Date of Hearing: June 27, 2018

ASSEMBLY COMMITTEE ON COMMUNICATIONS AND CONVEYANCE
Miguel Santiago, Chair
SB 1434 (Leyva) – As Amended May 2, 2018

**SENATE VOTE**: 29-7

**SUBJECT**: Transportation electrification: electricity rate design

**SUMMARY:** Requires the California Public Utilities Commission (CPUC) to direct electrical corporations to file rate design applications for transit agencies to support and accelerate the deployment of zero-emission transit buses. Specifically, **this bill**:

1) Requires the CPUC to direct an electrical corporation with more than 100,000 service connections in California to file a rate design application that is specific to transit agencies as commercial customers and that supports and accelerates the deployment of zero-emission transit buses to reduce dependence on petroleum, meet air quality standards, and reduce emissions of greenhouse gases (GHG) to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050.

2) Authorizes an electrical corporation with 100,000 or fewer service connections in California to file a rate design application that is specific to transit agencies as commercial customers and that supports and accelerates the deployment of zero-emission transit buses to reduce dependence on petroleum, meet air quality standards, and reduce emissions of GHGs to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050.

3) Specifies that a specified rate design proposed by an electrical corporation shall seek to minimize overall costs and maximize overall benefits to ratepayers and transit agencies. The CPUC shall approve, or modify and approve, a rate design application if it is consistent, as specified, and in the interests of ratepayers, as specified, and shall otherwise reject the application.

4) Specifies that this bill applies to an application to the CPUC for rate design if one of the following conditions is met:

    a) The application is filed on or after January 1, 2019; or,

    b) The application is filed before January 1, 2019, but has an evidentiary hearing scheduled on or after July 1, 2019.

5) Make the following findings and declarations:

    a) Reducing emissions of GHGs to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050 will require widespread transportation electrification, including of California's transit bus fleet.

b) Zero-emission transit buses are needed to reduce fossil fuel use, to meet air quality standards, to improve public health, to prove the viability of zero-emission heavy-duty technologies, and to achieve the state's goals for reducing emissions of GHGs.

c) Lower and more predictable electricity rates should support and accelerate increased deployment of zero-emission transit buses by providing access to a fuel that is cleaner and less costly than gasoline or other fossil fuels.

d) According to the State Alternative Fuels Plan analysis by the California Energy Commission (CEC) and the California Air Resources Board (CARB), light-, medium-, and heavy-duty vehicle electrification results in approximately 70 percent less of GHGs emitted, over 85 percent less of ozone-forming air pollutants emitted, and 100 percent less petroleum used. These reductions will become larger as renewable generation increases.

e) Specifies that it is the policy of the state and the intent of the Legislature to encourage electrification of California's transit bus fleet as a means to achieve ambient air quality standards and the state's climate goals. Agencies designing and implementing regulations, guidelines, plans, and funding programs to reduce emissions of GHGs shall take the specified findings into account.

**EXISTING LAW**:

1) Establishes the CPUC with regulatory authority over public utilities, including every common carrier, toll bridge corporation, pipeline corporation, gas corporation, electrical corporation, telephone corporation, telegraph corporation, water corporation, sewer system corporation, and heat corporation, where the service is performed for, or the commodity is delivered to, the public or any portion thereof. (Public Utilities Code (PUC) Section 216)

2) Requires all charges demanded or received by any public utility, or by any two or more public utilities, for any product or commodity furnished or to be furnished or any service rendered or to be rendered to be just and reasonable. Every unjust or unreasonable charge demanded or received for such product or commodity or service is unlawful. (PUC Section 451)

3) Requires the CPUC, in consultation with the CARB and CEC, to direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification to reduce dependence on petroleum, meet air quality standards, achieve the goals set forth in the Charge Ahead California Initiative, as specified, and reduce emissions of GHG to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. Programs proposed by electrical corporations shall seek to minimize overall costs and maximize overall benefits. Requires the CPUC to approve, or modify and approve, programs and investments in transportation electrification, including those that deploy charging infrastructure, via a reasonable cost recovery mechanism, as specified, do not unfairly compete with nonutility enterprises as specified, include performance accountability measures, and are in the interests of ratepayers, as specified. (PUC Section 740.12 (b))

