

Date of Hearing: April 11, 2011

ASSEMBLY COMMITTEE ON UTILITIES AND COMMERCE

Steven Bradford, Chair

AB 631 (Ma) – As Introduced: February 16, 2011

SUBJECT: Public utilities: electric vehicle charging stations.

SUMMARY: States that a facility that supplies electricity to charge electric vehicles is not a California Public Utilities Commission (PUC)-regulated "public utility."

EXISTING LAW:

- 1) The State Constitution permits the PUC to fix rates and establish rules for all public utilities and includes the furnishing power as a public utility, subject to control by the Legislature.
- 2) Includes electrical corporations in the definition of "public utility."
- 3) Requires the PUC to evaluate policies to develop infrastructure sufficient to overcome any barriers to the widespread deployment and use of plug-in hybrid electric vehicles (PHEVs) and electric vehicles (EVs), and adopt rules by July 1, 2011.

FISCAL EFFECT: Unknown.

COMMENTS: According to the author, "one of the biggest customer concerns about purchasing an electric vehicle is 'range anxiety'. Customers are concerned about where they can charge the electric vehicle away from home which often times mean they may not travel too far from home." The author states, "without adequate infrastructure, consumers will be reluctant to purchase electric vehicles. California's electric vehicle infrastructure is not yet robust enough to support the predicted growth of electric vehicle adoption in the state, and there is a need for electric vehicle infrastructure to drive the market for electric vehicles."

The author introduced AB 631 to put into law a recent decision by the PUC to not regulate electric vehicle charging stations as utilities. According to the author, "absent this bill, the needed charging stations won't exist. Apartment complexes, parking garages, and commercial buildings will not want to install these stations if they are regulated as a public utility. They don't want to assume the regulatory burden of hiring lawyers in order to invest in expanding infrastructure."

The PUC has an open proceeding (R.09-08-009) to consider the impacts of the electrification of vehicles on the grid and how to manage those impacts. A proposed decision in that proceeding concludes that entities selling electricity at retail for electric vehicle charging are not public utilities within the meaning of PUC Section 216. The author agrees that businesses providing the service to fuel electric vehicles should not be held to the same rigor as a public utility. Consequently, this bill codifies that decision.

Background: The California Energy Commission (CEC) published its 2010-2011 Investment Plan for the Alternative and Renewable Fuel and Vehicle Technology Program report, which notes that in the United States, and in California, 95 percent of vehicles are dependent on

petroleum-based fuels. In 2008, California's transportation sector consumed about 15 billion gallons of gasoline and more than 3 billion gallons of diesel fuel. This sector represents approximately 40 percent of the state's greenhouse gas emissions, the largest amount from any sector.

In January 2011, President Obama set an ambitious goal of putting 1 million advanced technology vehicles on the road by 2015, which would reduce dependence on foreign oil and lead to a reduction in oil consumption of about 750 million barrels through 2030.

Because of California's aggressive climate change goals, the state has become one of the most attractive markets for EVs. A vigorous new EV industry has the potential to fuel economic growth by creating jobs and building on the hub of EV technology and manufacturing companies headquartered in the state. The CEC projects the number of electric vehicles could grow from 32,756 in 2011 to 1.5 million by 2020 and 2.8 million by 2030. Most of the jobs created directly by the state's EV rollout will be in technology, manufacturing, installation, and support services, all provided locally.

Despite existing EV goals, it has been represented by some parties that consumers are unlikely to adopt EVs unless they are as convenient to own as the gasoline car. Without market solutions, California may not reap the environmental and economic benefits of electric vehicles. Encouraging consumer adoption, innovation and investment is the key to driving future growth of low to zero emissions vehicle markets.

1) PUC Rulemaking: The PUC has taken the first step in encouraging solutions for EVs. In 2009, the PUC opened a rulemaking (R-09-08-009) to consider infrastructure, rates, and policies to support EVs. The rulemaking also addressed the requirements of SB 626 (Kehoe) Chapter 355, Statutes of 2009, which requires the PUC, in consultation with the CEC, the Air Resources Board, electrical corporations, and the motor vehicle industry, to evaluate policies to develop infrastructure sufficient to overcome any barriers to the widespread deployment and use of PHEVs. SB 626 requires the PUC to adopt rules by July 1, 2011.

