UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

FEB 11 2005

Ms. Ivette E. Laborde
Environmental Compliance Manager
EcoElectrica, L.P.
Administrative Building, Road 337
Penuelas, Puerto Rico 00624-7501

Re: Administrative Amendments- Prevention of Significant Deterioration (PSD) Permit

Dear Ms. Laborde:

The U.S. Environmental Protection Agency's Region 2 Office received EcoElectrica's October 2, 2003, request for a PSD permit revision. EPA also received additional information from you on this request on January 26, 2004, and October 20, 2004. Based on the review of this information we have determined that these requested changes will not result in any increase in emissions or cause any adverse air quality impacts. Therefore, EPA has made a determination to approve these revisions administratively. Specifically, we are approving your request for an updated ammonia slip monitoring method, some requirements related to auxiliary diesel generators, NSPS related monitoring changes and a change affecting the time line for reporting deviations. A summary of today's permit amendments is provided in Enclosure A. A project description is provided in Enclosure I. The revised permit conditions are found in Enclosure II. This PSD permit supersedes the previous PSD permit issued to EcoElectrica on October 1, 1996.

This determination is final Agency action under the Clean Air Act (the Act). Under Section 307 (b)(1) of the Act, judicial review of this final action is available only by the filing of a petition for review in the United States Court of Appeals for the appropriate circuit within 60 days from the date on which this final permit decision is published in the Federal Register. Under Section 307 (b)(2) of the Act, this final permit decision shall not be subject to later judicial review in civil or criminal proceedings for enforcement.

If you have any questions regarding this letter, please call Mr. Steven C. Riva, Chief, Permitting Section, Air Programs Branch, at (212) 637-4074.

Sincerely,

Walter Mugdan, Director
Division of Environmental Planning and Protection

cc: Evelyn Rodriguez, Director, PREQB w/

bcc: C. Soderberg, CEPD, w/o
S. Riva, APB, w/
K. Mangels, ACB, w/
J. Siegel, ORC, w/
F. Claudio, CEPD, w/
U. Dholakia, w/
A. Coulter, w/
J. Aponte, CEPD, w/

Enclosure A

A List of Revisions to EcoElectrica's PSD Permit

Current Auxiliary Diesel Generator conditions (VI)

14. The maximum design capacity of the Auxiliary Diesel Generator shall be 1,280 kilowatts.
15. The Auxiliary Diesel Generator shall be limited to a maximum fuel consumption rate of 82.1 gallons per hour of distillate fuel oil (based on 138,750 Btu HHV per gallon) or 11.25 MMBtu/hr (HHV) of natural gas.
16. The Auxiliary Diesel Generator shall use distillate fuel oil which contains no more than:
    a. 0.15 percent sulfur by weight; and
    b. 0.10 percent nitrogen by weight.
17. The Auxiliary Diesel Generator shall operate no more than:
    a. 2,720 hours in any 365-day rolling period;
    b. 720 hours in any 365-day rolling period when utilizing distillate fuel oil; and
    c. one hour from the time any combustion turbine reaches minimum load after startup or shutdown.
18. The auxiliary diesel-cycle generator shall not operate concurrently with any two combustion turbine except for 12 hour period per 365-day rolling average during combustion turbine startup.

Revised Auxiliary Diesel Generator conditions (VI)

14. The maximum design capacity of the Auxiliary Diesel Generator shall be 1,280 kilowatts.
15. The Auxiliary Diesel Generator shall be limited to a maximum fuel consumption rate of 82.1 gallons per hour of distillate fuel oil (based on 138,750 Btu per gallon, higher heating value).
16. The Auxiliary Diesel Generator shall use distillate fuel oil which contains no more than:
    a. 0.04 % sulfur by weight; and
    b. 0.10 percent nitrogen by weight.
17. The Auxiliary Diesel Generator shall operate no more than:
    a. 955 hours in any 365-day rolling period; and
    b. one hour from the time any combustion turbine reaches minimum load after startup or shutdown.
18. The auxiliary diesel-cycle generator shall not operate concurrently with any two combustion turbine except for 38 hour period per 365-day rolling average.

Current Auxiliary Diesel Generator emission limits (VII-C)

1. Oxides of Nitrogen (NO_x)
    a. The NO_x emissions (one hour average) shall not exceed:
        (i) 3.97 lbs/hour when firing natural gas,
        (ii) 33.7 lbs/hour when firing distillate fuel oil.
2. Carbon Monoxide (CO)
    a. The CO emissions (one hour average) shall not exceed:
        (i) 7.93 lbs/hour when firing natural gas, and
        (ii) 2.78 lbs/hour when firing distillate fuel oil.

3. Particulate Matter < 10 microns (PM-10)
   a. The PM-10 emissions (one hour average) shall not exceed:
      (i) 0.40 lbs/hour when firing natural gas, and
      (ii) 0.67 lbs/hour when firing distillate fuel oil.
4. Volatile Organic Compounds (VOC)
   a. The VOC emissions (one hour average) shall not exceed:
      (i) 2.38 lbs/hour when firing natural gas, and
      (ii) 0.25 lbs/hour when firing distillate fuel oil.

5. Opacity Limitation: Opacity of emissions, as measured by 40 CFR Part 60, Method 9, shall not exceed 20%, except for a period or periods of not more than 4 minutes in any 30 minute interval when the opacity shall not exceed 60%.

Revised Auxiliary Diesel Generator emission limits (VII-C)

1. *Oxides of Nitrogen (NO_x)*
   a. The NO_x emissions (one hour average) shall not exceed:
      (i) 33.7 lbs/hour when firing distillate fuel oil.
2. *Carbon Monoxide (CO)*
   a. The CO emissions (one hour average) shall not exceed:
      (i) 2.78 lbs/hour when firing distillate fuel oil.
3. *Particulate Matter < 10 microns (PM-10)*
   a. The PM-10 emissions (one hour average) shall not exceed:
      (i) 0.67 lbs/hour when firing distillate fuel oil.
4. *Volatile Organic Compounds (VOC)*
   a. The VOC emissions (one hour average) shall not exceed:
      (i) 0.25 lbs/hour when firing distillate fuel oil.
5. *Sulfur Dioxide (SO_2)*
   a The sulfur dioxide emissions shall not exceed
      (i) 0.46 lbs/hr when firing distillate fuel oil
6. *Opacity Limitation: Opacity of emissions, as measured by 40 CFR Part 60, Method 9, shall not exceed 20%, except for a period or periods of not more than 4 minutes in any 30 minute interval when the opacity shall not exceed 60%.*

Current Steam/Fuel Ratio condition (VIII 2)

The optimum steam/water to fuel ratio for each unit shall be established during the performance testing and shall become a condition of this PSD permit.