4) Defines "interests" of ratepayers, short- or long-term, as specified, to mean direct benefits that are specific to ratepayers, consistent with both of the following:

a) Safer, more reliable, or less costly gas or electrical service, as specified, including electrical service that is safer, more reliable, or less costly due to either improved use of the electric system or improved integration of renewable energy generation; and,

b) Any one of the following:

i) Improvement in energy efficiency of travel;

ii) Reduction of health and environmental impacts from air pollution;

iii) Reduction of GHG emissions related to electricity and natural gas production and use;

iv) Increased use of alternative fuels; or,

v) Creating high-quality jobs or other economic benefits, including in disadvantaged communities, as specified. (PUC Section 740.8)

5) Requires the CPUC to establish rates using cost allocation principles that fairly and reasonably assign to different customer classes the costs of providing service to those customer classes, consistent with the policies of affordability and conservation. (PUC Section 739.6)

6) Requires the CPUC, in cooperation with the CEC, CARB, air quality management districts and air pollution control districts, regulated electrical and gas corporations, and the motor vehicle industry, to evaluate and implement policies to promote the development of equipment and infrastructure needed to facilitate the use of electric power and natural gas to fuel low-emission vehicles, as specified. (PUC Section 740.3)

7) Requires CARB to identify and adopt appropriate policies, rules, or regulations to remove regulatory disincentives preventing retail sellers and local publicly owned electric utilities from facilitating the achievement of GHG emission reductions in other sectors through increased investments in transportation electrification. Policies to be considered shall include, but are not limited to, an allocation of GHGs allowances to retail sellers and local publicly owned electric utilities, or other regulatory mechanisms, to account for increased GHG emissions in the electric sector from transportation electrification. (Health and Safety Code Section 44258.5)

**FISCAL EFFECT**: Unknown. This bill is keyed fiscal by the Legislative Counsel.

**COMMENTS**:

1) **Authors Statement:** According to the author, "SB 1434 supports widespread electrification of California's transit bus fleet, by addressing the high cost of electricity as fuel, which may make operating battery-electric buses uneconomic for transit agencies. Widespread electrification of California's transit fleet will be vital for meeting the state's SB 32 goals and continue reductions in criteria pollutants and toxic air contaminants. Such advancements will result in cleaner, healthier communities."

2) **Background:** The transportation sector represents 50 percent of the California's GHG emissions and 80 percent of nitrogen oxides. Reducing carbon emissions from the transportation sector is a critical step needed in order to meet California's climate goals and clean air standards. Zero-emission vehicles (ZEVs) run on electricity stored in batteries instead of fossil fuels, such as plug-in electric vehicles (EVs), plug in hybrid EVs, and hydrogen fuel cell EVs. ZEVs are a vital component of the state's effort to reach its GHG emission reduction goals. The availability of new vehicle models, improved battery technology resulting in greater driving range, increase availability of electric charging infrastructure, and federal and state incentives have all contributed to expanding the ZEV market.

3) **California's ZEV Action Plan:** In 2012, Governor Brown signed Executive Order B-16-12 which directed the CPUC and other state agencies to help accelerate the market for ZEVs to support the adoption of 1.5 million ZEVs on California roads by 2025 and the integration of plug-in EV charging into the state's electricity grid by 2020. In October 2016, the Governor's Interagency Working Group on ZEVs released its 2016 ZEV Action Plan, which provides an updated roadmap towards reaching the states ZEV goals. The plan highlighted certain priorities for ZEV development and adoption including, raising consumer awareness and education about ZEVs; ensuring ZEVs are accessible to a broad range of Californians, making ZEV technologies commercially viable in targeted sectors, and aiding ZEV market growth beyond California.

   In January 2018, Governor Brown issued a new executive order (B-48-18) directing all state entities to work with the private sector and all appropriate levels of government to put at least five million ZEVs on California roads by 2030. The executive order directed all state entities to spur the construction and installation of ZEV charging and fueling infrastructure, find ways to streamline ZEV infrastructure installation processes, and carry out additional programs and actions to reach the goal.

