SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY				
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Received by (Please Print Clearly) B. Date of Delivery 1				
Article Addressed to:	If YES, enter delivery address below:				
Mr. Rick A. Bowen Executive Vice President Palmetto Power LLC 1000 Louisiana Street					
Suite 5800 Houston, TX 77002	3. Service Type X Certified Mail Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D.				
	4. Restricted Delivery? (Extra Fee) ☐ Yes				
2. Article Number (Copy from service label) 7000 .2870 0000 7028 2836					
PS Form 3811, July 1999 Domestic Ret	urn Receipt 102595-99-M-1789				
+					

•

	U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)						
2836		AL USE					
8507 0000 0	Postage \$ Certified Fee Return Receipt Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required) Total Postage & Fees	Postmark Here					
2870	Sent To Rick A. Bowen						
Street, Apt. No.; or PO Box No. 1000 Louisiana St., Suite 5800 City, State, ZiP+ 4 Houston, TX 77002							
7	Houston, TX 77002	See Reverse for Instructions					



Department of Environmental Protection

Jeb Bush

Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000

David B. Struhs Secretary

November 13, 2001

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Rick A. Bowen
Executive Vice President
Palmetto Power LLC
1000 Louisiana Street, Suite 5800
Houston, TX 77002

Re:

Palmetto Power LLC – Simple Cycle Gas Turbine Power Plant Extension of Air Construction Permit Expiration Date

Air Permit No. PSD-FL-277A

Original Project No. 0970073-001-AC

Dear Mr. Bowen:

The applicant, Palmetto Power LLC, applied on October 15, 2001 to the Department for an extension of the expiration date of air construction Permit No. PSD-FL-277. The existing permit authorizes construction of a new simple cycle electrical generating power plant to be located in Osceola County approximately a half-mile east of State Road 532 and a quarter mile south of the Orange/Osceola County border. The applicant requested an extension of the expiration date from July 1, 2002 to July 1, 2003. Although construction has not yet commenced, Palmetto Power LLC states that the earlier BACT determinations remain consistent with recent BACT determinations for simple cycle gas turbine projects. Furthermore, Siemens Westinghouse now guarantees the final CO BACT limit of 15 ppmvd corrected to 15% oxygen. This makes the "first-year" CO BACT limit unnecessary (25 ppmvd corrected to 15% oxygen).

As requested, the revised permit extends the expiration date, specifies construction to start within 18 months of this action, and updates the CO BACT determination. In addition to granting additional time to construct, the changes ensure that achieving the CO standard specified in the original permit will remain on schedule. This permitting action does not authorize any new construction.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permitting decision is issued pursuant to Chapter 403, Florida Statutes.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57 of the Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3), F.S., must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code (F.A.C.)

"More Protection, Less Process"

Palmetto Power LLC Air Permit No. PSD-FL-277A Extension of Expiration Date Page 2 of 3

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This permitting decision is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this action will not be effective until further order of the Department.

Palmetto Power LLC Air Permit No. PSD-FL-277A Extension of Expiration Date Page 3 of 3

Any party to this permitting decision (order) has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty (30) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director

Division of Air Resources Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that, this, order was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on __///6/0/__ to the person(s) listed:

Mr. Rick A. Bowen, Palmetto Power LLC*

Ms. Starla Lacy, Dynegy

Mr. Ken Kosky, Golder Associates

Mr. Len Kozlov, DEP - Central District Office

Mr. Gregg Worley, EPA Region 4

Mr. John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Victoria Libson 11/1



Department of Environmental Protection

Jeb Bush Governor Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000

David B. Struhs Secretary

PERMITTEE:

Palmetto Power LLC 1000 Louisiana Street, Suite 5800 Houston, TX 77002

Authorized Representative:
Mr. Rick A. Bowen
Executive Vice President

Project No. 0970073-001-AC PSD Permit No. PSD-FL-277A Facility ID No. 0970073 SIC No. 4911

Expires: July 1, 2003

PROJECT AND LOCATION

This permit is issued pursuant to the requirements for the Prevention of Significant Deterioration of Air Quality (PSD Permit). The proposed project authorizes the installation of three simple cycle, combustion turbines with electrical generator sets fired solely by natural gas. Each gas turbine is capable of producing a nominal 170 MW of electricity. The new electric power generating plant will provide a nominal 510 MW of electrical power. The original PSD permit was issued June 2, 2000. This revised permit is issued to extend the expiration date and period of construction.

The project will be located in Osceola County approximately a half-mile east of State Road 532 and a quarter mile south of the Orange/Osceola County border. The UTM coordinates are Zone 17, 508.3 km E, 3135.2 km N and the map coordinates are Latitude 28° 20' 40", Longitude 80° 54' 52".

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.) and 40 CFR 52.21. The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

APPENDICES

The following Appendices are attached as part of this permit.

Appendix A - Terminology

Appendix BD - BACT Determinations

Appendix GC - Construction Permit General Conditions

Appendix GG - NSPS Subpart GG Requirements for Gas Turbines

Appendix XS - CEMS Excess Emissions Report

Howard L. Rhodes, Director

Division of Air Resources Management

Date: 11/15/01

"More Protection, Less Process"

Printed on recycled paper.

FACILITY DESCRIPTION

Completion of this project will result in a new electric power generating plant capable of providing a nominal 510 MW of electrical power.

NEW EMISSIONS UNITS

The proposed project will result in the following new emissions units.

ARMS ID No.	COMMON EMISSION UNIT DESCRIPTION
001 002 003	Three new Siemens/Westinghouse Model W501FD combustion turbines with electrical generator sets. Each unit will produce a maximum 196.2 MW of electrical power fired exclusively with natural gas. Dry low-NOx (DLN) combustion technology will control emissions of CO, NOx, and VOC. Each unit may employ an evaporative inlet air cooling system.

REGULATORY CLASSIFICATION

HAPs: This facility will not be a major source of hazardous air pollutants (Title III).

Acid Rain: This facility is subject to the acid rain provisions of the Clean Air Act (Title IV).

<u>Title V Major Source</u>: This facility is a Title V major source of air pollution because potential emissions of CO and NOx each exceed 100 tons per year.

PSD Major Source: This facility is a PSD major source of air pollution as defined in Rule 62-212.400, F.A.C. for Prevention of Significant Deterioration (PSD) of Air Quality because potential emissions of CO and NOx each exceed 250 tons per year. Therefore, each pollutant with potential emissions greater than the Significant Emissions Rates specified in Table 62-212.400-2, F.A.C. requires a PSD review and Best Available Control Technology (BACT) determination. For this project, emissions of CO, NOx, and PM/PM10 are significant and subject to the BACT standards specified in this permit.

NSPS Sources: The combustion turbines specified in this permit are also subject to regulation under the New Source Performance Standards for Stationary Gas Turbines, 40 CFR 60, Subpart GG.

RELEVANT DOCUMENTS

- Permit application received on 10/15/99 and all related correspondence.
- Intent to Issue Permit package mailed on March 28, 2000.
- Public Notice published in The Orlando Sentinel (Osceola and Orange County editions) on April 30, 2000.
- Proof of publication received May 22, 2000.
- Original PSD permit issued on June 2, 2000.

