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

MAY 17 2007

William T. Seils,
President
Besicorp-Empire Power Company, LLC
1151 Flatbush Road
Kingston, NY 12401

Re: Prevention of Significant Deterioration of Air Quality (PSD)
Request for a Second PSD Permit Extension for a Proposed 505 MW
Cogeneration Power Plant Owned by the Besicorp-Empire Power Company, LLC
(BEPCO)

Dear Mr. Seils:

This is EPA's final Agency action under the Clean Air Act extending the effective date of the PSD permit for Besicorp-Empire Power Company, LLC (BEPCO) from March 23, 2007 until March 23, 2008, for the construction of a proposed 505 MW combined-cycle cogeneration power plant. This PSD permit is effective immediately upon receipt.

Background

On September 23, 2004, the New York State Department of Environmental Conservation (NYSDEC) issued one PSD permit for a proposed project that, at the time, consisted of a cogeneration power plant and a newspaper recycling facility. Subsequently, at the request of the developer and for reasons related to securing financing from lenders, the proposed project was split into two separate and financially independent projects. The PSD permit was bifurcated into two PSD permits on December 8, 2005. However, the bifurcation did not change the original expiration date of March 23, 2006. By that time, these two proposed projects had not obtained all the necessary permits to start construction. In addition, these two proposed projects had not secured the necessary financing to start construction. In anticipation of the March 23, 2006 expiration date, BEPCO requested a PSD permit extension on January 10, 2006. EPA and NYSDEC granted a 12-month extension after allowing for a public comment period during which no comments were received. A new PSD permit expiration date was set for March 23, 2007.

On January 18, 2007, EPA received a second request from BEPCO to extend their PSD permit expiration date for commencement of construction from March 23, 2007 until March 23, 2008. A number of reasons were provided for this extension request.

On March 28, 2007, after reviewing the reasons provided, EPA issued a preliminary determination to grant an additional one-year extension, subject to public review. On EPA's behalf, the NYSDEC published a public notice in the Environmental Notice Bulletin (ENB) which allowed for a 30-day public comment period. No public comments were received.

Discussion

Pursuant to 40 C.F.R. § 52.21(r)(2), a PSD permit becomes invalid if construction does not commence within 18 months after permit issuance. EPA may exercise its discretion to extend the 18-month period "upon a satisfactory showing that an extension is justified" provided certain requirements are met. EPA and NYSDEC had previously granted a permit extension of 12 months for this project. In determining whether a second permit extension should be granted, EPA reviewed the information submitted by BEPCO regarding the continued viability of this proposed cogeneration power plant. Based on the information submitted by BEPCO, this proposed combined-cycle cogeneration plant project continues to appear viable based on the company's representations about the pending financing and contractual arrangements. In addition, all of the remaining unresolved issues appear to be heading to a likely resolution no later than the end of this year. Furthermore, EPA agrees that the proposed air pollution control equipment and air quality impact analyses remain current and appropriate. Therefore, based on the information provided by BEPCO, EPA proposed to extend the effective date of this permit by one year (until March 23, 2008) conditioned on completion of the public review process. As mentioned above, no public comments were received by the NYSDEC or EPA regarding the PSD permit extension request.

Please note that the PSD permit conditions have been contained in a merged PSD/Part 201 permit issued by the NYSDEC. These conditions were developed by the NYSDEC under a PSD delegation of authority in effect at that time. As the NYSDEC is no longer operating under that delegation, I am hereby exercising my authority to implement the PSD program under 40 CFR §52.21 by re-issuing the PSD permit with the revised expiration date. Attachment I contains the final PSD permit with the revised condition. Please be advised that today's modifications relate solely to the PSD requirements in the merged permit. Any changes pursuant to Part 201 must be addressed independently with NYSDEC.

The revised PSD permit conditions are effective immediately upon receipt. This determination is final Agency action under the Clean Air Act. No administrative review is possible since no comments were received on the proposed changes and EPA made no changes to the permit conditions after the period for public review.

