

Date of Hearing: July 1, 2024

ASSEMBLY COMMITTEE ON TRANSPORTATION

Lori D. Wilson, Chair

SB 983 (Wahab) – As Amended March 21, 2024

SENATE VOTE: 32-0

SUBJECT: Energy: gasoline stations and alternative fuel infrastructure

SUMMARY: Requires the California Energy Commission (CEC) to form a 21-member Alternative Fuels Infrastructure Taskforce (Taskforce), upon appropriation by the Legislature, and requires the Taskforce to prepare a report with recommendations for deploying alternative fuels infrastructure at existing gas stations. Specifically, **this bill**:

- 1) Specifies the backgrounds of members that the CEC must select for the Taskforce.
- 2) Defines an “alternative fuel” as electricity, hydrogen, or other zero-emission alternative fuel, as determined appropriated by the Taskforce that is not a fossil fuel.
- 3) Requires the Taskforce, on or before January 1, 2027, to conduct a study and submit to the Legislature a report on the study with recommendations on all of the following:
 - a) Policies to facilitate and accelerate the development and construction of alternative fuels infrastructure at retail gasoline fueling stations;
 - b) Barriers to the accelerated development and construction of alternative fuels infrastructure at retail gasoline fueling stations;
 - c) Best practices for compliance with the federal Americans with Disabilities Act of 1990 when developing and constructing alternative fuel infrastructure; and,
 - d) Other infrastructure challenges that may delay the development and construction of alternative fuels infrastructure at retail gasoline fueling stations.
- 4) Sunsets this bill on January 1, 2031.

EXISTING LAW:

- 1) Establishes the Petroleum Industry Information Reporting Act of 1980 (PIIRA), which establishes requirements for oil refiners and marketers to submit specified data to the CEC and requires the CEC to analyze this data to identify trends in demand and supply for petroleum, including factors influencing gasoline price changes. Existing law requires retail transportation fueling stations to report specified information about their sales of gasoline, diesel, and other fuels to the CEC. (Public Resources Code (PRC) 25350 et seq.)
- 2) Requires the CEC to submit a report to the Legislature every three years assessing the reliability and pricing of transportation fuels. Existing law requires this report to include an assessment of the availability of fuel retail outlets. (PRC 25371)

- 3) Establishes the Clean Transportation Program (CTP), administered by the CEC, to develop and deploy zero-emission technology and fuels in the marketplace through competitive grants, revolving loans, loan guarantees, loans, or other appropriate funding measures. (Health and Safety Code (HSC) 44271 and 44272)
- 4) Requires the CEC, working with the California Air Resources Board (CARB) and the California Public Utilities Commission (CPUC), to prepare a biennial statewide assessment of electric vehicle (EV) charging infrastructure. (PRC 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. (PRC 25231)
- 6) Requires the CEC and CARB to prepare an annual report on progress toward establishing a sufficient hydrogen-fueling network that provides the coverage and capacity to fuel vehicles requiring hydrogen fuel that are being placed into operation in the state. (HSC 43018.9(e)(8))
- 7) Requires a city, county, or city and county to administratively approve applications to install EV charging stations or hydrogen-fueling stations through the issuance of building permits or similar nondiscretionary permits. Applications for hydrogen-fueling stations are limited to parcels that are either zoned for industrial or commercial development and do not contain any residential units or were previously developed with a service station, *e.g.*, a retail gas (or other motor vehicle fuel) station. (Government Code 65850.7)

FISCAL EFFECT: According to the Senate Committee on Appropriations in its analysis of the March 21, 2024 version of this bill, this bill will result in one-time costs of approximately \$900,000 to the CEC.

This bill has been expanded since Senate Appropriations prepared this fiscal analysis and may incur additional costs with the addition of representatives from other state agencies.

COMMENTS:

California climate legislation and regulations. The Legislature has set a number of goals to address climate change, including reducing statewide GHG emissions to 40% below the 1990 level by 2030. Nearly 40% of California's GHG emissions are generated by the transportation sector, which includes light-duty passenger as well as medium- and heavy duty (MHD) vehicles. In order to reduce transportation-related GHG emissions, the state has focused a significant amount of effort toward promoting the use of ZEVs.