Thereafter, EcoElectrica shall comply with the optimum steam to fuel ratio determined during the performance testing. The information regarding this ratio shall also be contained within the written report submitted to EPA.

Revised Stem/Fuel Ratio condition (VIII 2):

A NOx CEM will be used to monitor excess emissions to comply with Section 60.334 of 40 CFR Part 60 Subpart GG.

Current Fuel Sampling condition (IX 1)

EcoElectrica shall sample the fuel being fired in the two Westinghouse 501 F combustion turbines or the diesel-cycle generator on each occasion that fuel is received at the site for transfer to the storage tanks at the facility from any other source. The fuel sampling shall include but not be limited to determining the fuel's:

a. sulfur content (% by weight); and
b. nitrogen content (% by weight).

EcoElectrica shall also comply with the fuel sampling requirements under the New Source Performance Standards.

Revised Fuel Sampling condition (IX.1):

a. *EcoElectrica shall sample the fuel oil being fired in the two Westinghouse 501 F combustion turbines or the diesel-cycle generator on each occasion that fuel is received at the site for transfer to the storage tanks at the facility from any other source. The fuel oil sampling shall include but not be limited to determining the fuel's sulfur content (% by weight). EcoElectrica shall not claim any credit for fuel oil bound nitrogen in order to comply with its NOx emission limits in all units.*

b. *In lieu of monitoring the sulfur content of the gaseous fuel combusted, EcoElectrica may use the gaseous fuel that shall meet the definition of natural gas in Section 60.331(u) of 40 CFR Part 60, Subpart GG. All appropriate records shall be kept on site for five years.*

Current sulfur analyses condition (IX.2):

Compliance with the sulfur content standard shall be determined using the testing methods established in 40 CFR 60.335(d).

Revised sulfur analyses condition (IX. 2):

Compliance with the sulfur content standard for fuel oil shall be determined using the testing methods established in 40 CFR 60.335(b)(10).

Current Nitrogen in Fuel Measurement condition (IX 3)

Compliance with the nitrogen content standard shall be determined using analytical methods and procedures that are accurate to within 5 percent and are approved by the Administrator to determine the nitrogen content of the fuel being fired.

Revised Nitrogen in Fuel Measurement condition (IX. 3):

This condition is deleted.

Current CEM condition (X.1 e):

Continuous monitoring systems to measure and record each combustion turbine's operating temperature, stack gas temperatures, fuel flows, and steam to fuel ratio. Upon request of EPA, EcoEléctrica shall conduct a performance evaluation of the monitors.

Revised CEM condition (X. 1 e):

Continuous monitoring systems to measure and record each combustion turbine's operating temperature, stack gas temperatures and fuel flows. Upon request of EPA, EcoEléctrica shall conduct a performance evaluation of the monitors.

Current Ammonia Slip condition (XI-10):

Ammonia Slip limit shall be met by maintaining the optimum ammonia flow rate at various operating loads. The optimum ammonia flow rate to meet with the ammonia slip limit shall be determined during the performance test and shall become a condition of this permit.

Revised Ammonia Slip condition (XI-10):

Ammonia Slip limit shall be met by maintaining the optimum ammonia flow rate at various operating loads. The optimum ammonia flow rate to meet both the ammonia slip and NOx emission limits shall be determined based on the NOx CEMs data, catalyst life and performance test. An ammonia flow meter shall be installed. calibrated, operated and maintained according to the manufacturer's specifications. An annual stack test shall be conducted on each combustion turbine stack to verify compliance with the 10 ppmdv ammonia slip limit.

Current Reporting condition (XIII 2)

Any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emission limit stated in Permit Condition VII of this permit and actions taken on any unit must be reported by telephone within 24 hours to:

Chief, Air Permit Division
Puerto Rico Environmental Quality Board
P.O. Box 11488
Santurce, Puerto Rico 00910
(787) 767-8025

In addition, the Regional Administrator and Puerto Rico Environmental Quality Board shall be notified in writing within fifteen (15) days of any such failure. This notification shall include: a description of the malfunctioning equipment or abnormal operation; the date of the initial failure; the period of time over which emissions were increased due to the failure; the cause of the failure; the estimated resultant emissions in excess of those allowed under Condition VII of this permit; and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause.

Revised Reporting condition (XIII 2)

Any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emission limit

stated in Permit Condition VII of this permit and actions taken on any unit must be reported by telephone within 2 working days to:

Chief, Air Permit Division
Puerto Rico Environmental Quality Board
P.O. Box 11488
Santurce, Puerto Rico 00910
(787) 767-8025

If the failure results in a release of emissions of a hazardous air pollutant that continues for more than an hour in excess of any applicable limit; or in a release of any other regulated pollutant that continues for more than 2 hours in excess of any applicable limit, the Board must be notified within 24 hours.

In addition, the Regional Administrator and Puerto Rico Environmental Quality Board shall be notified in writing within fifteen (15) days of any such failure. This notification shall include: a description of the malfunctioning equipment or abnormal operation; the date of the initial failure; the period of time over which emissions were increased due to the failure; the cause of the failure; the estimated resultant emissions in excess of those allowed under Condition VII of this permit; and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause.

Enclosure I

ECOELECTRICA LIQUIFIED NATURAL GAS (LNG) IMPORT TERMINAL AND COGENERATION PROJECT (ECOELECTRICA) PROJECT DESCRIPTION

Revised Permit

2005 REVISIONS

Pursuant to EcoElectrica's requests submitted between October 2, 2003 and October 20, 2004, the U.S. Environmental Protection Agency is amending certain permit conditions related to; 1) ammonia slip monitoring; 2) the operation of the auxiliary diesel generator; 3) fuel and water/fuel ratio monitoring pursuant to NSPS; and 4) the time line for reporting of the deviatior Specifically, Enclosure II conditions VI (14 to 18), VII-C (1 to 6), VIII.2, IX (1 to 3), X1 (e), XI (10) and XIII 2 are revised.

