

Date of Hearing: July 1, 2024

ASSEMBLY COMMITTEE ON TRANSPORTATION

Lori D. Wilson, Chair

SB 1418 (Archuleta) – As Amended May 15, 2024

SENATE VOTE: 33-0

SUBJECT: Hydrogen-fueling stations: expedited review

SUMMARY: Requires cities and counties to adopt an ordinance that creates an expedited, streamlined permitting process for hydrogen-fueling stations. Specifically, **this bill:**

- 1) Requires hydrogen-fueling stations to meet all applicable state laws and regulations pertaining to hydrogen-fueling, in addition to any rules established by the California Air Resources Board (CARB), the California Energy Commission (CEC), or the Department of Food and Agriculture (CDFA) regarding safety, reliability, weights, and measures.
- 2) Requires every city, county, or city and county to adopt an ordinance creating an expedited, streamlined permitting process for hydrogen-fueling stations and, in developing the expedited permitting process, to adopt a checklist of all requirements for hydrogen-fueling stations to comply with in order to be eligible for expedited review:
 - a) On or before September 30, 2025, for a city, county, or city and county with a population of 250,000 or more residents; and,
 - b) On or before September 30, 2028, for a city, county, or city and county with a population of fewer than 250,000 residents.
- 3) Authorizes the city, county, or city and county, in developing the ordinance, to refer to the recommendations contained in the Hydrogen Station Permitting Guidebook produced by the Governor's Office of Business and Economic Development (GO-Biz), and to modify the standards in the guidebook based on unique climate, geological, seismological, or topographical conditions.
- 4) Modifies the definition of "hydrogen-fueling station" to include structural design components for safety of the fueling station, such as hydrogen-refueling canopies.
- 5) Repeals these provisions on January 1, 2030.

EXISTING LAW:

- 1) Allows a city or county to make and enforce within its limits, all local, police, sanitary, and other ordinances and regulations not in conflict with general laws. This includes land use authority and the power to enact zoning ordinances and specify permitting requirements for development projects within their jurisdiction. (California Constitution, Art. XI, Section 7)
- 2) Requires cities and counties to administratively permit electric vehicle charging stations and hydrogen-fueling stations, provided that the hydrogen stations are located on parcels that are either zoned for industrial and commercial development or were previously developed as gas stations. (Government Code (GOV) 65850.7(b)(2)(A)-(B))

- 3) Prohibits a city, county, or city and county from denying an application for a use permit to install an electric vehicle charging station or hydrogen-fueling station unless it makes written findings based upon substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. (GOV 65850.7(b)(3))
- 4) Requires hydrogen-fueling stations to meet certain requirements, including any rules established by CARB, the CEC, or CDFA regarding safety, reliability, weights, and measures. (GOV 65850.7(f)(3))
- 5) Requires every city, county, or city and county to adopt an ordinance creating an expedited, streamlined permitting process for electric vehicle charging stations and, in developing the expedited permitting process, to adopt a checklist of all requirements for electric vehicle charging stations to comply with in order to be eligible for expedited review:
 - a) On or before September 30, 2016, for every city, county, or city and county with a population of 200,000 or more residents; and,
 - b) On or before September 30, 2017, for every city, county, or city and county with a population of less than 200,000 residents. (GOV 65850.7 (g)(1))
- 6) Defines “hydrogen-fueling stations” as the equipment used to store and dispense hydrogen fuel to vehicles according to industry codes and standards and that is open to the public. (GOV65850.7(i)(4))

FISCAL EFFECT: According to the Senate Appropriations Committee, pursuant to Senate Rule 28.8, negligible state costs.

COMMENTS: Nearly 40% of California's greenhouse gas (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. ZEVs encompass two vehicle technology categories—battery electric vehicles (BEVs, also referred to simply as “EVs”) and hydrogen-powered fuel cell electric vehicles (FCEVs).

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. Similar to refueling a gasoline- or diesel-fueled vehicle, an FCEV can be refueled in less than four minutes and has a range of around 300 miles. These characteristics create the potential for FCEVs to replace conventional medium- and heavy-duty trucks and buses. FCEVs can also complement BEVs because of their faster refueling and longer range capabilities over variable terrain.

Even with FCEVs’ potential complementarity to BEVs, BEVs dominate the ZEV market across light- and medium-and heavy-duty (MHD) 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).

GO-Biz's ABCs of ZEV permitting. To support ZEV deployment and infrastructure development, GO-Biz has produced a variety of tools as well as two guidebooks for permitting both electric vehicle charging and hydrogen-fueling stations.

