargers, and information communicated about the availability and functioning of each charging station, to standards for installation, operation, and maintenance of charging stations. NEVI-funded charging stations are required to contain a minimum number of ports, certain types of connectors, and provide specified customer support services. The FHWA rules outline minimum maintenance technician qualifications, including requirements for training and certification standards for technicians installing, operating, and maintaining chargers. The stated goal of these requirements is to standardize how charging stations would be installed, maintained, and operated throughout the country.⁹

California's NEVI plan – Through the NEVI Formula Program, California is expected to receive \$384 million in federal funding over 5 years to strategically deploy publicly available EV charging infrastructure and establish an interconnected network of EV chargers along key corridors across the state.¹⁰ Caltrans and the CEC developed the California NEVI Deployment Plan and submitted it to the new Federal Joint Office of Energy and Transportation in August 2022 and received approval of the plan by Federal Highway Administration in September

⁶ US Department of Transportation; “National Electric Vehicle Infrastructure Standards and Requirements”; February 2023; <https://www.federalregister.gov/documents/2023/02/28/2023-03500/national-electric-vehicle-infrastructure-standards-and-requirements>

⁷ US Department of Transportation; “National Electric Vehicle Infrastructure Standards and Requirements”; February 2023; <https://www.federalregister.gov/documents/2023/02/28/2023-03500/national-electric-vehicle-infrastructure-standards-and-requirements>

⁸ CEC; “National Electric Vehicle Infrastructure Program (NEVI)”; <https://www.energy.ca.gov/programs-and-topics/programs/national-electric-vehicle-infrastructure-program-nevi>

⁹ US Department of Transportation; “National Electric Vehicle Infrastructure Standards and Requirements”; February 2023; <https://www.federalregister.gov/documents/2023/02/28/2023-03500/national-electric-vehicle-infrastructure-standards-and-requirements>

¹⁰ CEC; “National Electric Vehicle Infrastructure Program (NEVI)”; <https://www.energy.ca.gov/programs-and-topics/programs/national-electric-vehicle-infrastructure-program-nevi>

2022.^{11,12} California’s plan focuses significant efforts on bringing charging infrastructure to communities of concern and rural areas throughout the state.

California’s NEVI Deployment Plan outlines an approach that focuses on federally-designated “Alternative Fuel Corridors” and identified gaps in charging coverage along those corridors. The corridors are clustered around major population centers, including Los Angeles and San Francisco, but are also distributed throughout the state, including corridors from Redding to Eureka and Indio to Calexico. The plan divides those gaps into segments and allows grant funding applicants to apply to install charging stations on a segment of those gaps. Based on timelines from previous EV charging installation projects, the state doesn’t expect the first chargers to be operational until the second quarter of 2025, with the full build out completed by 2030.¹³ California is also pursuing funding under DOT’s Charging and Fueling Infrastructure Discretionary Grant Program, which received \$2.5 billion over five years from the IIJA to fund a federal competitive grant program to deploy publicly accessible electric vehicle charging and alternative fueling infrastructure”¹⁴

¹¹ CEC; “National Electric Vehicle Infrastructure Program (NEVI)”; <https://www.energy.ca.gov/programs-and-topics/programs/national-electric-vehicle-infrastructure-program-nevi>

¹² US Joint Office of Energy and Transportation; “State Plans for Electric Vehicle Charging”; <https://driveelectric.gov/state-plans/>

¹³ CleanTechnica; “What Are States Planning To Do With Federal EV Charging Funds?”; August 2022; <https://cleantechnica.com/2022/08/04/what-are-states-planning-to-do-with-federal-ev-charging-funds/>

¹⁴ Caltrans and CEC; “California’s Deployment Plan for the National Electric Vehicle Infrastructure Program”; August 2022

Figure 1 – Designated Alternative Fuel Corridors for EVs in California.¹⁵



COMMENTS:

- 1) *Author's Statement.* “Readily available EV charging infrastructure is a key component to the implementation of EVs. Over the years, California has made strides in reducing emissions from the transportation sector by increasing the adoption of zero-emission vehicles (ZEVs). On November 15, 2021, President Joe Biden signed the Infrastructure

¹⁵ Caltrans and CEC; “California’s Deployment Plan for the National Electric Vehicle Infrastructure Program”; August 2022

Investment and Jobs Act, which included significant formula and discretionary grant funding to advance ZEV infrastructure deployment. California's share from the NEVI Formula Program is estimated at \$384 million over five years. More often than not, we've seen historically disadvantaged and low-income rural communities like my District, get left behind when it comes to accessing these resources. These are families that live in communities most affected by air pollution, commute long-distances for work, and live in apartments that may not have the ability to charge their cars at home. AB 1580 will require the Department of Transportation and Commission to work collaboratively in ensuring that for the next five years, we are well-informed on the progress and address gaps to ensure we meet our goal in developing infrastructure that will support clean and zero-emission vehicles in all communities across our state.”

