the APEA; and (5) identify those issues that require a detailed analysis, as well as those issues that do not require a detailed analysis.

**Procedures**

The meetings will be recorded by a stenographer and will become part of the formal record of the Commission proceeding on the project. Individuals presenting statements at the meetings will be asked to sign in before the meeting starts and to clearly identify themselves for the record.

Individuals, organizations, and agencies with environmental expertise and concerns are encouraged to attend the meetings and to assist the staff in defining and clarifying the issues to be addressed in the APEA.

**David P. Boergers,**

*Secretary.*

[FR Doc. 99–4788 Filed 2–25–99; 8:45 am]

**BILLING CODE 6717–01–M**

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

### Notice of Application Tendered for Filing with the Commission and Soliciting Additional Study Requests

February 22, 1999.

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection:

a. *Type of Application*: New Major License.

b. *Project No.*: 2009–018.

c. *Date filed*: January 28, 1999.

d. *Applicant*: Virginia Electric and Power Company.

e. *Name of Project*: Roanoke Rapids and Gaston Hydropower Project.

f. *Location*: On the Roanoke River, near the town of Roanoke Rapids, North Carolina, Northampton and Warren Counties North Carolina.

g. *Filed Pursuant to*: Federal Power Act, 16 USC 791(a)–825(r).

h. *Applicant Contact*

Mr. Ken Baker, Virginia Power Company, 5000 Dominion Boulevard, Glenn Allen, VA 23060, (804) 273–3257.

i. *FERC Contact*: Any questions on this notice should be addressed to Monte TerHaar, E-mail address monte.terhaarferc.fed.us, or telephone 202–219–2768.

j. Deadline for filing additional study requests: 60 days from the date of this notice.

All documents (original and eight copies) should be filed with:

David P. Boergers, Secretary, Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426.

The Commission's Rules of Practice and Procedure require all intervenors filing documents with the Commission to serve a copy of that document on each person whose name appears on the official service list for the project. Further, if an intervenor files comments or documents with the Commission relating to the merits of an issue that may affect the responsibilities of a particular resource agency, they must also serve a copy of the document on that resource agency.

k. Status of environmental analysis: This application is not ready for environmental analysis at this time. Also, the Commission is *not* requesting motions to intervene at this time. The Commission will publish a separate notice requesting motions to intervene after it is determined all relevant studies are completed.

l. Description of the Project: The Project consists of the Gaston Development and Roanoke Rapids Development located on the Roanoke River, immediately downstream from the John H. Kerr Dam and Reservoir operated by the U.S. Army Corps of Engineers.

The Gaston Development is located 34 miles downstream of Kerr Dam at river mile 145.5, and consists of: (1) a 3,600-foot-long and 105-foot-high concrete and earth dam; (2) a 550-foot-long concrete ogee spillway with 11 steel radial gates 40 feet wide by 38 feet high; (3) a 20,300-acre reservoir, 34 miles long which maintains a water surface elevation between 200 and 203 feet msl, a total volume of 450,000 acre-feet, and flood storage capacity of 63,000 acre-feet; (4) a concrete and masonry powerhouse, service bay, and unloading bay, about 425 foot long; (5) 4 turbines (3 vertical shaft fixed blade and 1 vertical shaft Kaplan turbine) with a total installed capacity of 225 megawatts, and a maximum hydraulic capacity of 44,000 cfs, producing an average of 336,362 megawatt hours annually, and a maximum dependable capacity of 225 MWH; and (6) four 14.4–kV generators connected to two 230-kilovolt transformers; and other appurtenances.

The Roanoke Rapids Development is located 42 miles downstream of Kerr Dam at river mile 138, and consists of: (1) a 3,050-foot-long and 72-foot-high concrete gravity dam; (2) a 1,133-foot-long concrete ogee spillway with 24 spillway bays each 44 feet wide with steel gates 38 feet wide, and one skimmer bay 25 feet wide; (3) a 4,600-acre reservoir, 8 miles long which has a maximum drawdown of 5 feet for generation storage, a total volume of 77,140 acre-feet, and storage capacity of 20,640 acre-feet; (4) a concrete and masonry powerhouse and service bay about 406 feet long; (5) 4 Kapland turbines with a total installed capacity of 104 megawatts, and a maximum hydraulic capacity of 20,000 cfs, producing an average of 336,408 megawatt hours annually, and a maximum dependable capacity of 99 MWH; and (6) four 14.4–kV generators connected to two 110-kilovolt transformers; and other appurtenances.

m. Locations of the application: A copy of the application is available for inspection and reproduction at the Commission's Public Reference Room, located at 888 First Street, NE, Room 2A, Washington, DC 20426, or by calling (202) 208–1371. The application may also be viewed on the Internet at http:/www.ferc.fed.us/online/rims.htm (call 202–208–222 for assistance). A copy is also available for inspection and reproduction at the address in item h above.

n. With this notice, we are initiating consultation with the State Historic Preservation Officer as required by § 106, National Historic Preservation Act, and the regulations of the Advisory Council on Historic Preservation, 36 CFR at § 800.4.

**David P. Boergers,**

*Secretary.*

[FR Doc. 99–4789 Filed 2–25–98; 8:45 am]

**BILLING CODE 6717–01–M**

## ENVIRONMENTAL PROTECTION AGENCY

**[FRL–6304–9]**

### Retrofit/Rebuild Requirements for 1993 and Earlier Model Year Urban Buses; Approval of a Certification of Equipment

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice of certification of equipment.

