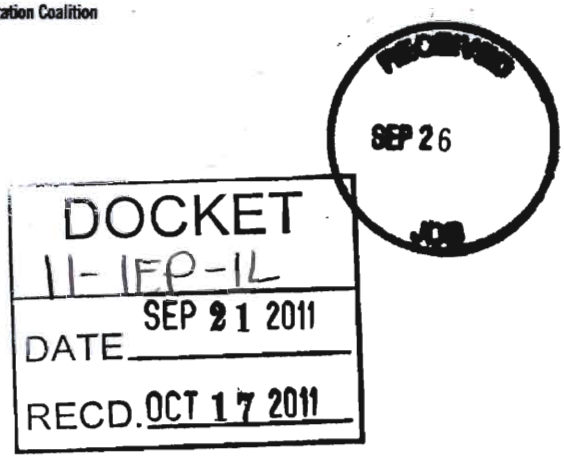
CalETC
California Electric Transportation Coalition



September 21, 2011

To: Mr. James D. Boyd, Vice-Chairman
Ms. Carla Peterman, Commissioner
California Energy Commission
Docket Office, MS-4
1516 Ninth Street
Sacramento, California 95814-5512

From: Eileen Wenger Tutt, Executive Director

Re: **Docket # 11-IEP-1L - Comments of the California Electric Transportation Coalition on the Draft Staff Report, Transportation Energy Forecasts and Analyses for 2011 IEPR**

The California Electric Transportation Coalition (CalETC) appreciates this opportunity to provide comments on Draft Staff Report, Transportation Energy Forecasts and Analyses for the 2011 IEPR (Draft Staff Report). CalETC is a non-profit association promoting energy diversity in the transportation sector, clean air and working to combat climate change through the transition of the transportation sector to electricity. CalETC is committed to the successful introduction and large-scale deployment of all forms of electric transportation including plug-in electric vehicles, transit buses, port electrification, off-road electric vehicles and equipment and rail. The members of CalETC include: Southern California Edison; Sacramento Municipal Utility District; San Diego Gas & Electric Company; Pacific Gas & Electric Company; Los Angeles Department of Water & Power; Nissan; and, General Motors.

CalETC utility members are substantially and proactively working to support the state's goals as reflected in the Draft Staff Report as well as working to support the customer demand for plug-in electric vehicles (PEVs). California electric utilities have all been fully engaged in comprehensive PEV Market Readiness activities to enable the safe, reliable and efficient integration of PEV charging loads with the grid. These activities include:

- Conducting outreach and education to customers regarding the choices, methods and best practices of PEV charging as well as the environmental benefits of PEVs connecting to the California grid.
- Investing in upgrades to the grid to support the new PEV market. The utilities work with their customers, auto makers, 3rd party providers and local government representatives to ensure that PEV owners have a positive experience installing charging systems and that community transformers do not fail as a result of PEV electricity demand.
- Offering time-of-use electricity rates and communicating the benefits of off-peak charging.
- Providing personal, hands-on customer technical assistance, including special call center support, direct visits to customers' homes and/or businesses to evaluate utility distribution system impacts and meter needs, providing personalized rate analysis, discussing charging

interests (e.g., 120v or 240v) and levels, and tailoring this assistance to address specific vehicle options each customer is considering.

- Partnering with infrastructure providers to support a seamless and satisfying experience for customers as they get their homes and businesses PEV ready.
- Integrating future PEV energy management measures (e.g., vehicle/grid communication standards, controlling the time and rate of charge at the circuit level and future energy storage alternatives) with the "Smart Grid" systems. (e.g., maximizing the use of renewable energy during off-peak periods).

Report Structure

As an overarching comment CalETC suggests the report be structured to reflect the diversity of the future transportation fuels market, presuming the state's policy goals are met.

Specifically:

- Chapter 1 should include breakdowns by fuel. Electricity is notably absent or misrepresented in Chapter 1. Although buried in a bullet on page 19, electricity is the 3rd most consumed transportation fuel in the state. In the forecast section, beginning on page 19, electricity is not even mentioned and the staff suggests that the ZEV mandate will be met with large numbers of fuel-cell vehicles and no battery-electric vehicles. We recommend this chapter be restructured by fuel type and appropriately represent the vital role electricity plays now in the transportation fuels market and the growth of electricity as a transportation fuel that is anticipated in the future.
- Chapters 3 and 5 should also be structured by transportation fuel type with electricity represented accurately as a viable transportation fuel now with an anticipated growth in use as a transportation fuel over the period of the forecast.

