

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking on
the Commission's Own Motion to
Consider Alternative-Fueled Vehicle
Tariffs, Infrastructure Rulemaking
R.13-11-007 and Policies To Support
California's Greenhouse Gas
Emissions Reduction Goals.

Rulemaking 13-11-007
(Filed November 14, 2013)

Plug In America Comments on Scoping Memo Questions

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**Plug In America Comments on California Public Utilities Commission
Order Instituting Rulemaking to Consider Alternative-Fueled Vehicle Programs,
Tariffs, and Policies
Rulemaking 13-11-007 (Filed November 14, 2013)**

Plug In America respectfully submits these comments on the **Assigned Commissioner's Ruling and Scoping Memo**, mailed July 16, 2014.

Plug In America drives change. We are a California non-profit 501 (c) (3) public charity advocating for clean and sustainable grid connected electric vehicles, including the power used to run them. We are working to accelerate the shift to plug-in vehicles powered by clean, affordable, domestic electricity to reduce our nation's dependence on petroleum and improve the global environment. With over 30,000 supporters, half of whom are California residents, we are the organization representing current and millions of potential future *consumers* of plug-in hybrids and fully electric vehicles.

Plug In America supports the California Public Utilities Commission's Alternative Fuel Vehicle (AFV) Guiding Principles, and we believe the Commission should support an increased utility role in electric transportation infrastructure deployment and market education.

Electrification of our transportation sector is key to achieving California's long-term greenhouse gas emissions reduction goals, petroleum reduction goals, as well as federal Clean Air Act air pollution reduction goals. The market for plug-in electric vehicles continues to grow, but growth is not rapid enough to achieve California and national objectives.

PEV charging infrastructure access is a critical element driving PEV demand. Plug In America supporters encounter many challenges when seeking to charge vehicles at home (particularly in multifamily dwellings) and at work – the venues where most PEV charging occurs. An increasingly important factor is access to DC fast charging. Reducing barriers to plug-in electric vehicle (PEV) adoption is critical to accelerate market success, and utilities should be allowed, and encouraged, to play a larger role in PEV infrastructure deployment and market education to overcome barriers to consumer adoption of PEVs.

I. Discussion – Scoping Memo Questions

Plug In America comments on specific questions raised in Order Instituting Rulemaking (OIR) 13-11-007 are outlined below:

1) *Should the Commission adopt the proposed AFV Guiding Principles? What modifications, if any, are appropriate?*

Plug In America supports the AFV Guiding Principles, and proposes that the Commission also encourage and foster deeper involvement and communication among all stakeholders in the acceleration of PEV market. For market growth, improved communication between PEV automakers and utilities that serve PEV consumers is needed.

Plug in America sees a future where Electric Vehicles will play an increasingly important and valuable role in balancing the needs of the modern grid. As the voice of consumers we support open and transparent stakeholder conversations that insure the value of grid services provided by Electric Vehicles are shared with vehicle owners and fleet operators. We believe the utilities role includes supporting innovation and helping encourage the ability for electric vehicles to become a preferred grid asset rather than a grid liability.

During the course of the upcoming proceeding we look forward to the Investor Owned Utilities fully enumerating the value and potential of Vehicle Grid Integration and to collaborate on ways to harness this value stream towards on-going reductions in the total cost of operating electric vehicles that increase adoption. We welcome open dialog with drivers and fleet operators to assess program viability in relation to our real world experience driving electric. The conversation must also include consideration of how to extend support for utility side of meter costs to provide EV charging well in advance of the waiver expiration. The potential for a large, un-expected utility upgrade cost being the burden of a single rate payer (and the news headlines that follow) is a huge deterrent to adoption.

Plug In America supporters strongly believe in the many benefits of fueling electric vehicles with distributed generation such as solar. Utilities should take a leading role in designing programs and rate structures that encourage pairing renewables with electric vehicle fueling in both residential and commercial settings. Programs that specifically prevent the combination EV charging, PV and or Energy Storage on the same meter should be discouraged.

2) Should the Commission consider an increased role for the utilities in PEV infrastructure deployment and, if so, what should that role be? If the Commission should consider utility ownership of PEV charging infrastructure, how should the Commission evaluate “underserved markets” or “market failure” pursuant to D.11-07-029? What else should the Commission consider when evaluating an increased role for utilities in EV infrastructure deployment?

The Commission should support an increased utility role in electric transportation infrastructure deployment to reduce barriers to PEV adoption and address “underserved markets” and “market failures.” Active utility involvement in PEV infrastructure deployment offers the opportunity to ensure charging access in underserved markets or where markets fail.

For example, Plug In America supporters state (and research corroborates) that most PEV charging occurs at home, or at work. However, much of the publicly-funded PEV

charging infrastructure installations, to date, have focused on “public charging” venues (such as shopping malls, entertainment centers, grocery stores) where our supporters engage in less than 10% of PEV charging.

Access to PEV charging infrastructure, at home and at work, is an important determinant in consumers’ PEV acquisition decision, according to our supporters and research. Accelerating market deployment of electric vehicles by facilitating plug-in charging infrastructure in apartments, condominiums, multifamily dwellings, and workplace settings are especially appropriate for utility involvement, as these venues pose unique challenges (underserved markets). Similarly, more active utility involvement in PEV infrastructure deployment can address issues of charging access by low-income households (market failures), as well as ensure an efficient development of renewable energy for this market.

