



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

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Order Instituting Rulemaking on the Commission's own motion to consider alternative-fueled vehicle tariffs, infrastructure and policies to support California's greenhouse gas emissions reduction goals.

**RULEMAKING 09-08-009**

**COMMENTS OF THE INTERNATIONAL COUNCIL ON CLEAN  
TRANSPORTATION IN RESPONSE TO ADMINISTRATIVE LAW JUDGE'S  
REQUEST FOR ADDITIONAL INFORMATION**

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December 3, 2010

## **1. Introduction**

The International Council on Clean Transportation (ICCT) commends the CPUC for your efforts, including the October workshop and staff white papers, to facilitate infrastructure for plug-in electric vehicles while also addressing potential impacts on the electric grid.

In response to the October 27, 2010 Administrative Law Judge's Ruling Requesting Additional Information and Setting Comment Schedule ("Ruling"), the ICCT submits additional information and comments in response to comments submitted by other parties on some of the questions identified in the Ruling.

## **2. Comments on consumer education**

We agree with the need for consumer information expressed in several comments. Utilities will need to respond to customer questions about equipment and service needed for plug-in vehicles at a minimum. We believe that some differentiation is important for the role of utilities using ratepayer dollars, and of other potential sources of information regarding electric vehicles. As noted by EV Service Providers Coalition in their November 12, 2010 comments, other organizations should also be considered for public education that goes beyond core utility responsibilities.

We believe that information about rates should encourage customers to adopt off-peak load following charging, once communications standards and technology are in place to control vehicle charging in this way, to facilitate off-peak renewables required by the 33% Renewable Portfolio Standard. This is not necessarily the same as simply encouraging off-peak charging. While off-peak coal and natural gas can operate at a constant level, renewables such as wind will have variable levels of night-time output<sup>1</sup>.

In addition to informing customers about options to help utilities meet their Renewable Portfolio Standards, education should address other opportunities for renewables as well. For instance, a large percent of electric vehicle customers in the past have chosen to install PV rooftop solar<sup>2</sup>. Consumer education should include information about renewable energy options including on-site generation, as referenced in SDG&E's November 12, 2010 comments, and voluntary purchase of renewable energy credits.

## **3. Comments on tariff design**

ICCT suggests two general principles regarding rate design. We suggest that rate structures that are different from traditional rate structures, such as residential time-of-use (TOU) pricing, should be implemented on an optional basis as suggested by PG&E's

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<sup>1</sup>This is true both in California for the 33% RPS, and also in Europe. At some point in the future, there may even be areas with solar peaks. See the Economic and Technology Advancement Advisory Committee "Advanced Technology Development" report page 4-6; and "Green Power for Electric Cars Development of policy recommendations to harvest the potential of electric vehicles", Delft, January 2010. Bettina Kampman, et. al.

<sup>2</sup> For instance, a Plug-in America survey of 152 EV owners found that 40% also have PV solar systems. "All You Need to Know About Charging Stations: End User Requirements", Daniel Davids, Get Plug-in Ready Now! Workshop Bellevue, WA, August 20, 2010.

November 12, 2010 comments. Given the expected predominance of off-peak charging, there should be sufficient incentive for customers to accept a TOU rate structure on a voluntary basis without mandating a different rate structure than applies to other customers. If actual experience is otherwise, the CPUC can always revisit this issue later.

Secondly, we agree with comments by EV Service Providers Coalition that two studies, the Department of Energy (“DOE”) EV Project and Coulomb ChargePoint America, will be helpful for informing potential changes - including the potential for load following controlled charging. By the time that the DOE study results are available in spring of 2013, there should also be additional data on the status of communication standards and systems to potentially support load-following off-peak charging to facilitate renewable electricity. In the meanwhile, differentiated TOU rates are an appropriate near-term incentive for off-peak charging.

#### **4. Comments on plug-in vehicles and demand response**

In response to the question regarding utility demand response programs, ICCT recommends that design of demand response programs should address air quality issues. In particular, the programs should address both the potential for avoided emissions at peaking natural gas fired power plants, and the potential for increased tailpipe emissions, if plug-in vehicle charging is curtailed through demand response programs. We note that demand response is most likely to occur on summer days with hot weather leading to both high ozone production and high air conditioning load, thus potentially affecting air quality at a critical time.

Since utility comments indicate that demand response for EVs is not a near-term issue (for instance see PG&E and SDG&E comments dated November 12, 2010) there is an opportunity to investigate air quality issues prior to any decision in this area. This does not preclude installation of “smart charging” equipment for other reasons, with the capability to enable demand response participation in the future if appropriate.

Thank you for your consideration of our comments.



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## CERTIFICATE OF SERVICE

I, Ed Pike, certify that I have, on December 3, 2010, served a copy of “Comments Of The International Coalition on Clean Air in Response to Administrative Law Judge’s Request for Additional Information” on all known parties to R.09-08-009 by transmitting an e-mail message with the document attached to each party named in the official service list as of December 2, 2010, and by mailing a hard copy to the Administrative Law Judge.

I declare under penalty of perjury, pursuant to the laws of the State of California, that the foregoing is true and correct.

Dated December 3, 2010 in San Francisco, California.



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Ed Pike

CPUC service list as of December 2, 2010

[http://docs.cpuc.ca.gov/published/service\\_lists/R0908009\\_78506.htm](http://docs.cpuc.ca.gov/published/service_lists/R0908009_78506.htm)

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