Date of Hearing: March 28, 2022

ASSEMBLY COMMITTEE ON TRANSPORTATION
Laura Friedman, 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 charging infrastructure and requires that an entity that receives state incentives for charging infrastructure report uptime to CEC. Specifically, **this bill**:

1) Defines uptime as the time an electric vehicle 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 electric vehicle 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 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, CEC to assess the uptime of public- and ratepayer-funded charging station infrastructure as part of its biennial assessments on 1) the electric vehicle charging infrastructure needed to meet state goals and 2) equitable deployment of infrastructure.

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

7) Authorizes CEC, in consultation with 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 electric vehicles by permitting the transfer of electrical energy to a battery or other storage device in an electric vehicle.

EXISTING LAW:

1) Creates the Clean Transportation Program (CTP), administered by 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.

2) Requires CEC, working with the California Air Resources Board (CARB) and CPUC, to prepare a statewide assessment of the electric vehicle charging infrastructure needed to support the levels of electric vehicle 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.

3) Requires CEC, in consultation with CARB, to assess whether charging station infrastructure is disproportionately deployed by population density, geographical area, or population income level.

FISCAL EFFECT: Unknown

COMMENTS:

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. Increased adoption of battery electric vehicles necessitates a corresponding increase in the supporting charging infrastructure. Deploying more charging stations will help consumer confidence in locating charging stations and transitioning to battery electric vehicles.

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.

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.

SB 129 (Skinner), Chapter 65, Budget Act of 2021 requires 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 kilo Watt 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 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

State planning documents and past budget legislation have determined that tracking and measuring charging station performance is critical to ZEV adoption; however, there is no policy guidance as to how this data will be collected and by whom. As the Legislature dedicates more money to ZEV infrastructure, it may wish to have uptime reporting requirements applied to these investments.

State and federal funding. 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 electric vehicle (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.

Open questions. 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 multi-unit dwellings. Landlords who are delinquent in maintaining home repairs may also neglect upkeep of charging infrastructure to the detriment of their tenants. If this bill progresses, the author should work with CEC to ensure that the bill as written covers multi-unit dwelling and single family rental home installations.

According to the author, "Access to reliable charging stations is the driving force that will lead to greater electric vehicle 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 CEC on all charging stations by July 1, 2023. This bill creates a policy framework to track station reliability and assess if there are underlying equitable access issues beginning January 1, 2025."

In support the Coalition for Clean Air writes, "Highly reliable charging infrastructure is integral to achieving the state's goal to phase out the sale of internal combustion engine vehicles by 2035. If an electric vehicle driver pulls up to a charging station only to find that it is broken, that experience creates consumer frustration and dampens consumer interest in purchasing electric vehicles. It only takes one bad charging experience for drivers to complain to their family, friends, coworkers, and neighbors that charging is inconvenient and unreliable. Ensuring positive electric vehicle experiences are particularly important for residents of low-income and disadvantaged communities, who often have limited resources and need reliable transportation just to keep afloat."

In opposition the California Association of Realtors writes, "AB 2061 imposes reporting requirements on an entity that receives an incentive funded by a state agency or through a charge on ratepayers to install, own, or operate an electric vehicle charging station. However, "entity" is not defined in the bill. As a result, we respectfully request that AB 2061 be amended to make clear that its provisions do not apply to small residential property owners, who are still struggling due to the COVID-19 pandemic and lack the financial and staff resources necessary to comply with the onerous reporting requirements contained in the bill."

Related legislation: AB 2703 (Muratsuchi) of 2022 requires 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 CEC. AB 2703 also requires 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.

REGISTERED SUPPORT / OPPOSITION:

Support

Chargerhelp! (co-sponsor)
Flo Services Usa, INC. (co-sponsor)
AAA Northern California, Nevada, and Utah
Amply Power
Auto Club of Southern California
California Environmental Voters (formerly CLCV)
Coalition for Clean Air
Cruise LLC
Plug in America
The Climate Center
Union of Concerned Scientists
Valley Can (clean Air Now)

Opposition

California Association of Realtors

Analysis Prepared by: Christine Casey / TRANS. / (916) 319-2093