ORIGINAL PROJECT DESCRIPTION:

The EcoElecrica L.P. is proposing to install and operate a 461 (+/-10%) megawatt (MW) (507 MW at 230 kilovolts) combined cycle cogeneration plant on a 36-acre site in Peñuelas, Puerto Rico. This site is located on Punta Guayanilla Bay 15 km west of the City of Ponce. The facility will produce electricity from two Westinghouse 501 F combustion gas turbines each with a power output of approximately 175 MW and from one Toshiba extraction-condensing, reheat steam turbine generator. The gas turbines will use natural gas as a primary fuel, propane (LPG) as a secondary fuel and No. 2 oil as a backup fuel. The duct burners will burn only natural gas or LPG. There will also be a 1280 kW auxiliary diesel-cycle generator for emergency purposes.

The other aspect of this project will consist of a four-arm LNG tanker marine unloading facility, two 42 million gallon LNG storage tanks and vaporization systems. A safety flare capable of burning natural gas or LPG will be used for LNG/LPG vaporizing systems. The No.2 fuel oil will be stored in a 9.1 million gallon fixed roof tank. In addition, EcoElectrica also proposes to use a 10-cell seawater cooling tower and construct a desalination facility that will generate up to 4 million gallons of fresh water per day.

PSD-Affected Pollutants Emitted at the EcoElectrica Project: The facility is classified as a major stationary source because it has the potential to emit more than 100 tons per year of at least one pollutant regulated by the Clean Air Act. The proposed facility is subject to the Prevention of Significant Deterioration of Air Quality (PSD) standards for oxides of nitrogen (NO_x), sulfur dioxide (SO_2), carbon monoxide (CO), particulate matter (PM), particulate matter less than 10 microns (PM-10), and volatile organic compounds (VOC). It is conservatively assumed that all PM will be PM-10 .

Pollutant	PSD Significant Emission Rate (tons/year)	Projected Facility Emission Rate[1] (tons/year)
Nitrogen oxides (NO_x)	40	560
Sulfur dioxide (SO_2)	40	182
Carbon monoxide (CO)	100	1179
Particulate matter - total (PM)	25	450
Particulate matter less than 10 microns (PM-10)	15	450
Volatile Organic Compounds (VOC)	40	96

EcoElectrica Project Control Equipment: The proposed facility will employ Best Available Control Technology to control the pollutants described above.

Combustion Turbines:

Emissions of **nitrogen oxides** will be controlled by the use of a steam or water injection process into the combustion system. The emissions will further be controlled by a Selective Catalytic Reduction (SCR) system located in the Heat Recovery Steam Generators (HRSGs). The steam/water to fuel ratio for each unit shall be established during performance testing and shall be incorporated into the Environmental Quality Board (EQB) operating permit. Each SCR system shall use a proven catalyst and shall operate in accordance with the manufacturer's design specifications.

Emissions of **sulfur dioxide** shall be controlled by the use of pipeline quality natural gas, or commercial grade LPG and by the use of only low sulfur No.2 fuel oil in which the sulfur content will not exceed 0.04% by weight.

Emissions of **carbon monoxide, total particulate matter, particulate matter less than 10 microns,** and **volatile organic compounds** will be controlled by implementing good combustion practices. EcoElectrica shall be required to operate each turbine within the designed combustion parameters of the Westinghouse 501 F combustion turbine. In addition, EcoElectrica shall be required to monitor the combustion temperature and fuel flow rate of each turbine, and EcoElectrica shall be required to maintain each turbine in good working order.

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[1] The maximum projected facility emission rates are based on both the combustion turbines firing at maximum load and the duct burners firing with the combined heat input limited to 600 MMBtu/hr.

Duct Burner/HRSG: Emissions of sulfur dioxide shall be controlled by the use of pipeline quality natural gas or commercial grade LPG. Distillate fuel oil will not be burned in the duct burners.

Emissions of carbon monoxide, total particulate matter, particulate matter less than 10 microns, and volatile organic compounds will be controlled by implementing good combustion practices. EcoEléctrica shall be required to operate each duct burner within the designed combustion parameters of the duct burner manufacturer. EcoEléctrica shall be required to maintain each duct burner in good working order.

Emissions of nitrogen oxides will be controlled by the use of a Selective Catalytic Reduction (SCR) system located in the HRSGs. Each SCR system shall use a proven catalyst design and shall operate in accordance with the manufacturer's design specifications.

Auxiliary Diesel Generator: Emissions of sulfur dioxide shall be controlled by the use of natural gas and low sulfur distillate fuel oils in which the sulfur content may not exceed 0.15 percent by weight and by limiting the hours of operation utilizing distillate fuel oils to less than 720 hours per year. [Pursuant to today's revisions, EcoElectrica will burn only low sulfur distillate fuel oil in which sulfur content may not exceed 0.04% by weight and limit the hours of operation to 955 hours per year]

Emissions of carbon monoxide, total particulate matter, particulate matter less than 10 microns, and volatile organic compounds will be controlled by implementing good combustion practices and limiting the total hours of operation to less than 2720 hours per year. [Pursuant to today's revisions, EcoElectrica will use only distillate fuel oil and limit the hours of operation to 955]. EcoEléctrica shall be required to operate the diesel generator within the designed combustion parameters of the diesel generator manufacturer. EcoEléctrica shall be required to maintain the diesel generator in good working order.

Flares: Emissions of carbon monoxide, total particulate matter, particulate matter less than 10 microns, and volatile organic compounds will be controlled by implementing good combustion practices. Emissions of sulfur dioxide shall be controlled by the use of pipeline quality natural gas or commercial grade LPG. EcoEléctrica shall be required to operate the flare within the designed combustion parameters of the flare manufacturer. EcoEléctrica shall be required to maintain the flare in good working order.

Seawater Cooling Tower: Emissions of total particulate matter and particulate matter less than 10 microns will be controlled by the use of two stages of mist eliminators to maintain drift to less than or equal to 0.0015 percent of the circulating water flow.

The attached Table I and II contain air quality data and the summary of BACT emission limits, respectively.

Table I

Projected Maximum Impacts from the EcoElectrica Cogeneration Facility
Air Quality Impacts ($\mu g/m^3$)*

POLLUTANT	AVERAGING TIME	MODELED IMPACT	SIGNIFICANCE LEVEL	BACKGROUND[2]	TOTAL	NAAQS
NO_2	Annual	0.71	1	4	4.71	100
SO_2	Annual 24-hour 3-hour	0.30 4.33 20.32	1 5 25	5 52 222	5.40 59.33 242.32	80 365 1300
PM_{10}	Annual 24-hour	0.83 4.94	1 5	30 79	30.83 83.94	50 150
CO	8-hour 1-hour	187 131	500 2000	6,111 10,400	6,298 10,531	10,000 40,000
O_3	1-hour	35.2	NA[3]	125	160.2	235

* There is no change in the air quality impacts due to permit revisions of 2005.