On July 29, 2010, the PUC issued a decision on Phase I of the rulemaking. The PUC ruled that the ownership or operation of a facility that sells electricity at retail to the public for use only as a motor vehicle fuel does not make the corporation or person a "public utility" within the meaning of the Public Utilities Code.

Phase II of the rulemaking will consider the appropriate utility role: 1) in the provision of electric vehicle charging services to the public; 2) with respect to charging equipment on the customer's side of the meter, and 3) in cost allocation, including a consideration of the circumstances in which the costs of any distribution system upgrades should be borne by an individual customer or be recoverable from all customers, in addition to other related issues. The Phase II decision is expected to be released soon.

3) Legislative oversight: On May 24, 2010, the Assembly Transportation Committee and this committee held a joint hearing to explore the requirement that manufacturers produce and deliver electric vehicles for sale in California as a greenhouse gas reduction method. One of the concerns raised was how rates would be set to encourage the efficient use of the electricity infrastructure when recharging EVs. Another issue was how California should address a market for retail electricity at remote public or private re-charging stations.

The hearing revealed that some companies are currently providing electricity for plug-in electric vehicle hybrid owners to re-charge at non-residential based locations. For example, Coulomb Technologies, Inc. provides networked charging stations throughout the U.S. and some European locations. Each station is embedded with an on-board computer, a fluorescent display, a radio-frequency identification (RFID) reader, and a utility-grade meter that provides precise, bi-directional energy measurement. The customer scans his or her RFID card to re-charge, and can access their energy usage and communicate over the network for demand-side management, preferred pricing incentives, and other mechanisms. Another company, Better Place, provides charging points and battery-exchange stations. In November 2008, the mayors of San Francisco, Oakland, and San Jose, signed up Better Place to deliver the charging infrastructure to the Bay Area. Their goal is to have 250,000 charging ports, 200 battery-exchange stations, and a control center to service Bay Area electric car drivers. The cost is estimated at \$1 billion. They started work in January 2009 and hope to have full commercial availability of the electric cars by 2012.

The CEC testified that California has 413 charging stations with 1,300 public access electric charge points. Many of the existing charging stations need to be upgraded to charge the new plug-in hybrid electric vehicles. However, the CEC did not address how this would be funded. The CEC reported that it has already issued about \$15.3 million in grants for charging stations.

4) Putting the cart before the horse: Several parties have expressed concerns with the bill. Pacific Gas and Electric claims this bill "undermines legislative and PUC efforts to minimize electric grid impacts, reduce greenhouse gas emissions and the need for new generating capacity and foster the integration of renewable energy." Southern California Edison (SCE) argues that the bill is premature because the market for EV's is still in its infancy and it is too soon to prejudge the best regulatory construct. Moreover, SCE states that the PUC is already addressing these early market issues in its EV proceeding and has proposed to establish a working group to bring together federal and state agencies, as well as other stakeholders to discuss appropriate regulation. The California Electric Transportation Coalition claim "the issues surrounding the decision by the PUC, codified AB 631, are directly related to the issue of how the entities identified in AB 631 will be regulated and by whom. Without the benefit of the completion of the PUC proceeding and an understanding of customer and ratepayer protection as determined by the proceeding, this bill is premature".

5) Previous Legislation: Last year, SB 1435 (Padilla) would have codified that electric vehicles are not a "public utility" consistent with the PUC decision; however, it made a finding that the PUC should exercise limited jurisdiction over third-party PHEV providers to ensure effective load management. This committee clarified that this "limited jurisdiction" in no way provides explicit or implicit authority over the business practices of the recharging facilities. "Limited jurisdiction" would allow the PUC to adopt a separate tariff structure for the investor-owned utilities to apply toward third-party recharging facilities that achieve the goals and objectives of discouraging electric vehicle charging during peak times. This bill died in the Assembly.

REGISTERED SUPPORT / OPPOSITION:

Support

Alliance of Automobile Manufacturers
Better Place

California Apartment Association (CAA)
California Business Properties Association
California Manufacturers and Technology Association (CMTA)
California Retailers Association (CRA)
Coulomb Technologies, Inc.
ECOtality, Inc.
Environmental Defense Fund
Plug In America
Western States Petroleum Association (WSPA)

Opposition

California Electric Transportation Coalition (CalETC)
Pacific Gas and Electric (PG&E)
Southern California Edison (SCE)

Analysis Prepared by: Gina Adams / DaVina Flemings / U. & C. / (916) 319-2083