Date of Hearing: April 6, 2022

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY
Eduardo Garcia, Chair
AB 2061 (Ting) – As Amended March 21, 2022

SUBJECT: Transportation electrification: electric vehicle charging infrastructure

SUMMARY: Requires the California Energy Resources Conservation and Development Commission (CEC) to calculate uptime for electric vehicle (EV) charging infrastructure and requires that an entity that receives state incentives for charging infrastructure report uptime to the CEC. Specifically, **this bill**:

1) Defines uptime as the time an EV charging station's hardware and software are both operational and available for use, or in use, and the charging station dispenses electricity at the intended power level.

2) Requires, beginning July 1, 2023, an entity that receives an incentive funded by a state agency or through a charge on ratepayers to install, own, or operate a charging station to report charging station uptime to the CEC every 12 months, calculated over a 12-month rolling basis, for at least 5 years.

3) Requires the service provider of EV service equipment selected by the entity that received the funding to provide the data on behalf of the entity. Authorizes the service provider to select a designee to provide this data if feasible.

4) Requires the CEC, in consultation with the California Public Utilities Commission (CPUC), to develop a formula to calculate uptime to provide standardized reporting of information, and to determine what constitutes excluded time, events that are outside a software or hardware provider's control.

5) Requires, beginning January 1, 2025, the CEC to assess the uptime of public- and ratepayer-funded charging station infrastructure as part of its biennial assessments on 1) the EV charging infrastructure needed to meet state goals and 2) equitable deployment of infrastructure.

6) Requires the CEC, if it determines charging station uptime to be an issue that undermines adoption of zero-emission vehicles (ZEVs), to consider, along with the CPUC, adopting tools to increase charging station uptime, including requirements or incentives.

7) Authorizes the CEC, in consultation with the CPUC, to develop different reporting requirements for non-networked charging stations, Level 1 charging stations, and all-inclusive mobile solar charging stations, if needed.

8) Exempts charging stations installed at single-family homes from reporting requirements.

9) Defines "charging station" as an electrical component assembly or cluster of component assemblies designed specifically to charge batteries within EVs by permitting the transfer of electrical energy to a battery or other storage device in an EV.

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 California Air Resources Board (CARB) and the 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 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) 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 benefits in terms of specified characteristics, the overall contribution of the funded projects toward specified goals, key obstacles and challenges to meeting the goals, and recommendations for future actions. (Public Resources Code § 44273)

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

BACKGROUND:

Transportation Electrification Goals. Executive Order (EO) N-79-20 states the goal that 100% of new passenger vehicles sales in California will be ZEVs by 2035. The EO directs CARB to develop and propose regulations to meet that goal. For passenger vehicle charging in 2030, the AB 2127 Electric Vehicle Charging Infrastructure Assessment projects over 700,000 public and shared private chargers are needed to support 5 million ZEVs, and nearly 1.2 million to support about 8 million ZEVs anticipated under Executive Order N-79-20. An additional 157,000 chargers are needed to support 180,000 medium- and heavy-duty vehicles anticipated for 2030.

Publicly Funded Charging Stations. Typically, the CTP receives $100 million per year through revenue from various fees. Due to recent surpluses, the Legislature has appropriated additional General Fund money to ZEV infrastructure. Last year's 2021-22 Budget approved $500 million for the CTP to fund charging and hydrogen refueling infrastructure for light-duty and medium- and heavy-duty ZEVs vehicles. This year's 2022-23 Proposed Governor's Budget includes $390

million General Fund investments to deploy infrastructure to support 1,000 drayage trucks and 1,600 transit buses and $500 million General Fund for ZEV infrastructure across a range of vehicle classes.

The $5 billion National Electric Vehicle Infrastructure (NEVI) Formula Program is part of $7.5 billion in EV infrastructure funding made available by the federal bipartisan Infrastructure Investment and Jobs Act (IIJA). This funding aims to provide a network of 500,000 ultra-fast EV charging stations along the nation's travel corridors to help make cross-country electric travel accessible to all Americans. The remaining $2.5 billion, awarded on a competitive basis, will be announced later this year.

Through NEVI formula funds, California will receive $57 million in Fiscal Year 2022, pending approval of a state plan, which must be submitted by August 1, 2022. Five-year NEVI formula funding for California totals $384 million.