**SUMMARY:** The Agency received an application with cover letter dated December 8, 1997 from the Detroit Diesel Corporation (DDC) with principal place of business at 13400 Outer Drive, West, Detroit, MI 48239–4001 for certification of urban bus retrofit/rebuild equipment pursuant to 40 CFR 85.1404–85.1415. The equipment is applicable to 1985 through 1993 model year federal and California certified 6V92TA DDEC engines originally

manufactured by Detroit Diesel Corporation (DDC). This includes all DDEC II engines, DDEC I engines (1985 through 1987), and methanol-fueled engines (manufactured from 1991 through 1993). On March 20, 1998 EPA published a notice in the **Federal Register** (63 FR 13662) that the notification had been received and made the notification available for public review and comment for a period of 45 days. EPA has completed its review and the Director of the Vehicle Programs and Compliance Division has determined that it meets the requirements for certification, conditioned on the terms discussed below in section IV. The effective date of certification is discussed below under **DATES**.

The equipment complies with the 0.10 gram per brake horsepower-hour (g/bhp-hr) particulate matter (PM) standard for the engines for which it is certified (see below). Certification of the DDC equipment, as it applies to engines of model years 1985 through 1993, is conditioned upon DDC complying with the terms discussed below in section IV.

**ADDRESSES:** The DDC application, as well as other materials specifically relevant to it, are contained in Public Docket A–93–42, Category XXIV–A, entitled ''Certification of Urban Bus Retrofit/Rebuild Equipment''. Docket items may be inspected from 8:00 a.m. until 5:30 p.m., Monday through Friday. As provided in 40 CFR part 2, a reasonable fee may be charged by the Agency for copying docket materials.

**DATES:** Today's **Federal Register** notice announces the Agency's decision to certify the DDC equipment, as described below. The effective date of certification was established in a letter dated October 2, 1998, from the Director of the Vehicle Programs and Compliance Division to DDC Corporation. (A copy of the letter is in the public docket, which is located at the address noted above.) This certified equipment may be used immediately by urban bus operators, subject to the condition in Section IV.

**FOR FURTHER INFORMATION CONTACT:** Anthony Erb, Engine Programs and Compliance Division (6403J), U.S. Environmental Protection Agency, 401 M St. SW, Washington, DC 20460. Telephone: (202) 564–9259.

**SUPPLEMENTARY INFORMATION:**

## I. Background and Equipment Identification

In a notification of intent to certify signed December 8, 1997, DDC applied for certification of equipment under the urban bus program. The notification is clarified and the equipment further described in letters from DDC dated July 28, 1998, and August 20, 1998. The equipment is referred to as the DDC rebuild kit, and is applicable to 1985 through 1993 model year Detroit Diesel Corporation 6V92TA diesel engines equipped with Detroit Diesel Electronic Control (DDEC).

The notification states that the DDC rebuild kit is designed to update all electronically controlled DDC 6V92TA DDEC engines that are either 253 or 277 horsepower (hp). The DDC kit utilizes components from DDC's certified engine upgrade kit, modified fuel injectors, conversion to DDEC IV engine control system, and a converter/muffler (previously certified to reduce particulate matter by 25 percent and manufactured by either Engine Control System Ltd, Engelhard Corporation, or Nelson Industries).

The original test data provided with the certification was based on testing performed on an upgraded engine using a DDEC III system. In a letter dated July 28, 1998, DDC stated that since the kit was originally configured and tested, the DDEC IV system was released for all EPA certified on-highway Series 50 and 60 engines. DDC requested that the retrofit rebuild kits be modified to include the DDEC IV system. DDC stated that the DDEC IV system uses the same software as the DDEC III units so engine calibrations developed using the DDEC III system can be used in the DDEC IV system with no changes to the calibration. DDC stated that the DDEC IV system provides additional memory, increased processing speed and communication capability with the other vehicle/transmission computer systems and has no effect on engine performance or emissions. Based on the statements provided by DDC, EPA finds that the PM emission test results from testing performed using the DDEC III system presented in Table 1 below would not be affected by the use of the DDEC IV system in the retrofit kit. Additional discussion to the use of the DDEC IV system can be found in the response to comments section of this notice.

The equipment to be certified is included in three constituent kits. The three constituent kits included in this submission are as follows:

*Engine Rebuild Kit—Newly Manufactured Parts:* This kit is comprised of newly manufactured parts and consist of a gasket kit, air inlet hose, blower drive gear (2.05 to 1), blower by-pass valve assembly, cylinder kits (piston assemblies and cylinder liners), new electronic unit fuel injectors and DDEC IV conversion kits.

*Engine Rebuild Kit—Reliabilt® Parts:* This kit includes Reliabilt® remanufactured parts, including camshafts, blower assembly, turbocharger and head assemblies.

*Converter/Muffler Kits:* In order to provide the greatest flexibility to transit operators by providing several catalytic converter/muffler options, DDC plans to include the converter/mufflers provided by three suppliers: Engelhard Corporation, Engine Control Systems Ltd, and Nelson Industries. Transit operators will be able to select a converter/muffler from any one of the suppliers which will be packaged as a direct replacement for the vehicle muffler and which will accommodate the installation requirements of the various engine/vehicle combinations. Certification of the Engelhard CMX™ converter/muffler is described in a **Federal Register** notice of May 31, 1995 (60 FR 28402). The Engine Control Systems' converter/muffler is described in a **Federal Register** notice of January 6, 1997 (62 FR 746). Nelson Industries' converter/muffler is described in a **Federal Register** notice of November 26, 1997 (62 FR 63159).

One of each type of constituent kit is required for the rebuild of an engine. The engine rebuild kit usage is based on the required engine power rating (253 and 277 horsepower are available), engine rotation direction and orientation (43 degree tilt, 15 degree tilt, and upright). The notification includes parts lists. The converter/muffler kit usage is based on the operator's choice of converter supplier and the engine/vehicle combination.

DDC states that standard procedures, as described in the service manual of 92 Series engines, are to be used when rebuilding the base engine using the candidate kit and will also provide specific conversion instructions with each kit. Additionally, there are no differences in service intervals or maintenance practices for the base engine associated with the installation of the kit. The converter/muffler requires no regularly scheduled maintenance, only an occasional cleaning if the maximum back pressure of the exhaust system is exceeded. The engines also receive an upgraded control program for the electronic control module.