EXTENSION

On October 15, 2001, the permittee requested a 12-month extension of the original PSD permit. The permit was revised to extend the expiration date, specify construction to start within 18 months of this action, and update the CO BACT determination to remain on schedule.

GENERAL AND ADMINISTRATIVE REQUIREMENTS

- 1. Permitting Authority: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (DEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and phone number 850/488-0114.
- 2. Compliance Authority: All documents related compliance activities such as reports, tests, and notifications should be submitted to the Air Resources Section of the Central District Office, Florida Department of Environmental Protection, 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767. The phone number is 407/894-7555 and the fax number is 407/897-5963.
- 3. <u>Terminology</u>: The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. *Appendix A* lists frequently used abbreviations and explains the format used to cite rules and regulations in this permit.
- 4. <u>General Conditions</u>: The owner and operator are subject to, and shall operate under, the attached General Conditions listed in *Appendix GC* of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
- 5. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.); and the Title 40, Parts 52, 60, 72, 73, and 75 of the Code of Federal Regulations (CFR), adopted by reference in Rule 62-204.800, F.A.C. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the facility permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
- 6. <u>PSD Expiration</u>: Approval to construct shall become invalid if construction is not commenced within 18 months after November 15, 2001, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. {Permitting Note: The 18-month period was extended once in November of 2001.} [40 CFR 52.21(r)(2)]
- 7. <u>Permit Expiration</u>: For good cause, the permittee may request that this PSD air construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080, and 62-210.300(1), F.A.C.]
- 8. <u>BACT Determination</u>: In conjunction with extension of the 18-month period to commence or continue construction, phasing of the project, or an extension of the permit expiration date, the permittee may be required to demonstrate the adequacy of any previous determination of Best Available Control Technology (BACT) for the source. [Rule 62-212.400(6)(b), F.A.C. and 40 CFR 52.166(j)(4)]
- 9. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
- 10. <u>Modifications</u>: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

SECTION II. ADMINISTRATIVE REQUIREMENTS

- 11. Application for Title IV Permit: At least 24 months before the date on which the new unit begins serving an electrical generator greater than 25 MW, the permittee shall submit an application for a Title IV Acid Rain Permit to the Region 4 Office of the U.S. Environmental Protection Agency in Atlanta, Georgia and a copy to the Department's Bureau of Air Regulation in Tallahassee. [40 CFR 72]
- 12. <u>Title V Permit</u>: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions units. The permittee shall apply for and obtain a Title V operation permit in accordance with Rule 62-213.420, F.A.C. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's Bureau of Air Regulation and a copy to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

This section of the permit addresses the following new emissions units.

EU ID No.	COMMON EMISSION UNIT DESCRIPTION				
001 002 003	Siemens/Westinghouse Model W501FD combustion turbine with electrical generator set: This unit produces a maximum 196.2 MW of electrical power at a heat input of 1981 mmBTU per hour when fired exclusively with natural gas. Dry low-NOx (DLN) combustor technology controls CO, NOx, and VOC emissions. Efficient combustion design and pipeline-quality natural gas minimize emissions of PM/PM10, SAM, and SO2. Exhaust gases exit a 50 feet tall stack that is 19 feet in diameter at approximately 1100°F with a volumetric flow rate of 2,522,120 acfm. During warm weather conditions, an evaporative cooling system reduces the ambient temperature of the compressor inlet air to provide additional power.				

APPLICABLE STANDARDS AND REGULATIONS

- 1. <u>BACT Determinations</u>: The emissions units addressed in this section are subject to Best Available Control Technology (BACT) determinations for carbon monoxide (CO), nitrogen oxides (NOx), and particulate matter (PM/PM10). [Rule 62-212.400, F.A.C.]
- 2. NSPS Requirements: Each combustion turbine shall comply with all applicable requirements of 40 CFR 60, adopted by reference in Rule 62-204.800(7)(b), F.A.C.
 - (a) Subpart A, General Provisions, including:
 - 40 CFR 60.7, Notification and Record Keeping
 - 40 CFR 60.8, Performance Tests
 - 40 CFR 60.11, Compliance with Standards and Maintenance Requirements
 - 40 CFR 60.12, Circumvention
 - 40 CFR 60.13, Monitoring Requirements
 - 40 CFR 60.19, General Notification and Reporting Requirements
 - (b) Subpart GG, Standards of Performance for Stationary Gas Turbines, identified in Appendix GG of this permit. These provisions include a requirement to correct test data to ISO conditions; however, such correction is not used for compliance determinations with the BACT standards.

PERFORMANCE RESTRICTIONS

- 3. <u>Combustion Turbines</u>: The permittee is authorized to install, tune, operate and maintain three new combustion turbines with electrical generator sets (Siemens/Westinghouse Model 501FD or equivalent). Each unit is designed to produce a maximum 196.2 MW of electrical power. [Applicant Request]
- 4. Permitted Capacity: The heat input to each combustion turbine from firing natural gas shall not exceed 1981 mmBTU per hour based on the following: 100% base load (196.2 MW); a higher heating value (HHV) of 23,299 BTU/lbm for natural gas; a compressor inlet air temperature of 32° F; a compressor inlet air relative humidity of 50%. The permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial compliance testing. Heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Compliance shall be determined by data compiled from the automated gas turbine control system. This data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department. Operation below 70% of base load shall not exceed two (2) hours during any 24-hour period. [Design, Rule 62-210.200, F.A.C. (Definition PTE)]

- 5. Simple Cycle, Intermittent Operation Only: Each combustion turbine shall operate only in simple cycle mode not to exceed the permitted hours of operation allowed by this permit. This restriction is based on the permittee's request, which formed the basis of the CO and NOx BACT determinations and resulted in the emission standards specified in this permit. Specifically, the CO and NOx BACT determinations eliminated several control alternatives based on technical considerations due to the elevated temperature of the exhaust gas as well as higher cost effectiveness due to the requested intermittent operation of 3750 hours per year. For any request to convert these units to combined cycle operation by installing/connecting to heat recovery steam generators or increasing the allowable hours of operation, the permittee shall submit a full PSD permit application complete with a new proposal of the best available control technology as if the units had never been built. [Rules 62-212.400(2)(g) and 62-212.400(6)(b), F.A.C.]
- 6. Allowable Fuels: Each combustion turbine shall only be fired with pipeline-quality natural gas containing no more than 1 grain of sulfur per 100 dry standard cubic feet of gas, monthly average. It is noted that this limitation is much more stringent than the sulfur dioxide limitation in 40 CFR 60, NSPS Subpart GG and assures compliance with regulations 40 CFR 60.333 and 60.334 of this Subpart. The permittee shall demonstrate compliance with the fuel sulfur limit by keeping the records specified in this permit. [Applicant Request, Rule 62-210.200, F.A.C. (Definition PTE)]
- 7. <u>Hours of Operation:</u> Each combustion turbine shall operate no more than 3750 hours during any consecutive 12-month period. For each combustion turbine, the permittee shall install, calibrate, operate and maintain a monitoring system to measure and accumulate the amount of natural gas fired and the hours of operation. [Applicant Request; Rule 62-212.400, F.A.C. (BACT); Rule 62-210.200, F.A.C. (Definitions PTE)]
- 8. Operating Procedures: The Best Available Control Technology (BACT) determinations established by this permit rely on "good operating practices" to minimize emissions. Therefore, all operators and supervisors shall be properly trained to operate and maintain the combustion turbines and pollution control systems in accordance with the guidelines and procedures established by the manufacturer. The training shall include good operating practices as well as methods of minimizing excess emissions. [Applicant Request; Rule 62-4.070(3); Rule 62-212.400, F.A.C. (BACT)]
- 9. Plant Operation Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify the Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