What data are collected regarding funding recipients? Although, the CEC is required to provide an evaluation of the efforts funded through the CTP in the IEPR, there is no legislative directive for the CEC to collect data from CTP participants and beneficiaries. The IEPR evaluation must include:

- A list of projects funded by the Alternative and Renewable Fuel and Vehicle Technology Fund.
- The expected benefits of the projects in terms of air quality, petroleum use reduction, GHG emissions reduction, technology advancement, benefit-cost assessment, and progress towards achieving these benefits.
- The overall contribution of the funded projects toward promoting a transition to a diverse portfolio of clean, alternative transportation fuels and reduced petroleum dependency in California.
- Key obstacles and challenges to meeting these goals identified through funded projects.
- Recommendations for future actions.

SB 129 (Skinner), Chapter 65, Budget Act of 2021 requires the CEC to collect the following data from recipients of ZEV infrastructure funding for that year’s appropriations:

- Number, type, date, and location of chargers or hydrogen refueling stations installed.
- Nameplate capacity of the installed equipment, in kilowatts for chargers and kilograms/day for hydrogen.
- Number and type of outlets per charger.
- Location type, such as street, parking lot, hotel, restaurant, or multi-unit housing
- Total cost per charger or refueling station, the subsidy from the CEC per charger or refueling station, federal subsidy per charger or refueling station, utility subsidy per charger or refueling station, and privately funded share per charger or refueling station.
- Data on the chargers over a 12 month period including:
    - Number of charging or refueling sessions
    - Average session duration
    - Average kWh or kg dispensed

- Average charger or refueling station downtime

Anecdotal Reliability Data. Although statewide data on charging stations' performance does not exist, anecdotally the charging experience for drivers is unreliable. Drivers face situations where publicly available charging stations charge at far slower speeds than displayed, are broken upon arrival, incorrectly advertised by operators, or fail to start a charge when plugged in. In 2020, Plug In America surveyed over 4,000 EV owners and 54% reported experiencing problems with public charging, with broken chargers being the most common issue.

COMMENTS:

1) *Author's Statement.* According to the author, "Access to reliable charging stations is the driving force that will lead to greater EV adoption, which is key to meeting our climate goals. Consumers need to know they won't be stranded and will be able to plug in wherever they travel in our state. California has been investing billions in charging infrastructure over the last decade and we need a holistic understanding of station reliability and if any steps are necessary to improve overall reliability. We need to understand the state of the charging infrastructure in order to address issues and better direct resources to fix them. This bill bolsters existing reporting requirements and expands data collected by the Energy Commission on all charging stations by July 1, 2023. AB 2061 creates a policy framework to track station reliability and assess if there are underlying equitable access issues beginning January 1, 2025."

2) *Single Family Homes.* While this bill is not intended to apply to individuals who receive funding to install charging equipment at single family homes, as currently written it may fail to explicitly capture recipients of funding for charging installed in small multi-unit dwellings. Additionally, stakeholders may disagree as to what is included in the term "single family homes" it is not statutorily defined. *The authors may wish to consider a more specific phrasing of residential real property of 4 or fewer units as opposed to single family homes.*

3) *Related Legislation.*

   AB 2700 (McCarty, 2022) among other provisions, would require electrical corporations to ensure that their distribution systems are upgraded at the times and locations necessary to support the level of ZEV charging anticipated by assessments from the CEC and other agencies. Status: In Committee Process – Assembly Committee on Utilities & Energy

   AB 2703 (Muratsuchi, 2022) would require a person who receives state funding or other incentives to deploy ZEV infrastructure to agree, as a condition of receiving the incentive, to operate the station in compliance with reliability standards that would be developed by the CEC. AB 2703 also requires the CEC, upon appropriation by the Legislature, to develop a program to provide financial assistance to low-income and disadvantaged community members to use ZEV infrastructure, micromobility transportation options, and ridesharing services, as specified. Status: In Committee Process – Assembly Transportation Committee

4) *Prior Legislation.*

AB 2127 (Ting, 2018) 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 percent below 1990 levels by 2030, to be updated at least once every two years. Status: Chaptered – Chapter 365, Statutes of 2018

REGISTERED SUPPORT / OPPOSITION:

Support

350 Bay Area Action
AAA Northern California, Nevada & Utah
Amply Power
Auto Club of Southern California (AAA)
Automobile Club of Southern California
California Environmental Voters (formerly CLCV)
Chargerhelp!
Coalition for Clean Air
Cruise LLC
Flo Services USA, INC.
Plug in America
The Climate Center
Union of Concerned Scientists
Valley CAN (Clean Air Now)

Oppose Unless Amended

California Apartment Association
California Association of Realtors

Analysis Prepared by: Natalie Seitzman / U. & E. / (916) 319-2083