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[2] Measured background concentrations were obtained from the following ambient monitoring stations: Guayannila Government Center (SO_2) and Salinas (NO_2 and O_3). The CO monitor is a traffic monitor in downtown San Juan.

[3] A significance level for ozone may be defined as 100 tons/year of VOC emissions. EcoElectrica's VOC potential to emit is 96 tons/year

Table II

BACT CONTROL LEVELS*

POLLUTANT	NSPS LEVELS[4]	EMISSION LIMITS	EMISSION CONTROL
NO_2	111 ppmdv	7 ppmdv for LNG 9 ppmdv for LPG/Oil	Steam Injection and SCR
SO_2	150 ppmdv	(7.5 ppmdv)[5]	Low Sulfur Fuel (0.04% S)
PM_{10}	N/A	0.0053 lbs/MMBtu for LNG/LPG 0.0390 lbs/MMBtu for No. 2 oil	Good Combustion Practices
CO	N/A	100 ppmdv @ 50% load 33 ppmdv @ maximum load	Good Combustion Practices
VOC	N/A	8 ppmdv @ minimum load 5 ppmdv @ maximum load	Good Combustion Practices

* There is no change in the BACT control levels due to permit revisions of 2005.

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[4] Limits are set in 40 CFR Part 60 Subpart GG "Standards of Performance for Stationary Gas Turbines"

[5] The concentration limit is given here for comparison purposes. The permit will limit the sulfur content of the distillate oil to 0.04% and mass emission rate to 70.5 lbs/hr.

Enclosure II

THE ECOELECTRICA LIQUIFIED NATURAL GAS IMPORT TERMINAL AND COGENERATION PROJECT (ECOELECTRICA)

EcoElectrica as Described in Attachment I Is Subject to the Following Conditions:

I. Permit Expiration

1. This PSD Permit shall become invalid if construction:

   a. has not commenced (as defined in 40 CFR Part 52.21(b)(9)) within 18 months after the approval takes effect;
   b. is discontinued for a period of 18 months or more; or
   c. is not completed within a reasonable time.

II. Notification of Commencement of Construction and Startup

The Regional Administrator (RA) shall be notified in writing of the anticipated date of initial startup (as defined in 40 CFR Part 60.2) of each combustion turbine not more than sixty (60) days nor less than thirty (30) days prior to such date. The RA shall be notified in writing of the actual date of both commencement of construction and startup of each combustion turbine within fifteen (15) days after such date.

III. Plant Operations

All equipment, facilities, and systems, including the combustion and electric generation units, installed or used to achieve compliance with the terms and conditions of this PSD Permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. The continuous emission monitoring systems required by this permit shall be on-line and in operation 95% of the time when turbines are operating.

IV. Right to Entry

Pursuant to Section 114 of the Clean Air Act (Act), 42 U.S.C. §7414, the Administrator and/or his/her authorized representatives have the right to enter and inspect for all purposes authorized under Section 114 of the Act. The permittee acknowledges that the Regional Administrator and/or his/her authorized representatives, upon the presentation of credentials shall be permitted:

1. to enter at any time upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this PSD Permit;

2. at reasonable times to access and to copy any records required to be kept under the terms and conditions of this PSD Permit;

3. to inspect any equipment, operation, or method required in this PSD Permit; and

4. to sample emissions from the source relevant to this permit.

V. Transfer of Ownership

In the event of any changes in control or ownership of facilities to be constructed, this PSD Permit shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this PSD Permit and its conditions by letter, a copy of which shall be forwarded to the Regional Administrator.

VI. Operating Requirements

Combustion Turbines:

1. Each Westinghouse 501 F combustion turbine shall be primarily firing natural gas or LPG. No. 2 fuel oil (distillate oil) will only be fired as a backup fuel. Any combustion turbine shall not fire multiple fuels except during the fuel switching operation.

2. Each Westinghouse 501F combustion turbine unit shall be limited to a maximum fuel consumption rate (3 hour average) of 12,500 gallons per hour of distillate fuel (based on 138,750 British Thermal Units HHV per gallon) or 1911 million British Thermal Units HHV per hour (MMBtu/hr) of natural gas or 1801 MMBtu/hr HHV of LPG. The combustion turbines combined consumption of distillate fuel oil shall not exceed 54,000,000 gallons for any 365 day rolling period.

3. The No. 2 fuel oil (distillate fuel oil) fired in the combustion turbines shall contain no more than 0.04 percent sulfur by weight and 0.10% nitrogen by weight.

4. Except for startup, shutdown, and fuel switching or transfer, each Westinghouse 501F combustion turbine unit shall only be allowed to operate above Minimum Load as defined below.

> Minimum Load, which shall be set for each fuel during the Performance Tests, shall be defined as the operating temperature of the combustion turbines that maintains the VOC emissions concentration at or below the Minimum Load concentration limits under condition VII-A of this permit. Minimum Load shall not be set less than 50 percent of maximum load. For this permit, the maximum load is defined as one hundred percent of the manufacturer's design capacity of the gas turbine for given inlet air conditions and fuel.

5. For this PSD permit, startup is defined as the period beginning with fuel input to the combustion turbines and ending when required minimum load has been attained. The duration of startup shall not exceed one (1) hour for any given combustion turbine startup.

6. For this PSD permit, shutdown is defined as the period beginning with load decreasing from the required minimum load and ending with the cessation of fuel input to the combustion turbine. The duration of the shutdown shall not exceed one (1) hour for any given turbine shutdown.

7. Fuel switching or transfer for each Westinghouse 501F combustion turbine is defined as the period of time beginning with the load decreasing from the Minimum Load level and ending when the fuel switching is complete and the load has increased to the Minimum Load level. The duration of the fuel switching or transfer shall not exceed one consecutive hour for any given combustion turbine fuel transfer.

8. At all times, except during startup, shutdown and fuel switching EcoElectrica shall operate the Westinghouse 501 F combustion turbines at or above minimum load. Combustion turbines shall not use bypass stacks to vent exhaust gases.