EMISSIONS CONTROLS

- 10. <u>Unconfined Particulate Emissions</u>: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering, confining, or applying water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]
- 11. <u>Automated Control System</u>: In accordance with the manufacturer's recommendations, the permittee shall install, calibrate, tune, operate, and maintain an ECONOPAC™ automated gas turbine control system (or equivalent) for each unit. Each system shall be designed and operated to monitor and control the gas turbine combustion process and operating parameters including, but not limited to: fuel distribution and staging, turbine speed, load conditions, combustion temperatures, heat input, and fully automated startup, shutdown, and cool-down. [Design; Rule 62-4.070(3); Rule 62-212.400, F.A.C. (BACT)]

- 12. <u>DLN Combustion Technology</u>: To control NOx emissions, each combustion turbine shall include a dry low-NOx (DLN) combustion system designed for firing natural gas only. The DLN system shall be tuned, operated and maintained in accordance with the manufacturer's recommendations. [Design and Rule 62-212.400, F.A.C.]
- 13. <u>Tuning</u>: Prior to the initial emissions performance tests for each gas turbine, the dry low-NOx (DLN) and automated gas turbine control systems shall be tuned to optimize the reduction of CO, NOx, and VOC emissions. Thereafter, each system shall be maintained and tuned in accordance with the manufacturer's recommendations to minimize these pollutant emissions. [Design, Rules 62-4.070 and 62-212.400, F.A.C.]
- 14. <u>Circumvention</u>: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
- 15. Future Controls: If for any reason additional controls are necessary to comply with the BACT standards specified in this permit, the permittee shall submit a full PSD permit application to modify this permit. The application shall propose Best Available Control Technology for combustion turbines as if the project had never been constructed. [Rule 62-212.400(2)(g), F.A.C.]

EMISSIONS STANDARDS

16. Summary: The following table summarizes the emissions standards specified in this permit.

EU-001, 00	2, and 003: Siemens/Westinghouse Model 501 I	FD Combustion Turbines		
BACT Standards				
Pollutant Control Method ^a		Emission Standard ^b		
СО	DLN W/Gas Firing	15.0 ppmvd @ 15% oxygen, and 68.0 pounds per hour		
NOx	DLN W/Gas Firing,	15.0 ppmvd @ 15% oxygen, and 111.0 pounds per hour		
PM/PM10	DLN W/Gas Firing (Fuel Specification)	Visible emissions ≤ 5% opacity Natural gas only (≤ 1 grain per 100 scf) {The PM/PM10 emission factor is 8.6 lb/hour.}		
	PSD Synthetic Min	or Standards		
SAM/SO2	Fuel Sulfur Specification	1 grain per 100 SCF of natural gas		
VOC	DLN W/Gas Firing	1.5 ppmvd @ 15% oxygen, as methane, and 3.7 pounds per hour, as methane		

- "DLN" means dry low-NOx combustion technology.
- The mass emission limits (pounds per hour) were based on 100% base load (196.2 MW), a heat input of 1981 mmBTU per hour (HHV) from firing natural gas, a higher heating value (HHV) for natural gas of 23,299 BTU/lbm, an ambient temperature of 32° F, a relative humidity of 50%, and no evaporative cooling.
- 17. Carbon Monoxide (CO): CO emissions from each combustion turbine shall not exceed 68.0 pounds per hour and 15.0 ppmvd corrected to 15% oxygen based on a 3-hour performance test average. In addition, CO emissions shall not exceed 15.0 ppmvd corrected to 15% oxygen based on a 3-hour block average for data collected from any required CO continuous emissions monitor. The permittee shall demonstrate compliance with these standards by conducting performance tests and emissions monitoring in accordance with EPA Method 10 and the requirements of this permit. [Rule 62-212.400, F.A.C. (BACT)]
- 18. Nitrogen Oxides (NOx): NOx emissions from each combustion turbine shall not exceed 111.0 pounds per hour and 15.0 ppmvd corrected to 15% oxygen based on a 3-hour performance test average. In addition,

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

NOx emissions shall not exceed 15.0 ppmvd corrected to 15% oxygen based on a 3-hour block average for data collected from the NOx continuous emissions monitor. NOx emissions are defined as oxides of nitrogen measured as NO2. The permittee shall demonstrate compliance by conducting performance tests and emissions monitoring in accordance with EPA Methods 7E and 20 and the requirements of this permit. [Rule 62-212.400, F.A.C. (BACT)]

- 19. Particulate Matter (PM/PM10), Sulfuric Acid Mist (SAM) and Sulfur Dioxides (SO2)
 - (a) Fuel Specifications. Emissions of PM, PM10, SAM, and SO2 shall be limited by the exclusive use of pipeline-quality natural gas containing no more than 1 grain per standard cubic feet and good combustion techniques as specified in this permit. The permittee shall demonstrate compliance with the fuel sulfur limit by maintaining the records specified by this permit. The fuel specification is a work practice standard established as a BACT limit for PM/PM10 emissions [Rule 62-212.400, F.A.C. (BACT)] and as a synthetic minor limit for SAM/SO2 emissions [Rule 62-4.070(3), F.A.C.].
 - (b) VE Standard. Visible emissions from each combustion turbine shall not exceed 5% opacity, based on a 6-minute average. This work practice standard is established as a BACT limit for PM/PM10 emissions. The permittee shall demonstrate compliance with this standard by conducting tests in accordance with EPA Method 9 and the performance testing requirements of this permit. [Rule 62-212.400, F.A.C. (BACT)]
- 20. Volatile Organic Compounds (VOC): VOC emissions shall not exceed 3.7 pounds per hour and 1.5 ppmvd corrected to 15% oxygen based on a 3-hour performance test average. The VOC emissions shall be measured and reported in terms of methane. The permittee shall demonstrate compliance with these standards by conducting tests in accordance with EPA Methods 25 and/or 25A and the performance testing requirements of this permit. Optional testing in accordance with EPA Method 18 may be conducted to account for the actual methane fraction of the measured VOC emissions. [Application; Design; Rule 62-4.070(3), F.A.C.]

EXCESS EMISSIONS

- 21. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited. These emissions shall be included in the calculation of the 3-hour averages to demonstrate compliance with the continuous CO and NOx emissions standards. [Rule 62-210.700(4), F.A.C.]
- 22. Excess Emissions Allowed: Providing the permittee adheres to best operational practices to minimize the amount and duration of excess emissions, the following conditions shall apply:
 - (a) During startup and shutdown, visible emissions excluding water vapor shall not exceed 20% opacity for up to 2 hours in any 24-hour period. [Design; Rule 62-210.700(1) and (5), F.A.C.]
 - (b) During all startups, shutdowns, and malfunctions, the continuous emissions monitors (CEMs) shall monitor and record emissions. However, up to 2 hours of monitoring data during any 24-hour period may be excluded from continuous compliance demonstrations as a result of startups, shutdowns, and documented malfunctions. In case of malfunctions, the permittee shall notify the Compliance Authorities within one working day. A full written report on the malfunctions shall be submitted in a quarterly report. [Design; Rules 62-210.700(1), (5), and 62-4.130, F.A.C.]

