

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

Contract Number:	582-11-11141-3264		
Grantee:	GRIDbot, LLC		
Report for the Monthly period:	7/09/2011- 8/08/2011	Date Submitted:	8/08/11

Section I. Accomplishments

Provide a bulleted list of project accomplishments as well as a description of their importance to the project.

- In July, June monthly Progress Report and Financial Status Report were prepared and submitted.
- Information sharing and project coordination continues with representatives from City of Houston (COH), Good Company, Houston Advanced Research Consortium (HARC), and GRIDbot, along with several contractors, to provide input on updated planning, data collection, and installation and keep the project on the timeline.
- GRIDbot continues to provide manufacturer with specification review, modification, and technical support.
- Good Company continues to collect information to include in the owner's manual which will be provided to the COH before the end of the project.
- COH maintenance staff has the restricted parking and electric charging signs installed for the Phase 1 location.
- GRIDbot conducted basic functional tests of each station installed at COH for the ability to accept RFID cards and start and stop charging sessions and the ability to deliver power.
- HARC has established access to Nissan's onboard systems and will be able to incorporate this information from the vehicles themselves into their modeling.
- The first two Nissans and four of the PHEV Prius' have been reassigned to the centralized parking area, providing us the necessary data to complete interim tests on the equipment and data collection.
- Good Company continues to interact with COH staff to obtain information and feedback on the user experience. As an example, the Nissan drivers reported that the LEAFs did not seem to be charging fully in the first few days on-site, but we later discovered that the Leafs were in fact charging to the correct level they are programmed to accept.
- Contractors installed the remaining 28 wheel-stops for Phase 2 installation.

- In-service training for various department staff has not been scheduled by the various COH departments, but we continue to work with them to facilitate this training.

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

- **Task 1: Planning and Design** – all activities under Task 1 have been completed.
- **Task 2: Site Installation and Data Collection – Site 1** - 2.2.1 installation completed, 2.2.2 materials have been developed for COH staff, and 2.2.3 vehicles have been identified to relocate to the fleet charging location and the City has taken delivery of the first two Nissan LEAF's. They have assigned 5 drivers to each LEAF at this time due to insurance limitations. The initial tests of the data collection equipment 2.2.4 have been done - requiring some adjustments to data collection and sharing. User Feedback from vehicle and station users 2.2.5 continues to be directed to Good Company for documentation or solutions.
- **Task 3: Interim Evaluation of Site 1** - 2.3.1 costs have been compiled for analysis, 2.3.2 interface changes have been implemented due to policy changes by the COH fleet management team, and 2.3.3 the second installation site location has been identified. Information is being compiled 2.2.4 to include in the operation or owners manual.
- **Task 4: Site installation and Data Collection of Site 2** – 2.4.1 the second site was included into one permit with one site plan. This site has had site preparations made for the next 14 GRIDbots to be installed.
- Reporting continues to meet the requirements under Task 6.

Section II: Problems/Solutions

Problem(s) Identified: Report anticipated or unanticipated problem(s) encountered and its effect on the progress of the project

- a) During the initial tests of the data collecting system for HARC, we discovered some unexpected hurdles in getting usable data getting through to HARC, requiring some additional resources from the software and firmware vendors.

Proposed Solution(s): Report any possible solution(s) to the problem(s) that were considered/encountered

- a) GRIDbot and HARC have identified solutions and revisions that will be needed to bridge the information and provide the data as planned.

Action(s) Conducted and Results: Describe the action(s) taken to resolve the problem(s) and its effect

- a) Over the last few days we believe we have resolved these problems. A revision to the data collection tools provided to HARC have been made and will be fully tested in the field in early August.

Section III. Goals and Issues for Succeeding Period:

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

- Security cameras installation has been completed, but has required some additional wiring and recording device to support the security system. It is expected to be completed and operational before mid-August.
- COH has received official notification that funds are available for the RFP and lease of additional cars to support this project. We anticipate they will release the bid early in August. We will determine our installation for Phase 2 to precede the purchase of these additional cars.
- The Mayor's Office is still working on a press event announcing the Phase 1 installation.
- Manufacturing and assembly of 14 stations required for Phase 2 will be completed in early August. Plans for the Phase 2 installation will be finalized at that time.
- Modifications to the data collection (software and firmware) and process of sharing this information with HARC will be fully tested. Station and vehicle data will be collected and interim data modeling will be completed by HARC in August.
- Troubleshooting instructions and basic training will be provided for the COH security staff and maintenance staff that work in the garage, as well as Fleet Management Staff.
- GRIDbot will finalize installation diagrams and materials, and establish best practices and relative costs for future projects.
- GRIDbot will work with Good Company to develop a City of Houston owner's manual that includes installation, operation and electrical drawings.
- Data collection will continue on all vehicles with access to GRIDbot chargers. HARC will determine what information is available and whether there will be additional need for on-board data loggers.
- Continued reporting of progress.

Date: 8/08/11

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.*