9. At all times, including periods of startup, shutdown, and fuel transfer, EcoElectrica shall, to the extent practicable, maintain and operate the two Westinghouse 501 F combustion turbines including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to EPA and/or EQB which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the plant.

Duct Burners

10. Each duct burner shall be limited to a maximum design heat input of 480 MMBtu/hr. The duct burners shall fire natural gas or LPG only.

11. The combined consumption of natural gas and/or LPG in both duct burners shall not exceed 600 MMBtu/hr.

12. No duct burner shall be operated if the corresponding combustion turbine is operating at less than 90% of the maximum load.

Auxiliary Diesel Generator:

14. The maximum design capacity of the Auxiliary Diesel Generator shall be 1,280 kilowatts.

15. The Auxiliary Diesel Generator shall be limited to a maximum fuel consumption rate of 82.1 gallons per hour of distillate fuel oil (based on 138,750 Btu per gallon, higher heating value).

16. The Auxiliary Diesel Generator shall use distillate fuel oil which contains no more than:

a. 0.04 % sulfur by weight; and

b. 0.10 percent nitrogen by weight.

17. The Auxiliary Diesel Generator shall operate no more than:

a. 955 hours in any 365-day rolling period; and

b. one hour from the time any combustion turbine reaches minimum load after startup or shutdown.

18. The auxiliary diesel-cycle generator shall not operate concurrently with any of the two combustion turbines except for 38 hour period per 365-day rolling average.

Flare:

19. The Flare shall be designed with heat input rate of 6,500 MMBtu/hr of natural gas or 4,500 MMBtu/hr of LPG.

20. The flare shall be used for non-routine purposes such as but not limited to the disposal of vented natural gas in emergency over pressure or fire safety, control system malfunction, emergency shutdown or normal depressurization for maintenance work.

21. The flare shall be designed for and operated to meet all applicable state and federal regulations. The flare shall be operated with a pilot flame present at all times.

Cooling Towers:

22. The PM/PM_{10} emissions shall be limited to less than or equal to 0.0015% of the circulating flow using two stages of mist eliminators.

23. The mist eliminators shall be inspected every year for wear and tear and replaced pursuant to good operational practices.

Distillate Oil Storage Tank:

24. A fixed roof tank shall be used for the storage of distillate oil.

Operating Scenarios:

25. EcoElectrica shall operate the combustion turbines and the duct burners at appropriate load conditions depending on the ambient temperature such that the facility's projected maximum yearly emission rate in Enclosure I shall not be exceeded.

VII-A Emission Limitation for Each Westinghouse 501 Combustion Turbine

1. **The concentration of VOC (measured as methane) in the exhaust gas, corrected to 15% oxygen (one hour average), shall not exceed:**

   (i) 1.5 parts-per-million by volume on a dry basis (ppmvd) firing natural gas, and
   2.5 ppmvd when firing LPG, and
   6.0 ppmvd when firing distillate fuel oil at maximum load

   (ii) 8 ppmvd for any fuel at minimum load

VII-B Emission Limitations at Each Heat Recovery Steam Generator (HRSG) Stack For Each Westinghouse 501 F Combustion Turbine

1. **Oxides of Nitrogen (NO_x) (3 hour rolling average)**

   a. The NO_x emissions calculated as NO_2 at or above minimum load shall not exceed:

      (i) 60 pounds per hour (lbs/hr) when firing natural gas or distillate oil.
      (ii) 73 lbs/hr when firing LPG

   b. The concentration of NO_x in the exhaust gas at or above minimum load shall not exceed:

      (i) 7 ppmdv corrected to 15% oxygen when firing natural gas
      (ii) 9 ppmdv corrected to 15% oxygen when firing LPG or no. 2 fuel oil.

2. **Sulfur Dioxide (SO_2) (3 hour rolling average)**

   The SO_2 emissions at or above minimum load shall not exceed 70.5 lbs/hr when firing distillate oil.

3. **Carbon Monoxide (CO) (3 hour rolling average)**

   a. The CO emissions while firing any fuel at or above minimum load shall not exceed 244 lbs/hr.

   b. The concentration of CO in the exhaust gas when firing any fuel, corrected to 15% oxygen, shall not exceed:

      (i) 33 ppmdv at combustion turbine 75% and maximum load
      (ii) 100 ppmdv at combustion turbine minimum load

4. **Particulate Matter (PM) and Particulate Matter < 10 microns (PM-10) (3 hour rolling average)**

   a. The PM/PM-10 emissions at or above minimum load shall not exceed

      (i) 12 lbs/hr when firing natural gas or LPG
      (ii) 59 lbs/hr when firing distillate fuel oil

b. The PM/PM-10 emissions at or above minimum load shall not exceed:

(i) 0.0053 lbs/MMBtu (HHV) while firing natural gas or LPG
(ii) 0.0390 lbs/MMBtu (HHV) while firing distillate fuel oil

5. **Volatile Organic Compounds (VOC)**
(1 hour average measured as methane)

a. The VOC emissions for any fuel at or above minimum load shall not exceed 13.8 lbs/hr.

b. The concentration of VOC in the exhaust gas for any fuel, corrected to 15% oxygen, shall not exceed:

(i) 5 ppmdv at 75% and maximum load
(ii) 8 ppmdv at minimum load

6. **Ammonia (NH_3)**:

The concentration of NH_3 in the exhaust gas shall not exceed 10 ppmdv, corrected to 15% oxygen.

7. **Opacity limitation**: Opacity of emissions shall not exceed 20%, except for one period of not more than six (6) minutes in any thirty (30) minute interval when the opacity shall not exceed 60%.

VII-C Emission Limitations for the Auxiliary Diesel Generator

1. Oxides of Nitrogen (NO_x)

The NO_x emissions (one hour average) shall not exceed:
33.7 lbs/hour when firing distillate fuel oil.

2. Carbon Monoxide (CO)

The CO emissions (one hour average) shall not exceed:
2.78 lbs/hour when firing distillate fuel oil.

3. Particulate Matter < 10 microns (PM-10)

The PM-10 emissions (one hour average) shall not exceed:
0.67 lbs/hour when firing distillate fuel oil.

4. Volatile Organic Compounds (VOC)

The VOC emissions (one hour average) shall not exceed:
0.25 lbs/hour when firing distillate fuel oil.

