

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

<b>Contract Number:</b>	582-11-11141-3264		
<b>Grantee:</b>	GRIDbot, LLC		
<b>Report for the Monthly period:</b>	6/09/2011- 7/08/2011	<b>Date Submitted:</b>	7/08/11

**Section I. Accomplishments**

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

- In June, May 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.
- The Phase 1 city electrical inspection was passed on June 2, which included the transformer and two panels which will support both Phase 1 & 2 installations. This (green slip attached) allows us to power the first 14 stations.
- GRIDbot installed updated firmware and completed all beta testing of the charging stations prior to vehicle assignment to the centralized parking area.
- COH maintenance staff has the restricted parking and electric charging signs and will install the signs for the Phase 1 location. All necessary signs were purchased for both the Phase 1 and Phase 2 installations (template artwork attached).
- HARC completed the data specifications and data collection processes. Communications testing has been successfully completed between HARC and GRIDbot. One vehicle data monitor has been purchased. Access to the Nissan's onboard systems will determine what information can be obtained from the vehicles themselves.
- GRIDbot worked with the software vendors to implement all necessary changes or modifications.
- Contractors installed 30 wheel-stops for Phase 1 and will be installing the remaining 28 wheel-stops for Phase 2 in July.

- The first two Nissans were delivered to the City of Houston on June 29th. Four of the PHEV Prius' have been reassigned to the centralized parking area. Charging data will begin to be collected immediately.
- Educational materials have been developed, printed, and provided to the Fleet Management Staff, to be kept in the glove box of all vehicles with access to the GRIDbot chargers. Materials specific to Level-1 and Level-2 charging are to be provided to the appropriate cars.
- Electric charging key fobs (GRIDkey's) have been programmed to each specific vehicle – with records kept by VIN and Fleet number. These will be distributed to the vehicles as they are assigned to the centralized parking area.
- Troubleshooting instructions and basic training has been developed for the COH security staff and maintenance staff that work in the garage. GRIDbot Reset Keys have been programmed for their use. In-service training for various department staff will be held in early July.

*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.
- 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.
- 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*

City of Houston has delayed some decisions regarding the fleet management software and the specific logos for the project, due to the slow acquisition of vehicles. They are likely to use a key/storage system rather than the proposed RFID access for the vehicles. Budget for these systems have been delayed until FY 2012, which begins in July. No decision has been made on this or on the on-line reservation system.

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

We continue to stay in regular contact with the COH fleet staff.

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

We have adapted to the slow introduction of vehicles, using key fob RFID's for charging and instructional placard (specific to either level-1 or level-2) for the vehicles that will remain in the glove box. The charging interface has been simplified so that little or no user/driver training will be required.

### 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*

- The continued communications between COH and Nissan indicate that there will be more cars available after July 1. The COH is drafting a bid request that will go out as soon as possible in July, to assure additional vehicle procurement as soon as they are available.
- The Mayor's Office hopes to plan a press event announcing the Phase 1 installation late in July.
- Security cameras installation was delayed, but will be installed in early July.
- Manufacturing and assembly of 14 stations required for Phase 2, is expected to be complete and delivery by the end of July.
- The 28 wheel-stops for Phase 2 are scheduled to be installed in July.
- COH Fleet staff has agreed to get additional PHEV vehicles assigned to the fleet, to allow us to collect larger quantities of data.
- 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. This In-service training for various department staff will be held in early July.
- 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 through July 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: 7/08/11*

---

*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.*