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 E. Mugdan, Director
Division of Environmental Planning and Protection

Attachment

POWER PSD PERMIT

BESICORP - EMPIRE POWER COMPANY, LLC
Riverside Avenue
Rensselaer, NY 12144

I. Facility Wide PSD Emission Limits

The Besicorp - Empire Power Generating Facility (PGF), a nominal 505 MW combined cycle power plant, is a major source under the Federal Prevention of Significant Deterioration (PSD) rule. The PGF will offer the electricity produced for sale on the merchant market. The PGF will also serve as a cogeneration plant, providing steam to an adjacent recycled newsprint manufacturing plant.

The power plant is configured with two GE Frame 7FA combustion turbines, heat recovery steam generators (HRSGs) and a steam turbine. With all of these components the maximum electrical output of the facility will be approximately 670 MW. The PGF will use natural gas as the primary fuel and low sulfur (0.5%) distillate as the backup fuel in the combustion turbines and duct burners within the HRSGs.

This power plant shall meet the following emission limits:

SO_2	148.2 tons/year, rolled daily
H_2SO_4	58.5 tons/year, rolled daily
CO	76.7 tons/year, rolled daily
Ammonia slip	110.9 tons/year, rolled daily
PM	244.7 tons/year, rolled daily
PM-10	244.7 tons/year, rolled daily
VOC	71.1 tons/year, rolled daily
NO_x	209.8 tons/year, rolled daily

II. Emission Unit Conditions

A. Emission Unit (1-CTDBR): Combustion Turbines, Heat Recovery Steam Generators and Duct Burners

Two GE Frame 7FA Model combined cycle, combustion turbines (CTs) equipped with dry low NOx combustor. Each of the two CTs will be connected to one of the two electrical generators. The two generators will provide about two-thirds of the electrical energy produced by the PGF. The CT exhaust gases will heat water circulating through the two heat recovery steam generators (HRSGs) to produce steam. Each HRSG will contain a duct burner that can be fired to produce steam in addition to the steam that is generated from the heat contained in the CT

exhaust. The turbines will primarily fire natural gas. Low sulfur content No. 2 fuel oil will be used as a secondary fuel. The gas turbines are subject to the Federal New Source Performance Standards for gas turbines (40 CFR Part 60 Subpart GG). The duct burners will fire natural gas and low sulfur content No. 2 oil. The duct burners are subject to Federal New Source Performance Standards for Industrial-Commercial-Institutional Steam Generating Units (40 CFR Part 60 Subpart Da).

A.1) Emission Limit Controls for (Emission Unit 1-CTDBR):

This facility shall use the following control measures in order to meet BACT requirements:

Nitrogen Oxides - Emission control shall consist of dry low NOx combustion technology in combination with a selective catalytic reduction (SCR) system.

Particulate - PM and PM10 emissions shall be controlled by the use of clean burning (low ash) fuel and by efficient combustion techniques.

Carbon Monoxide - Emissions of carbon monoxide shall be controlled by an oxidation catalyst and good combustion control.

Sulfur Dioxide and Sulfuric Acid Mist - Emissions of sulfur dioxide and sulfuric acid mist shall be controlled by using natural gas and very low sulfur content distillate oil as fuels for combustion.

Ammonia - Emissions of Ammonia shall be controlled by proper operation of the SCR control equipment.

A.2) Emission Limits for (Emission Unit 1-CTDBR)

This facility shall meet the following emission limits for this source:

a. Each CT firing natural gas @ 100% load without supplementary duct firing (Process CO1)

	Limits	**Applicable Requirement**
NO_x	14.59 lbs/hr & 2.0 ppmdv @ 15% oxygen	BACT/LAER
PM	13.00 lbs/hr & 0.012 lb/mmBTU	BACT
PM_{10}	13.00 lbs/hr & 0.012 lb/mmBTU	BACT
CO	8.88 lbs/hr & 2.0 ppmdv @ 15% oxygen	BACT
NH_3 slip	5.0 ppmdv @ 15% oxygen	NYCRR Subpart 200.7
VOC (as propane)	1 ppmdv & 0.001 lb/mmBTU	LAER
SO_2	1.67 lbs/hr	BACT
H_2SO_4	0.52 lbs/hr	BACT

b. Each CT firing natural gas @ 100% load with supplementary duct firing (Process CO3)