5. Sulfur Dioxide (SO_2)

The sulfur dioxide emissions shall not exceed
0.46 lbs/hr when firing distillate fuel oil

6. Opacity Limitation: Opacity of emissions, as measured by 40 CFR Part 60, Method 9, shall not exceed 20%, except for a period or periods of not more than 4 minutes in any 30 minute interval when the opacity shall not exceed 60%.

VII-D Emission Limitations for the Cooling Towers

Particulate Matter < 10 microns (PM-10) (one hour average) shall not exceed 59.8 lbs/hour.

VIII. Pollution Control Equipment

1. EcoElectrica shall install and shall continuously operate at each Westinghouse 501 F combustion turbine the following air pollution controls:

   a. a steam/water injection system; and
   b. a Selective Catalytic Reduction (SCR) system.

2. A NOx CEM will be used to monitor excess emissions to comply with Section 60.334 of 40 CFR Part 60 Subpart GG.

3. Each SCR system shall continuously use a proven catalyst and shall continuously be operated and maintained in accordance with the manufacturer's design specifications.

4. Each Westinghouse 501 F combustion turbine shall continuously use gaseous fuels. The turbine may use No. 2 fuel oil as a backup fuel in which:

   a. the sulfur content does not exceed 0.04% by weight; and
   b. the nitrogen content does not exceed 0.10% by weight.

5. Each Westinghouse 501 F combustion turbine shall continuously operate in accordance with its specified design combustion parameters.

6. Each Duct Burner shall always be operated in accordance with the manufacturer's specified combustion parameters.

7. EcoElectrica shall install and operate a meter for each SCR system to measure and record the ammonia flows.

8. The Auxiliary Diesel Generator shall use distillate oil as fuel in which:

   a. the sulfur content does not exceed 0.04% by weight; and
   b. the nitrogen content does not exceed 0.10% by weight.

9. EcoEléctrica shall install and shall continuously operate two stages of mist eliminators in the seawater cooling tower .

IX. Fuel Sampling and other Compliance/Monitoring Requirements

1 Fuel Sampling and Testing

   a. EcoElectrica shall sample the fuel oil being fired in the two Westinghouse 501 F combustion turbines or the diesel-cycle generator on each occasion that fuel is received at the site for transfer to the storage tanks at the facility from any other source. The fuel oil sampling shall include but not be limited to determining the fuel's sulfur content (% by weight). EcoElectrica shall not claim any credit for fuel oil bound nitrogen in order to comply with its NOx emission limits in all units.

   b. In lieu of monitoring the sulfur content of the gaseous fuel combusted, EcoElectrica may use the gaseous fuel that shall meet the definition of

natural gas in Section 60.331(u) of 40 CFR Part 60, Subpart GG. All appropriate records shall be kept on site for five years.

2. Compliance with the sulfur content standard shall be determined using the testing methods established in Section 335(b)(10) of 40 CFR Part 60, Subpart GG.

3. The presence of a flare pilot flame shall be monitored using a thermocouple or any equivalent device to detect the presence of a flame.

X. Continuous Emission Monitoring (CEM) Requirements

1. Prior to the date of startup and thereafter, EcoElectrica shall install, calibrate, maintain, and operate the following continuous monitoring systems in each of the combustion turbine/HRSG exhaust stack.

   a. A continuous opacity monitoring system (COMS) to measure and record stack opacity levels. The system shall meet all applicable EPA monitoring performance specifications (including but not limited to 40 CFR Part 60.13 and 40 CFR Part 60, Appendix B, Performance Specifications 1).

   b. A continuous emission monitoring system (CEMS) to measure and record stack gas NO_x (as measured as NO_2) concentrations. The system shall meet all applicable EPA monitoring performance specifications (including but not limited to 40 CFR Part 60.13 and 40 CFR Part 60, Appendix B, Performance Specifications 2, and Appendix F).

   c. A CEMS to measure and record stack gas oxygen concentrations. The system shall meet all applicable EPA monitoring performance specifications (including but not limited to 40 CFR Part 60.13 and 40 CFR Part 60, Appendix B, Performance Specifications 3, and Appendix F).

   d. A CEMS to measure and record stack gas carbon monoxide concentrations. The system shall meet all applicable EPA monitoring performance specifications (including but not limited to 40 CFR Part 60.13 and 40 CFR Part 60, Appendix B, Performance Specifications 4, and Appendix F).

   e. Continuous monitoring systems to measure and record each combustion turbine's operating temperature, stack gas temperatures and, fuel flows. Upon request of EPA, EcoEléctrica shall conduct a performance evaluation of the monitors.

   f. Continuous monitoring systems to measure and record each Duct Burner's fuel flows. Upon request of EPA, EcoEléctrica shall conduct a performance evaluation of the monitors.

2. Not less than 90 days prior to the date of startup of each combustion turbine, EcoElectrica shall submit a written report to EPA of a Quality Assurance Project Plan for the certification of the combustion turbine's monitoring systems. Performance evaluation of the monitoring systems may not begin until the Quality Assurance Project Plan has been approved by EPA.

3. EcoElectrica shall conduct performance evaluations of the COMS's, CEMS's and continuous monitoring systems prior to and/or during the initial performance testings required under Permit Condition XII of this permit or within 30 days thereafter in accordance with the applicable performance specifications in 40 CFR Part 60, Appendix B, and 40 CFR Part 52, Appendix E. EcoElectrica shall notify

the Regional Administrator (RA) 15 days in advance of the date upon which demonstration of the monitoring system(s) performance will commence.

4. EcoElectrica shall submit a written report to EPA of the results of all monitor performance specification evaluations conducted on the monitoring system(s) within 60 days of the completion of the tests. The monitoring systems must meet all the requirements of the applicable performance specification test in order for the monitors to be certified.

XI. Performance Testing Requirements For Each Combustion Turbine and Auxiliary Diesel Generator

1. Within 60 days after achieving the maximum production rate of the combustion turbine and auxiliary diesel generator, but no later than 180 days after initial startup as defined in 40 CFR Part 60.2, and at such other times as specified by the EPA, EcoElectrica shall conduct performance tests for NO_x, PM, PM_{10}, CO, VOCs and opacity at the HRSG stacks and the auxiliary diesel generator. All performance tests shall be conducted at maximum load conditions and/or other loads specified by EPA. When natural gas is available to the facility, the performance tests shall be conducted within 60 days after achieving the maximum production rate of the combustion turbines while utilizing natural gas fuel.

