



TUG Tidbits

Newsletter of the Natural Gas Transit (& School Bus) Users Group

April 2009

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DOE Announces Availability of Energy Block Grants

The Department of Energy (DOE) has released a funding solicitation for the Energy Efficiency and Conservation Block Grant Program. The program received \$3.2 billion in funding under the American Recovery and Reinvestment Act of 2009 (ARRA, PL 115-5). This program provides funding to state and local governments, Indian tribes, and U.S. territories to improve energy efficiency and reduce energy use and fossil fuel emissions. The solicitation is for the distribution of \$2.7 billion in formula grant

funding. The DOE will issue a separate solicitation to address the remaining funding and will grant competitive awards of nearly \$455 million.

Even though this is a formula grant program (i.e., non-competitive), recipients must still apply. State applications are due **May 26**. City, county, and Indian tribe applications are due **June 25**. Although Congress previously authorized this program, no money had been appropriated for it and no guidelines had been issued – until now. DOE's Web site and the funding solicitation now provide some guidance on the types of projects that qualify for funding. Specifically, transportation projects qualify if they increase efficiency or conserve energy. The solicitation and guidance do not explicitly say whether alternative fuel transportation projects qualify for funding, but we believe they do – particularly if the projects involve public transportation. DOE is specifically interested in funding projects related to the reduction and capture of methane and greenhouse gases generated by landfills or similar waste-related sources. Thus, projects involving capturing and using landfill gas for NGV (Natural Gas Vehicle) use should qualify for funding.

The funding solicitation notice for this offering is: DE-FOA-0000013. For more information on this program, visit DOE's Web site here: <http://www.eecbg.energy.gov/>.

Louisiana City to Buy Natural Gas Buses

The city of Shreveport, Louisiana, announced that it will buy five new CNG (Compressed Natural Gas) buses with some of its \$4.7 million of federal economic stimulus money. Sportran Director Gene Eddy said CNG buses will be cheaper to run than the diesel or hybrid buses the city bought three years ago. They also will be quieter. The new buses are expected to be in service sometime next year. The city will also use stimulus money for a new fueling station. Source NGVAmerica

Tulsa Schools to Repower 140 Buses to CNG

The Tulsa Public School District announced that it will repower 140 diesel buses — about half of its fleet — to CNG with Emission Solutions engines over the next year. "The bottom line is we will be paying for the conversion with the savings from the fuel costs," said Jim Spear, chief operations officer. To capitalize on the federal vehicle income tax credit, the district has an innovative plan. First, the school district will sell the buses in groups of four to 10 for fair market value to Joe Cooper Ford of Tulsa. Second, the dealership will complete the repowers and sell the buses to an Oklahoma-based firm called NGV Fleet Partners, LLC. Finally, the district will lease the buses from NGV Fleet Partners, with an option to purchase the buses back for a discounted rate after five years.

"We've been working on the whole idea for about a year," Spear said. "We went through all the legal hoops to make sure we could do this and then we had to consider the fuel prices." The sale of the school buses was necessary because tax-exempt entities such as school districts and municipalities cannot qualify for the estimated \$18,000 per bus in federal tax credits currently available for CNG conversions. Because NGV Fleet Partners can receive the tax credits, the district will be getting its buses converted for almost \$2.5 million less than it would have cost for the repowers directly. Source NGVAmerica

FTA Notice Contains Details on Stimulus Funding Grants

The Federal Transit Administration (FTA) issued a notice detailing plans for distributing \$8.4 billion in new funding for transit capital improvements. The new funding was provided by Congress as part of the American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5). Most of the funding for capital improvements, about \$6 billion, will be apportioned by formula grants. The largest portion of this new funding, \$4.3 billion, goes to large urban areas with populations of one million or more. In future notices, the FTA will address funding not apportioned by formula (i.e., competitive and discretionary) grants.

The formula grant apportionments require the submission of funding applications. The FTA notice provides extensive details on the requirements for these submissions. It is absolutely essential that areas qualifying for this funding apply quickly. Grant applications must be submitted by **July 1, 2009**. ARRA requires that at least 50% of the funds apportioned must be obligated by September 1, 2009. After that date, FTA will withdraw and reallocate any portion of the 50% not obligated. The FTA considers the funds obligated when an application for funding is approved. By March 5, 2010, all funds apportioned to an area must be obligated or FTA will withdraw them and reallocate them to other areas that have not had any funds withdrawn. These areas will then have until September 30, 2010 to obligate the funds.

Given the very tight time constraints, applications for funding most likely will include projects local and state authorities have already selected. This does not mean new projects can't be proposed, but it does mean that the window for such projects is extremely tight. FTA's notice also specifies that projects must be listed in an approved Metropolitan Transportation Plan, Transportation Improvement Plan, or Statewide Transportation Improvement Plan. Projects already under contract or projects that bids have already been awarded can also use the funds. Funds, however, cannot be used to replace funds already obligated under an existing FTA grant. The federal share for projects funded with this new money can be as high as 100%.

For purposes of our industry, funding can be used for acquiring buses, rehabilitating buses, remanufacturing buses, leasing equipment or facilities, preventative maintenance of facilities, or acquiring or constructing facilities. A portion also can be used for administration. Funds cannot be used for operational expenses. Grant recipients can include metropolitan planning organizations, transit authorities, or state governors.