	Limits	**Applicable Requirement**
NO_x	28.90 lbs/hr & 3.0 ppmdv @ 15% oxygen	BACT/LAER
PM	35.00 lbs/hr & 0.017 lb/mmBTU	BACT
PM_{10}	35.00 lbs/hr & 0.017 lb/mmBTU	BACT
CO	29.32 lbs/hr & 5.0 ppmdv @ 15% oxygen	BACT
NH_3 slip	5.0 ppmdv @ 15% oxygen	NYCRR Subpart 200.7
VOC (as propane)	7 ppmdv @ 15% oxygen & 7.45E-3 lb/mmBTU	LAER
SO_2	2.21 lbs/hr	BACT
H_2SO_4	0.87 lbs/hr	BACT

c. One CT firing distillate oil @ 100% load without supplementary duct firing (Process CO2)

	Limits	**Applicable Requirement**
NO_x	74.04 lbs/hr & 9.0 ppmdv @ 15% oxygen	BACT/LAER
PM	75.00 lbs/hr & 0.037 lb/mmBTU	BACT
PM_{10}	75.00 lbs/hr & 0.037 lb/mmBTU	BACT
CO	20.03 lbs/hr & 4.0 ppmdv @ 15% oxygen	BACT
NH_3 slip	5.0 ppmdv @ 15% oxygen	NYCRR Subpart 200.7
VOC (as propane)	2 ppmdv @ 15% oxygen & 1.99E-3 lb/mmBTU	LAER
SO_2	105.77 lbs/hr	BACT
H_2SO_4	33.22 lbs/hr	BACT

d. One CT firing distillate oil @ 100% load with supplementary duct firing (Process CO4)

	Limits	**Applicable Requirement**
NO_x	106.83 lbs/hr & 10.0 ppmdv @ 15% oxygen	BACT/LAER
PM	130.00 lbs/hr & 0.059 lb/mmBTU	BACT
PM_{10}	130.00 lbs/hr & 0.059 lb/mmBTU	BACT
CO	65.04 lbs/hr & 10.0 ppmdv @ 15% oxygen	BACT
NH_3 slip	5.0 ppmdv @ 15% oxygen	NYCRR Subpart 200.7
VOC (as propane)	12 ppmdv @ 15% oxygen & 1.34E-2 lb/mmBTU	LAER
SO_2	138.00 lbs/hr	BACT
H_2SO_4	54.94 lbs/hr	BACT

B. Operation Restrictions

Emission Unit: CTBDR

1. When two turbine trains are operating, the minimum allowable continuous load during normal operation for each combustion turbine during the firing of **distillate oil** is 50 percent. Turbine load shall be **continuously** recorded to demonstrate compliance with this requirement.

2. For each turbine train, the duct burner may not operate unless the combustion turbine is at 100 percent load. The minimum allowable continuous load during normal operation for each duct burner is 10 percent during firing of natural gas and 25 percent during firing of distillate oil. The turbine and duct burner loads shall be continuously recorded to demonstrate compliance with this requirement.

3. The minimum allowable continuous load during normal operation for the combustion turbine during the firing of **natural gas** is 50 percent. Turbine load shall be continuously recorded to demonstrate compliance with this requirement.

4. When only one turbine train is operating, the minimum allowable continuous load during normal operation for the combustion turbine during the firing of distillate oil is 100 percent. Turbine load shall be continuously recorded to demonstrate compliance with this requirement.

5. The duct burners (DBRN1 and DBRN2) shall be limited to firing no more than a total of 7.4 million gallons/year of fuel oil on a rolling daily basis. Fuel oil flow to the duct burners shall be continuously monitored and recorded to demonstrate compliance with this requirement.