   Since 2012, California's ZEV market has grown significantly through the expansion of federal and state incentives and programs. This includes support by the Legislature through the passage of a number of legislation. Amongst them includes SB 1275 (De Leon) Chapter 530, Statutes of 2014, which created the California Charge Ahead Initiative that sets a goal and policies to achieve the goal of one million ZEVs vehicles on the road by 2023; and AB 118 (Nunez) Chapter 750, Statutes of 2007, which established the Alternative and Renewable Fuels and Vehicle Technology program, the Enhanced Fleet Modernization Program, and the Air Quality Improvement Program to promote vehicle and fuel technology to reduce air pollution and GHG emissions.

4) **Transportation Electrification:** In 2015, the Legislature passed SB 350 (De Leon) Chapter 547, Statutes of 2015, which set 2030 GHG reduction targets to be achieved through a variety of measures, including widespread transportation electrification. The CPUC directed California's three investor owned utilities (IOUs) to submit applications proposing projects aimed at achieving the transportation electrification goals in SB 350. The CPUC has since proposed two decision authorizing utility investments in transportation electrification, including in November 2017, authorizing the three IOUs to spend up to $42.8 million on 15 pilot projects aimed at accelerating EV adoption, improving air quality and reducing GHG emissions; and in March 2018 approving four IOU projects, totaling approximately $589 million, aimed at installing EV charging infrastructure.

As part of its SB 350 efforts, each IOU has, or plans to, submit proposals to promote the development of medium or heavy duty commercial EVs. For example, in May 2018, the CPUC approved D. 18-05-040 which includes a proposal by Southern California Edison to establish a rate design structure and timeline for medium to heavy duty vehicle charging that would provide better energy cost predictability for such vehicle owners. In addition, San Diego Gas and Electric filed an application in January 2018 which, if approved, would provide program participations the option of selecting approved rates for medium to heavy duty EVs. Finally, Pacific Gas and Electric Company has also committed to developing a proposal for commercial EV rates within six to 12 months following the CPUC's decision.

This bill requires the CPUC to direct IOUs to file rate design applications for transit agencies to support and accelerate the deployment of zero-emission transit buses. According to the author, transit agencies are replacing conventionally-fueled transit buses with zero-emission buses can help reduce GHG emissions and play a role in the state's transportation electrification efforts. Unfortunately, as agencies try to scale up their deployment of zero-emission buses, they have found that the cost of electricity as a fuel far exceeds the cost of conventional diesel and compressed natural gas (CNG) buses. According to the California Transit Association, by directing the CPUC to initiate a ratemaking proceeding, specific to transit agencies, this bill would bring relevant stakeholders together to deliberate on an appropriate rate structure for transit agencies that is fair to all parties.

5) **Ratepayer Cost-Shifting:** The electrification of our transportation system is a critical component in the states effort to reduce GHG emissions. But along with increased EV uses, comes greater demand on our electric grid. Current law requires the CPUC to set rates that are just and reasonable. The idea is that customers will pay a fair rate that is based on the cost it takes to serve them. In addition, currently law requires the CPUC to establish rates that are fair and reasonable to different customer classes. Furthermore, as part of transportation electrification proposals, SB 350 required programs proposed by IOUs to minimize overall costs and maximize overall benefits. By requiring IOUs to file applications to accelerate the deployment of zero-emissions transit buses, it is unclear if the efforts proposed under this bill would result in cost-shifting to other ratepayers.

<u>The author may wish to consider an amendment to clarify that the bill does not result in cost-shifting onto other ratepayers and are consistent with efforts currently underway by the IOUs.</u>

6) **Suggested Amendments:**

**740.17** (a) (1) (C) ~~Lower and~~ ~~m~~<u>M</u>ore predictable electricity rates should support and accelerate increased deployment of zero-emission transit buses by providing access to a fuel that is cleaner and less costly than gasoline or other fossil fuels.

**740.17** (b) (1) <u>On or before July 1, 2019, the</u> ~~The~~ commission shall direct an electrical corporation with more than 100,000 service connections <u>without an existing or proposed rate tariff that meets the goals of this section</u> in California to file a rate design application that ~~is specific to transit agencies as commercial customers and that~~ supports and accelerates the deployment of zero-emission transit buses to reduce dependence on petroleum, meet air quality standards, and reduce emissions of greenhouse gases to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050.

