

Date of Hearing: April 12, 2023

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY

Eduardo Garcia, Chair

AB 1626 (McCarty) – As Introduced February 17, 2023

SUBJECT: Transportation electrification: fleet data

SUMMARY: Requires the California Energy Commission (CEC) to annually gather aggregated information from state agencies that would allow the public sector to estimate the total anticipated hydrogen fueling capacity at each fleet location and share the aggregated data with developers of publicly available hydrogen fueling stations. Also prohibits the developer of a publicly available hydrogen fueling station from disclosing that data to third parties.

EXISTING LAW:

- 1) Requires the CEC, in collaboration with the California Air Resource Board (CARB) and the California Public Utilities Commission (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 local publicly owned electric utilities (POUs) to help inform electrical grid planning efforts to support anticipated demand for electric vehicle charging. (Public Resources Code § 25328)
- 2) Establishes the Charge Ahead California Initiative that, among other things, includes the goal of placing at least one million zero-emission vehicles (ZEVs) and near-zero emission vehicles (NZEVs) into service by January 1, 2023, and increasing access to these vehicles for disadvantaged, low-income, and moderate-income communities and consumers. (Health and Safety Code § 44258)
- 3) Requires the CEC to conduct a statewide assessment every two years of EV charging infrastructure needed to support the levels of EV adoption required to meet the state 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)
- 4) 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)
- 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 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)
- 6) Requires CEC to allocate \$20,000,000 annually to fund the number of publicly available hydrogen-fueling stations identified by CARB, not to exceed 20% of the moneys appropriated by the Legislature from the Alternative and Renewable Fuel and Vehicle

Technology Fund, until there are at least 100 publicly available hydrogen-fueling stations in operation in the state. (Health and Safety Code § 43018.9)

- 7) Requires CEC and CARB, on an annual basis, to jointly review and report progress toward establishing a hydrogen-fueling network that provides the coverage and capacity to fuel vehicles requiring hydrogen fuel that are being placed into operation in the state. (Health and Safety Code § 43018.9)

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 Greenhouse Gas (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 vehicles sales will be ZEVs by 2035.¹ ZEV is an umbrella term encompassing hydrogen fuel cell electric vehicles (FCEV), battery electric vehicles (BEVs), and plug-in hybrid electric vehicles. To meet 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, with ZEVs accounting for 16% of new car sales. The Legislature has remained largely technology neutral on ZEVs, funding vehicle incentives for both FCEVs and BEVs and the required infrastructure, hydrogen fueling stations and EV charging stations, respectively.

Small element, big investment – As of November 2022, California has 62 hydrogen refueling stations in operation, with estimates that that number will surpass 100 stations, a benchmark set by AB 8 (Perea, Chapter 401, Statutes of 2013), in 2024.² Loftier goals for hydrogen fueling infrastructure development have also been set, headlined by an executive order establishing a goal of reaching 200 operational hydrogen fueling stations by 2025.³ The one-time appropriation through the California Budget Act of 2021 of \$1.1 billion across three fiscal years for ZEV infrastructure across light-, medium-, and heavy-duty sectors is anticipated to help the state reach the 200-station goal. The hydrogen stations currently operating in California have excess fueling capacity that is nearly quadruple the current demand from the approximately 12,000 FCEVs in the state.⁴ CEC estimates that a network of 200 hydrogen stations would be capable of supporting about 273,000 light-duty FCEVs.⁵

The CTP has been central in the development of hydrogen fueling infrastructure. The program is administered by the CEC to provide funding for infrastructure and technologies that help the state transition to cleaner fuels and transportation. CARB also administers funding for ZEV infrastructure and vehicles, and the California Public Utilities Commission (CPUC) oversees ratepayer investments in EV infrastructure deployed through load serving entities. Under existing law, the CTP provides up to \$100 million annually for clean transportation infrastructure and

¹ Executive Order N-79-20

² CEC; “2022–2023 Investment Plan Update for the Clean Transportation Program”; January 2023

³ Executive Order B-48-18

⁴ CEC and CARB; “Joint Agency Staff Report on Assembly Bill 8: 2022 Annual Assessment of Time and Cost Needed to Attain 100 Hydrogen Refueling Stations in California”; December 2022

⁵ CEC; “2022–2023 Investment Plan Update for the Clean Transportation Program”; January 2023

technology projects. The CEC identifies priorities for CTP funding through a regular investment plan and updates.

