

Item #14
May 4, 2011
Energy Commission Business Meeting

TransPower

Amendment of Grant Agreement ARV-10-020
for

Vertically-integrated Manufacturing Facility
Feasibility Study for Class 8 Trucks

Summary

TransPower has an existing \$1 million agreement with the Energy Commission to conduct a study and performance tests to determine the “Feasibility of a Vertically-Integrated Facility for Electric Truck Manufacturing” (VIFET). The VIFET project goal is to develop an integrated manufacturing process that will be used at a new manufacturing facility for large Class 8 electric trucks in Southern California by January 2013. The existing agreement will fund one prototype vehicle that will be used for dynamometer testing.

TransPower requested an amendment of their existing agreement, executed on February 17, 2011, to reflect approximately \$605,074 in additional match funds from the South Coast Air Quality Management District and TransPower for the production of one additional Class 8 truck. The amendment will also move work that was originally planned for a subcontractor to the in-house team.

Benefit

The amendment will result in one additional heavy-duty, electric truck which will be used in a demonstration in the San Pedro port area. The vehicle demonstration could effectively accelerate the project by providing field performance data that would not have been available under the existing agreement.

Successful completion of the larger VIFET project and commercialization of the technologies is expected to result in 120 million gallons of diesel saved between 2013 and 2020. Similarly, emission reductions are estimated at 75.57 tons per year when comparing the electric truck to its diesel counterpart, with a potential aggregate carbon reduction of 1,511,400 tons for the same period (2013-2020).

It is estimated that up to 1,500 new jobs will be created by the establishment of the manufacturing facility and commercialization of the electric truck technology.

Participants

TransPower's team, led by Michael Simon, includes in-house experts on electric vehicle and control systems development, augmented by strategic partners that address every major need for successful commercial implementation. Partners include:

EPC, a startup firm based in San Diego, develops and markets advanced power conversion devices, with a focus on high-power converters using silicon carbide transistor and flexible control technology. These converters are expected to offer significant efficiency and cost benefits for transportation and renewable energy applications.

Navistar is a \$14 billion a year manufacturer of trucks and truck engines. This funding will be used to support development and manufacturing of electric trucks with capacities of up to two tons.

PortTechLA is a public benefit, non-profit technology commercialization center and business incubator founded by the San Pedro and Wilmington Chambers of Commerce in collaboration with both the City and Port of Los Angeles. PortTechLA will help evaluate potential VIFET manufacturing sites in the San Pedro area, which is consistent with its mission to attract technology companies to the Los Angeles harbor area.

Implementation Schedule

TransPower will be conducting integrated component testing during the first year of the project and manufacturing planning in the second year. In mid-2012, TransPower will begin seeking support from investors and local officials for the manufacturing facility. TransPower expects to complete this project in December 2012.

CEQA

The Chief Counsel's Office has reviewed this project to determine what level of environmental review is necessary under the California Environmental Quality Act (CEQA) and recommends including a finding that the amendment is "not a project" and therefore not subject to environmental review.