In 2022, CARB adopted its Advanced Clean Cars II rule, which will require all new cars and light-duty trucks sold in California to be zero-emission (ZE) by 2035. Starting this year, CARB's Advanced Clean Fleets (ACF) regulation sets ZE purchase requirements for certain fleets of MHD vehicles to replace internal combustion engine vehicles at the end of their useful life.

ZEV adoption and supporting charging and fueling infrastructure. Battery electric vehicles (BEVs, but more commonly and simply known as "EVs") and hydrogen-powered fuel cell electric vehicles (FCEVs) are the two principal ZEV technologies that CARB's various incentive programs and regulations have advanced. BEVs utilize electricity as a fuel to recharge the vehicle battery, which then discharges to power an electric motor, whereas FCEVs fuel up with

hydrogen, which is subsequently converted to electricity by the vehicle to power its electric motor.

Among ZEVs and near-zero-emission (*e.g.*, plug-in hybrids, or PHEVs) vehicles, BEV adoption has outpaced FCEV adoption across light-, medium- and heavy-duty sales. According to CARB and the DMV, as of 2024 Q1, over 1.3 million light-duty BEVs and over 490,000 light-duty Plug-in Hybrid BEVs were registered in California, compared to only about 17,800 light-duty FCEVs. For MHD ZEVs, at the end of 2023, BEVs made up almost 95% of all MHD ZEVs (3,581 BEVs and 203 FCEVs out of 3,784 total MHD ZEVs).

In support of ZEV adoption, the Clean Transportation Program (CTP, enacted under AB 118 (Núñez), Chapter 750, Statutes of 2007) provides funding to accelerate deployment of ZEV infrastructure, and to bolster manufacturing and workforce training to meet the state's needs in growing a clean transportation and fuels market. The CTP is extended through July 1, 2035.

By the CEC's count, California has approximately 105,000 EV chargers in the ground. The CEC projects that, a decade from now, the state will need 2.11 million chargers (including 83,000 direct-current (DC) fast chargers) to support the 15.2 million light-duty EVs expected on the road. According to 2023-2024 Investment Plan Update for CTP, the CEC has awarded more than \$412 million for installation of new EV chargers over the program's lifetime. The state has further committed \$1.9 billion dollars over the next four years to build out EV chargers and, combined with funding from the federal government, utilities and other programs, expects to reach 250,000 chargers in a few years.

BEV drivers are experiencing the growing pains of the transition from gas to electricity as a fuel. EV charging is an experience unlike traditional gasoline or diesel fueling, as the time to recharge depends on the charging speed offered. For example, typical Level 1 charging provides 3.5-6.5 miles of driving range per hour of charging time and Level 2 charging about 14-35 miles per hour of charging time, whereas DC fast charging can provide a full charge in less than an hour (roughly 200-300 mile range). Charging speed will be a critical factor for customer convenience during the transition to EV charging. The longer the charging speeds, the more unlike the current transportation fueling experience the customer may be accustomed to, leading to greater potential frustration. News organizations report that current EV drivers are also frustrated by the limited availability and poor reliability of existing EV charging infrastructure, while potential EV owners are hesitant to buy electric for the same reasons.

Under existing statute, at least 15% of the CTP's annual funds must also go towards hydrogen-fueling stations. At the end of 2023, there were 68 active hydrogen-fueling stations statewide. In the latest 2023 Annual Hydrogen Evaluation Report by the CEC and CARB, previous projections that 100 stations would be fully operational by the end of 2023 have now been pushed back to 2025 based on input from station developers. Unfortunately, several planned fueling stations have been canceled by station developers, and there have been closures of some existing stations for light-duty passenger vehicles by station operators.

FCEV drivers face similar issues as BEV drivers with limited station availability and poor equipment reliability. Across operational fueling stations, consumers frequently experience long wait times and occasional equipment failures. Station owners are evaluating strategies ranging from equipment improvements to changes in operational strategies and even workforce development to improve consumer experiences with hydrogen-fueling.

