

Item #13
October 6, 2010
Energy Commission Business Meeting

COULOMB TECHNOLOGIES

Grant Agreement
For
Development of a Charge Point Communication Processor

Summary

Coulomb Technologies (Coulomb) is a California-based Electric Vehicle Supply Equipment (EVSE) manufacturer. Coulomb will develop and manufacture their Charge Point Communication Processor, which is designed for installation into existing electric chargers and into new chargers manufactured by other companies. The Charge Point Communication Processor will enable the charge point to connect to a smart grid, which will offer multiple services.

Coulomb's project will culminate in hardware and software capability for a complete smart charger network. The network will be capable of remotely controlling the charging and discharging of batteries by creating a network that can shift charging loads away from peak hours. Large scale electric vehicle charging during peak load periods on hot summer afternoons has the potential to exacerbate local grid reliability. Shifting charging to off peak periods reduces stress on the grid and allows chargers to take advantage of renewable generating technologies.

In addition to load leveling, the smart charge network will be capable of providing billing, wireless monitoring, and web and cell phone services for consumers.

The Energy Commission is providing \$1,102,985 towards this project from the Alternative and Renewable Fuel and Vehicle Transportation program fund and Coulomb is providing a match of \$1,102,985.

Benefits

As California continues to deploy charging infrastructure throughout the state, this project will provide the capability for those chargers to be integrated into a smart grid.

Once established a smart grid can significantly reduce green house gas emissions emitted from power plants through load leveling. At the same time load leveling can reduce the cost of providing electricity.

Participants

Coulomb Technologies a California based Electric Vehicle Supply Equipment (EVSE) manufacturer.