

Back-up Documentation for Business Meeting October 05, 2011

EISG Program Solicitation 10-02T

TRUSTEES OF THE CALIFORNIA STATE UNIVERSITY. Possible approval of four grants under CEC Contract 500-98-014, totaling \$288,953, from the Public Interest Energy Research (PIER) programs Energy Innovations Small Grants Solicitation number 10-02T. These grants were competitively selected and are capped at \$95,000. The awards include innovative energy research projects on integrating plug-in electric vehicles onto the electric grid, improved electric vehicle charging technologies, and computer modeling of innovative transportation system solutions in community design concepts. (PIER electricity funding.) Contact: Michael Gravely. (5 minutes)The specific proposed award is:

1. University of Toledo, Impacts of Plug-in Electric Vehicles on Distribution Network Reliability, \$50,000. The goal of this project is to determine the feasibility of using advanced modeling techniques and evaluation methods to more accurately determine the impacts of large fleets of plug-in electric vehicles on distribution network reliability in the smart grid environment. This project will benefit California by informing the planning efforts of the Independent System Operator and electric utilities as they prepare for the widespread deployment and use of plug-in electric vehicles.
2. Mission Motor Company, Lightweight Onboard Charging Device for Electric Vehicles, \$94,000. The goal of this project is to determine the feasibility of a small, lightweight charging device that can meet the high power demands of a performance electric vehicle. This project is expected reduce the onboard charger size and weight by 50 percent, with comparable power and costs to current market offerings. By improving the performance of a neglected subsystem, the onboard charger, this project will improve the viability of plug-in electric vehicles.
3. Green Dot Transportation Inc., Seamless Mechanized Charging Interface for EV/PHEV, \$94,953. The goal of this project is to determine the feasibility of using a mechanized charging device to automatically and safely connect plug-in electric vehicles to the electricity grid. This proposed innovation will enable safer electric vehicle charging and enable drivers with disabilities to more easily charge their vehicles.
4. Mogavero Notestine Associates, Community Integrated Agriculture Development, \$50,000. The goal of this project is to determine the feasibility of an innovative community design concept that locates high-density housing around a minimum five-acre farm. This project will develop a methodology to compare the potential transportation energy impacts of the integrated residential-farming development.