Driver preferences and problems going forward. Over decades of personal vehicle ownership, California drivers have become accustomed to a generally predictable experience re-fueling at gas stations. Across multiple surveys, EV drivers nationwide have expressed strong interest in having EV chargers located along major highways and at gas stations, with amenities that resemble those of existing gas stations: well-lit, covered charger bays, with bathrooms, convenience stores, and easy-to-read signs about the chargers' speed and charging price. While charging stations with these features exist in the state, they are largely found only in regions with exceptionally high EV adoption rates.

One of the greatest challenges for widespread gas station-to-EV charging station conversion is the existence of, and consumer preference for, alternative charging methods, given the limited availability of DC fast chargers. Ninety-two percent of EV drivers prefer the option of charging at home to other public charging methods, such as at work, at shopping malls, or in any parking lot with chargers installed. Most all of these options reflect the long charging speeds for Level 1 and Level 2 chargers, allowing EV drivers to occupy themselves while they wait for their vehicle to charge. Another challenge is that the installation of EV charging equipment, particularly DC fast chargers, at existing gas stations may be constrained if extensive upgrades to grid capacity are required to support them.

Gas station conversions may be better suited for hydrogen fueling given it is much more akin to traditional fueling in terms of distribution and dispensing fuel. However, despite its outwards similarities to traditional fueling, hydrogen fueling stations still experience issues with hydrogen dispensing, such that station equipment reliability remains a challenge and frustration to FCEV drivers. Moreover, supply and distribution challenges may make it difficult to ensure sufficient supplies of hydrogen are available to fuel FCEVs at existing hydrogen fueling stations.

An uncertain future. The role of retail gas stations during the ZEV transition and thereafter is unclear. A 2021 report from McKinsey predicts that without a shift in the business model, the retail fuel industry will shrink in value across mature markets from \$87 billion in 2019 to \$79 billion in 2030. In anticipation of the transition, some larger companies are installing ZEV infrastructure alongside existing gasoline and diesel pumps. For example, General Motors, Pilot Flying J and EVgo have collaborated to provide EV charging stations at truck stops, with plans to install over 2,000 charging stations over the next few years. However, while some larger corporate owners are deploying EV chargers and hydrogen fueling at or near existing retail gas stations, many gas stations are owned and operated by branded independent or franchisee station owners and operators on leased land. These independent owners/operators lack the resources to invest in new EV charging or hydrogen fueling equipment to supplement or replace their existing gas and diesel pumps, including time and costs for re-designing stations, siting new infrastructure, training operators/technicians and modifying business plans to account for the different costs and demands associated with ZEV fuel sales.

According to the author, "To meet Governor Newsom's 2035 net-zero emissions goal and ensure that California promotes the use of alternative fuels, developing our alternative fueling infrastructure is essential. While we pursue these goals, it is essential to keep retail gas station owners –many of whom are first generation immigrants and small business owners— included in the conversation. SB 983 will ensure that we are finding the most cost-effective solution to reach our net-zero emissions goals by bringing experts and business owners together to add to our fuel infrastructure."

In support, the League of California Cities writes: “The current iteration [of the bill] creates a task force to examine how the state of California can expand its alternative fuel infrastructure in a cost-effective, environmentally conscious, and inclusive way. The task force will examine the feasibility of adding alternative fuel infrastructure to gasoline fueling stations, most of which are owned by single families. As representatives from local government are required members of the task force, this ensures that the interests of local municipalities as it relates to infrastructure, local streets, and roads funding, permitting authority, and local commerce are voiced.”

Committee comments: This bill requires the CEC to form a Taskforce to conduct a study and submit a report on the study to the Legislature by January 1, 2027, with recommendations for policies to accelerate alternative fuel infrastructure development at existing gas stations.

While CTP has provided funds to support deployment of ZEV infrastructure, it is not clear how many funding opportunities, if any, have been directed specifically towards the conversion of retail gas stations to support ZEV fuels, rather than construction of new, standalone EV charging and hydrogen fueling stations.