Using engine dynamometer testing conducted in accordance with the Federal Test Procedure (FTP) for heavy-duty diesel engines, DDC documented in its December, 1997 notification, PM emissions below the 0.10 g/bhp-hr level.

DDC presents exhaust emission data that were developed for the engine configuration rated at 277 horsepower.

Testing of the candidate kit was conducted using each of the three converter/mufflers with the upgraded engine configuration. The test data indicate that the emissions of hydrocarbon (HC), carbon monoxide (CO), oxides of nitrogen ($NO_X$), and smoke measurements for the engine equipped with the candidate equipment are less than exhaust emissions standards applicable to 1993 model year urban buses when tested over the Federal Test Procedure (FTP). The test data is summarized in Table 1.

TABLE 1.—EXHAUST EMISSIONS FROM 6V92TA DDEC II

[277 hp]

| Gaseous and particulate g/bhp-hr | | | | | Smoke percent opacity | | | Comment |
|---|---|---|---|---|---|---|---|---|
| HC | CO | $NO_X$ | PM | BSFC [a] | ACC | LUG | PEAK | |
| 1.3 | 15.5 | 5.0 | [b] 0.10 | 20 | 15 | 50 | 1993 | Urban Bus Standards. |
| 0.3 | 1.0 | 4.8 | 0.08 | 0.516 | 1.7 | 1.2 | 3.0 | Converter/Muffler A. |
| 0.1 | 0.2 | 4.7 | 0.08 | 0.506 | 2.2 | 1.9 | 2.9 | Converter/Muffler B. |
| 0.2 | 0.5 | 4.9 | 0.095 | 0.517 | 1.6 | 1.3 | 2.7 | Converter/Muffler C. |

[a] Brake specific fuel consumption in units of pounds of fuel per brake-horsepower-hour.
[b] Non-compliance penalties are available up to 0.25 g/bhp-hr.

No life cycle costs information has been submitted by DDC. DDC does not intend certification of this equipment to trigger program requirements for the applicable engines and no new requirements are triggered by this certification. The certification testing document a PM emissions level of 0.08 to 0.095 g/bhp-hr depending upon the catalyst installed, and also show that emissions of hydrocarbon (HC), carbon monoxide (CO), oxides of nitrogen ($NO_X$), and smoke are within the applicable standards when tested over the FTP.

Based on the testing demonstration, EPA believes that all DDC-equipped engines will meet the 0.10 g/bhp-hr PM standard because installation of the kit upon engine rebuild results in the replacement of all emissions related parts with a specific set of parts, the combination of which results in a documented PM level of 0.08 to 0.095 g/bhp-hr.

The fuel consumption of the DDC kit ranged between 0.506 to 0.517 pounds of fuel per brake-horsepower hour in the testing results provided.

The DDC equipment is certified to a PM emission level of 0.10 g/bhp-hr for all 1985 through 1993 DDC 6V92TA DDEC urban bus engines using either diesel fuel #1 or #2 (including engines originally certified, or rebuilt, to meet California emissions standards. This includes all DDEC II engines, DDEC I engines (1985 through 1987), and methanol-fueled engines (manufactured from 1991 through 1993).

Table 2 lists the applicable engine models and certification levels associated with the certification announced in today's **Federal Register**.

TABLE 2.—CERTIFICATION PM LEVELS

| Applicable models [1] | Engine code | PM level |
|---|---|---|
| 1988–1993 Detroit Diesel 6V92TA DDEC II ..... | ALL (including those certified or rebuilt to meet California or 50-state emissions standards). | 0.10 g/bhp-hr. |
| 1985–1987 Detroit Diesel 6V92TA DDEC I | | |
| 1990–1993 Detroit Diesel 6V92TA Methanol Fueled DDEC Engines | | |

[1] Conditional certification applies to all model year engines. See discussion in section IV.

DDC is required to provide a 100,000 mile defect warranty and 150,000 mile emissions performance warranty for the components of the kit.

## II. Summary and Analysis of Comments

Comments were received from five parties in response to the **Federal Register** notice (63 FR 13660; March 20, 1998): Engelhard Corporation (Engelhard), Johnson Matthey, Incorporated (JMI), Chicago Transit Authority of Chicago, IL (CTA), Pierce Transit of Tacoma, Washington (Pierce), and the King County Metro of Seattle, Washington (Metro). Engelhard and JMI both have applied for certification of equipment to meet the 0.10 g/bhp-hr standard under the urban bus program for 6V92TA DDEC engines. The Engelhard equipment was approved for certification for the 1988 to 1993 6V92TA DDEC engines on July 1, 1998. The CTA, Pierce and Metro are operators of urban bus fleets in areas to which the Urban Bus Rebuild Requirements apply.

Comments and issues generally fell into the following categories: (a) emissions testing; (b) equipment durability and in-service concerns; (c) installation instructions; (d) kit components; (e) life cycle cost; (f) kit supply options and labeling; and, (g) $NO_X$ increases. These are discussed in the sections below.

Copies of the complete comments and other documentation are available in the public docket, which is located at the address stated above.

*a. Emissions Testing*

JMI commented that the engine selected by DDC and used for certification testing was a brand new engine built specifically for urban bus rebuild development and certification testing. JMI commented that in order to demonstrate emissions reductions on an engine that is representative of the in-use engines in the transit industry, the EPA should require DDC to re-test their 0.1 DDEC kit on an existing, in-use engine procured from typical transit service. JMI commented that based on statements made in the notification the test engine information is not clear as to whether the test engine was manufactured per the build requirements for a previously certified 1996 model year 6V92TA engine or

whether it was a 1992–1993 engine or a 1996 engine. Engelhard asked what type of certification was the test engine certified to in 1996, is the parts list the same as a pre-1994 engine and are the block and all internal components the same. JMI commented that DDC presents emissions data from the certification testing of three converter mufflers. JMI notes that two of the converter mufflers in combination with the additional parts kits attain PM emission levels of 0.08 g/bhp-hr and that this would allow for some level of engine deterioration and catalyst deterioration over the 150,000 mile performance requirement. However, testing with converter/muffler C attains a PM emission level of 0.1 g/bhp-hr which is the standard and does not allow for any engine or catalyst deterioration over the 150,000 mile performance period. JMI commented that converter/muffler C should be eliminated from consideration in this certification package.

