

From: David Tomzik <David.Tomzik@Pacebus.com>
Sent: Wednesday, April 04, 2012 9:24 AM
To: Holly Ostdick
Cc: Ross Patronsky; Doug Ferguson; Lorraine Snorden
Subject: Pace Diesel Engine Retrofit Request

Holly:

As a part of Pace's continuing efforts to reduce emissions and improve fuel economy, Pace had selected an emerging technology to be an important part of the improvements requested in the FY 2012-2016 CMAQ program applications. Pace had chosen to have a Syngas generator which was developed by NextGen to be installed along with an improved emission after treatment system. During the course of developing this project the company which owned the rights to the technology lost their financial backing and eventually went into receivership. As a result the device referred to as a Syngas generator is not available as part of an approved emissions device for this project. The original proposal we were retrofitting the existing engines with improved mechanical components and syngas DPF. Our intent was to add the syngas DPF at time of midlife engine replacement.

As a result, Pace proposes a revision to our original program with a revised proposal to replace the current vehicle engine with an upgraded model, engine electronic control programing and installing a Diesel Particulate Filter with Diesel Oxidation Catalyst. Pace plans to replace the current 2006 model year engines with upgraded 2007 model year. While the 2007 is not the latest model available it is the latest that we can install in the bus without significant and very expensive structural changes to the vehicle.

This is most effective treatment to reduce the bus emissions we have been able to develop since the syngas DPF has been removed from the market. This change will reduce NOx exhaust emissions and increase fuel economy reducing NOx emissions from 2.5g/hp-hr to 1.2g/hp-hr.

Pace is requesting approval for this change on the three project years within the current FY 2012-2016 program. We estimate the new proposal can be accomplished within the same cost of the original scope with no reduction in the number of buses. Our grant submittal with FTA is pending approval of this scope revision.

ID # DR13123720 Transit Diesel Engine Retrofits – 2012 CMAQ funded \$3,060,000

ID # DR13123717 Transit Diesel Engine Retrofits – 2013 CMAQ funded \$3,060,000

ID # DR13123718 Transit Diesel Engine Retrofits – 2014 CMAQ funded \$2,280,000

We appreciate your and the CMAQ Project Selection Committee's consideration of this request. Please contact me with any questions.

Thanks,

David Tomzik
Manager, Long Range Planning
Pace Suburban Bus Service

Chicago Metropolitan Agency for Planning

CMAQ Cost Increase Analysis

TIP ID: **17-12-0003**

Description: **Pace - Transit Diesel Engine Retrofits 2012-2016**

Ranking Computation

	2012	2013	2014	2012 (requested)	2013 (requested)	2014 (requested)
Total PM Eliminated (Kg)	6,128	6,128	4566	13537	13537	10087
Cost	\$3,825,000	\$3,825,000	\$2,850,000	\$3,825,000	\$3,825,000	\$2,850,000
\$/Kg PM Eliminated	\$624	\$624	\$624	\$283	\$283	\$283
Rank	6	6	6	6	6	6

Project Expenses

	Federal Share	Total	Federal %	Basis
2012	\$ 3,060,000	\$ 3,825,000	80.0%	Approved Projects
2013	\$ 3,060,000	\$ 3,825,000	80.0%	Approved Projects
2014	\$ 2,280,000	\$ 2,850,000	80.0%	Approved Projects

FY 2012-2016 CMAQ Program

Application Number	Sponsor	Description	2012-2016 total	\$/Kg PM Eliminated
DR13123744	Metra	Metra UP Automatic Engine Start-Stop System	\$368,000	\$18
DR13123743	Metra	Metra BNSF Replace Main Engine Drive Generator	\$920,000	\$28
DR13123746	IEPA	Chicago Area Clean School Bus Initiative	\$5,000,000	\$61
DR01123614	CTA	Purchase a ZF TopoDyn Program	\$892,800	\$124
DR13123843	IEPA	Illinois Clean Diesel Engine Repowers	\$5,000,000	\$115
Transit Diesel Engine Retrofits - 2014			\$2,280,000	\$283
Transit Diesel Engine Retrofits - 2013			\$3,060,000	\$283
Transit Diesel Engine Retrofits - 2012			\$3,060,000	\$283
DR13123718	Pace	Transit Diesel Engine Retrofits - 2014	\$2,280,000	\$624
DR13123717	Pace	Transit Diesel Engine Retrofits - 2013	\$3,060,000	\$624
DR13123720	Pace	Transit Diesel Engine Retrofits - 2012	\$3,060,000	\$624
DR13123719	Pace	Transit Diesel Engine Retrofits - 2016	\$0	\$624
DR13123761	Pace	Transit Diesel Engine Retrofits - 2015	\$0	\$624
DR13123745	Metra	Metra MD Locomotive Repowers	\$4,000,000	\$240
DR01123603	University of Illinois-Chicago	Emissions Reduction Program for UIC Fleet	\$0	\$446
DR01123606	CTA	Retrofit of Electronic Engine Cooling Fan/System	\$6,244,000	\$1,336
DR05123739			\$0	No Benefit
DR05123740			\$0	No Benefit
DR05123741	Berwyn	Public Works Fleet Vehicle Replacement 1989	\$0	No Benefit
	Berwyn	Public Works Fleet Vehicle Replacement 1991	\$0	No Benefit

