

**DOCKET** 

09-IEP-1K

DATE

April 14 2009

**RECD.** April 14 2009

# Electrification of Transportation & Potential Impacts

# **Integrated Energy Policy Report**

April 14, 2009



## **Primary Objectives**

- Maximize customer satisfaction as we transition to electricity as a transportation fuel
- Maximize differential between the cost of electricity and the cost of fossil fuel to create largest justifiable incentive for consumers
- Minimize the impact to all customers
- Maximize the carbon reduction potential by electrifying on and off road transportation
- Execute research and development to maximize value proposition

#### **Customer Satisfaction**

- Customer education
- Metering to support time of use rates and carbon credit capture
- Carbon credits to be passed back to the customer to keep costs as low as possible
- Internal utility processes to be able to proactively serve all customers

#### **Maximize Cost Differential**

- Ensure an incentive for the consumer by maximizing the cost differential between electricity and fossil fuel
- While serving all customers minimize the cost by having common standards and infrastructure across the state
- Execute careful analysis of potential cost drivers

### **CEC - Research and Development**

- Support research on stationary and secondary use of advanced automotive batteries
- Review carefully impact on existing infrastructure especially during the early entry 2010 - 2015
- Develop protocols and standards across the state and nationwide
- Initiate analysis of the potential to use energy storage (on and off board the vehicle) to support ancillary services
- Support development of vehicle to smart grid connectivity