In response to the JMI comment that the EPA should require DDC to re-test their 0.1 DDEC kit on an existing in-use engine procured from typical transit service, Section 85.1406 (a)(2)(iv) specifically allows the use of a new engine to demonstrate compliance with the 0.1 g/bhp-hr PM requirement. In regard to JMI's and Engelhard's questions concerning the build specifications of the test engine, DDC states in section 05.02.01 of the Notification of Intent to Certify, that the test engine was built in June 1997. The test build configuration was not previously sold or certified so the engine cannot be identified with a model year designation. DDC states that the reference in section 05.02.04 to the 1996 model year was intended only to indicate the test engine used a DDEC III engine control system. The conversion kit as certified will convert all in-service engines to virtually the same configuration as the test engine.

With regard to JMI's comment that converter/muffler C should be eliminated from consideration because it does not allow for any deterioration over the 150,000 mile performance period, DDC has responded that it does not expect any catalyst or engine deterioration over the 150,000 performance period. DDC explained that the actual PM emissions results with catalyst C were 0.095 g/bhp-hr. This was reported as 0.10 g/bhp-hr using the specified rounding convention. DDC notes that the system utilizing catalyst C has a 10% margin for deterioration before the 0.10g/bhp-hr standard would be exceeded. EPA does not believe it would be appropriate to withhold this certification for catalyst C based on the emission results presented.

*b. Equipment Durability and In-service Concerns*

The CTA asked whether DDC had performed thorough field service reliability testing to ensure that these upgraded kits will have equal operating performance and useful life in comparison to the original design. The CTA commented that the EPA certified catalytic converters used by CTA during the last two years have had very high failure rates that were both structural and functional in nature. Structural failures that CTA encountered on the converters were cracking or breakages of the wall material on the exhaust side of the converters. Functional failures were manifested by lack of engine power and high engine exhaust back pressure due to severe clogging and/or restriction of the catalytic converters. The CTA commented there is no documented information as to how the catalyst is working after being in service for an extended period of time. The CTA also commented that catalytic converter manufacturers should provide standard guidelines and/or procedures for evaluating or assessing the condition of a used catalytic converter.

Engelhard commented that DDC included new prototype aftermarket injectors in the upgrade kit with no durability or service information. Engelhard asked what the maintenance interval is for the new injector, and whether it will last 150,000 miles. Engelhard commented that DDC has not provided any data demonstrating that the injectors will last 150,000 miles and not cause an emissions shift, and will not require additional maintenance. Engelhard also noted that the injectors used in the DDC certification were ''pre-production parts'' and asked what assurance there is that the production parts produced with production tolerances will meet the standard. Engelhard noted that the kit contains an upgraded electronics package including new sensors. Engelhard asked if the new sensors require additional maintenance or replacement.

Pierce commented that it has experienced shortened engine life, in the order of 120,000 miles between engine overhauls since 1995, compared to the original engine life of 280,000 miles before the first engine overhaul. Pierce noted that two significant events occurred during this time period. First, Pierce notes that it began using 15W/40 engine oil in its DDC sub-fleets as a result of successes achieved in a two-year test. Second, between 1990 and 1995, DDC made significant changes to the cylinder kits, including a part number change. Pierce noted that the 15W/40 engine oil performance came into question only after re-manufacture with new cylinder kits approved after 1995. Engine problems related to liner scuffing of the #1 and #2 cylinders on the right bank began in 1995. Pierce expressed its concern with the durability of the DDC engine components offered in the retrofit/rebuild kit.

Metro operates a fleet of 1,112 motor buses which includes 236 Breda dual-mode buses used primarily for commuter service and which operate as diesels on freeways and other roads and operate as trolley buses in the downtown tunnel. The Breda buses were delivered in 1989–1991 and are fitted with DDC 6V–92TA DDEC engines rated at 330 horsepower. Metro commented that the original engine life of these engines was 131,000 miles. Since mid-1995 the fleet has suffered shortened engine life on the order of 28,000 miles between overhaul. Metro noted two significant events occurred during this time period. First, catalytic converter mufflers were installed in all buses when engines were rebuilt after March 1995. Second, between 1990 and 1995, DDC made significant changes to the cylinder kit, including the part number (changed in May 1995). This product has not been durable in Metro's application. Converter plugging has been a problem from the beginning with no discernible difference between Engelhard and Johnson Matthey equipment. Metro notes that the average converter life has been less than 19,000 miles. Metro also commented that the engine problems have centered on liner scuffing of the #1 and #2 pistons on the right bank of cylinders. Metro commented that it is concerned with the durability of the engine components offered for retrofit/rebuild and that DDC has not been able to provide Metro with cylinder kits with a demonstrated life anywhere near that of the original engine. JMI commented that while it recognizes that demonstration of durability is not a requirement of the urban bus retrofit/rebuild program, based on the cost of a 0.10 retrofit/rebuild kit, it would be prudent to have some demonstration of durability on typical engines in revenue service fitted with a trial kit. JMI commented that EPA should require DDC to provide a demonstration of durability of the proposed equipment before any decision is made concerning certification.

