Item #5
April 6, 2011
Energy Commission Business Meeting

Boulder Electric Vehicles, Inc.

Grant Agreement ARV-10-039
for
Vehicle Manufacture of Medium and Heavy Duty
Electric Drive Trucks and Buses

Summary

Boulder Electric Vehicles (BEV) proposes to design and locate a 20,000+ square foot (SF), manufacturing facility in Los Angeles to produce medium and heavy duty all electric drive trucks and buses. BEV will be locating a vehicle manufacturing facility to take advantage of their supply network located in Southern California and be closer to California customers.

In June 2009 BEV released its prototype all-electric drive truck, which to date has been driven over 10,000 miles in a wide variety of weather conditions and terrains. Due to its unique lightweight design, the BEV prototype is an 11,000 pound gross vehicle weight truck with a cargo capacity of 5,000 pounds. As a zero emissions vehicle, BEV's trucks can travel over 100 miles on a single charge. The key market for these trucks and buses will be the major cities of California as well as major private California fleet operators such as FedEx.

Thirty vehicles will be produced during the trial period.

The Energy Commission is providing $3,000,000 in Alternative and Renewable Fuel and Vehicle Transportation Program funds. The project participant is providing $3,000,000 in match funding.

Benefits

Completion of this project will result in the establishment of an energy efficient manufacturing line that produces medium and heavy duty all electric drive trucks and buses in Southern California. BEV estimates that it will be able to produce up to 6,000 trucks and/or 6,000 buses per year with an annual savings of 1.2 billion pounds of CO2 per year based upon figures for direct replacement vehicles for typical diesel-powered trucks.

BEV is committed to operational sustainability by reducing energy consumption and waste in their operational processes. BEV will incorporate low energy manufacturing techniques into

the design of the facility as well as several novel manufacturing techniques developed for cycling the high voltage battery packs with a minimum current draw from the electricity grid.

BEV estimates 15 jobs would be created during plant facility improvements and up to 300 jobs created when the plant is fully functioning with 3 shifts.

Participants

BEV's project partners include the City of Los Angeles and BEV's existing supply network in Southern California such as Flux Power Systems, AC Propulsion, and Dynatrac.

Project Milestones

BEV's project schedule and milestones include 12 months for plant design, retrofit and testing, 12 months for tooling and test protocol implementation, and 6 months for full operation, production and final reports. The project will be completed 30 months after signing of the business agreement between CEC and BEV of funding with final reports by December 2013.