GO-Biz has also published a parallel “Hydrogen Station Permitting Guidebook,” which was last updated September 2020. GO-Biz expects to update and release a new “Hydrogen Station Permitting Guidebook” in 2025. The Go-Biz Guidebook is intended to help local jurisdictions streamline the station development process and hydrogen station developers navigate the process by serving as a centralized resource “to minimize the research required to permit a station from both the authorities having jurisdiction or reviewing entities (usually city or county) and station developer perspective, offering insight and tools from past experiences and general recommendations for streamlining the permitting process.” GO-Biz is in the process of developing a model streamlining ordinance and sample checklist for hydrogen-fueling station permitting that local governments may adopt, tentatively to be released in 2025.

For BEVs, GO-Biz has published an “Electric Vehicle Charging Station Permitting Guidebook” alongside model checklists for EV chargers from jurisdictions around the state.

Easy as 1, 2 ... How Many Hydrogen Stations? AB 8 (Perea), Chapter 401, Statutes of 2013, set a target for the CEC to award funding for at least 100 publicly available hydrogen-fueling stations by January 1, 2024, whereas Executive Order (EO) B-48-18 issued by Gov. Jerry Brown, set an elevated objective of building 200 total hydrogen-fueling stations by 2025. The majority of hydrogen-fueling stations to date have been built for light-duty FCEVs, though the proposed milestones do not specify or emphasize any particular vehicle size class.

California has more FCEVs and hydrogen-fueling stations than any other state in the nation. However, the construction of hydrogen-fueling stations has been slower than anticipated. In the CEC and CARB’s latest 2023 Annual Hydrogen Evaluation Report, 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. According to the CEC’s Zero Emission Vehicle and Infrastructure Statistics Dashboard, the state has 54 open light-duty hydrogen-fueling stations, with seven listed as temporarily non-operational and an additional 33 planned (28 light-duty, five mixed-duty) and currently in permitting, construction or commissioning phases. Per the CEC’s MDHD ZEV Station Dashboard (in beta version), California has 27 MHD ZEV stations listed as having hydrogen-fueling capacity, though this number includes stations both under development and operating.

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. The 2023 Report notes that “securing site access, permitting timelines, utility connection timelines, and other site-specific issues appear to remain barriers to rapidly deploying hydrogen-fueling stations.” There also appear to be hiring difficulties related to the tight labor market, *e.g.*, the limited availability of skilled contractors with specialized experience in hydrogen permitting and construction as well as personnel trained to work with high-pressure hydrogen.

Permits, permits, everywhere. To keep up with the state’s goals and demand for battery EV charging stations, the Legislature enacted AB 1236 (Chiu), Chapter 598, Statutes of 2015, which with certain exceptions, requires cities and counties to administratively approve an application to install EV charging stations by issuing a building permit or similar nondiscretionary permit, limiting review to whether a station meets all health and safety requirements of local, state, and

federal law. Administrative or ministerial approval is in lieu of discretionary approval, which is a more arduous review process requiring hearings by the local planning commission, public notice, and potential additional approvals.

AB 1236 also requires every city and county to adopt an ordinance that creates an expedited, streamlined permitting process for EV charging stations. The ordinance must include a checklist for determining an application is complete and allow for electronic submittal of applications. Other subsequent measures have sought to further accelerate EV charging deployment. In particular, AB 970 (McCarty), Chapter 710, Statutes of 2021 requires local governments to review and approve EV charger applications within a certain number of days of receipt of a complete application.

Seeking to extend some of the streamlining benefits applicable to EV chargers to hydrogen-fueling stations, the Legislature enacted SB 1291 (Archuleta), Chapter 373, Statutes of 2022. SB 1291 requires cities and counties to administratively permit hydrogen-fueling stations located on a parcel that is either zoned for industrial and commercial development or was previously developed as a gas station. This provision limits both the public hearings as well as any California Environmental Quality Act (CEQA) analysis for a project. Similar to the law governing EV charging station permitting, local governments can only consider health and safety requirements for hydrogen-fueling stations, and they can only deny a permit if they document a specific, adverse impact to the public health or safety. SB 1291 sunsets on January 1, 2030.

Unlike AB 1236 for EV chargers, SB 1291 did not require every jurisdiction to adopt an ordinance providing for the streamlined permitting of hydrogen-fueling stations. At the time, an ordinance for expedited permitting was viewed as unnecessary, as very few hydrogen-fueling stations were expected to be built over the next several years, which meant that most jurisdictions were unlikely to see an application for a hydrogen-fueling station. Today, the situation is generally unchanged. According to the GO-Biz Hydrogen-fueling Permit Streamlining Map, only one city or county in the state has even partially streamlined permitting for hydrogen-fueling stations—the City of Baldwin Park. This bill, SB 1418, applies approach adopted in AB 1236 for expedited permitting to hydrogen-fueling stations, requiring cities and counties to adopt an ordinance streamlining the permitting process for hydrogen-fueling stations regardless of local demand.