In regard to the CTA comments, DDC has responded that it has not completed a field test with the proposed kit. With

regard to improvements to the design of the converter mufflers, DDC responded that it is aware that some converter/muffler failures have occurred as a result of excessive torsional stresses caused by a rigid mounting of the exhaust system. DDC stated its understanding that this problem was unique to a particular bus design and has been eliminated by modifying the converter/muffler mounting design. With regard to CTA's comment that catalytic converter manufacturers should provide standard guidelines and/or procedures for evaluating or assessing the condition of a used catalytic converter, DDC responded that a simple visual inspection for leaks, dents or structural damage to the catalyst core is usually sufficient to assess the condition of a used converter. EPA recommends that transits contact the catalyst manufacturers directly for updated information on procedures for evaluating catalyst condition if further information is desired or needed. EPA knows of no method for accurately testing PM performance of a catalyst in the field. However, to the extent a catalyst is mechanically clogging, use of the defect warranty may be an appropriate remedy.

In regard to the Engelhard comments on the use of new prototype injectors in this kit and concerns regarding maintenance and durability, DDC has responded that the fuel injector does not require any scheduled maintenance. The diagnostic and repair procedures for the new injector are the same as for other DDC electronic injectors. DDC states that the fuel injectors that will be provided with the proposed kits are the same fundamental design that DDC has used since DDC first introduced electronic injectors in 1985. Diesel Technology Corporation, DDC's regular injector supplier, will manufacture these injectors using the same production processes and quality standards used for all DDC injectors. DDC stated that the only functional difference between the candidate injectors and the standard 1993 model year urban bus engine injector is that the number of spray orifices has been reduced from ten to nine with a corresponding increase in injection pressure. Secondary design changes were made to ensure injector life is maintained. DDC and Diesel Technology Corporation are conducting laboratory tests to demonstrate the durability of the design.

In regard to Engelhard's comments on the upgraded electronics package (DDEC III as included in the original notice), DDC has requested that the DDEC IV system be included in the kit in place of the DDEC III system that was tested. The retrofit kit was originally described as updating the DDEC I and II systems to DDEC III. DDC states that as DDEC IV ECM production increases, it will eventually be used on all new engine production. DDC states that the DDEC IV control system to be used in this retrofit kit is an evolutionary advancement over prior generations of the DDEC engine control systems including the DDEC III kit that was installed during the FTP. DDEC IV contains the same software as DDEC III and calibrations developed for DDEC III will be used in the DDEC IV with no effect on engine performance or emissions according to DDC. DDEC IV provides additional memory capability for additional storage of engine codes and will identify all codes with the engine hour and date when they occur. All diagnostic capabilities available with DDEC III will remain available, but the information stored will be expanded and be available for analysis by newer computer systems. DDC states that the DDEC IV system also includes a coolant level sensor and associated diagnostics which were not available with DDEC II. DDC states that although the DDEC IV has more capabilities than previous DDEC systems, it is not more complicated and is not more difficult to operate or maintain. The added sensors in the DDEC IV system do not require more maintenance or replacement than previous systems. DDEC IV was introduced in September 1997 and has been shown to be durable and reliable according to DDC. DDC does not anticipate any problems with the use of the DDEC IV system in the retrofit kit.

In response to the Pierce comments, DDC states that it has experienced increased cylinder kit failure rates at Pierce and other transits since 1995. DDC agrees that Pierce's use of 15W/40 oil may contribute to shortened engine life. For two stroke engines, DDC recommends straight 40 weight oil and does not recommend the use of multi-viscosity oils unless they have been CF2 approved. DDC states that the cylinder kits included in the original notification for this certification used the same components as the cylinder kits used in DDC's urban bus rebuild/retrofit kits certified to provide a 25% particulate reduction on 6V92 DDEC engines. DDC has recently made several changes to improve durability. This will result in a new cylinder kit which is virtually identical to the kits used in 1990. DDC believes these kits will provide the same durability as the kits provided to customers prior to 1995. These changes include a groove in the fire ring face to provide improved lubrication of the ring surface, changes to the oil rings and skirt to facilitate oil drain back to the crankcase and modifications to the cylinder liner manufacturing technique, but not to the cylinder liner itself.

In a letter dated September 15, 1998 DDC provided information on the expected effect of this cylinder change on PM emission for the urban bus engine rebuild kit. DDC performed an engineering analysis demonstrating that the emission effects are small and that the emission standards will continue to be met using the revised cylinder kits. The grooved fire ring will carry more oil to the cylinder walls and increase oil consumption and, has the potential to increase volatile particulate emissions derived from the lubricating oil. DDC states that because the exhaust catalyst is very efficient in oxidizing volatile particulate, the net effect of any increase in engine out volatile components of the PM is substantially reduced. The soot and fuel derived volatile components of the PM are not expected to be affected. DDC also provided information on the breakdown of particulate emissions obtained during certification testing prior to revising the cylinder kit. Also shown is a particulate breakdown without any converter installed. DDC also provided data on the results of 100 hour oil consumption tests run at DDC to assess the impact of the cylinder kit revisions. The data shows that the cylinder kit revisions increased oil consumption by 21 percent. Based on the 21 percent oil consumption increase, DDC estimated the effect of the cylinder kit revisions on particulate matter exhaust emissions. DDC's analysis shows that the average PM increase with the three catalysts is 0.002 g/bhp-hr (the maximum increase was 0.0025 g/bhp-hr) and that the 0.10 g/bhp-hr standard will be met with each of the three catalysts. EPA finds that based on the analysis provided by DDC, the revised cylinder kit is acceptable for inclusion in the rebuild kit. A copy of DDC's letter and analysis has been placed in the public docket.

In response to the Metro concerns, DDC comments that Metro is correct in stating that DDC made a number of changes to bus engine cylinder kits in the 1990–1995 time frame. Changes to the cylinder kits included piston-to-liner clearance, compression ring gap, oil ring expander tension, and cylinder liner honing. DDC states that the position of the top fire ring was never changed. DDC notes that it uses different cylinder kit designs for urban bus engines rated at 253 and 277 horsepower and, the higher horsepower ratings typically used in truck

applications. As described above in response to the Pierce comments, DDC is modifying the cylinder kits provided with the certified kit to improve durability. DDC comments that these cylinder kits will be very similar to the kits used in 1990 which Metro suggests had superior life to overhaul. DDC commented that the retrofit/rebuild kit, will apply only to engines with 253 or 277 horsepower ratings. Consequently, it would not be applicable to the 330 horsepower engines in the Metro fleet.