EMISSIONS PERFORMANCE TESTING

23. Sampling Facilities: The permittee shall design the combustion turbine stack to accommodate adequate testing and sampling locations in order to determine compliance with the applicable emission limits

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

specified by this permit. Permanent stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C. [Rules 62-4.070 and 62-204.800, F.A.C., and 40 CFR 60.40a(b)]

- 24. <u>Performance Test Methods</u>: Compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A, and adopted by reference in Chapter 62-204.800, F.A.C.
 - (a) EPA Method 7E Determination of Nitrogen Oxide Emissions from Stationary Sources;
 - (b) EPA Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources;
 - (c) EPA Method 10 Determination of Carbon Monoxide Emissions from Stationary Sources;
 - (d) EPA Method 20 Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines; and
 - (e) EPA Method 25 or 25A Determination of Volatile Organic Concentrations. (EPA Method 18 may be conducted to account for the non-regulated methane portion of the VOC emissions.)

No other test methods may be used for compliance testing unless prior DEP approval is received, in writing, from the DEP Emissions Monitoring Section Administrator in accordance with an alternate sampling procedure specified in Rule 62-297.620, F.A.C.

- 25. <u>Test Notification</u>: The permittee shall notify the Compliance Authority in writing at least 30 days prior to initial NSPS performance tests and at least 15 days prior to any other required tests. [40 CFR 60.7, 40 CFR 60.8 and Rule 62-297.310(7)(a)9., F.A.C.]
- 26. <u>Initial Tests Required</u>: Initial performance tests to demonstrate compliance with the emission standards specified in this permit shall be conducted within 60 days after achieving at least 90% of permitted capacity, but not later than 180 days after initial operation of the emissions unit. Initial performance tests shall be conducted for CO, NOx, VOC, and visible emissions from each combustion turbine. Initial NOx performance tests shall be conducted in accordance with the requirements of NSPS Subpart GG including testing at four separate load conditions (see Appendix GG). NOx emissions data shall also be converted into units of the NSPS emissions standard. Initial CO performance tests shall be conducted concurrently with all NOx performance tests required at the four load conditions. [Rule 62-297.310(7)(a)1., F.A.C.]
- 27. Annual Performance Tests: To demonstrate compliance with the emission standards specified in this permit, the permittee shall conduct annual performance tests for CO, NOx, and visible emissions from each combustion turbine. If conducted at permitted capacity, NOx emissions data collected during the annual NOx continuous monitor RATA required pursuant to 40 CFR 75 may be substituted for the required annual performance test. CO and NOx performance tests shall be conducted concurrently. Tests required on an annual basis shall be conducted at least once during each federal fiscal year (October 1st to September 30th). [Rule 62-297.310(7)(a)4., F.A.C.]
- 28. Tests Prior to Permit Renewal: Prior to renewing the air operation permit, the permittee shall conduct performance tests for CO, NOx, VOC, and visible emissions from each combustion turbine. These tests shall be conducted within the 12-month period prior to renewing the air operation permit. For pollutants required to be tested annually, the permittee may submit the most recent annual compliance test to satisfy the requirements of this provision. [Rule 62-297.310(7)(a)3., F.A.C.]
- 29. <u>Tests After Substantial Modifications</u>: All performance tests required for initial startup shall also be conducted after any substantial modification and appropriate shakedown period of air pollution control equipment including the replacement of dry low-NOx combustors. Shakedown periods shall not exceed 100 days after re-starting the combustion turbine. [Rule 62-297.310(7)(a)4., F.A.C.]

- 30. Combustion Turbine Testing Capacity: Initial performance tests shall be conducted in accordance with 40 CFR 60.8 and 40 CFR 60.335 for pollutants subject to a New Source Performance Standard (NSPS) in Subpart GG for stationary gas turbines. Other required performance tests for compliance with standards specified in this permit shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. However, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for inlet temperature) and 110 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Emissions performance tests shall meet all applicable requirements of Chapters 62-204 and 62-297, F.A.C. [Rule 62-297.310(2), F.A.C.]
- 31. <u>Calculation of Emission Rate</u>: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

32. Applicable Test Procedures

- (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. [Rule 62-297.310(4)(a)1., F.A.C.]
 - 2. The minimum observation period for a visible emissions compliance test shall be sixty (60) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur. [Rule 62-297.310(4)(a)2., F.A.C.]
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet. [Rule 62-297.310(4)(b), F.A.C.]
- (c) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C. [Rule 62-297.310(4)(d), F.A.C.]

33. Determination of Process Variables

- (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards. [Rule 62-297.310(5)(a), F.A.C.]
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5)(b), F.A.C.]
- 34. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any

applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

CONTINUOUS MONITORING REQUIREMENTS

- 35. NOx CEMS: The permittee shall install, calibrate, operate, and maintain a CEMS to measure and record NOx and oxygen concentrations in each combustion turbine exhaust stack. A monitor for carbon dioxide may be used in place of the oxygen monitor, but the system shall be capable of correcting the emissions to 15% oxygen. The NOx monitoring devices shall comply with the certification requirements, quality assurance procedures, and all other provisions of Performance Specifications 2 and 3 as defined in Appendix B of 40 CFR 60 and the Acid Rain monitoring requirements of 40 CFR Part 75. A monitoring plan shall be provided to the Department's Emissions Monitoring Section Administrator, EPA Region 4, and the Compliance Authority for review no later than 45 days prior to the first scheduled certification test pursuant to 40 CFR 75.62. The plan shall consist of data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location. [Rule 62-212.400, F.A.C. (BACT) and 40 CFR 75]
- 36. CO CEMS: If the initial stack tests indicate CO emissions of less than 15.0 ppmvd corrected to 15% oxygen for each installed unit, then the permittee is not required to install any CO continuous emission monitoring system (CEMS). Otherwise, the permittee shall install, calibrate, operate, and maintain a continuous emission monitoring system (CEMS) on the exhaust stack of at least one of the combustion turbines to measure and record CO and oxygen concentrations. If required, the monitor shall be installed within 90 days following the initial test. A monitor for carbon dioxide may be used in place of the oxygen monitor, but the system shall be capable of correcting the emissions to 15% oxygen. The CO CEMS shall comply with the certification requirements, quality assurance procedures, and all other provisions of Performance Specifications 3 and 4 as defined in Appendix B of 40 CFR 60. The CO CEMS shall collect and report data during a consecutive 12-month period to demonstrate compliance with the CO emissions standard. After the 12-month period, the permittee may request removal of the CO CEMS if the monitoring data sufficiently demonstrates compliance with the CO emissions standard. The permittee shall submit a report summarizing the compliance monitoring data and requesting approval from the Department to remove the CO CEM. The permittee shall only remove the CO CEMS after obtaining written approval from the Department. [Rule 62-212.400, F.A.C. (BACT)]

