

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

Contract Number: 582-11-13470-2019
Grantee: GE Transportation (GE)
Report for the Monthly period: March 1, 2013 – March 31, 2013 **Date Submitted:** April 10, 2013

Section I. Accomplishments

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

- Task 2.5.1: The necessary inputs to complete the United States Environmental Protection Agency (EPA) certification requests were completed, with official EPA certification obtained for all 6L250 engine ratings.
- Task 2.7.1: The engine performance design reviews for the 8L250 engine ratings were completed to finalize the engine performance development for the 8L250.
- Task 2.8.1: The necessary inputs to complete the EPA certification requests were completed, with official EPA certification obtained for all 8L250 engine ratings.
- Task 2.8.1.1: The performance team completed a performance and emissions test of the 8L250 test engine in the engine test cells. This test was completed to close design review action items and verify engine emissions compliance.

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

Task 2.5.1. The PERFORMING PARTY will complete EPA certification testing of the prototype engine. The PERFORMING PARTY will submit all necessary documentation to the EPA and respond to all EPA questions as necessary to receive Tier 3 certification for the prototype engine.

Task 2.7.1. The PERFORMING PARTY will complete all performance testing on the 8L250 prototype engine and complete performance design reviews for the 8L250 engine configuration, ensuring that it meets all of the specification requirements.

Task 2.8.1. The PERFORMING PARTY will complete EPA certification testing of the prototype engine. The PERFORMING PARTY will submit all necessary documentation to the EPA and respond to all EPA questions as necessary to receive Tier 3 certification for the prototype engine.

Task 2.8.1.1. All EPA certification testing will be completed using the 8L250 test engine and be completed in the engine test cells in Erie, Pennsylvania.

Section II: Problems/Solutions

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

Engine test lab personnel support has caused delays in the startup of the 8L250 engine and subsequent testing.

The turbocharger on the engine failed during the final performance testing.

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

Overtime and weekend work shifts can be leveraged to improve the current timeline for finishing the engine performance development.

- a) The performance team has worked with the turbocharger supplier to identify a root cause of the failure. This root cause has been corrected for future products, and the engine has been reassembled to continue testing.

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

Overtime and weekend work shifts have been leveraged, and whereas the performance development is behind with respect to the original schedule the performance team believes that all testing will be complete per the grant timeline.

- a) The performance team has worked with the turbocharger supplier to identify a root cause of the failure. This root cause has been corrected for future products, and the engine has been reassembled to continue testing.

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

- Throughout the next month, the goal is to complete all necessary testing to close out all open action items from design reviews, any new control software release items, and close all open design items to prepare for production shipment of this engine family should an order be placed.

Date: April 10, 2013

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.*