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

Contract Number: _582-5-70807-0002_____

Grantee: _County of El Paso_____

Date Submitted: _8-10-06_____

Report for the **Monthly** period:

Starting Date __7-1-06_____ Ending Date __7-31-06_____

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

In July, El Paso County, Ruby Mountain Inc., and Border Quality Campaign of El Paso del Norte (BQC) have been coordinating with industry and local service providers in El Paso on the development of the natural gas shuttle bus for El Paso County, including the steps summarized below.

- Conducted conference calls with Hydraulic Launch Assist (HLA) manufacturer Eaton Technologies to discuss the El Paso County project application. Specifically, the following issues were addressed: completing modifications to the project work scope which will allow for a bifurcated field testing process for the project vehicle; and ensuring that the HLA device can be installed by February 28, 2007, providing for a 3-month technology assessment period.
- Project team members have been coordinating with Bell Powers Systems in Essex, CT to ensure the timely re-power of the project vehicle from diesel to natural gas and subsequent installation of the L/CNG fueling system.
- Continued planning for pilot test evaluation and transport of project vehicle from Essex, CT to El Paso. Team members made additional contacts regarding CNG and LNG refueling facilities to provide refueling of project vehicle during pilot test evaluation from Essex, CT to El Paso, TX.
- Discussed deployment of demonstration vehicle with area transportation directors and elected officials to help facilitate preparation of vehicle introduction and public outreach efforts.
- Coordinated development of a test data matrix for in-service performance data collection and preparation of analysis of vehicle operations pre- and post-mechanical hybrid system installation.
- Worked with International to replace electronics modules and a turbo apparatus. Additional detail in the following section of this report.

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

Task 2: Installation and Fabrication
2.2 Task Statement: The performing party will install and fabricate the necessary components to construct the transit bus with ADA capabilities with the HLA and the natural gas engine.

Task 4: Reporting
2.4 Task Statement: Prepare and submit monthly detailed project reports and a comprehensive final report while ensuring compliance with all TCEQ program requirements.

Section II: Problems/Solutions

Problem(s) Identified (*Please report anticipated or unanticipated problem(s) encountered and its effect on the progress of the project)*	Two problems associated with the factory installed gasoline powered engine were identified and caused the vehicle to malfunction prior to the natural gas re-power. The first problem encountered was with the vehicle's four electronic control modules which were all replaced twice. The second engine issue was a turbo failure most likely due to "lot rust" which occurred when the back end of the vehicle was being constructed.
Proposed Solution(s) *(Please report any possible solution(s) to the problem(s) that were considered/encountered)*	The following options were explored by the project team: Electronic Modules: The International dealership was asked to replace all electronics modules in the vehicle. Turbo Failure: The most obvious option was to have the International dealership in Pennsylvania replace the turbo apparatus. As another option, the project partners looked at estimates to flatbed the vehicle the remainder of the way to Essex, CT.
Action(s) Conducted and Results *(Please describe the action(s) taken to resolve the problem(s) and its effect)*	Team members had International replace all electronic modules in the vehicle as well as the turbo apparatus, as per the factory warranty. The vehicle is now at Bell Power Systems in Essex, CT awaiting re-power with the Cummins natural gas engine.

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)*

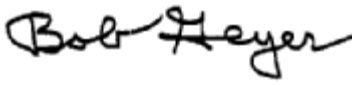
Work in the next month of the project period will focus on the following contract tasks:

Task 2: Installation and Fabrication of bus.

2.2 Task Statement: The performing party will install and fabricate the necessary components to construct the transit bus with the L/CNG engine and tank systems.

2.2.1 Install and fabricate the necessary components to construct the transit bus with L/CNG engine:

a. Install CNG fuel system
b. Fabricate and install LNG system
c. Fabricate and install economizer valve
d. Design interface software to integrate CNG and LNG system
e. Integrate L/CNG system with engine



Date*:* *8-10-06*

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.*