

**Item #5**  
**March 9, 2010**  
**Energy Commission Business Meeting**  
**Sacramento Metropolitan Utility District**  
**Grant Agreement ARV-10-034**  
**for**

**Charging Infrastructure for Plug-in Hybrids and Electric Vehicle  
Demonstration with General Motors**

**Summary**

Sacramento Municipal Utility District (SMUD) is partnering with General Motors, the California Department of General Services (DGS), the City of Sacramento and the Sacramento Metropolitan Air Quality Management District to demonstrate and test 34 Chevrolet Volt plug-in hybrid vehicles in their fleet applications. Along with testing these vehicles, this project includes deployment and upgrades of the electric vehicle infrastructure system in SMUD's service territory, the expansion of public education and outreach activities, and ongoing efforts to standardize local permitting processes of the various local agencies. This program is being conducted under contract with the US Department of Energy's American Reinvestment and Recovery Act – Transportation Electrification funding opportunity, DE-FOA 0000028.

Project participants will be assigning their new fleet demonstration vehicles to numerous offices and departments over the course of the test period in order to maximize vehicle exposure to a wide variety of drivers. The Chevrolet Volt is a four passenger sedan plug-in hybrid "extended range electric vehicle" with a 40 mile all-electric range. With over 87% of Sacramento area commuters driving 40 miles or less per day, the Volt appears ideally suited for the Sacramento region commuting patterns.

The Energy Commission is providing \$553,000 in Alternative and Renewable Fuel and Vehicle Technology Program funds and the project team will provide in-kind match valued at \$553,000. The project also includes \$2,116,898 of federal funding for vehicle deployment, infrastructure installation and oversight, Smart Grid and demand response studies, and data collection.

**Benefits**

This project is expected to result in eight full-time electrical contractor jobs as well as related jobs from the manufacture and sale of batteries and charging components. Deployment of the Volts will reduce petroleum use and substantially reduce criteria

tailpipe emissions for this small fleet. The 34 Chevrolet Volts are projected to operate 95% of the time in all-electric mode during the demonstration. The Volts will reduce greenhouse gas emissions by 89 metric tons per year and gasoline by 9,600 gallons per year.

## **Participants**

The project participants for this contract include SMUD, a publically-owned utility company, the California Department of General Services, who serves as the business manager for the State, the City of Sacramento and the Sacramento Metropolitan Air Quality Management District whose mission is to achieve clean air goals in the Sacramento region.

## **Project Milestones**

This project is scheduled to be completed by September 30, 2013.