Persons interested in advancing natural gas projects should immediately reach out to local transit agencies and metropolitan planning organizations. Something to consider when approaching these organizations is whether existing projects include language that is flexible enough to accommodate additional bus acquisitions or a larger planned facility. There also may be ways to modify or expand projects that are already in the pipeline to accommodate natural gas buses, vehicles, or infrastructure. The FTA announcement also says that grantees can save time in some cases by piggybacking on existing contracts or partnering with other grantees on joint purchases.

You can view the FTA notice here: <http://edocket.access.gpo.gov/2009/pdf/E9-4745.pdf>. Source NGVAmerica

NGVs Plays Role in Cleaning the Air in Seoul

The Korean Research Institute of Public Health and Environment announced that air quality in Seoul last year improved significantly. The switch from diesel to natural gas transit buses has played a key role. Specifically, the yearly average of PM10 dropped 9.8 % from 2007 (the lowest since recordings began in 1995) and PM2.5 decreased by 13.3% (the lowest level since the monitoring of that pollutant started in 2003). “The cleaner air reflects falls in air pollution from diesel vehicles,” a city official said. During the last five years, the city has replaced 70% of its 7,748 urban buses with CNG buses. CNG use will extend to local shuttle buses, garbage trucks, and door-to-door delivery vehicles. Diesel vehicles will have to go through a pollution test or will be banned from operating in the city. Source NGVAmerica

More Natural Gas Buses for the Philippines in 2009

In 2009, the Philippine Department of Energy plans to increase the number of CNG transit buses operating in Manila and two nearby provinces from the current total of 24 to at least 185. The department has renewed the accreditation of seven operators of CNG buses and issued four certificates of authority to import buses. The department plans to accredit more bus operators to participate in the commercial phase of the government’s Natural Gas Vehicle Program for Public Transport, a seven-year program. At present, only Shell Companies in the Philippines offers CNG to buses, which is half the price of diesel. Source NGVAmerica

Stockholm Plans Expansion of Biomethane Bus Fleet

After considering the most environmentally friendly and economical biofuels on the market, the company responsible for public transport in the city of Stockholm, Sweden (Storstockholms Lokaltrafik, or SL), has announced it will have 80 buses powered by biomethane by the end of 2009. SL is greatly concerned about the environmental impact of their vehicles and has implemented a policy of long-term reduction in emissions of carbon dioxide. As part of a European project, Biogasmax, the company introduced its first biogas bus in 2003. Today, there are 52 units powered by natural gas or bioethanol. An analysis by SL of a range of alternative fuels showed that biomethane is the most efficient biofuel. The study concluded that the use of biomethane as a fuel for public transport vehicles establishes a clearly attractive closed loop for the environment. This means that the organic waste produced by the people of the city adequately supplies the resources necessary for producing fuel for its own public vehicles. Therefore, SL announced the expansion of buses using biogas from 80 by late 2009 to 500 over the next four years. Today, the biogas buses are running in downtown Stockholm, but the increase in buses will allow them to operate in the suburbs as well. Source NGVAmerica

New TUG Manager

Following the retirement of Hank Seiff at the end of January, John Lapetz has now taken the lead in handling TUG related events. John enters this role following 35 years at Ford Motor Company (28 of those years in the field of alternative fuels and energy for transportation, including many working with natural gas). You can reach John at 248-924-3120 or jlapetz@cleanvehicle.org.

Petroleum Reduction: 10,233 Toyota Priuses or 1 Hybrid Bus?

Ever wonder what impact the Transit Fleet has when it comes to reducing the petroleum usage in the real world? Well you're not alone. Take a look at this analysis based on publicly available information.

**Comparison of the Efficiencies of Natural Gas and Diesel Hybrid Buses
(Using the Toyota Prius as a Benchmark)**

	Natural Gas Bus	Diesel Hybrid Bus
Fuel saved per useful life*	216,000 gal	43,200 gal
How many Priuses to equal fuel savings of each bus	45 Priuses	9 Priuses
How many buses to achieve total Prius benchmark	4,013 buses	20,065 buses
How many buses currently on the road (APTA-2007)	8,303 buses	1,133 buses
Current fuel savings	1,793,448,000 gal	48,945,600 gal
Equivalent number of Priuses to achieve fuel savings	374,949 Priuses	10,233 Priuses

Benchmark - Toyota Prius

Total Number of Toyota Priuses sold thru 2007 (IRS)	181,221 Priuses
Fuel saved during useful life (NREL analysis using VISION model)	866,812,628 gal
Fuel saved per Prius during useful life	4,783 gal

Assumptions

Bus useful life = 12 years

Petroleum gal = diesel gal = gasoline gal

*Calculations:Conventional Bus Fuel Usage and NG Bus Fuel Savings

45,000 mpy X 12 years = 540,000 total lifetime miles
 divided by 2.5 mpg = 216,000 lifetime gallons of diesel fuel used
 Lifetime fuel savings of a NG bus= 216,000 gal
 (Assuming a dedicated NG bus uses no petroleum)

Diesel Hybrid Bus Fuel Savings

45,000 mpy X 12 years = 540,000 total lifetime miles
 divided by 3.125 mpg (2.5 X 1.25) = 172,800 lifetime gallons of diesel fuel used
 (Assuming 25% mpg improvement over conventional bus)
 Lifetime fuel savings of a diesel hybrid bus= 43,200 gal

Please send all questions, comments, requests for information, etc. to John Lapetz at 248-924-3120 or jlapetz@cleanvehicle.org. See the TUG Web site at http://www.eere.energy.gov/afdc/vehicles/natural_gas_users.html and the TUG meeting archives Web site at http://www.afdc.energy.gov/afdc/vehicles/natural_gas_users_meeting_archives.html