**740.17** (b) (3) A rate design proposed by an electrical corporation pursuant to this subdivision shall seek to minimize overall costs and maximize overall benefits. ~~to ratepayers and transit agencies.~~ The commission shall approve, or modify and approve, a rate design application if it is consistent with this section and in the interests of ratepayers as defined in Section 740.8, and shall otherwise reject the application.

**740.17** (x) The rate tariff required under this section shall not result in cost shifts to non-participating customers.

7) **Arguments in Support:** According to the California Transit Association, the sponsor of the bill, "Transit agencies across California are replacing conventionally-fueled transit buses, powered by [CNG] or diesel, with zero-emission buses that promise to reduce [GHG] emissions, improve air quality and increase fuel efficiency. To date, 132 zero-emission buses have been deployed by California's transit agencies. Unfortunately, as agencies scale up their deployment of battery-electric buses some have found that the cost of electricity as a fuel far exceeds the cost of CNG and diesel […] Rather than accept this reality and let it thwart out industry's progress on transit electrification, we are sponsoring this legislation to jumpstart discussion about a reasonable solution to the cost of electricity as a fuel. We believe this conversation is necessary as our industry moves to fully electrify by 2040, and could help prove technologies that benefit other heavy-duty sectors."

8) **Related Legislation:** SB 1000 (Lara) of 2018 requires the CEC to evaluate the extent to which charging infrastructure is proportionately deployed and use funds to more proportionately deploy EV chargers as need; prohibits cities and counties from restricting EV charging access, and requires the CPUC to explore facilitating the development of technologies related to charging. *Status: Pending in the Assembly Committee on Transportation.*

   SB 1014 (Skinner) of 2018 requires CARB to adopt, and the CPUC, to implement annual targets for the reduction of GHG emissions driven on behalf of a Transportation Network Company. *Status: Pending in the Assembly Committee on Transportation.*

9) **Previous Legislation:** SB 32 (Pavley) of 2016 requires CARB to ensure that statewide GHG emissions are reduced to at least 40% below the 1990 level by 2030. *Status: Chaptered by the Secretary of State, Chapter 249, Statutes of 2016.*

   SB 350 (De Leon) of 2015 set GHG reduction targets to be achieved by 2030 through a variety of measures, including supporting electrification of the transportation system and established requirements of the CPUC in adopting EV charging proposals from the IOUs. *Status: Chaptered by the Secretary of State, Chapter 547, Statutes of 2015.*

   SB 1275 (De Leon) of 2014 established the Charge Ahead California Initiative to be administered by the CARB, in consultation with the CEC, air pollution control and air quality management districts, and the public. Specifies that the goals of the initiative is to, among other things, place in service at least one million ZEVs by January 1, 2023, and to increase access for disadvantaged, low-income, and moderate-income communities and consumers to ZEVs. *Status: Chaptered by the Secretary of State, Chapter 530, Statutes of 2014.*

SB 1204 (Lara and Pavley) of 2014 created the California Clean, Truck, Bus, and Off-Road Vehicle and Equipment Technology Program, to be administered by CARB and funded with cap and trade revenues to develop zero and near zero emission truck, bus, and off-road vehicle and equipment technologies and related projects. *Status: Chaptered by the Secretary of State, Chapter 524, Statutes of 2014.*

10) **Double-referral:** This bill is double referred, having been previously heard by the Assembly Committee on Utilities and Energy on June 20, 2018 and approved on a 10 to 3 vote.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

California Transit Association (sponsor)
BYD America
City of Santa Monica
Coalition for Clean Air
Foothill Transit
Livermore Amador Valley Transit Authority
Los Angeles County Metropolitan Transportation Authority
Monterey-Salinas Transit
Orange County Transportation Authority
Proterra Inc.
San Francisco Municipal Transportation Agency
San Diego Metropolitan Transit System
San Joaquin Regional Transit District
Santa Clara Valley Transportation Authority
Santa Cruz Metropolitan Transit District

**Opposition**

None on file.

**Analysis Prepared by**: Edmond Cheung / C. & C. / (916) 319-2637