Transportation:

Calif. utility sparks debate, proposing to install 25,000 charging stations to promote electric vehicles

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The biggest utility in California yesterday proposed installing 25,000 electric vehicle charging stations with ratepayers funding the tab, triggering a debate about the best route to get more EVs on state roads.

Pacific Gas and Electric Co. (PG&E) wants approval from the California Public Utilities Commission (CPUC) to spend $653.8 million on the charging stations and related expenses. It seeks to get drivers plugged in at workplaces and near multi-unit housing, with 10 percent of the units landing in disadvantaged communities.

Only 1.2 percent of the Northern California utility's customers drive EVs. But PG&E argued that a major shift is needed to accelerate the charging market. Gov. Jerry Brown (D) has said he wants 1.5 million zero-emission vehicles, or ZEVs, in the state by 2025. California aims to shrink its greenhouse gas emissions 80 percent below 1990 levels by 2050.

"There are currently barriers to market adoption" in the EV market, said James Ellis, PG&E's director of electric vehicles. "To make the charging infrastructure work and help the transition from nascent market to full market development, it's going to take some investment, and it's going to take everybody working together to make that happen."

The PG&E request comes about six weeks after the CPUC told the state's three investor-owned utilities that they could enter the EV charging market. The utilities earlier had been blocked from participating, with the regulator fearing they would have unfair advantages. But wanting to speed up EV adoption, the CPUC last year lifted the blockade.

PG&E is proposing a more expensive and expansive alternative than plans by utilities Southern California Edison Co. (SCE) in Los Angeles and San Diego Gas & Electric Co. (SDG&E). SCE wants to build the electrical infrastructure needed for EV chargers but stop short of installing the
actual stations. Private companies would develop and run the sites and could get rebates from SCE for some costs.

SCE's effort would cost $355 million, including a $22 million pilot program for installation of up to 1,500 chargers and market education. The results of the first phase would shape the rest of the program over five years.

SDG&E proposes launching a $103 million electric vehicle-grid integration pilot program. It would contract with companies to install 550 charging stations over a four- to five-year period.

**Consumer group girds for fight**

A consumer group in the PG&E region criticized the utility's proposal as too risky.

"We have some serious concerns about these enormous ratepayer investments" PG&E is seeking to make, said Mark Toney, executive director of the Utility Reform Network, or TURN. "We're going to seek to minimize ratepayer contributions to electric vehicle infrastructure."

Utilities make money based on the infrastructure they develop, he noted. They get repaid for costs earn plus a rate of return. With growth in renewable power displacing the need for some new power plants, utilities increasingly are looking to make new investments, he said.

"They're doing this to add to their capital costs," Toney said. "I don't blame them for being in love with EVs. They're trying to use whatever they can."

PG&E declined to say what the proposal would mean to its shareholders. More on that will be in a document filed with the Securities and Exchange Commission today. In terms of ratepayer impact, a typical residential customer would pay about 70 cents more per month from 2018 to 2022 for the EV program. In the 2016-17 period, he or she would pay less than that, the utility said. It did not specify the amount for the startup time frame.

Toney said it seems unbalanced that all of PG&E's ratepayers would fund an effort benefiting a small portion of customers. He also noted that customers of municipal-owned utilities like the one in Sacramento would not be paying.

"It's the wrong pot of money to be coming from," Toney said. "Taxpayer revenue is more evenly distributed than ratepayer money."

PG&E argued that the EV project costs should be spread across all electricity customers because it's like other state policy goals for which the expense is shared. Energy efficiency and help for low-income customers are other examples, the utility said. Moreover, PG&E said, all ratepayers -- and all state residents -- benefit from cleaner air.

Gil Tal, a researcher with the Institute of Transportation at the University of California, Davis, had not seen the utility's proposal but said that adding 25,000 more stations could boost the EV sales market to develop more rapidly.
"Right now, it's really hard to make a business out of installing it on your own dime. The market is not big enough," Tal said. "For the public to pay for it ... that seems like the best way, for sure, in the next five to 10 years. Later, it will become a business, but right now we need" help for it to develop.

Adding workplace charging "is the most important and will have the strongest effect," Tal said, because "there is a strong correlation between workplace charging" and EV purchases.

But it isn't clear how much adding charging stations would accelerate the plug-in buying market, he said. While there are "a lot of qualitative interviews with focus groups that tell us again and again that it's important" to have charging stations, there aren't any studies that say for each one added, you might get a certain number of new EV buyers, Tal said.

**Market monopoly feared**

While there's space for utilities to play a bigger role in the EV charging market, PG&E's plan is flawed, said Pasquale Romano, CEO of ChargePoint, which operates an EV charging network.

PG&E installing and managing the sites smacks of monopoly power similar to when the phone company controlled the phone choices in homes. It will block innovation and competition that drive prices down, he said.

"I think they're going to substantially distort the market," Romano said. "They may actually slow the market down, because people might assume a free [station] is coming" and therefore not develop one.

PG&E is attempting "to define the EV charging hardware, network, pricing, features and everything in between," Romano said. He said that he prefers the SCE proposal. It would provide enough subsidy to boost the charging station market, he said.

PG&E said it's hoping to spur the charging market by partnering with third-party companies. While the utility would install and operate the stations, other companies would run the billing operation. They would buy the power from PG&E and charge motorists for the energy.

The utility also said 25,000 stations out of an estimated 100,000 needed to meet the state's climate goals left plenty of room for competitors.

"We're trying to help. We're looking to be a partner," PG&E's Ellis said. "PG&E's not looking to control the market by any means."

Romano also said the cost of PG&E's proposal seems very high. In addition to facilitating a charging network, ChargePoint sells charging equipment. It's sold about 25,000 units, the amount PG&E is proposing.
Romano said that while he didn't want to reveal exactly what ChargePoint's expenses were, "the fully burdened costs" of installing and maintaining were "not anywhere near $650 million. ... It's much less than that."