

TUG Tidbits



Newsletter of the Natural Gas Transit Users Group

September, 2006

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TUG Meeting October 24-26 – includes FREE Cylinder Inspector Training and Certification Test

The next meeting of the Natural Gas Transit Users Group (TUG) will be hosted by the Los Angeles County MTA, October 24-26 in Los Angeles. This three-day meeting includes:

- Two-day CNG Cylinder Inspector Training Course and Certification Testing
- Tour of LACMTA CNG Bus Facilities, and
- Tour of SCI's CNG Cylinder Manufacturing Facility and Test Lab

If you received this newsletter, you have also received a detailed meeting announcement, response form, and agenda. We look forward to seeing you in L.A.! Contact Hank Seiff at hseiff@cleanvehicle.org or 703-534-6151 if you have any questions:

There is no charge to attend TUG meetings!



New Natural Gas Bus Purchases

Santa Cruz, CA has requested \$6,800,000 from Caltrans (CA DOT) to convert 40 diesel engines to CNG in 2007, as required by the California Air Resources Board. The buses were purchased with the intent to convert at the first opportunity. Approval of this new project will allow SCMTD to meet fleet emission limits without reducing public transit service. (Source: The Santa Cruz Sentinel and a July memo to CA DOT)

El Paso, TX: Sun Metro Mass Transit Department of El Paso, TX ordered 35 forty-foot low-floor buses from North American Bus Industries, Inc. (NABI) in July. These new compressed natural gas (CNG) 40-LFW low-floor buses will serve as replacements for a 15-year-old fleet of standard-floor diesel buses. The buses are scheduled for delivery in March 2007. (Source: NABI Press Release 8-1-06)



Los Angeles International Airport: North American Bus Industries, Inc. (NABI) recently completed delivery of 12 CNG buses to Los Angeles World Airports, the operating body of Los Angeles International Airport (LAX). These stylized, articulated 60-BRT (bus rapid transit) buses will be the first articulated vehicles for passenger service at LAX, replacing a 22-year-old fleet of diesel buses. (Source: NABI Press Release 8-25-06)

Denver: UQM Technologies has received an order from the Denver Regional Transportation District (Denver RTD) for UQM generators and motor controllers to provide an additional 10 CNG-Hybrid Electric mall shuttle buses. Denver RTD already has seven such buses operating. The series hybrid-electric MallRide shuttle buses are powered by a CNG-fueled 2.5 liter Ford industrial engine that operates at 2,200 RPMs, turning the UQM-supplied generator to produce electricity to recharge the bank of batteries that power the shuttle. (Source: NGV America Member Newsletter 6-9-06)

New Delhi, India:- "There will be soon a transport service with buses running on methane which will join Haryana with several areas of New Delhi.... With the introduction of the new service, which is estimated to have 150 new buses running on methane by the end of the year, Haryana highways will improve connectivity." (Source: NGV Communications Group 8-10-06)

Qing Dao City, China "has launched 40 CNG buses on city routes. Between now and 2008, when the Olympic sailing events will be held in the city, the Group will be investing 180 million Yuan (\$US 22.5 million) putting a total of 856 CNG vehicles on the road. 520 of which will be buses with other vehicles making up the balance, including 120 gasoline vehicles slated for conversion. (Source: CNGV via NGV Global 7-26-06).

South Korea: The South Korean government has invested over \$800 million since 2000 in the "Blue Corridor Project," to enhance CNG and LNG use in public trans-

portation. The goal is to replace 23,000 buses operating in major cities with natural gas. As of April, there were a total of 10,026 CNG buses in the country. In addition, the government is supporting a major expansion of LNG use. (Source: NGV America Member Newsletter 7-28-06).

San Diego MTA Experiments with CNG Hybrid Bus

Fleets and Fuels (8-14-06) reports that the San Diego Metropolitan Transit System is contributing a 40-foot CNG New Flyer Bus to a project building a demonstration CNG-electric hybrid transit bus. A Cummins Westport 5.9 liter B Gas Plus engine will replace the present 8.3 liter engine and will power the bus through an ISE electric drive in a series hybrid configuration. Both ultracapacitors and batteries are being considered to store electric power. “The project, which will eventually see vehicle trials in the Los Angeles area as well as in San Diego, has the backing of the South Coast Air Quality Management District, the San Diego Air Quality Control District and the California Air Resources Board, as well as San Diego Metro and ISE.”

While Another California Transit Agency Turns Back from Gasoline-Electric Hybrids to Natural Gas

In response to poor highway performance by its hybrid gasoline-electric buses, the city of Elk Grove, CA is purchasing 10 new CNG buses, scheduled for delivery in the second half of 2007, and is considering converting nine diesel buses to CNG.

The city has found that the hybrids, which work well under stop-and-start conditions, don't perform well on highway routes, where they have trouble accelerating into the fast lane and the air conditioning fails in very hot weather. Only five of the city's 21 hybrids are now used on freeways. (Source: CalNGV News 8-21-06)

Natural Gas \$1.56/dge, Diesel \$2.44/gallon (both before tax)

Natural gas is the lowest-cost vehicle fuel in the nationwide averages listed in the August 24 “Alternative Fuels Index.” Of course, there's also a \$0.50/gallon federal CREDIT for natural gas fuel which takes effect in October (you don't have to be a tax-paying entity to get the credit, see www.cleanvehicle.org and click on “Federal Tax Incentive Summary Sheet” for more information).

Granted, natural gas buses cost more than diesel buses and natural gas buses may get poorer mileage than diesel buses. But diesel fuel prices will rise with ultra-low sulfur diesel being required this Fall and diesel engine fuel economy will fall with the new emission requirements, so natural buses look like both the clean AND more economical alternative.

Meeting Presentations from 2005 added to TUG Web Site

You can now download the presentations from the October 2005 TUG meeting in Lawrenceville, GA, along with November 2004 and April 2003 TUG meeting presentations from the TUG-Members Only Site at <http://www.nrel.gov/extranet/vehiclesandfuels/tug/>. Contact Hank Seiff (703-534-6151, hseiff@cleanvehicle.org) if you need the member login and password to access the site. NREL's Natural Gas Transit Users Group website at <http://www.nrel.gov/vehiclesandfuels/ngvtf/tug.html> is open to everybody.

Please send all questions, comments, requests for information, etc. to Hank Seiff at 703-534-6151 or hseiff@cleanvehicle.org. The photo of an LA Metro Rapid Transit CNG bus in the heading was provided by the Los Angeles County Metropolitan Transit Authority. The photo of the El Paso Sun Metro bus is from a NABI press release. The bus cylinder inspection photo is courtesy of AFV International.