37. CO/NOx CEMS Data Requirements:

- (a) Installation. Each CEMS shall be installed, calibrated, and properly functioning prior to the initial performance tests. Each device shall comply with the applicable monitoring system requirements of 40 CFR 60.7(a)(5), 40 CFR 60.13, and Appendix F of 40 CFR 60.
- (b) Data Collection. Emissions shall be monitored and recorded at all times including startup, operation, shutdown, and malfunction except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments. Each valid 1-hour average shall be calculated using at least two valid data points at least 15 minutes apart.
- (c) Data Reporting: Data collected by the CEMS shall be used to demonstrate compliance with the emissions standards specified for each 3-hour block average. Emissions shall be reported in units of ppmvd corrected to 15% oxygen for each hour of operation. The compliance averages shall be determined by calculating the arithmetic average of a 3-hour block of valid hourly emission rates. When a monitoring system reports emissions in excess of the standards allowed by this permit, the permittee shall notify the Compliance Authority within one (1) working day of: the nature, extent, and

- duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. The Department may request a written report summarizing the excess emissions incident. The permittee shall also report excess emissions in a quarterly report as required in specific condition 43 of this permit.
- (d) Data Exclusion. Unless prohibited by 62-210.700 F.A.C., valid hourly emission rates shall not include periods of start up, shutdown, or documented malfunction as described under the excess emissions requirements of this permit.

[Rules 62-4.130, 62-4.160(8), 62-204.800, 62-210.700, 62-297.520, F.A.C. and 40 CFR 60.7].

COMPLIANCE DEMONSTRATIONS

- 38. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]
- 39. Fuel Records: The permittee shall demonstrate compliance with the fuel sulfur limit for natural gas specified in this permit by maintaining records of the sulfur content of the natural gas being supplied for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods D4084-82, D3246-81 or equivalent methods. These methods shall be used to determine the sulfur content of the natural gas fired in accordance with any EPA-approved custom fuel monitoring schedule (see Alternate Monitoring Plan) or natural gas supplier data or the natural gas sulfur content referenced in 40 CFR 75 Appendix D. The analysis may be performed by the permittee, a service contractor retained by the permittee, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335(e). However, the permittee is responsible for ensuring that the procedures in 40 CFR 60.335 or 40 CFR 75 are used to determine the fuel sulfur content for compliance with the 40 CFR 60.333 SO2 standard. [Rules 62-4.070(3) and 62-4.160(15), F.A.C.]
- 40. <u>Alternate Monitoring Plan</u>: Subject to EPA approval, the following alternate monitoring may be used to demonstrate compliance.
 - (a) When requested by the Department, the CEMS emission rates for NOx on this unit shall be corrected to ISO conditions to demonstrate compliance with the NOx standard established in 40 CFR 60.332.
 - (b) Data collected from the NOx CEM shall be used to report excess emissions in accordance with 40 CFR 60.334(c)(1) of NSPS, Subpart GG.
 - (c) A custom fuel monitoring schedule pursuant to 40 CFR 75 Appendix D for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2) provided the following conditions are met.
 - (1) Each combustion turbine shall fire only pipeline-quality natural gas. No other fuels are permitted.
 - (2) The permittee shall apply for an Acid Rain permit within the deadlines specified in 40 CFR 72.30.
 - (3) The permittee shall submit a monitoring plan, certified by the Authorized Representative, that commits to using a primary fuel of pipeline-supplied natural gas containing no more than 1 grain of sulfur per 100 SCF of gas (monthly average) pursuant to 40 CFR 75.11(d)(2).
 - (4) Each unit shall be monitored for SO₂ emissions using methods consistent with the requirements of 40 CFR 75 and certified by the U.S. EPA.

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

This custom fuel-monitoring schedule will only be valid with the use of pipeline natural gas as the exclusive fuel. Changing to a higher sulfur fuel or adding an alternate fuel would require a modification of this permit with SO2 emissions accounted for as required pursuant to 40 CFR 75.11(d).

[40 CFR 60, Subpart GG and Applicant Request]

41. Monthly Operations Summary: By the fifth calendar day of each month, the permittee shall record the hours of operation and the million cubic feet of natural gas fired for each combustion turbine. The information shall be recorded in a written or electronic log and shall summarize the previous month of operation and the previous 12 months of operation. Information recorded and stored as an electronic file shall be available for inspection and/or printing within at least one day of a request from the Compliance Authority. [Rule 62-4.160(15), F.A.C.]

REPORTS

- 42. Emissions Performance Test Reports: A report indicating the results of any required emissions performance test shall be submitted to the Compliance Authority no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.].
- 43. Quarterly Excess Emissions Reports: If excess CO, NOx or visible emissions occur due to malfunction, the permittee shall notify the Compliance Authority within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Following the NSPS format in 40 CFR 60.7, Subpart A, periods of startup, shutdown and malfunction, shall be monitored, recorded and reported as excess emissions when emission levels exceed the standards specified in this permit. Within thirty (30) days following each calendar quarter, the permittee shall submit a report on any periods of excess emissions that occurred during the previous calendar quarter to the Compliance Authority. This quarterly report shall follow the format provided in Appendix XS of this permit. [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C., and 40 CFR 60.7]
- 44. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

APPENDIX A - TERMINOLOGY

ABBREVIATIONS AND ACRONYMS

°F - Degrees Fahrenheit

DEP - State of Florida, Department of Environmental Protection

DARM - Division of Air Resource Management

EPA - United States Environmental Protection Agency

F.A.C. - Florida Administrative Code

F.S. - Florida Statute

SOA - Specific Operating Agreement
UTM - Universal Transverse Mercator

CT - Combustion Turbine

HRSG - Heat Recovery Steam Generator

DLN - Dry Low-NOx Combustion Technology

SCR - Selective Catalytic Reduction

OC - Oxidation Catalyst Technology for CO Control

RULE CITATIONS

The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, permit numbers, and identification numbers.

Florida Administrative Code (F.A.C.) Rules:

Example: [Rule 62-213.205, F.A.C.]

Where: 62 - identifies the specific Title of the F.A.C.

62-213 - identifies the specific Chapter of the F.A.C. 62-213.205 - identifies the specific Rule of the F.A.C.

Facility Identification (ID) Number:

Example: Facility ID No. 099-0001

Where: 099 - 3 digit number that identifies the specific county location

0221 - 4 digit number that identifies the specific facility

New Permit Numbers:

Example: Permit No. 099-2222-001-AC or 099-2222-001-AV

Where: AC - identifies the permit as an Air Construction Permit

AV - identifies the permit as a Title V Major Source Air Operation Permit

- 3 digit number that the specific county location
- 4 digit number that identifies the specific facility

001 - 3 digit sequential number identifies the specific permit project

Old Permit Numbers:

Example: Permit No. AC50-123456 or AO50-123456

Where: AC - identifies the permit as an Air Construction Permit

AO - identifies the permit as an Air Operation Permit

123456 - 6 digit sequential number that identifies the specific permit project

APPENDIX GC - CONSTRUCTION PERMIT GENERAL CONDITIONS

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - (a) Have access to and copy and records that must be kept under the conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (a) A description of and cause of non-compliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by

APPENDIX GC - CONSTRUCTION PERMIT GENERAL CONDITIONS

- Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extend it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
 - (a) Determination of Best Available Control Technology (X);
 - (b) Determination of Prevention of Significant Deterioration (X); and
 - (c) Compliance with New Source Performance Standards (X).
- G.14 The permittee shall comply with the following:
 - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

APPENDIX BD - SUMMARY OF BACT DETERMINATIONS

The following table summarizes the emissions standards for the gas turbines. The standards for carbon monoxide, nitrogen oxides, and particulate matter were determined by the Department to represent the Best Available Control Technology (BACT).