Electricity

- **The assumptions behind a forecast which shows no significant sales of plug-in electric vehicles (PEVs) should be made transparent.** It is not clear what assumptions resulted in Figure B-6's forecast that shows almost no significant sales of battery electric vehicles, even out to the year 2030, and even with high case gasoline prices and low case electricity prices. CalETC expects that the number of PEVs coming to California will dramatically increase in the next 5 years. Our estimates for PEVs in California are based on information from the major auto makers and twelve external studies by entities including TIAX, Charles River Associates, Electric Power Research Institute and the California Air Resources Board. It should be noted that California is considered a key market for PEVs. Although only about 10 percent of the new vehicles sold in the U.S. are sold in California,

California represents approximately 18 percent of the new vehicle market for hybrid vehicles. This factor, along with the impacts of the economic slowdown, was considered in CalETC's projections for PEV sales. In the 2015 timeframe, CalETC PEV projections range from a low of 125,000, mid-range of 250,000-275,000 and high of approximately 450,000. These estimates represent cumulative numbers of vehicles sold between 2010 and 2015 and CalETC believes the mid-range projection to be the most likely.

- **Page 13 of the Draft Staff Report should be corrected as there is no evidence which conclusively indicates that DC fast chargers will be required in large numbers.** CEC staff offers no analysis or justification as to why large numbers of DC fast chargers will be needed or what the staff means by that claim (how many, at what kW level, by when, etc.). The statement on p. 13 is the only mention of such a need in the report and should be removed. Later in the report (p. 186), staff states that the majority (95%) of charging will take place in the home or fleet operations and customers in the home will be charging using Level 1 or Level 2. This seems to conflict with the claim on page 13. ICF International estimates that in the early market, roughly 95 percent of charging will either be at home or at fleet facilities.
- **Figure B-7 and Table B-7 should reflect the cost per mile of electricity as a transportation fuel.** The current reflection of cents per gallon equivalent of gasoline is easily misconstrued and not easily understood from a policy maker or customer perspective. As the models CEC is converting the cents per GGE into cents per mile, it would be more transparent and better understood if the Price Cases tables in Appendix B either replace the cents per gallon with a cents per mile estimate from the modeling exercise or the cents per mile estimate be included in the existing Appendix B tables, particularly in B-7. Commissioner Peterman directed staff to reflect the cents per mile estimates and we agree with that direction.
- **Figure 3-15 should be revised to reflect the fact that demand for electricity as a transportation fuel will likely grow, not decline, after 2025**. CEC staff acknowledged that Mr. Duleep's assessments indicate plug-in hybrid electric vehicles are more attractive to the market than gasoline-powered vehicles. Therefore, any decrease in the use of electricity as a transportation fuel over time, as suggested by the Draft Staff Report, is not intuitive nor is the reason for the downward trend reflected in the Draft Staff Report transparent. CalETC recommends the graph be corrected or the staff clarifies the assumptions that cause a downturn in the forecasted demand for electricity as a transportation fuel after 2025.

Subject: **10-ALT-1**
Reference: **2011-2012 Investment Plan for the Alternative and Renewable Fuel and Vehicle Technology Program, Committee Draft Report.**

Low-Carbon Fuel Standard (LCSF)

The LCFS discussions in the Draft Staff Report entirely ignore the potential for electricity used in vehicles in meeting the requirements of the LCFS regulation at a lower cost and higher benefit than many of the liquid fuel options discussed. California is leading the nation in attracting PEVs to the state and in PEV readiness efforts. The numbers of PEVs in the state are currently in the thousands with hundreds of thousands of PEVs anticipated in the 2015 timeframe. The LCFS regulations also allow off-road electric vehicles to generate LCFS credits. CalETC's initial estimates for the number of tons of carbon reduced as a result of electrification of off-road equipment are well in excess of the available tons reduced in the on-road sector. Finally, electricity is significantly less expensive than many of the other alternative fuel options for meeting the LCFS obligation. For all these reasons it is clear that electricity will play a significant role in meeting the obligations of the LCFS regulation and staff should include electricity in the discussion of the LCFS in the Draft Staff Report.

Concluding Thank You

In conclusion, CalETC thanks CEC Commissioners and staff for their willingness to work through these complex issues with stakeholders. We look forward to continuing to work with you. Thank you for your consideration.

Sincerely,

Eileen Wenger Tutt
Executive Director