EPA appreciates JMI's comments concerning a durability demonstration and understands that transit operators are concerned with the durability of retrofit/rebuild equipment, and subsequent additional costs or engine damage that potentially could result from premature equipment failure. However, EPA notes that the urban bus retrofit/rebuild regulations do not require a durability demonstration as a condition of certification. Rather, those certifying equipment, including DDC, are required pursuant to 40 CFR 85.1409 to provide a 100,000 mile equipment defect warranty and a 150,000 mile emissions performance warranty.

EPA believes that equipment suppliers will evaluate the durability of their equipment in order to minimize their liability resulting from the emissions defect and performance warranties. EPA believes that the available information does not indicate a durability concern with the equipment certified in today's notice, and therefore, does not provide sufficient basis to deny certification on these grounds. EPA will continue to monitor problems with this, and other certified equipment, and encourages transit operators to provide specific, detailed information regarding in-service problems with certified equipment.

The equipment certifier is responsible for the emissions performance of the engine through the 150,000 mile emissions performance warranty period, if the transit properly installs and maintains equipment in accordance with the equipment manufacturer's instructions. The transit operator is responsible for proper installation and use of certified equipment, and is responsible for the emissions performance of equipment operated beyond the 150,000 miles emissions warranty period. Also, the retrofit/rebuild program does not obviate compliance with any state or local emission requirements, such as inspection/maintenance (I/M) or smoke testing programs.

*c. Installation Instructions*

JMI comments on the DDC statement that the standard procedures described in the service manual for the 92 series are sufficient for rebuilding base engines using the proposed equipment. JMI notes that the service manual in their possession dated October 1988 contains no information on how to install DDEC III equipment. For transits that have older DDEC engines without DDEC III information, this would be a burden. JMI commented that EPA should require DDC to supply specific instructions on how to install a DDEC III conversion.

While, as noted earlier, DDC is modifying the kit contents to use DDEC IV instead of DDEC III, the point of JMI's comment is still relevant. DDC states that the conversion will not be burdensome and will require less than three hours. DDC will provide detailed conversion instructions with each kit. DDC has provided EPA a sample copy of the instructions as an attachment to a letter to EPA from DDC dated September 24, 1998. A copy of these instructions has been placed in the public docket.

*d. Kit Components*

JMI asked that EPA require DDC to explain why installation of the system does not alter or render inoperative any feature of the on-board diagnostic system incorporated by the engine manufacturer in view of the fact that the conversion to the DDEC III increases diagnostic and data logging capability. JMI also asks if there are any components or ancillary parts that are required which are not included in the parts lists of the kit. JMI comments that the parts lists in the DDC application do not include the appropriate ECM certification word codes (CWC's) for the listed parts combinations. JMI commented that to avoid confusion, EPA should require DDC to identify the correct CWC for each parts list. If the ECM needs to be changed to incorporate a different CWC, the EPA should require DDC to explain how this is done.

As noted above, DDC plans to use DDEC IV operating systems in the rebuild kits. All necessary conversion hardware will be supplied with the kit. DDC states that the change to DDEC IV per se will have no effect on engine performance or emissions. All diagnostic capabilities available with DDEC II will remain available with DDEC IV. The only changes to the diagnostic system with DDEC IV are the additions of memory that allows engine hour, time, and date information to be stored with each engine code to assist in troubleshooting, and the addition of a coolant level sensor, and associated diagnostics according to DDC. DDC will provide in the kits the parts necessary to convert to DDEC IV. In regard to the CWC's, DDC states that the CWC used depends on the engine rating, engine rotation and the operators choice of #1 or #2 diesel fuel. Because the appropriate parts list is selected based on different criteria, engine rotation and tilt angle, DDC finds it is not appropriate to include the CWC in the parts lists 1–3. Attachment 9 of DDC's notification lists the twelve CWC's (six for right hand rotation engines and six for left hand rotation) and identifies when each is to be used. DDC will supply an unprogrammed DDEC IV ECM with each kit. Local DDC distributors will program the ECM with the operator specified CWC at the time of installation.

*e. Life Cycle Cost*

CTA asked about the total cost of these upgrade kits be to fleet operators. JMI commented that EPA should require DDC to provide cost data in order for transits to fairly and objectively evaluate and compare the various 0.10 technologies. JMI asks about the labor costs associated with the conversion and whether there is a cost to a transit if a change to the ECM CWC program is necessary. JMI also asked about the impact of the DDC DDEC III technology on fuel consumption.

Engelhard commented that DDC has not included a baseline test for comparison with the proposed retrofit kit and that this data is necessary to verify that the equipment being installed on the engine does not affect engine performance or fuel economy. Engelhard commented that DDC has not provided life cycle cost data for this retrofit equipment and that the retrofit equipment should not be approved without providing the fuel economy penalty, installation costs, and additional maintenance.

As noted earlier, DDC has not provided cost information in this notification. The regulations do not require certifications that are not trigger technology to include cost data. However, EPA will provide a limited response to this comment, based on the cost information provided in the notification. Section 1403(b)(1)(ii) describes those items which must be considered when analyzing life cycle cost of equipment, including equipment purchase price, incremental fuel cost, maintenance costs and costs of any fuel additives required.