- 2) *Loop in the Legislature.* Caltrans and the CEC developed the California NEVI Deployment Plan in August 2022 and the plan was approved by the FHWA in September. There is substantial overlap between the contents of this existing plan and the presumed contents of the plan outlined in this bill. However, this bill would require the agencies to report to the legislature annually, not just on the proposed plan but also on its implementation. Greater legislative involvement and oversight may more effectively inform future legislation on EV charging infrastructure buildout as well as potentially increase transparency and responsiveness of NEVI funding use and plan implementation.
- 3) *Federal funds, federal rules.* There is a great deal of linguistic overlap between the California National Electric Vehicle Infrastructure Deployment Plan that the state filed with the federal government to receive NEVI funding, and the proposed State Electric Vehicle Infrastructure Deployment Plan proposed under this bill. However, the difference in objective may prove important down the road. The former is specific to the NEVI program funding and guidelines, while the latter, if interpreted broadly, would lay out a comprehensive strategy for all EV infrastructure development throughout California—such as ratepayer-funded utility EV deployment, state general funded EV grants and incentives—that would be statutorily required under this bill to adhere to federal NEVI requirements and guidance. This may unnecessarily subject a wide variety of non-NEVI funded projects to NEVI requirements and force the entire buildout of a statewide EV infrastructure network to adhere to federal rules. This is not the author's intent with the plan proposed under this bill; they have communicated their desire is to have the plan specific to just NEVI funded projects. *As such, the author and committee may wish to consider amendments to specify that the State Electric Vehicle Infrastructure Deployment Plan proposed by this bill is exclusively related to federal NEVI funding and does not apply to projects that are not funded by NEVI.*
- 4) *Related Legislation.*

AB 1482 (Gabriel) mandates, for publicly owned electric utilities (POUs), an average service energization time for EV charging infrastructure of 125 business days, requires

POUs to annually report on the service energization time for EV charging infrastructure projects to the CEC, and requires the CEC to give preference in providing financial assistance to projects that receive permits from a locality that has established expedited EV charging permitting processes. Status: *pending hearing* in this committee on April 26, 2023.

AB 1529 (Gabriel) requires the CEC to study and report on the suitability of gas stations for conversion to EV charging stations, as well as identify related financial and regulatory barriers. Status: *pending hearing* in the Assembly Committee on Transportation after passage in this committee on April 12, 2023 by a 13-0-2 vote.

AB 1614 (Gabriel) requires CARB to conduct a study on how to phase out the existence of gasoline fueling stations by a specified date and the potential incentives that may be required in order to transition those stations into electric vehicle charging stations. Status: *referred* to Assembly Transportation Committee

SB 507 (Gonzalez) expands the scope of information the CEC must consider when assessing the state's need for EV charging infrastructure. Status: *referred* to Senate Transportation Committee

SB 493 (Min) requires the CEC to assess the energy resources needed to meet state goals to transition medium- and heavy-duty vehicles to ZEVs, and it requires CARB to use the CEC's assessment to create a strategic plan to achieve this transition. Status *referred* to Senate Environmental Quality Committee.

5) *Prior Legislation.*

SB 589 (Hueso) incorporated workforce needs into the CEC's regular assessment of ZEV resources needed to meet state goals. The bill also expanded the types of projects eligible for funding from the CEC's CTP. Status: Chapter 732, Statutes of 2021.

SB 1000 (Lara) among several provisions, required the CEC to assess whether EV chargers, including DC fast chargers, are disproportionately deployed by population density, geographical area, or population income level, including low, middle, and high income levels. Status: Chapter 368, Statutes of 2018.

AB 2127 (Ting) required the CEC to assess the amount of EV infrastructure—including chargers, make-ready electrical equipment, and supporting hardware and software—needed to meet the goals of putting at least five million ZEVs on the road and reducing GHG emissions 40% below 1990 levels by 2030, to be updated at least once every two years. Status: Chapter 365, Statutes of 2018.

SB 32 (Pavley) requires CARB to ensure that statewide GHG emissions are reduced to 40% below the 1990 levels by 2030. Status: Chapter 249, Statutes of 2016.

- 6) *Double Referral*. This bill was previously heard in the Assembly Committee on Transportation on March 27, 2023, where it passed with a 15-0-0 vote.

REGISTERED SUPPORT / OPPOSITION:

Support

California Environmental Voters (formerly Clcv)

Opposition

None on file.

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