

## **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: \_\_3/29/05\_\_\_\_\_

Report for the **Monthly** period:

Starting Date \_\_\_\_2/1/05\_\_\_\_ Ending Date \_\_\_\_3/1/05\_\_\_\_\_

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

1. Received baseline injectors and .5" barrel and plunger injectors and conducted the bench test of injectors.
2. Identified engineering design review strategy to follow GE Tollgate/ISO process. The team will also use the design review checklist from the Principal Engineering office.
3. Acquire project scheduling software Gantt Builder for the GE and Southwest Research Institute review.
4. Completed Real Time Oil Consumption DOE, design of experiments, and Verification and Validation Plan. Completed Tollgate 525, Concept Review, 535 Detailed Design Review and 565 Verification and Validation Plan Review.
5. Due to locomotive availability in the market the development testing will have to be conducted on a 645E engine, which is to be mounted on a test bed locomotive at SwRI. This engine is being produced at a GE manufacturing facility.
6. GE and SwRI Program Review for status update. 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:**

Southwest Research Institute contractual development and test activities

Section II: Problems/Solutions

<p><b>Problem(s) Identified</b></p> <p><i>(Please report anticipated or unanticipated problem(s) encountered and its effect on the progress of the project)</i></p>	<p><i>Camshaft supplier had a production delay due to heat treatment problem.</i></p>
<p><b>Proposed Solution(s)</b></p> <p><i>(Please report any possible solution(s) to the problem(s) that were considered/encountered)</i></p>	<p><i>Expedited the supplier and offered engineering support for troubleshoot</i></p>
<p><b>Action(s) Conducted and Results</b></p> <p><i>(Please describe the action(s) taken to resolve the problem(s) and its effect)</i></p>	<p><i>The camshaft supplier is late in delivering the products. Total delay is 4 weeks.</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
- Tollgate 425 System Validation Plan Design Review
- Tollgate 3 & 4 Review for project status update
- Injector and camshaft, Tollgate 525 Concept Review, 535 Detailed Design Review, and 565 Verification and Validation Design Review
- Determine piston ring supplier for lube oil consumption package.

*Ed Lu*

Date: 2/23/05

*Authorized Project Representative's Signature*

Implementation Grants Section

Texas Commission on Environmental Quality