

NTRD Program Disclaimers

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**Texas Commission on Environmental Quality
New Technology Research & Development (NTRD) Program
Monthly Project Status Report
GTI Project #20485**

Contract Number: 582-5-70807-0018

Grantee: Gas Technology Institute

Date Submitted: April 10, 2006

Report for the Monthly period: March 2006

Starting Date: March 1, 2006

Ending Date: March 31, 2006

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

Accomplishment	Importance to the Project
System integration and engine controller installation has been completed.	Components being integrated into the system are: <ul style="list-style-type: none"> • Gas clean-up system • Oil separator • Valve train for gas clean-up system • Heat exchanger • Oil cooler
Testing and reassembly of components mentioned in previous month's reports has resulted in system leaks being found. Leak detection and repair is ongoing.	Component refurbishment and/or replacement is needed to assure reliability and to maximize efficiency of the system.
Two potential deployment sites have been identified. A Cost estimate for system installation is being prepared for one of the sites.	A site host that operates LNG-fueled vehicles is necessary for the successful demonstration of the on-site liquefier.

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

Accomplishment	Grant Activity
System component integration, engine controller installation.	Tasks 1-6
Engine component replacements	Tasks 1-6
Demonstration site identification	Tasks 5

Section II: Problems/Solutions

Problem(s) Identified	
<i>(Please report anticipated or unanticipated problem(s) encountered and its effect on the progress of the project)</i>	1) Deployment and demonstration site is not yet contracted for.

<p>Proposed Solution(s)</p> <p><i>(Please report any possible solution(s) to the problem(s) that were considered/encountered)</i></p>	<ol style="list-style-type: none">1. GTI has identified a major transit agency in Texas that operates LNG vehicles and is interested in becoming a replacement host site for the natural gas liquefier.
<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>	<ol style="list-style-type: none">1. GTI is currently in discussions with the transit agency concerning the details for field-testing the liquefier at that agency's LNG fueling site. GTI is awaiting a final "go" from the transit agency in order to conduct final site assessment and cost estimates.

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)*

- Continue systems refinement, efficiency enhancements, and system optimization activities that were initiated during October.
- Reach agreement on deployment location and begin on-site permitting, gas supply, and operating groundwork. This item will most likely continue for the next reporting period.

The photo on the following page shows the front panel of the liquefier system control unit. The simplified controls will allow for easy operation with minimal training.





Date: 4-10-06

Authorized Project Representative's Signature

**J. Brian Weeks, Associate Director,
Hydrogen Energy Systems
Gas Technology Institute**

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.*