

NTRD Program Disclaimers

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

Contract Number: _____ 582-5-65591-0009 _____

Grantee: ___ General Electric Transportation Rail , Erie, PA _____

Date Submitted: ___ 4/26/05 _____

Report for the **Monthly** period:

Starting Date ___ 3/2/05 ___ Ending Date ___ 4/12/05 _____

Section I. Accomplishments *(Please provide a bulleted list of project accomplishments as well as a description of their importance to the project.)*

1. Completed baseline and .5" barrel and plunger injectors development testing on SwRI 645E test engine with modified camshaft *
2. Review injector preliminary test data and new injector design strategy
3. Delivered 645E GE test engine to SwRI and deliver liners, gaskets and piston rings to SwRI for system development testing. *
4. Completed Tollgate 425 System Validation Plan Design Review *
5. Completed Tollgate 3 and 4 Reviews for project status update
6. Completed injector and camshaft Tollgate 525/535 for concept and Verification and Validation Plan design review with SwRI participation *
7. Completed GE internal Program Review with Marketing and all other supporting functions.

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

* Indicated Southwest Research Institute contractual development and test activities

Section II: Problems/Solutions

<p>Problem(s) Identified</p> <p><i>(Please report anticipated or unanticipated problem(s) encountered and its effect on the progress of the project)</i></p>	<p><i>645E Engine had running noise during test run and also low power</i></p>
<p>Proposed Solution(s)</p> <p><i>(Please report any possible solution(s) to the problem(s) that were considered/encountered)</i></p>	<p><i>Troubleshoot, teardown and reassemble the engine. Replaced one roots blower.</i></p>
<p>Action(s) Conducted and Results</p> <p><i>(Please describe the action(s) taken to resolve the problem(s) and its effect)</i></p>	<p><i>GE engine manufacturing facility delivered the engine to SwRI on 4/8/05.</i></p>

Section III. Goals and Issues for Succeeding Period: *(Please 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)*

- New injectors helix design
- Meet piston ring supplier to discuss the development of new piston rings for GE
- Install 645E engine and run baseline FTP, Federal Test Procedure, test
- Prepare the engine to conduct Real Timer Oil Consumption Test. The major tasks include setting up DOE, remove Power Assemblies and rebuild them with test parts per design of experiment, and 100 hours run-in.



Date: 4/26/05

Authorized Project Representative's Signature

Implementation Grants Section

Texas Commission on Environmental Quality