

NTRD Program Disclaimers

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

Contract Number: 582-5-70807-0002

Grantee: County of El Paso

Date Submitted: 4-10-06

Report for the **Monthly** period:

Starting Date 3-1-06 Ending Date 3-31-06

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

To date, El Paso County, Ruby Mountain Inc., the Idaho National Lab (INL), and Border Quality Campaign of El Paso del Norte 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. This has included the following:

- ARBOC regarding final manufacture of the project vehicle prior to transport to Essex, Connecticut for engine re-power (diesel to natural gas) and installation of natural gas refueling system (LNG and CNG).
- Bell Power Systems concerning the installation of the Cummins 5.9L B Gas Plus natural gas engine into the International 3200 chassis, including details regarding anticipated engine and transmission performance, natural gas fuel system plumbing and installation issues and logistics.
- Coordinated with ARBOC, INL and Bell Power Systems on design and integration of fueling distribution panel into project vehicle.
- Continued work on Task 1 NTRD Contract Deliverable related to a report on the final design for fabrication of the project vehicle.
- Coordination with Bell Power Systems to begin obtaining parts and serviceable items of importance for delivery with the project vehicle – having anticipated parts on-hand will reduce down-time associated with any needed repairs on the project vehicle once it is placed into service in El Paso.
- Continued working to make modifications to the project work scope which will allow for a bifurcated field-testing process for the project vehicle.
- Continued planning for transport of project vehicle from Essex, CT to El Paso, TX
- Continued coordination among project partners on engine service/repair considerations and maintenance requirements needed for project application (See next section).

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 LNG engine.

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>The project partners have been working for some time to establish a network for continuing routine maintenance and warranty service for the project vehicle. However, given El Paso's geographic isolation and the fact that the local Cummins distributor has never worked on natural gas vehicles, proper training of maintenance/service personnel is of paramount importance.</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>The project team is looking into the following measures to ensure proper maintenance and warranty service for the project vehicle:</p> <ul style="list-style-type: none"> • Arranging factory maintenance training for personnel from Cummins Southwest to perform warranty work on the Cummins B Gas Plus engine and arranging for personnel from Border International to perform warranty work on the International Chassis • Ensuring availability of sufficient parts at El Paso dealerships for the project vehicle
<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>The project team is taking the following measures to ensure proper maintenance and warranty service for the project vehicle:</p> <ul style="list-style-type: none"> • Arranging factory maintenance training for personnel from Cummins Southwest to perform warranty work on the Cummins B Gas Plus engine • Arranging factory maintenance training for personnel from Border International to perform warranty work on the International Chassis • Determining whether Sun Metro Transit (which utilizes the Cummins B Gas Plus) would be willing to serve as a backup option for warranty and/or maintenance service <p>Additionally, the project team is in the process of determining whether the Border International dealership is capable of performing warranty service not only on the International chassis, but also on the Cummins B Gas Plus engine given that the dealership sells Cummins engine in International trucks.</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)*

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

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 LNG engine.

2.2.1 Install and fabricate the necessary components to construct the transit bus with ADA capabilities with the HLA and the LNG engine

2.2.1.1 Install low-floor chassis

2.2.1.2 Fabricate and install HLA mounting system

2.2.1.3 Develop wiring/plumbing interfaces to engine and brakes

2.2.1.4 Design interface software to manage engine and brake systems

2.2.1.5 Install hardware/software in chassis



Date: 4/10/2006

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.*