The price of the kit is not provided in the notification. This pricing information will obviously be provided

to the operator for consideration prior to purchase. The cost to program the CWC will be included in the price charged to the transit operator for the kit. Further, DDC responded that the conversion to the DDEC IV version will require approximately three additional hours of labor. Incremental fuel costs are based on a comparison with a baseline test. Since baseline test data was neither required nor provided in this notification, incremental fuel costs cannot be provided. However, based on the DDC data provided the brake specific fuel consumption (BSFC) in units of pounds of fuel per brake-horsepower-hour (lb/bhp-hr), fuel usage during the FTP testing provided BSFCs of 0.506, 0.516 and 0.517 lb/bhp-hr dependent upon which of the three catalysts was tested in conjunction with the kit. DDC responds that there will be no additional maintenance costs associated with this kit. No fuel additives are required or specified.

*f. Supply Options and Labeling*

JMI comments that it is unclear how DDC intends to supply the converter/muffler kits and asked how the kits would be stocked, supplied, delivered, labeled, serviced and warranted.

DDC states that complete rebuild kits, including converter/mufflers, will be supplied by DDC through DDC's normal parts distribution system. Adequate supply will be maintained to assure timely distribution, of complete rebuild and any replacement parts that users may require. The complete kits will be warranted by DDC. DDC will provide the label within each kit.

*g. Adverse Impact on $NO_X$ Emissions*

Engelhard questioned whether, if DDC is upgrading the control ECM from DDEC I and DDEC II to DDEC III, there will be a significant difference in the engine control maps. Engelhard also asked if this conversion would actually increase on-road $NO_X$ emissions. Engelhard requested that DDC verify that there will be no increase in $NO_X$ emissions under normal operating conditions.

As noted earlier, DDC will use the DDEC IV system in place of the DDEC III system proposed in the original notification. DDC responds that the engine control strategies are the same as were used on 1991–1993 DDC 6V–92 engines when originally manufactured. The control maps used during emission testing with the DDEC III system were modified slightly to meet emission requirements and achieve the same power/torque rating with the modified fuel injector. No changes were made to the engine programming or control maps, which would have modified $NO_X$ emission characteristics during operation on or off the federal emission test cycle (FTP), compared to the 1991–1993 engine configurations. The 1991–1993 control maps and strategies, which were designed to meet the more stringent 5.0 g/bhp-hr $NO_X$ standard effective in 1991, should generally reduce $NO_X$ emissions for pre-1991 engines according to DDC. However, DDC commented that $NO_X$ emissions might conceivably increase in certain operating modes.

As stated in section IV of this notice, EPA has placed conditions on the 1985–1993 model years engines covered by this certification because these engines will receive an upgraded electronic control module. EPA is concerned that electronically controlled engines may have been equipped by the original manufacturers with strategies designed to decrease fuel consumption during certain driving modes not substantially included in the FTP, with the effect of substantially increasing $NO_X$ during these modes. As a result, certification of the DDC kit, as it applies to 1985 through 1993 model year engines, is conditioned upon DDC demonstrating by March 1, 1999 that any replacement engine control module (ECM) or ECM program used in conjunction with the certified kit will not adversely impact the emissions of $NO_X$ in comparison to the ECM or ECM program that is being replaced under conditions which may reasonably be expected to be encountered in normal vehicle operation and use, unless such conditions are substantially included in the Federal emission test procedure.

## III. California Engines

The $NO_X$ emission standard for new engine certification applicable to 1988 through 1990 model year engines sold in the State of California is 6.0 g/bhp-hr. For 1991 through 1993, the standard is 5.0 g/bhp-hr. The emissions testing presented by DDC demonstrate a $NO_X$ emissions level that complies with the 5.0 g/bhp-hr standard. Therefore, today's certification of the DDC kit for DDEC engines applies to DDEC engines certified to meet California emissions standards, subject to the conditions discussed below.

The equipment certified today may require additional review by the California Air Resources Board (CARB) before use in the State of California. EPA recognizes that special situations may exist in California that are reflected in the unique emissions standards, engine calibrations, and fuel specifications of the State. While requirements of the federal urban bus program apply to several metropolitan areas in California, EPA understands the view of CARB that equipment certified under the urban bus program, to be used in California, must be provided with an executive order exempting it from the anti-tampering prohibitions of that State. Parties interested in additional information should contact the Aftermarket Part Section of CARB, at (626) 575–6848.

## IV. Certification and Conditional Certification

EPA has reviewed this notification, along with comments received from interested parties, and finds the equipment described in this notification of intent to certify:

(1) Complies with a particulate matter emissions standard of 0.10 g/bhp-hr, without causing the applicable engine families to exceed other applicable emission requirements, subject to the conditions discussed below;

(2) Will not cause an unreasonable risk to the public health, welfare or safety;

(3) Will not result in any additional range of parameter adjustability; and

(4) Meets other requirements necessary for certification under the Urban Bus Rebuild Requirements (40 CFR 85.1401 through 85.1415).

With the following conditions, EPA hereby certifies this equipment for use in the Urban Bus Retrofit/Rebuild Program. As noted above, the equipment being certified today includes, for 1985–1993 model year engines, an upgraded control program for the electronic control module. EPA has recently become concerned that many electronically controlled engines may have been equipped by the original manufacturers with strategies designed to decrease fuel consumption during certain driving modes not substantially included in the federal test procedure, with the effect of substantially increasing $NO_X$ during these modes. Such electronic control strategies have the potential to be ''defeat devices'' as defined at 40 CFR 86.094–22, and thus may violate 40 CFR 85.1406 and 85.1408 if included in an urban bus retrofit application. The upgraded control program used for the 1985—1993 model year upgrade must therefore be reviewed for such violations.

As a result, certification of the DDC kit, as it applies to 1985 through 1993 model year engines, is conditioned upon DDC demonstrating by March 1, 1999 that any replacement engine control module (ECM) or ECM program used in conjunction with the certified kit will not adversely impact the emissions of $NO_X$ in comparison to the

ECM or ECM program that is being replaced under conditions which may reasonably be expected to be encountered in normal vehicle operation and use unless such conditions are substantially included in the Federal emission test procedure. The DDC equipment may be used immediately by transit operators in compliance with requirements of this program, subject to the above condition.