EU-001, 002,	and 003: Siemens/Westinghouse	Model 501 FD Combustion Turbines				
	I	BACT Standards				
Pollutant	Controls f	Emission Standard				
CO ^a	DLN W/Gas Firing	15.0 ppmvd @ 15% oxygen, and 68.0 pounds per hour				
NOx b	DLN W/Gas Firing,	15.0 ppmvd @ 15% oxygen, and 111.0 pounds per hour				
PM/PM10 °	DLN W/Gas Firing Fuel Specifications	Visible emissions ≤ 5% opacity Natural gas only (< 1grain per 100 scf) {PM estimated < 0.001 grains per dscf}				
	PSD Syl	nthetic Minor Standards				
Pollutant	Controls f	Emission Standard				
SAM/SO2 d	Fuel Sulfur Specification	1 grain per 100 SCF of natural gas				
VOC °	DLN W/Gas Firing	1.5 ppmvd @ 15% oxygen, as methane, and 3.7 pounds per hour, as methane				

- a. Compliance with the carbon monoxide standard shall be determined by conducting initial and annual tests in accordance with EPA Method 10.
- b. Continuous compliance with the nitrogen oxide standard shall be demonstrated with data collected from the certified continuous emissions monitoring system (CEMS) for each combustion turbine.
- c. Compliance with the particulate matter standard shall be determined by conducting initial and annual tests in accordance with EPA Method 9.
- d. Potential emissions of sulfuric acid mist and sulfur dioxide are effectively limited by this fuel specification.
- e. Compliance with the volatile organic compounds standard shall be determined conducting initial tests in accordance with EPA Methods 25 or 25A and prior to renewal of the operation permit. EPA Method 18 may be conducted to account for the non-regulated methane portion of the VOC emissions.
- f. DLN means dry low-NOx combustion technology.

The above BACT standards and the PSD synthetic minor standards are established in accordance with Rule 62-212.400, F.A.C. The BACT standards were reevaluated in November of 2001 and determined to be consistent with current BACT standards for large simple cycle gas turbines. Please see the file for original Air Permit No. PSD-FL-277 issued on June 2, 2000 for the complete project review and BACT rationale.

APPENDIX GG - NSPS SUBPART GG REQUIREMENTS FOR GAS TURBINES

40 CFR 60, SUBPART A - NSPS GENERAL PROVISIONS

This emissions unit is subject to the applicable portions of 40 CFR 60, Subpart A, General Provisions, including:

- 40 CFR 60.7, Notification and Record Keeping
- 40 CFR 60.8, Performance Tests
- 40 CFR 60.11, Compliance with Standards and Maintenance Requirements
- 40 CFR 60.12, Circumvention
- 40 CFR 60.13, Monitoring Requirements
- 40 CFR 60.19, General Notification and Reporting Requirements

For copies of these requirements, please contact the Department's New Source Review Section.

40 CFR 60, SUBPART GG - STATIONARY GAS TURBINES

This emissions unit is subject to 40 CFGR 60, Subpart GG for stationary gas turbines adopted by reference in Rule 62-204.800(7)(b), F.A.C. The following conditions follow the original NSPS rule language and numbering scheme. Regulations that are not applicable were omitted for clarity. Because this emissions units is subject to an NSPS, it is also subject to the following federal provisions: 40 CFR 60, Subpart A, General Provisions for sources subject to an NSPS, adopted by reference in Rule 62-204.800(7)(d), F.A.C.; 40 CFR 60, Appendix A - Test Methods, Appendix B - Performance Specifications, Appendix C - Determination of Emission Rate Change, Appendix D - Required Emissions Inventory Information, Appendix F - Quality Assurance Procedures, adopted by reference in Rule 62-204.800(7)(e).

40 CFR 60.330 APPLICABILITY AND DESIGNATION OF AFFECTED FACILITY.

(a) The provisions of this subpart are applicable to all stationary gas turbines with a heat input at peak load equal to or greater than 10 million BTU per hour, based on the lower heating value of the fuel fired.

40 CFR 60.331 DEFINITIONS.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

- (a) Stationary gas turbine means any simple cycle gas turbine, regenerative cycle gas turbine or any gas turbine portion of a combined cycle steam/electric generating system that is not self propelled. It may, however, be mounted on a vehicle for portability.
- (b) Simple cycle gas turbine means any stationary gas turbine which does not recover heat from the gas turbine exhaust gases to preheat the inlet combustion air to the gas turbine, or which does not recover heat from the gas turbine exhaust gases to heat water or generate steam.
- (d) <u>Combined cycle gas turbine</u> means any stationary gas turbine which recovers heat from the gas turbine exhaust gases to heat water or generate steam.
- (f) Ice fog means an atmospheric suspension of highly reflective ice crystals.
- (g) ISO standard day conditions means 288 degrees Kelvin, 60 percent relative humidity and 101.3 kilopascals pressure.
- (h) Efficiency means the gas turbine manufacturer's rated heat rate at peak load in terms of heat input per unit of power output based on the lower heating value of the fuei.

APPENDIX GG - NSPS SUBPART GG REQUIREMENTS FOR GAS TURBINES

- (i) Peak load means 100 percent of the manufacturer's design capacity of the gas turbine at ISO standard day conditions.
- (j) <u>Base load</u> means the load level at which a gas turbine is normally operated.
- (p) Gas turbine model means a group of gas turbines having the same nominal air flow, combustor inlet pressure, combustor inlet temperature, firing temperature, turbine inlet temperature and turbine inlet pressure.
- (q) <u>Electric utility stationary gas turbine</u> means any stationary gas turbine constructed for the purpose of supplying more than one-third of its potential electric output capacity to any utility power distribution system for sale.

60.332 STANDARD FOR NITROGEN OXIDES.

- On and after the date of the performance test required by Sec. 60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraphs (b) of this section shall comply with one of the following, except as provided in paragraphs (e) of this section.
 - (1) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

STD =
$$(0.0075) \frac{(14.4)}{Y} + F$$

Where:

STD = allowable NOx emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO emission allowance for fuel-bound nitrogen as defined in the following table:

(3) F shall be defined according to the nitrogen content of the fuel as follows:

	"F"				
(Percent By Weight)	(NOx Percent By Volume)				
N < 0.015	0				
0.015 < N < 0.1	0.04(N)				
0.1 < N < 0.25	0.004 + 0.0067(N - 0.1)				
N > 0.25	0.005				

Where, N = the nitrogen content of the fuel (percent by weight).

(b) Electric utility stationary gas turbines with a heat input at peak load greater than 100 million Btu per hour based on the lower heating value of the fuel fired shall comply with the provisions of paragraph (a)(1) of this section.