Meanwhile, hydrogen remains important for the state's efforts to reduce GHG emissions, particularly in the freight sector. Under existing statute, at least 15% of the CEC's annual funds under the Clean Transportation Program must go towards hydrogen-fueling stations. In its recent Clean Freight Corridor Efficiency Assessment (December 2023), required by SB 671 (Gonzalez), Chapter 769, Statutes of 2021, the California Transportation Commission highlighted 34 priority freight corridors, including a list of the "Top 6" priority freight corridors (I-5, I-15, SR 99, I-10/I-710, I-40, I-80/I-580/I-880) for the development of MHD ZEV infrastructure. Timely permitting of hydrogen-fueling stations along these highways, which traverse both major urban centers and sparsely populated rural communities, will be critical to establishing an initial ZEV fueling network to support goods movement.

In addition to state funds, the U.S. Department of Energy recently awarded \$1.2 billion to California's Alliance for Renewable Clean Hydrogen Energy Systems (ARCHES), a public-private partnership led by GO-Biz, to support the deployment of clean hydrogen technologies in California. The ARCHES program is expected to focus on hydrogen infrastructure projects in

support of three hard-to-decarbonize sectors: heavy-duty vehicles, power plants, and ports. SB 1418 may help stretch federal dollars further by reducing the cost of hydrogen station development, especially along highly trafficked freight corridors.

Health and safety. While EV charging stations face difficulties related to grid interconnection and capacity, hydrogen-fueling stations face some unique health and safety obstacles that EV charging stations do not. For example, hydrogen is highly flammable and burns invisibly. Despite these properties, hydrogen will need to be compressed and kept under high pressure at various stages of storage, delivery, and dispensing. In addition, hydrogen is not a commonly used gas and, due to its small molecular size, is more prone to leakage than methane, which can be readily transmitted through gas pipelines. Though most all of the state's hydrogen supply is produced off-site from large-scale generation facilities and delivered to hydrogen-fueling stations via truck, there is increasing interest in generating hydrogen on-site which may result in additional permitting challenges in the future. The author may also wish to amend the bill to modify the definition of hydrogen-fueling station to include stations having on-site generation of hydrogen to reflect guidance in GO-Biz's permitting guidebook.

This bill does allow for an expedited permit to be denied if the city or county can document a specific, adverse impact to the public health or safety. While this does create a health and safety carve out, it sets the bar high for cities and counties to deny an expedited permit.

According to the author, "The permitting process for electric vehicle charging stations and hydrogen-fueling stations is similar, but has a few key differences. Both applications undergo review by the building official to ensure compliance with health and safety requirements. However, while electric vehicle charging stations require locals to streamline the permitting process, my bill, SB 1418, aims to extend this streamlining process to hydrogen-fueling stations, achieving parity in the permitting process for both types of stations. With California's recent success in securing substantial federal funding for clean renewable hydrogen initiatives, such as through the Alliance for Renewable Clean Hydrogen Energy Systems (ARCHES) application, the timely passage of SB 1418 is essential to expedite the development and deployment of hydrogen infrastructure, facilitating the transition to a cleaner transportation future."

Writing in support, the Los Angeles County Business Federation states: "Los Angeles and the State of California have enacted numerous policies to help drive the decarbonization of vehicles, but few policies are as meaningful as permit streamlining for zero-emission vehicle (ZEV) infrastructure. This infrastructure is essential to creating trust with consumers and must be deployed at speed and scale. The patchwork nature of local ordinances related to permitting often slows the pace of deployment. EV chargers already enjoy permit streamlining. This bill extends the same streamlining provisions to hydrogen stations, bringing parity between the two technologies. SB 1418 sets clear timelines for compliance based on population size, which will ensure municipalities have the necessary guidance to implement these processes effectively. This approach allows for a coordinated and efficient rollout of hydrogen-fueling infrastructure across the state."

Writing in opposition, the League of California Cities (Cal Cities) states: "While Cal Cities respects the policy objectives of SB 1418, we disagree with the approach taken by the measure. Cal Cities supports hydrogen as clean fuel alternative and, in many ways, would prefer it to fuel medium-to-heavy duty public fleets. However, the local permitting process is not the barrier to this industry growing in the state. The largest factors have been the state prioritizing

electrification over hydrogen, the cost of hydrogen, the energy required to produce hydrogen, complexities to the production, storage and dispensing of the hydrogen, and the upfront cost of the vehicles....Given the relatively small numbers of pending permits and operational hydrogen fuel stations, the effect of SB 1418 would be to compel local agencies with scarce resources to favor the exceedingly low number of hydrogen fuel station permits over all other permit seekers, including solar permit applications. Both that law and this bill depart from longstanding efforts by cities to treat all applicants equally.”

Committee comments: This bill requires every city, county, and city and county to adopt a local ordinance to create an expedited, streamlined permitting process for hydrogen-fueling stations, and also to adopt a checklist indicating eligibility requirements for expedited permitting.

