NJ COMPRESSED NATURAL GAS REFUSE TRUCKS, SHUTTLE BUSES AND INFRASTRUCTURE

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May 17, 2012

Project ID # ARRAVT051

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Overview

Timeline
- Start date: Dec. 15, 2009
- Complete date: Dec. 14, 2013

Budget
- Federal Share: $14,997,240
- Non-federal share: $31,672,444
- Total Project: $46,669,684
Overview – con’t

Partners

- Atlantic County Utilities Authority
- Waste Management of NJ
- Clean Energy
- Atlantic City Jitney Association
- Central Jersey Waste & Recycling
- Blue Diamond Disposal
- Suburban Disposal
- The Parking Spot Group
- City of Linwood
- Giordano Companies
- Casworth Enterprises
Objectives

- Stimulate the economy by creating and preserving green jobs
- Increase visibility of the DOE’s role in support of alternative fuel deployment projects
- Reduce tailpipe emissions in heavy-duty fleet applications as natural gas refuse trucks and shuttle buses are deployed
- Reduce oil dependency by having fueling stations that provide a domestically produced fuel;
Educate the public about the “mainstream availability” and other benefits of using a clean, domestically produced fuel as more vehicles are sold and owners operate their vehicles throughout the region.

Reduce more than 900,000 pounds of identified criteria pollutants and greenhouse gas emissions annually.

Displace approximately 2 million gallons of petroleum per year as a direct result of this project.
The NJCCC has assembled and is managing a public/private partnership which is utilizing DOE ARRA grant funds to offset the cost of:

- Deployment of approximately 300 natural gas vehicles (NGVs) in refuse and shuttle bus fleets operating across the state of New Jersey.
- Design and construction of 6 Compressed Natural Gas fueling stations at various locations across the state.
- Public outreach and education, and for significantly increased visibility of alternative fueled vehicles.
Technical Accomplishments

- NEPA Categorical Exclusions have been approved for all 6 CNG Station sites as well as for vehicle purchases.
- Design, construction and operation contracts have been awarded for all of the stations.
- Three stations are operational, two will be opened shortly, and one is in the local permitting process.
Technical Accomplishments

Camden Site

- Twin 330 SCFM compressors (660 SCFM total)
- Two Public Access, Dual Hose Fast-Fill Dispensers with card readers to accept major credit cards
- 88 time-fill CNG posts for WM CNG vehicles
ACUA CNG Station

- Two ANGI JGQ/2, 3-stage, 150 horsepower compressors capable of providing 456 SCFM each
- Two Dual Hose Fast-Fill Dispensers (4 Fueling Points), two Fuel Card Readers, a 200 kW backup diesel generator
- Has dispensed almost 500,000 GGE since opening in Oct 2010.
Two Dual Hose Fast-Fill Dispensers (4 Fueling Points), Two Fuel Card Readers, Two 1000 SCFM Compressors, 14 Diesel Gallons a Minute, 863 Diesel Gallons an Hour
Technical Accomplishments

Trenton Site

- Currently a 20 Truck Time-Fill Station
- This station will be upgraded to a hybrid station, which will have both fast-fill and time-fill capabilities
- All of the CNG trucks fuel at the same time over 6-8 hours
- CJW serves Hamilton Township residential contract, which was the first in NJ to mandate alternative fueled refuse trucks
Technical Accomplishments

M T. ARLINGTON S I T E

- 40 Truck Time-Fill Station with plans for a future fleet access fast-fill, became operational this past December
- Deployed 14 new CNG Autocar’s, with several more on order, All of the CNG trucks can fuel at the same time over 6-8 hours
Fleet Access Fast-Fill Station will be operational this spring, Four Dual Hose Fast-Fill Dispensers (8 Fueling Points), Two Fuel Card Readers, Two 500 SCFM Compressors, 8 Gasoline Gallons a Minute, 480 Gasoline Gallons an Hour
Deployment Accomplishments

- 35 CNG garbage trucks from four fleets have been deployed.
- 202 CNG shuttle buses from 2 fleets have been deployed.
The NJCCC has sub-recipient agreements with 11 public and private sector project partners.

Project Collaborators have included: the NJ Board of Public Utilities, the NJ Department of Environmental Protection, NJ Transit, the Federal Transit Administration, the Port Authority of NY/NJ, each of NJ’s public gas utilities.
Future Work

- Order and deploy additional NG vehicles
- Continue construction activities for new stations
- Continue to provide training for fueling and maintaining NGVs
- Continue to provide educational outreach workshops for both the public and for policy makers, and station marketing campaigns
Summary

- NJ Clean Cities Coalition is leading a public/private team to implement the first large-scale deployment of alternative fuel vehicles and infrastructure in NJ.
- Highly visible vehicle fleets of trash collection operators and shuttle bus companies being converted to CNG.
- Six CNG stations to be built which will ultimately be available to additional fleets and the public.
- Project is stimulating significant interest from other public and private fleets and policy-makers in CNG and other alternative fuels.