

**Texas Commission on Environmental Quality
New Technology Research & Development (NTRD) Program
Monthly Project Status Report**

Contract Number: 58211111473264

Grantee: Alternative Motive Power Systems (AMPS)

Report for the Monthly period: July 2012 **Date Submitted:** August. 10, 2012

Section I. Accomplishments

Provide a bulleted list of project accomplishments as well as a description of their importance to the project.

- Continued programming efforts and continued data acquisition programming. Programming will ensure proper communication between sub-systems and establish control over individual components for proper locomotive function. Data acquisition system (DAS) will provide very precise feedback. This empirical data will allow us to make minor programming changes to improve locomotive function and efficiency. Preliminary DAS being tested on dual genset locomotive. Preliminary testing of the system will occur prior to shipment to Railserve.
- Both the 400 kilowatt and the 150 kilowatt alternator/generators have arrived.
- Continuing to implement component and component drawing acquisition per schedule and have made significant progress toward incorporating component drawings into our Solid Works 2012 locomotive drawings.
- Cab/short-hood is complete. Operator control stand and roll-up door in short-hood has been completed. Traction motor rack assemble from ATS has delivered (minus 2-generator inverters) and has been installed in short-hood.
- Axle generator is still being tested on a Railserve locomotive in Michigan with no problems. Incorporation of this new “AMPS designed and manufactured” axle generator will result in improved traction control and the elimination of “faults” due to poor signal quality.
- Traction motor blowers and other miscellaneous components have been ordered. An Atlas Copco air compressor has been specified but not ordered.
- Engine/generator module/cube design has been completed.

Indicate which part of the Grant Activities as defined in the grant agreement, the above accomplishments are related to:

- Task #2

Section II: Problems/Solutions

Problem(s) Identified: Report anticipated or unanticipated problem(s) encountered and its effect on the progress of the project

- a) We have been notified by John Deere that we will not have engines until the end of August 2012 or the first part of September 2012.

Proposed Solution(s): Report any possible solution(s) to the problem(s) that were considered/encountered

- a) We have requested an amendment to our schedule.

Action(s) Conducted and Results: Describe the action(s) taken to resolve the problem(s) and its effect

- a) We have made repeated requests to speed up the process and John Deere has committed to do the best they can.

Section III. Goals and Issues for Succeeding Period:

Provide a brief description of the goal(s) you hope to realize in the coming period and identify any notable challenges that can be foreseen

- Continued software development
- Continue axle generator durability testing
- Delivery of completed cab/short-hood assembly to Railserve
- Completion of design and initial fabrication of long-hood
- Continue ordering required components
- Continue rebuild of complete truck assemblies and traction motors

Date: August 10, 2012

Authorized Project Representative's Signature

NOTE: *Please attach any additional information that you feel should be a part of your report or that may be required to meet the deliverable requirements for tasks completed during this reporting period.*