The low adoption of light-duty passenger FCEVs and slow deployment of hydrogen-fueling stations currently present a chicken-and-egg problem for California’s hydrogen-fueling station network. Consumers are reluctant to commit to FCEVs in view of limited hydrogen-fueling infrastructure, and station developers hesitant to build out capacity based on BEV dominance. Demand for hydrogen is expected to increase as MHD fleets transition to ZEVs and with the anticipated influx of federal dollars to support the growth of a renewable hydrogen market.

Hydrogen-fueling stations will be an important part of the state’s ZEV future and expedited permitting processes will support California’s most immediate needs in building out MHD ZEV freight infrastructure and developing projects under ARCHES. Outside of these instances, it is not apparent where else in the state or when in the future expedited permitting processes will be useful. The uniform requirement for all jurisdictions to create an expedited permitting process for hydrogen-fueling stations helps prevent a patchwork of requirements across the state but also imposes a time-, cost- and personnel-burden on many cities and counties without an obvious need or near-term benefit.

As acknowledged in its analysis of the bill, Senate Transportation Committee notes that: “For many reasons fewer fueling stations are being developed than previously projected and it is unclear when the state will even remotely approach its goals for fueling stations. As a result, SB 1418 may require local governments to expend time and resources on developing an ordinance that may never get used. On the other hand, SB 1418 phases in its requirements so that most cities and counties in the state will not have to develop an ordinance until September 30, 2028—well after GO-Biz releases its model ordinance and checklist for hydrogen-fueling station permitting, which should reduce the burden on local governments.”

This author models this bill after the expedited permitting process provisions for EV chargers in AB 1236. However, FCEV adoption has followed a different path than BEV adoption, given the ZEV drivers’ familiarity and comfort with electricity, as well as the ubiquity of electricity in our counties, cities and homes. The model for EV charging stations may not translate so well to hydrogen-fueling stations, without recognizing that the light-duty market is unlikely to shore up the hydrogen marketplace and without more nuance to this bill’s requirements reflecting the absence of strong light-duty demand. In consideration of the above, the author may wish to amend the bill to require the adoption of a local ordinance for expedited permitting for jurisdictions that encompass or fall within some distance of a Top 6 priority freight corridor as identified by the CTC.

Double referral and Proposed Committee Amendments. This bill was heard in the Assembly Committee on Local Government on June 26, 2024, and approved by a vote of 7-0. Conceptual amendments were discussed, but not taken, in that committee to restrict expedited permit approvals of hydrogen-fueling stations to parcels of land that are either zoned for industrial and commercial development and do not have residences or were previously developed as gas stations. This would harmonize the expedited permitting process to include a restriction currently applies to administrative approvals of hydrogen-fueling stations under GOV 65850.7(b)(2). **The author has agreed to adopt the amendments proposed by Assembly Local Government Committee in this committee.**

Proposed amendment: At GOV 65850.7(g)(1)(B), relating to the expedited, streamlined permitting process for hydrogen-fueling stations, **strike out “stations.” and insert “stations that meet the requirements of paragraph (2) of subdivision (b)”**.

Related legislation: SB 1291 (Archuleta), Chapter 373, Statutes of 2022 requires administrative review of applications for hydrogen-fueling stations and allows for denials based only on health or safety impacts.

AB 970 (McCarty), Chapter 710, Statutes of 2021 establishes specific time frames in which local agencies must approve permits for EV charging stations.

AB 1236 (Chiu), Chapter 598, Statutes of 2015 requires, with certain exceptions, counties and cities to administratively approve an application to install EV charging stations through the issuance of a building permit or similar nondiscretionary permit and limits review to whether the station meets all health and safety requirements of local, state, and federal law.

AB 8 (Perea), Chapter 401, Statutes of 2013 requires the CEC and CARB to annually review and report on progress toward establishing a hydrogen-fueling network that provides coverage and capacity necessary to fuel current and anticipated FCEVs in the state. AB 8 also established a target for the CEC to award co-funding for at least 100 stations by 2023.

REGISTERED SUPPORT / OPPOSITION:

Support

California Fuels and Convenience Alliance
California Hydrogen Car Owners Association
California Hydrogen Coalition
Calstart
Los Angeles Area Chamber of Commerce
Los Angeles County Business Federation (BIZFED)

Support If Amended

Oberon Fuels

Oppose

Asian Pacific Environmental Network
Ballona Institute

Ceja Action
Center for Biological Diversity
Center on Race, Poverty and the Environment
City of Oceanside
Coastal Lands Action Network
Communities for A Better Environment
Defend Ballona Wetlands
Natural Resources Defense Council
Sierra Club California
So-Cal 350 Climate Action
Social Eco Education
Southern California Watershed Alliance
The Climate Center
The Greenlining Institute
Vote Solar

Oppose Unless Amended

League of California Cities

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