APPENDIX GG - NSPS SUBPART GG REQUIREMENTS FOR GAS TURBINES

(f) Stationary gas turbines using water or steam injection for control of NOx emissions are exempt from paragraph (a) when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine.

40 CFR 60.333 STANDARD FOR SULFUR DIOXIDE.

On and after the date on which the performance test required to be conducted by Sec. 60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with one or the other of the following conditions:

(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight.

40 CFR 60.334 MONITORING OF OPERATIONS.

- (a) The owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water injection to control NOx emissions shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within +/- 5.0 percent and shall be approved by the Administrator.
- (b) The owner or operator of any stationary gas turbine subject to the provisions of this subpart shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:
 - (1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
 - (2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with paragraph (b) of this section.
- (c) For the purpose of reports required under Sec. 60.7(c), periods of excess emissions that shall be reported are defined as follows:
 - (1) Nitrogen oxides. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with Sec. 60.332 by the performance test required in Sec. 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in Sec. 60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under Sec. 60.335(a).
 - (2) Sulfur dioxide. Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent.

40 CFR 60.335 TEST METHODS AND PROCEDURES.

(a) To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Administrator to

APPENDIX GG - NSPS SUBPART GG REQUIREMENTS FOR GAS TURBINES

determine the nitrogen content of the fuel being fired.

- (b) In conducting the performance tests required in Sec. 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided for in Sec. 60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this section.
- (c) The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in Secs. 60.332 and 60.333(a) as follows:
 - (1) The nitrogen oxides emission rate (NOx) shall be computed for each run using the following equation:

NOx = (NOxo)
$$(P_r/P_0)^{0.5}$$
 (e^{19 (Ho - 0.00633)}) (288° K / Ta)^{1.53}

Where

NOx = emission rate of NOx at 15 percent oxygen and ISO standard ambient conditions, volume percent

NOxo = observed NOx concentration, ppm by volume

Pr = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg

Po = observed combustor inlet absolute pressure at test, mm Hg

Ho = observed humidity of ambient air, g H2O/g air

E = transcendental constant, 2.718

Ta = ambient temperature, degrees Kelvin

- (2) The monitoring device of Sec. 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with Sec. 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.
- (3) Method 20 shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NOx emissions shall be determined at each of the load conditions specified in paragraph (c)(2) of this section.
- (d) The owner or operator shall determine compliance with the sulfur content standard in Sec. 60.333(b) as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels (incorporated by reference--see Sec. 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.
- (e) To meet the requirements of Sec. 60.334(b), the owner or operator shall use the methods specified in paragraphs (a) and (d) of this section to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

APPENDIX XS - CEMS EXCESS EMISSIONS REPORT

FIGURE 1 – QUARTERLY PERFORMANCE SUMMARY REPORT GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEMS

	[Note: The basis of th	is form is 40 CFR	60.7, S	ubpart A-	General Provisions	[]	
Pollutant (Circle One):	SO ₂	NOx	7	ΓRS	H ₂ S	CO	Opacity
Reporting period dates:	From		t o				
Company:							
Emission Limitation:							
		 -					······································
							
Monitor Manufacturer ar							
Date of Latest CMS Cert		it:				-	
Process Unit(s) Descript	ion:						
Total source operating ti	me in reporting	period ^a :				_	
Emissio	n data summary	a			CMS perfor	mance summa	ry a
1. Duration of Excess Em	issions In Reporti	ng Period Due	To:	I. CMS	downtime in i	reporting period	due to:
a. Startup/Shutdown				a. N	Ionitor Equipm	ent Malfunction	ıs
b. Control Equipment F	roblems				Ion-Monitor Ec	luipment	
					Malfunctions		
c. Process Problems				*** ***********************************	uality Assuran		
d. Other Known Causes	5	-		d. Other Known Causes			
e. Unknown Causes				e. U	Inknown Cause	S	
2. Total Duration of Exces				2. Tota	l CMS Downti	me	
3. [Total Duration of Exce		100%)				<u>vntime]</u> x (100	1%)
[Total Source Opera	ting Time] b			[Tota	al source opera	ting time]	
For opacity, record all For the reporting period operating time or the transmary report form a Note: On a separate page. I certify that the information	od: If the total of otal CMS down and the excess enge, describe any	duration of extime is 5 permission report	ccess cent of t desc e last	emission great cribed in quarter	ons is 1 perce er of the total n 40 CFR 60.7 r in CMS, pro	l operating tim (c) shall be su cess or contro	e, both the ibmitted.
	Title						
	Signature	L				Date	

Memorandum

Florida Department of Environmental Protection

TO:

Howard Rhodes

THRU:

Clair Fancy

Al Linero

FROM:

Jeff Koerner

DATE:

November 13, 2001

SUBJECT:

Air Permit No. PSD-FL-277A

Original Project No. 0970073-001-AC

Palmetto Power LLC

Simple Cycle Gas Turbine Peaking Plant

The applicant, Palmetto Power LLC, previously received a PSD permit authorizing construction of a new simple cycle electrical generating power plant to be located in Osceola County approximately a half-mile east of State Road 532 and a quarter mile south of the Orange/Osceola County border. The applicant now requests an extension of the expiration date of this air construction permit from July 1, 2002 to July 1, 2003. Although specific project development activities have been pursued, the applicant states that construction has been delayed due to financial viability concerns related to merchant plant projects and the Florida Public Service Commission. The extension will allow Palmetto Power additional time to reevaluate the financial viability and move the project towards construction.

The applicant states that the earlier BACT determinations remain consistent with recent BACT determinations for simple cycle gas turbine projects. Furthermore, Siemens Westinghouse now guarantees the final CO BACT limit of 15 ppmvd corrected to 15% oxygen. This makes the "first-year" CO BACT limit unnecessary (25 ppmvd corrected to 15% oxygen). As requested, the revised permit extends the expiration date, specifies construction to start within 18 months of this action, and updates the CO BACT determination. In addition to granting additional time to construct, the changes ensure that achieving the CO standard specified in the original permit will remain on schedule. This permitting action does not authorize any new construction.

I recommend your approval and signature.

Attachments

CHF/AAL/ifk

BAR

1000 Louisiana, Suite 5800 Houston, Texas 77002-5050 (713) 507-6400



OCT 15 2001

BUREAU OF AIR REGULATION

October 3, 2001

Administrator, New Source Review Section Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Attention: Mr. A.A. Linero, P.E.

RE: DYNEGY, INC.

Air Permit No. PSD-FL-277 Facility ID No. 970073

PALMETTO POWER PROJECT, OSCEOLA COUNTY, FLORIDA

Dear Mr. Linero:

On behalf of Palmetto Power L.L.C., I authorize Starla Lacy, Director, Environmental to provide and sign correspondence on behalf of the Palmetto Power Project, proposed for Osceola County, Florida.

If you have any questions, please contact me at (713) 767-8532.