6. The combustion turbines (CTRB1 and CTRB2) shall be limited to firing no more than a total of 31 million gallons/year of fuel oil on a rolling daily basis. Fuel oil flow to the combustion turbines shall be continuously monitored and recorded to demonstrate compliance with this requirement.

7. During natural gas firing, the maximum design capacity of each duct burner is 645.9 mmbtu/hr when one turbine train is operating; and 527 MMbtu/hr when two turbine trains are operating. Records documenting the maximum design capacity of the duct burners shall be kept on site.

8. During distillate oil firing, the maximum design capacity of each duct burner is 639.4 MMbtu/hr when one turbine is operating; and 511.7 MMbtu/hr when two turbine trains are operating. Records documenting the maximum design capacity of the duct burners shall be kept on site.

C. Testing and Compliance Certification Requirements

1. Compliance stack testing shall be conducted as follows:

   a) Compliance stack testing shall be conducted in accordance with 40 CFR 60.8.

   b) Stack testing to determine compliance with emission limits shall be

completed for each gas turbine for each fuel within 180 days of first fire of fuel in each gas turbine. Stack testing shall be done in accordance with a stack test protocol approved by the Department. The permittee shall submit a stack test protocol to the Department for review at least 60 days prior to conducting testing.

The permittee shall notify the Department of the scheduled test dates at least 30 days prior to such dates. The final stack test report shall be submitted to the Department within 60 days of completion of testing.

D. Reporting and Record Keeping Requirements

1. The facility shall comply with the reporting and record keeping requirements of 40 CFR 60.

2. The permittee shall maintain written records of the compliance determinations required in accordance with conditions II.A to C. These records shall be maintained on site and shall be reported upon request.

E. Plant-wide Requirements

1. The particulate emission limits based on heat input correspond to the Higher Heating Value (HHV) of the fuel burned.

2. All emission limits apply at all permissible loads and modes of operation. During periods of startup, shutdown, maintenance, and malfunction or emergency, the provisions of 6 NYCRR Part 201-1.4 and 1.5 apply.

3. PM, PM-10 emission limit testing shall be conducted as specified in the appropriate Reference Test Method (Method 5 for PM, Methods 201A and 202 for PM-10).

4. During Facility Construction: Trucks used for transporting soil and/or gravel during construction shall be covered to avoid loss of transported material, and truck speed on site shall be controlled to minimize fugitive dust. Any spillage from trucks on paved roadways shall be cleaned regularly.

5. The approval to construct the facility shall become invalid if construction is not commenced by March 23, 2008, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time.

F. General NSPS Permit Conditions

These conditions identify the general NSPS requirements applicable to the gas turbines, duct burners and auxiliary boiler.

1. All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted in duplicate to the following address:

   Director, Division of Enforcement and Compliance Assistance
   USEPA Region 2
   290 Broadway, 21st floor
   New York, NY 10007-1886

   Copies of all correspondence to the administrator pursuant to this part shall also be submitted to the NYSDEC Regional Office issuing this permit (see address at the beginning of this permit) and to the following address:

   NYSDEC
   Bureau of Enforcement and Compliance Assurance
   625 Broadway
   Albany, NY 12233-3254

   2. Any owner or operator subject to this part shall furnish the Administrator with the following information:

      a. a notification of the date construction or reconstruction commenced, post marked no later than 30 days after such date;

      b. a notification of the date construction or reconstruction commenced, post marked no later than 30 days prior to such date;

      c. a notification of the actual date of initial start up, post marked within 15 days after such date;

      d. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless the change is specifically exempted under this part. The notice shall be post marked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature to the change, present and proposed emission control systems, productive capability of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional information regarding the change;

e. A notification of the date upon which the demonstration of continuous monitoring system performance commences, post marked not less than 30 days prior to such date;

3. Affected owners or operators shall maintain records of occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

4. Affected owners or operators shall submit an excess emissions report quarterly (or more frequently as required by the applicable Subpart or the Administrator), to the Administrator. These reports shall be post marked no later than 30 days after each calendar quarter (or as appropriate), and shall contain the following information:

   a. The magnitude of excess emissions computed, any conversion factors used, the date and time of each occurrence, and the process operating time during the reported period;

   b. Specific identification of each period of excess emissions that occur during startup, shutdown, or malfunction, where the nature, cause, and corrective action are provided for a malfunction;

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

   d. When no excess emissions have occurred, or when the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be provided in the report.

