

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

Order Instituting Rulemaking to
Consider Alternative-Fueled Vehicle
Programs, Tariffs, and Policies.

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

**COMMENTS OF THE
CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

The California Independent System Operator Corporation (the ISO) hereby files these comments in accordance with the schedule established by the assigned Administrative Law Judge on February 5, 2014. In this Rulemaking, the Commission is examining issues relating to the increased use of alternative-fueled vehicles in California.¹ The ISO supports the CPUC's initiative to examine how to expand the use of alternative fueled vehicles, including vehicle to grid applications. But while this work proceeds, the Commission should examine means for alternative fueled vehicles – especially electric vehicles - to contribute to favorably managing load patterns on the electric grid by establishing tariff rules that align customer charging behavior with grid conditions.

The ISO believes that alternative fueled vehicles have the potential of offering services that provide different values to different stakeholders. By modifying load patterns on the electric system, electric vehicles can bring value to all customers by reducing the need for peaking generation, avoiding the cost to secure additional

¹ *Order Instituting Rulemaking to Consider Alternative-Fueled Vehicle Programs, Tariffs, and Policies.* (Order Instituting Rulemaking 13-11-007).
<http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M081/K996/81996327.PDF>

resource adequacy capacity, mitigating the risk of over-generation at certain times, and meeting or decreasing ramping needs. By helping to modify the load shape on the electric grid, electric vehicles can also increase utilization of existing infrastructure that should also result in cost savings for all ratepayers.

The February 5, 2014 Administrative Law Judge's Ruling asks parties to submit additional comments on the CPUC Energy Division's white paper as well as the following three questions:

1. What programmatic changes can be made to support VGI as a resource within existing or proposed state energy programs and policies, such as demand response, resource adequacy requirements, energy storage, interconnection, and net energy metering?
2. What immediate, near-term actions should the Commission undertake to support the development and implementation of VGI use cases and applications?
3. In consideration of the Use Case prioritization proposed in the Whitepaper, are there near-term actions that the Commission should avoid in order to not preclude progress on Use Cases considered to be more complex?

In response to the above questions, the ISO strongly recommends that the Commission focus first on managed charging by electric vehicles. Whether through rate structures, dynamic signals with incentives, or other means, the Commission, through its jurisdictional utility distribution companies, should provide signals to customers when to charge. To ensure that electric vehicle charging does not create new reliability concerns, managed charging should be tied to the seasonal and real-time needs of the electric grid to the extent feasible. Customer behavior in response to such signals will inform load forecasting efforts, which in turn will provide the foundation for future grid infrastructure planning.

There does remain the need to undertake assessments of more complex use cases and the ISO commits to work with the Commission, the California Energy Commission and interested parties to develop a research agenda to understand the benefits and barriers of these more complex use cases. In this regard, the ISO believes the work it is performing with Southern California Edison and the Department of Defense to interconnect electric vehicles as a resource that can participate in the ISO's energy and ancillary service markets will prove valuable information to all interested parties. More immediately, however, this proceeding should seek to identify and extract the benefits that can come from the managed charging of electric vehicles.

Respectfully submitted,

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