**V. Transit Operator Responsibilities**

Today's **Federal Register** notice announces certification of the above-described Engelhard equipment, when properly applied, as meeting the 0.10 g/bhp-hr particulate matter standard of the Urban Bus Rebuild Program for urban bus engines certified as meeting both federal and California emissions standards. Affected urban bus operators who choose to comply with compliance program 1 may use this, or other equipment that is certified to meet the 0.10 g/bhp-hr particulate matter standard, for any engines listed in Table 2 which are rebuilt or replaced, subject to the condition of Section IV.

Urban bus operators who choose to comply with compliance program 2 may use the certified DDC equipment, and those who use this equipment may claim the respective particulate matter certification level from Table 2 when calculating their Fleet Level Attained (FLA), subject to the condition of Section IV.

Urban bus operators must be aware of their responsibility for maintenance of records pursuant to 40 CFR 85.1403 through 85.1404. As stated in the program regulations (40 CFR 85.1401 through 85.1415), operators should maintain records for each engine in their fleet to demonstrate that they are in compliance with the Urban Bus Rebuild Requirements beginning on January 1, 1995. These records include purchase records, receipts, and part numbers for the parts and components used in the rebuilding of urban bus engines. Urban bus operators must be able demonstrate that all parts used in the rebuilding of engines are in compliance with program requirements. In other words, urban bus operators must be able demonstrate that all required components of the kit certified in today's **Federal Register** notice are installed on applicable engines.

Dated: February 19, 1999.

**Robert Perciasepe,**

*Assistant Administrator for Air and Radiation.*

[FR Doc. 99–4828 Filed 2–25–99; 8:45 am]

**BILLING CODE 6560–50–P**

## ENVIRONMENTAL PROTECTION AGENCY

**[ER–FRL–6240–3]**

## Environmental Impact Statements and Regulations; Availability of EPA Comments

Availability of EPA comments prepared February 01, 1999 Through February 05, 1999 pursuant to the Environmental Review Process (ERP), under Section 309 of the Clean Air Act and Section 102(2)(c) of the National Environmental Policy Act as amended. Requests for copies of EPA comments can be directed to the Office of Federal Activities at (202) 564–7167.

An explanation of the ratings assigned to draft environmental impact statements (EISs) was published in FR dated April 10, 1999 (62 FR 17856).

**Draft EISs**

*ERP No. D–COE–J31027–WY* Rating EO2, Little Snake Supplemental Irrigation Water Supply Project, Construction, Right-of-Way Permit and COE Section 404 Permit, Carbon County, WY.

*Summary:* EPA objected to the proposed action given the potential significant adverse impacts associated with the Colorado River Cutthroat Trout recovery program. EPA also recommended that a new alternative which combines a reduced storage pool and increased water conservation be evaluated in the Final EIS.

*ERP No. D–DOI–K39053–CA* Rating EC2, San Joaquin River Agreement Project, Implementation of the Meeting Flow Objectives for 1999—2010, Vernalis Adaptive Management Plan, San Joaquin, Stanislaus, Madera, Merced, Fresno and Tuolume Counties, CA.

*Summary:* EPA supported the project, as long as it will be implemented in a manner that does not degrade existing conditions or limit future management options. EPA expressed concerns regarding impacts to water quality, groundwater, and riparian habitat and requested additional information on these issues be included in the FEIS. EPA will continue to participate in implementation of the plan and a long-term fishery management program for the San Joaquin River.

*ERP No. D–FAA–B51021–MA* Rating EC2, Provincetown Municipal Airport Safety and Operational Enhancement Project, Improvements (1) Firefighter Equipment Garage; (2) General Aviation Parking Apron Expansion; (3) Runaway Safety Areas, and (4) a Runaway Extension, COE Section 404 Permit, Cape Cod National Seashore, Barnstable County, MA.

*Summary:* EPA expressed environmental concerns that some alternatives considered in the DEIS were not adequately evaluated and that more information should be provided about mitigation measure associated with the runway extension proposals.

*ERP No. D–FHW–B40084–RI* Rating EC2, Western Johnston and Cranston, Improved Highway Access to the Environmental Management District, Funding and COE Section 404 Permit, Providence County, RI.

*Summary:* EPA requested information regarding stormwater management system for the proposed project and additional information to quantify the loss of wetland functions associated with either build alternative. Based on the available information, EPA also suggested that the Scituate Avenue extension appears to be less environmentally damaging than the Comstock Parkway extension.

*ERP No. DS–FHW–E40700–GA* Rating EC2, Harry S. Truman Parkway, Construction from the Abercon Street Extension (GA–204) to Derenne Avenue, COE Section 404 Permit and U.S. Coast Guard Permit, Chatham County, GA.

*Summary:* EPA's review found that althought the preferred alternatives does avoid residential and commercial properties, it crosses the Vernon River floodplain and non floodplain wetlands. Bridging the entire floodplain and avoiding wetland impact is recommended.

**Final EISs**

*ERP No. F–COE–E32078–00* Savannah Harbor Section 203 Expansion Project, Channel Deepening, Harbor Improvements, Georgia Ports Authority, Federal Navigation Project, Chatham County, Ga and Jasper County, SC.

*Summary:* EPA noted that its earlier concerns over the proposal in the Draft EIS to deepen the channel by B feet have been eliminated by the proposal in the Final EIS to examine four deepening alternative, with a maximum deepening of only 6 feet. EPA has agreed with the need to continue the evaluate process associated with deepening the Savannah Harbor via a Tier II EIS analysis. The additional data developed by its preparation will form the basis for a reasoned decision, as to whether/how much this facility can be upgraded and the unavoidable environmental costs.

*ERP No. F–NOA–A91063–00* Monkfish Fishery Regulations Northeast Multispecies Fishery (FMP), Fishery Management Plan, Amendment 9, Implementation, Exclusive Economic