Sincerely,

Rick Bowen

Executive Vice President

CC: Jeff Koerner-FDEP

1000 Louisiana, Suite 5800 Houston, Texas 77002-5050 (713) 507-6400

RECEIVED

OCT 15 2001

October 11, 2001

BUREAU OF AIR REGULATION

Administrator, New Source Review Section Florida Department of Environmental Protection 2600Blair Stone Road Tallahassee, Florida 32399-2400

Attention: Mr. A.A. Linero, P.E.

RE: DYNEGY, INC.

AIR PERMIT EXTENSION REQUEST

Permit No. PSD-FL-277 Facility ID No. 970073

PALMETTO POWER PROJECT, OSCEOLA COUNTY, FLORIDA

Dear Mr. Linero:

As a followup to our prior Request for Extension dated October 3, 2001, please find enclosed a check for \$50.00 made out to the FDEP as well as a signatory assignment letter from our Executive Vice President, Mr. Rick Bowen, allowing me to sign on behalf of Palmetto Power L.L.C.

If you need any additional information or have any questions, please contact me at (713) 767-8961.

Sincerely,

Starla Lacy

Director, Environmental

CC: Jeff Koerner-FDEP



Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

David B. Struhs Secretary

October 11, 2001

Ms. Starla Lacy Director, Environmental Palmetto Power L.L.C. 1000 Louisiana, Suite 5800 Houston, Texas 77002-5050

RE: Dynegy, Inc., Palmetto Power Project Facility ID No. 970073, PSD-FL-289 27

Dear Ms. Lacy:

The Bureau of Air Regulation received your October 3, 2001, request to extend the above referenced permit. Since the facility does not have a Title V permit, you will need to submit a \$50 fee before we can begin processing your request. If you have any questions, please call me at (850)921-9505.

Sincerely,

Patty Adams

Bureau of Air Regulation

Patty adams

/pa

cc: J. Koerner

1000 Louisiana, Suite 5800 Houston, Texas 77002-5050 (713) 507-6400

October 3, 2001

Administrator, New Source Review Section Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, Florida 32399-2400 RECEIVED

OCT 09 2001

BUREAU OF AIR REGULATION

Attention: Mr. A.A. Linero, P.E.

RE: DYNEGY, INC.

AIR PERMIT EXTENSION REQUEST

Permit No. PSD-FL-277 Facility ID No. 970073

PALMETTO POWER PROJECT, OSCEOLA COUNTY, FLORIDA

Dear Mr. Linero:

As per the above referenced permit conditions 6 and 7, Palmetto Power is requesting an additional twelve month extension of both the original 18 month period associated with commencement of construction, which is due to expire during the month of December, 2001 and a twelve month extension of the permit expiration date which is currently July 1, 2002.

In the information provided below, Palmetto is providing a description of the conditions that caused the commencement of construction to be delayed on this project. As well, we are also providing justification that the original BACT determination presented in the above referenced permit is still valid, as per condition 8 of the permit.

Development Activities and the Florida Power Market

Coincident with the issuance of the Prevention of Significant Deterioration of Air Quality (PSD) Permit for the Palmetto Power project, Dynegy has pursued numerous development activities. We have completed the principal environmental field studies – including an ecological resources survey, endangered species survey, water resources survey, and a Phase 1 property assessment - that are all required to support our various environmental approvals. We conducted fuel supply negotiations with Florida Gas Transmission Company and electrical transmission discussions with both Florida Power Corporation and Florida Power & Light. We are also currently pursuing arrangements to secure a water supply for the 3-unit simple-cycle combustion turbine plant from East Central Florida Services, Inc.

While pursuing these project development activities, however, we have been subjected to somewhat contradictory regulatory and legislative actions by the State of Florida that

1000 Louisiana, Suite 5800 Houston, Texas 77002-5050 (713) 507-6400

have deleteriously impacted our ability to make the financial viability determinations necessary to support a construction commitment for the Palmetto Power project, as described below:

First, the Florida Public Service Commission on March 22, 1999, issued an order approving the 500 MW Duke New Smyrna Beach combined cycle merchant facility. This order beneficially established a regulatory precedent favoring construction of merchant plants. Unfortunately, that order was later challenged in court by the Florida investor-owned utilities and the order was ultimately overturned by the Florida Supreme Court on April 20, 2000. (The Palmetto Air Permit application was made after the 1999 PSC order and well prior to the Florida Supreme Court decision.) The Supreme Court decision had the effect of arguably requiring merchant plants to obtain a certification of need from the Florida Public Service Commission as per current Florida state law. It is noted that to obtain such a "need certificate" would require substantially all of the output of the facility to be pre-sold to retail load-serving entities – i.e. the investor-owned utilities as opposed to allowing merchant trading of the output.

Subsequently, the Florida Public Service Commission encouraged the investor-owned utilities to adopt an electric supply reserve margin of 20% over peak demand requirements. This standard clearly implied that any new generation required to meet the desired reserve margin could be built as an approved investment in the incumbent utilities' rate-base. The bottom line is that this standard has had the effect of discouraging power purchases by the incumbent utilities from new merchant facilities.

Finally, Governor Jeb Bush during 2000 convened the Florida 2020 Commission to establish a blueprint for deregulating the Florida electric utility industry. The interim report from the 2020 Commission was actively debated in the Florida Legislative session completed in the spring. Dynegy believes that the legislation that may ultimately arise from this study Commission will clarify the status of merchant plants to be built in Florida. However, due to the concerns over the California energy crisis, which arose from that state's attempt at full deregulation, the needed legislative clarifications for merchant plant status have not so far been forthcoming. As it stands today, pure merchant plants cannot get commercial treatment at par with rate-based power generation in the State of Florida.

In light of these various regulatory and legislative dynamics, Dynegy plans to reevaluate power market conditions in Florida and determine whether the Palmetto Power project, as currently permitted, can be supported with various bilateral power offtake contracts with load-serving entities. If so, Dynegy plans to premarket power from the facility in order to obtain the necessary assurances of financial viability to allow the project to move into construction. While we pursue this change in commercial structure for the project, we are respectfully requesting the twelve (12) month extension on the commencement of construction deadline as well as the twelve (12) month extension of the expiration of the air permit.

1000 Louisiana, Suite 5800 Houston, Texas 77002-5050 (713) 507-6400

Respecting the BACT determination and limits placed in the air permit, recent PSD determinations for projects utilizing the Westinghouse 501FD turbine have continued to specify identical emission rates as found in the Palmetto permit. Based on this fact, the original BACT determination remains valid. Most recently, our affiliate company, Renaissance Power, L.L.C., received a PSD air permit this summer for a four turbine simple cycle facility to be located in Carson City, Michigan. The BACT permitted levels for the primary emissions at the Renaissance facility are as follows:

NOx – 15 ppm @ 15% O₂ CO – 15 ppm @ 15% O₂

These are the identical limits as specified in the Palmetto permit with the exception of the first year limitation on CO, which is 25 ppm @ 15% O₂. Given our recent operating history with the Westinghouse 501FD turbines, Palmetto is now confident that our project could meet the 15 ppm CO limit the first year and would therefore be willing to drop the higher limit of 25 ppm CO for the first year and replace it with 15 ppm.

We appreciate your timely review of this extension request and look forward to continuing our work with you. If you have any questions, please contact me at (713) 767-8961.

Sincerely,

Starla Lacv

Director, Environmental

CC: Jeff Koerner-FDEP