2. Three test runs shall be conducted for maximum, 75%, minimum and other intermittent load conditions (i.e., at four load conditions) and compliance for each operating mode shall be based on the average emission rate of the three runs. Duct burners shall be firing during the tests at maximum load.

3. At least 60 days prior to actual testing, EcoElectrica shall submit to the EPA a Quality Assurance Project Plan detailing methods and procedures to be used during the performance stack testing. A Quality Assurance Project Plan that does not have EPA approval may be grounds to invalidate any test and require a re-test.

4. EcoElectrica shall use the following test methods, or a test method which would be applicable at the time of the test and detailed in a test protocol approved by EPA:

   a. Performance tests to determine the stack gas velocity, sample area, volumetric flow rate, molecular composition, excess air of flue gases, and moisture content of flue gas shall be conducted using 40 CFR Part 60, Appendix A, Methods 1, 2, 3, and 4.

   b. Performance tests for the emissions of NO_x shall be conducted using 40 CFR Part 60, Appendix A, Method 7E.

   c. Performance tests for the emissions of PM shall be conducted using 40 CFR Part 60, Appendix A, Method 5.

   d. Performance tests for the emissions of PM_{10} shall be conducted using 40 CFR Part 51, Appendix M, Method 201 (exhaust gas recycle) or Method 201A (constant flow rate), and Method 202.

   e. Performance tests for the emissions of CO shall be conducted using 40 CFR Part 60, Appendix A, Method 10.

   f. Performance tests for the emissions of VOCs shall be conducted using 40 CFR Part 60, Appendix A, Method 18 and Method 25A. Method 18 shall be used to determine the non-VOC components of the emission stream.

Performance tests for VOCs shall be conducted annually for at least three years following the start of operations at EcoElectrica. After three years, EcoElectrica may request EPA in writing for a determination whether or not these tests shall continue to be conducted annually as required by this condition.

g. Performance tests for the visual determination of the opacity of emissions from the stack shall be conducted using 40 CFR Part 60, Appendix A, Method 9 and the procedures stated in 40 CFR Part 60.11.

h. Performance test for confirming the specified drift rate of 0.0015% of the circulating sea water flow rate on the cooling towers shall be conducted using 40 CFR Part 60, Appendix A, Method 5.

5. Test results indicating that emissions are below the limits of detection shall be deemed to be in compliance.

6. Additional performance tests or test runs may be required at the discretion of the EPA or EQB for any or all of the above pollutants.

7. For performance test purposes, sampling ports, platforms and access shall be provided by EcoElectrica on each of the combustion turbine units in accordance with 40 CFR Part 60.8(e).

8. Compliance with the SO_2 emission limit shall be determined by calculation methods based upon the distillate oil's sulfur content and the distillate oil's flow to the combustion turbine.

9. Compliance with the cooling tower PM/PM-10 emission limit shall be determined by multiplying the maximum cooling water circulation rate with cooling water's drift rate and total dissolved solids (TDS) concentration. The TDS shall be monitored continuously.

10. Ammonia Slip limit shall be met by maintaining the optimum ammonia flow rate at various operating loads. The optimum ammonia flow rate to meet both the ammonia slip and NOx emission limits shall be determined based on the NOx CEMs data, catalyst life and performance test. An ammonia flow meter shall be installed, calibrated, operated and maintained according to the manufacturer's specifications. An annual stack test shall be conducted on each combustion turbine stack to verify compliance with the 10 ppmdv ammonia slip limit.

11. EcoElectrica shall submit a written report to EPA of the results of all emission testing within 60 days of the completion of the performance test.

12. Operations during periods of startup, shutdown, malfunction and fuel switching or transfer shall not constitute representative conditions for the purpose of a performance test.

XII. Recordkeeping Requirements

1. Logs shall be kept and updated daily to record the following:

a. the gallons of No. 2 fuel oil fired on an hourly basis at each Westinghouse 501 F combustion turbine and auxiliary diesel generator;

b. the hours of operation of each Westinghouse 501 F combustion turbine for each fuel;

c. the sulfur content of all fuel oil burned;

d. the amount of steam consumed at each Westinghouse 501 F combustion turbine to control NO_x emissions;

e. the amount of electrical output (MW) on an hourly basis from each Westinghouse 501 F combustion turbine;

f. any adjustments and maintenance performed on each Westinghouse 501 F combustion turbine;

g. any adjustments and maintenance performed on monitoring systems; and

h. all fuel sampling results obtained pursuant to Condition IX of this permit.

i. the amount of fuel consumed in MMBtu HHV on an hourly basis at each Duct Burner

j. the amount of ammonia flow to each SCR

k. the number of hours the flare operated

l. cooling tower emission calculations

m. inspections and maintenance performed on mist eliminators.

2. All monitoring records, fuel sampling test results, calibration test results and logs must be maintained for a period of five years after the date of record, and made available upon request. All rolling averages shall be computed on a daily basis.

XIII. Reporting Requirements

1. EcoElectrica shall submit a written report of all excess emissions to EPA for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each quarter and shall include the information specified below:

   a. The magnitude of excess emissions computed in accordance with 40 CFR Part 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, malfunctions and fuel switching or transfer for each turbine unit. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted shall also be reported.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the monitoring systems have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

e. Results of quarterly monitor performance audits, as required in 40 CFR Part 60, Appendix F.

f. For the purposes of this PSD Permit, excess emissions indicated by monitoring systems, except during startup, shutdown or fuel switching or transfer shall be considered violations of the applicable emission limits.

2. Any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emission limit stated in Permit Condition VII of this permit and actions taken on any unit must be reported by telephone within 2 working days to:

Chief, Air Permit Division
Puerto Rico Environmental Quality Board
P.O. Box 11488
Santurce, Puerto Rico 00910
(787) 767-8025

If any failure results in a release of emissions of a hazardous air pollutant(s) that continues for more than an hour in excess of any applicable limit; or in a release of any other regulated pollutant that continues for more than 2 hours in excess of any applicable limit, the Board must be notified within 24 hours.

In addition, the Regional Administrator and Puerto Rico Environmental Quality Board shall be notified in writing within fifteen (15) days of any such failure. This notification shall include: a description of the malfunctioning equipment or abnormal operation; the date of the initial failure; the period of time over which emissions were increased due to the failure; the cause of the failure; the estimated resultant emissions in excess of those allowed under Condition VII of this permit; and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause.