Efforts to promote the co-location of ZEV infrastructure at existing retail gas stations could provide a number of benefits to ZEV drivers, while advancing the state’s climate goals. The availability of amenities at gas stations aligns with driver preferences, and the availability of station staff may help smooth out a number of difficulties that new and experienced ZEV drivers encounter on a regular basis (*e.g.*, general understanding of the charging/fueling process, station equipment reliability, *etc.*). To the extent that this bill helps identify opportunities to better align ZEV infrastructure deployment with driver preferences, this bill may support greater ZEV adoption.

Retail gas stations already exist where people drive and in proportion to transportation fueling demand. EV charging and hydrogen fueling applications for major transportation corridors to accommodate freight and longer distance driving, such as road trips, will be necessary to complete the state’s transition to zero-emission. Without more coordinated plans to transition to ZEV fueling options, gas stations may face difficulty adopting new business models and local governments may lose opportunities to address equity issues associated with the ZEV transition, while being left with stranded assets. This bill could provide data and recommendations on how to initiate this type of coordinated plan.

Related legislation: AB 1418 (Archuleta) of 2024 would require a city, county, or city and county to adopt an ordinance that creates an expedited, streamlined permitting process for hydrogen-fueling stations. Pending in Assembly Committee on Local Government.

AB 2147 (Mathis) of 2024 would require the CEC and CARB’s joint annual report on hydrogen fueling infrastructure in the state to include progress information on progress made on job creation and workforce development in support of a hydrogen-fueling network. Held in Assembly Appropriations Committee.

AB 1529 (Gabriel) of 2023 would have required the CEC to identify potential financial and regulatory incentives for gasoline stations to convert to EV charging stations. Died in Assembly Committee on Transportation.

AB 1614 (Gabriel) of 2023 would have required the CEC to, upon appropriations by the Legislature, consult with various stakeholders to conduct a study on the transitioning of retail gasoline fueling stations from providing gasoline to providing alternative fuels by January 1, 2027. Vetoed by the governor.

SBX1-2 (Skinner), Chapter 1, Statutes of 2023 modifies PIIRA to require refineries to submit specified data regarding their economic performance to the CEC. The bill also required the CEC to assess the reliability of transportation fuels and retail outlets for those fuels.

AB 1074 (C. Garcia) of 2015 would have required the CEC to develop a plan to deploy alternative fuel infrastructure to meet the state's climate, emissions, and economic goals. Held in the Assembly Committee on Appropriations.

REGISTERED SUPPORT / OPPOSITION:

Support

Afghan American Business Alliance
African American Farmers of California
Alliance for Automotive Innovation
American Petroleum and Convenience Store Association
Asian Business Association of Los Angeles
Asians in Energy
Bay Planning Coalition
California Alliance of Small Business Association
California Chamber of Commerce
California Fuels and Convenience Alliance
California Hispanic Chamber of Commerce
California Hydrogen Business Council
California Hydrogen Coalition
California League of Food Producers
California Manufacturing Technology Association
Carson Chamber of Commerce
Central Valley Latino Mayors and Elected Officials Coalition
Coalition of Filipino-American Chambers of Commerce
Coastal Energy Alliance
East Bay Leadership Council
Greater Coachella Valley Chamber of Commerce
Greater Conejo Valley Chamber of Commerce
Industrial Association of Contra Costa County
Inland Empire Economic Partnership
Latin Business Association
League of California Cities
Long Beach Area Chamber of Commerce
Los Angeles County Business Federation
Los Angeles Latino Chamber of Commerce (UNREG)
Moorpark Chamber of Commerce
Murrieta Wildomar Chamber of Commerce
Nisei Farmers League

Port Hueneme Chamber of Commerce
San Gabriel Valley Economic Partnership
Santa Paula Chamber of Commerce
Southwest California Legislative Council
State Building and Construction Trades Council
Tri County Chamber Alliance
Ventura Chamber of Commerce
Ventura County Coalition of Labor, Agriculture and Business
Vietnamese American Chamber of Commerce
Western States Petroleum Association

Support If Amended

California Tribal Business Alliance

Opposition

None on file

Analysis Prepared by: Stephanie Choing / TRANS. / (916) 319-2093