5. An excess emissions report and/or a summary report, for each pollutant monitored, shall be sent to the Administrator quarterly (or as required), in the form prescribed in Figure 1 of subdivision 60.7(d).

6. The following files shall be maintained at the facility for all affected sources: all measurements, including continuous monitoring systems, monitoring device, and performance testing measurements; all continuous monitoring system evaluations, all continuous monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part, recorded in permanent form suitable for inspections. The file shall be maintained for at least two years following the date of such measurements,

reports, and records.

7. Within 60 days after achieving the maximum production rate, but not later than 180 days after the initial startup of the facility, the owner or operator of the facility shall conduct performance testing and provide the results of such tests, in a written report, to the Administrator.

8. Performance testing shall be conducted in accordance with the methods and procedures in this part or by alternative methods and procedures approved by the Administrator.

9. Performance tests shall be conducted under such conditions specified by the Administrator, based upon representative performance data supplied by the owner or operator of the facility.

10. The owner or operator shall provide the Administrator with prior notice of any performance test at least 30 days in advance of testing.

11. The following performance testing facilities shall be provided during all tests:

    a. Sampling ports adequate for tests methods applicable to such facility;

    b. A safe sampling platform;

    c. A safe access to the sampling platform; and

    d. Utilities for sampling and testing equipment.

12. Each performance test shall consist of three separate runs, at the specified duration required in the applicable test method. Compliance with all applicable standards shall be determined by using the arithmetic mean of the results of the three runs.

13. The availability to the public of information provided to, or otherwise obtained by, the Administrator under this part shall be governed by part 2 of this chapter.

14. Compliance with standards in 40 CFR Part 60, other than opacity standards, shall be determined in accordance with performance tests established by section 60.8 of 40 CFR Part 60 unless otherwise specified in the applicable standard.

15. At all times, including periods of startup, shutdown, and malfunction, owners and operators of this facility shall, to the extent practicable

maintain and operate any affected facility 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 the Department and the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

16. No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

17. All monitoring systems and devices shall be installed, calibrated, maintained, and operated in accordance with the requirements of section 60.13.

18. Within 180 days of the completion of any physical or operational change (as defined in section 60.14), compliance with the applicable standards must be achieved.

19. The following shall be submitted to the Administrator prior to reconstruction (as defined in Section 60.15):

    a. A notice of intent to reconstruct 60 days prior to the action;

    b. Name and address of the owner or operator;

    c. The location of the existing facility;

    d. A brief description of the existing facility and the components to be replaced;

    e. A description of the existing air pollution control equipment and the proposed air pollution control equipment.

    f. An estimate of the fixed capitol cost of the replacements and of constructing a comparable entirely new facility;

    g. The estimated life of the facility after the replacements; and

h. A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

G. Future PSD Modifications

The PGF was permitted in conjunction with an adjacent Besicorp-Empire Recycled Newsprint Facility (RNF) as one major source under an original PSD Permit (Permit ID: 4-3814-00052). For future PSD modification purposes, the total potential emissions from both facilities (PGF and RNF) from the original PSD permit as shown below shall be used to define the source.

The total PSD potential to emit for both facilities was originally defined as follows and shall be used to evaluate future modifications to the facility:

	Total PSD Potential for Both Facilities
SO_2	151.4 tons/year
H_2SO_4	59.0 tons/year
CO	151.4 tons/year
Ammonia slip	115.4 tons/year
PM	250.9 tons/year
PM-10	250.9 tons/year
VOC	160.1 tons/year
NO_x	221.8 tons/year