XIV. Other Requirements

1. EcoElectrica shall meet all other applicable federal, state and local requirements, including but not limited to those contained in the Puerto Rico State Implementation Plan (SIP), the General Provisions of the New Source Performance Standards (NSPS) (40 CFR Part 60, Subpart A), and the NSPS for Stationary Gas Turbines (40 CFR, Part 60, Subpart GG).

2. All reports and Quality Assurance Project Plans required by this permit shall be submitted to:

Chief, Air Compliance Branch
United States Environmental Protection Agency
Region II
290 Broadway
New York, New York 10007-1866

3. Copies of all reports and Quality Assurance Project Plans shall also be submitted to:

   a. Region II CEM Coordinator
      United States Environmental Protection Agency
      Region II
      Air and Water Section
      Monitoring Management Branch
      2890 Woodbridge Avenue - MS - 102
      Edison, New Jersey 08837-3679

   b. Director, Air Permit Division
      Puerto Rico Environmental Quality Board
      P.O. Box 11488
      Santurce, Puerto Rico 00910

FACT SHEET
ECOELECTRICA LIQUIFIED NATURAL GAS (LNG)COGENERATION PROJECT

AMENDMENTS TO THE PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY (PSD) PERMIT (January, 2005)

This fact sheet has been developed under provisions of the Clean Air Act (CAA) for the amended permit which the United States Environmental Protection Agency (EPA) intends to issue to the EcoElectrica L.P. (EcoElectrica) for certain changes to the PSD permit for the construction and operation of the LNG Import Terminal and Cogeneration Project in Penuelas, Puerto Rico.

AMENDMENTS TO THE PSD PERMIT: EcoElectrica submitted requests for some changes to its PSD permit between October 2, 2003 and October 20, 2004. These changes will not increase emissions or result in any adverse air quality impacts. Therefore, EPA is amending certain PSD permit conditions related to; 1) ammonia slip monitoring; 2) the operation of the auxiliary diesel generator; 3) fuel and water/fuel ratio monitoring pursuant to NSPS and; 4) the time line for reporting of the deviation. Specifically, Enclosure II conditions VI (14 to 18), VII-C (1 to 6), VIII.2, IX (1 to 3), X1 (e), XI (10) and XIII 2 are revised.

ORIGINAL DESCRIPTION OF FACILITY: EcoElectrica is proposing to install and operate a 461 (+/-10%) megawatt (MW) combined cycle cogeneration plant and a LNG marine unloading terminal in Penuelas, Puerto Rico. The proposed cogeneration project will consist of two LNG/Liquified Petroleum Gas (LPG)/ No. 2 fuel oil firing Westinghouse 501 F combustion turbine/generators exhausting into separate heat recovery steam generators (HRSGs). Each HRSG will recover energy from the high-temperature flue gas exiting the respective combustion turbine, and from supplemental firing via duct burners. The HRSGs will produce steam that will be routed to a steam generator and to a desalination plant capable of producing up to 4 million gallons per day of fresh water. Combustion emissions will be minimized by the use of natural gas, 0.04% sulfur oil when necessary, various air pollution control equipments and good combustion practices. The stated purpose of this facility is to provide the Puerto Rico Electric Power Authority (PREPA) with additional electric power using fuels other than oil.

BACKGROUND:

- October 1, 1996- EPA issued a final Prevention of Significant Deterioration of Air Quality (PSD) to EcoElectrica to construct and operate 461 MW combined cycle cogeneration plant.
- October 2, 2003- EcoElactrica submitted a request to make crtain revisions to its October, 1996, PSD Permit and also requested waiver from NSPS 40 CFR 60, Subpart GG monitoring provisions.
- November 28, 2003- EPA determines that EcoElectrica's request is incomplete and requests additional data and information.
- January 26, 2004- EcoElectrica submits addional information related to Ammonia Slip monitoring.
- October 20, 2004- EcoElectrica submits additional information related Ammonia Slip monitoring and fuel testing pursuant to the revised NSPS, Subpart GG.

CONCLUSIONS AND RECOMMENDATIONS

Attached for the DD's signature, therefore, is the amended permit for approval.

Table I

Projected Maximum Impacts from the EcoElectrica Cogeneration Facility
Air Quality Impacts ($\mu g/m^3$)*

POLLUTANT	AVERAGING TIME	MODELED IMPACT	SIGNIFICANCE LEVEL	BACKGROUND[1]	TOTAL	NAAQS
NO_2	Annual	0.71	1	4	4.71	100
SO_2	Annual 24-hour 3-hour	0.40 4.33 20.32	1 5 25	5 52 222	5.40 56.33 242.32	80 365 1300
PM_{10}	Annual 24-hour	0.83 4.94	1 5	30 79	30.83 83.94	50 150
CO	8-hour 1-hour	187 131	500 2000	6,111 10,400	6,298 10,531	10,000 40,000
O_3	1-hour	35.2	NA[2]	125	160.2	235

* There is no change in the air quality impacts due to permit revisions of 2005.

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[1] Measured background concentrations were obtained from the following ambient monitoring stations: Guayanilla Government Center (SO_2) and Salinas (NO_2 and O_3). The CO monitor is a traffic monitor in downtown San Juan.

[2] A significance level for ozone may be defined as 100 tons/year of VOC emissions. EcoElectrica's VOC potential to emit is 96 tons/year

Table II

BACT CONTROL LEVELS*

POLLUTANT	NSPS LEVELS[3]	EMISSION LIMITS	EMISSION CONTROL
NO_2	111 ppmdv	7 ppmdv for LNG 9 ppmdv for LPG/Oil	Steam Injection and SCR
SO_2	150 ppmdv	(7.5 ppmdv)[4]	Low Sulfur Fuel (0.04% S)
PM_{10}	N/A	0.0053 lbs/MMBtu for LNG/LPG 0.0390 lbs/MMBtu for No. 2 oil	Good Combustion Practices
CO	N/A	100 ppmdv @ 50% load 33 ppmdv @ maximum load	Good Combustion Practices
VOC	N/A	8 ppmdv @ minimum load 5 ppmdv @ maximum load	Good Combustion Practices

* There is no change to the BACT control levels due to 2005 changes.

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[3] Limits are set in 40 CFR Part 60 Subpart GG "Standards of Performance for Stationary Gas Turbines"

[4] The concentration limit is given here for comparison purposes. The permit will limit the sulfur content of the distillate oil to 0.04% and mass emission rate to 70.5 lbs/hr.