Despite considerable progress in hydrogen fueling buildout, the large amount of funding needed to open stations, permitting requirements, and construction times can create long lead times between the proposal of a hydrogen station and the opening of the station. Many hydrogen vehicle drivers have limited options for refueling, particularly in areas of California where fewer hydrogen stations have been built. While the lack of hydrogen refueling stations can discourage consumers from purchasing hydrogen vehicles, the lack of hydrogen vehicle purchases can lower market incentives for building additional hydrogen refueling stations.⁶

COMMENTS:

- 1) *Author's Statement.* According to the author, "Clean cars are key to California meeting our climate, clean air, and renewable energy goals. AB 1626 provides hydrogen station developers with aggregated and protected data to best inform placement of hydrogen fueling infrastructure. Specifically, this bill requires the California Energy Commission to gather and share fleet data that is already being collected by CARB and other agencies with hydrogen station developers to inform future station locations. AB 1626 is a common-sense step that aligns California's grid-planning processes with the state's ZEV, air quality, and climate goals."
- 2) *Expanding on an existing framework.* AB 2700 (McCarty, Chapter 354, Statutes of 2022) requires the CEC, in collaboration with CARB and the CPUC, to annually gather from state agencies specified entities' fleet data and share that data with electrical corporations and POU's to inform electrical grid planning. This bill builds upon that information collection and data sharing framework, expanding it from focusing exclusively on BEVs to also include data relevant to FCEVs. The primary arguments in favor of this expansion focus on the potential for increased data-sharing to better inform the buildout of hydrogen fueling infrastructure, as well as leveling the playing field between BEV and FCEV support infrastructure development, in keeping with the Legislature's general position to remain technology-neutral.

However, there are substantial concerns about applying a data-sharing framework designed for BEVs and utilities to a market of FCEVs and hydrogen fueling station developers. Data-sharing between state agencies and utilities occurs often and through an established, secure process. These data sharing processes may not exist between state agencies and hydrogen station developers. Additionally, these companies may have different incentive structures than utilities which may dictate how they would use the information and may or may not have existing methods for safeguarding the shared data.

⁶ CEC; "Hydrogen Refueling Stations in California"; <https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics/hydrogen-refueling#:~:text=Currently%20five%20Light%20Duty%20Open,and%20Mountain%20View%20are%20TNO>.

There is also little assurance that the private hydrogen fueling developers are not, or would not, be engaged in private fleet operations, presenting a potential for market conflict should sensitive data about other private fleet operators be shared. Supporters of this bill cite existing data protections in statute prohibiting sharing information with third parties, but those protections do not address potential concern regarding the usage of private fleet data with the private fueling developers themselves. *As such, the author and committee may wish to increase privacy protections in this measure by considering an amendment to add a subdivision excluding “personal information,” as defined in the Civil Code, from the data and information collected and shared with hydrogen developers.*

- 3) The bill tasks the CEC with gathering information that would enable the estimation of hydrogen fueling potential, which may be useful in determining where to build hydrogen fueling stations. However, the language outlining this function is vague. *As such, the author and committee may wish to consider amendments to 25328. (b) (1) (D) to specify relevant state agencies, rather than “the public sector”, and clarify that the information is meant to estimate anticipated hydrogen fueling demand, rather than “capacity”, at each fleet location.*
- 4) The bill requires that the specified information should be aggregated prior to being collected by the CEC and that the data be aggregated again prior to release to developers of hydrogen fueling stations. Aggregating the data for sharing between state agencies would reduce the granularity of information shared, while seemingly providing minimal privacy benefits. Moreover, removing the aggregation requirement for data sharing between state agencies may reduce the cost of implementation and ease the burden on the specified agencies. *As such, the author and committee may wish to consider amendments to 25328. (b) (1) (D) to strike “aggregated”, while retaining “aggregated” in 25328. (d).*
- 5) *Related Legislation.*

AB 673 (Bennett) requires the CEC to evaluate whether the project needs to also include access for light-duty vehicles when considering providing funding for projects for the construction and operation of hydrogen-fueling medium- and heavy-duty stations. Status: *referred* to the Assembly Committee on Natural Resources.

AB 1550 (Bennett) requires, on and after January 1, 2045, that all hydrogen produced and used in California for the generation of electricity or fueling of vehicles be green hydrogen. Status: *set for hearing* in this committee on April 12th, 2023.

AB 1711 (Juan Carrillo) requires the CEC to equitably allocate funds appropriated by the Legislature for purposes of achieving an accessible statewide hydrogen-fueling network and expanding an existing hydrogen-fueling network, as necessary, to specifically prioritize rural communities and low-income communities. Status: *referred* to the Assembly Committee on Transportation.

SB 493 (Min) requires the CEC to assess the electric and hydrogen infrastructure needed to meet the deadlines in Executive Order No. N-79-20 for the transition of medium- and heavy-duty vehicles to zero-emission vehicles. Status: *referred* to the Senate Committee on Environmental Quality.

6) *Prior Legislation.*

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 POU's to help inform electrical grid planning efforts to support the state's anticipated demand for electric vehicle charging. Status: Chapter 354, Statutes of 2022.

AB 8 (Perea) directs the CEC to allocate \$20 million annually, not to exceed 20% of the funds appropriated by the Legislature, from the Clean Transportation Program to deploy hydrogen fueling stations until there are at least 100 publicly available stations in operation. Status: Chapter 401, Statutes of 2013.

REGISTERED SUPPORT / OPPOSITION:

Support

California Hydrogen Coalition – *sponsor*

Opposition

None on file

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