In many cases the direct pre-existing relationship between the utility and the customer (be it a residence or workplace) could enable the lowest cost provision of electricity for charging cars. Given the importance of consumer confidence, ease of use and low cost of electricity in driving sales, utilities ought not be prohibited from participation in this market. The drive to leverage public infrastructure development money to attain access to electricity for plug-in cars in order drive sales is sometimes hampered by the complication and cost of third-party solutions. Allowing direct utility participation could provide downward price pressure to maintain the delta between gas and electricity. California utilities are also in a unique position to offer incentives to residential and business customers as they have in the past with energy efficient products ranging from from light bulbs to appliances. This type of program could significantly increase the acceleration of both residential and commercial charging infrastructure.

Plug In America believes that there is a significant, expanded role for utilities in PEV infrastructure deployment, especially in accelerating deployment of residential PEV charging infrastructure (particularly in multifamily dwellings) and in workplace charging. Plug In America strongly encourages the Commission to support an increased utility role in electric transportation infrastructure deployment.

3) What education and outreach activities must the utilities provide to support further customer PEV adoption? What existing resources are available for these activities and what additional resources are needed?

Plug In America strongly supports an increased role for utilities in market education and outreach to potential PEV consumers. Plug In America has found one of the most successful outreach efforts to gain new PEV consumers to be getting people in the driver’s seats of plug-in electric vehicles. Consumers want to test drive several different makes and models of PEVs, and assess which would work best for them. Anecdotal feedback from PEV Ride & Drives indicates about 1 in 10 test drivers is converted to a new PEV consumer. Getting drivers into the seats of PEVs is one of the most successful market education and outreach strategies, accelerating adoption of PEVs. Greater utility involvement in these and other types of market outreach and education efforts would prove beneficial for all.

Garnering 80% reduction in greenhouse gases (below 1990 levels, in California), and achieving petroleum reduction and air pollution reduction goals, will require widespread adoption of PEVs. While automakers have made considerable progress bringing new PEVs to market, most do not rely on PEV sales as a central part of their business strategies, and they are understandably wary of events where their PEVs are on stage with that of their competitors. Enabling greater utility involvement in market education and outreach, especially in Ride & Drive events, would help accelerate PEV adoption while ensuring utility (and ratepayer) concerns are properly addressed.

More than half of PEV drivers charge their car exclusively or most often on 120V Level 1 (L1). Industry priorities suggest the consumers are doing it wrong! In fact this is an opportunity to spur EV ownership. The utilities are well-placed to educate about the value proposition of L1 to drive PEV sales.

Automaker and utility coordination, at point of sale, could benefit from improvement. By enabling greater utility involvement in market education and outreach efforts, consumers would better understand the opportunities for Time of Use rates, the importance of charging at night, and the importance of utility awareness of the location of all PEV consumers (facilitating appropriate plans for electricity distribution and transmission).

Enabling utility involvement in market education and outreach efforts is critically needed today, to jump-start the accelerated deployment of PEVs crucial to achieving societal goals. Utility involvement, especially through market outreach programs such as National Drive Electric Week (formerly know as National Plug In Day) and Plug In @ Work, would build market momentum and foster a sustainable, growing market segment of plug-in electric drivers. National Plug In Day 2013 created a national celebration that reached over 50,000 people and provided PEV test drives across more than 100 cities. Plug In @ Work has introduced PEVs at a wide range of workplaces; host campuses have included Google, Sony, Qualcomm and Coke among others.

Plug In America urges the Commission to support an increased utility role in electric transportation market education and outreach efforts.

4) How should the commission mitigate the impact of demand charges, if at all, on entities pursuing transportation electrification?

Plug In America believes that demand charges for EV charging are archaic and counterproductive. They are holding back the installation of charging infrastructure in several venues, but most particularly where DC Fast Charging infrastructure is needed in both urban and corridor environments. Increasingly, lack of access to DC Fast Charging is seen as a key consumer barrier.

To reduce barriers to PEV adoption, Plug In America urges the Commission to evaluate alternative methods of cost recovery for DC Fast Charging sites and other PEV charging sites (that run the risk of incurring demand charges). Of particular note is the experience of the state of Connecticut, where the public utility commission eliminated demand

charges while substituting an additional 4 cents onto electricity tariffs at electric transportation charging venues, as an alternative method for cost recovery.

Other creative solutions can be sought to mitigate demand charge concerns including the promotion of L1 in the workplace. Why have everyone arrive at work, plug into multiple L2 chargers and be done charging in an hour or two? Peak power consumption can be cut by 75% by encouraging the use of L1 in the workplace (1.44 kW vs. 7 kW or more). In some cases, where L2 charging finishes before peak rates begin, L2 may be better. In all cases, utilities should work with workplace customers to help them understand the advantages of L1 and the trade-offs between L1, L2, demand changes and peak rates.

II. Conclusion

Plug In America appreciates the opportunity to share its views with the California Public Utilities Commission on the Order Instituting Rulemaking to Consider Alternative-Fueled Vehicle Programs, Tariffs, and Policies, Rulemaking 13-11-007. We urge the Commission to support an increased role for utilities in PEV infrastructure deployment and market education.”

Dated: August 29, 2014, at San Francisco, California.

Respectfully Submitted,



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