

Jeb Bush Governor

# Department of Environmental Protection

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

Colleen M. Castille Secretary

# P.E. Certification Statement

Permittee:

Progress Energy Florida **DeBary Facility** 

DRAFT Air Construction Permit No. 1270028-006-AC DRAFT Title V Air Operation Permit No. 1270028-007-AV

**Project:** Air Construction Permit and Title V Air Operation Permit Renewal

This facility consists of ten intermittent duty simple cycle combustion turbine-electrical generators, fuel oil storage tanks and ancillary equipment. Six of the units pre-date 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines and are not subject to Acid Rain regulations. These six turbines (Units 1 through 6) fire new No. 2 or new No. 6 fuel oil with the sulfur content not to exceed 0.5% and 0.7% by weight, respectively. Each is a nominal 51.9 MW GE Model MS7000 combustion turbine-electrical generator with a maximum heat input (LHV) of 720 MMBtu/hr (No.6 fuel oil) and 825 MMBtu/hour (No. 2 fuel oil). Emissions are not controlled and each turbine exhausts through a separate stack. The emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. These units began commercial service in 1975-1976. The other four (Units 7 through 10) are subject to Subpart GG and were subject to the Rules for the Prevention of Significant Deterioration (PSD) and a determination of best available control technology (BACT). They are subject to the Acid Rain Phase II requirements of Title IV of the Clean Air Act. These four combustion turbine-electrical generator are fired with natural gas and/or new No. 2 fuel oil and equipped with inlet foggers. Each is a nominal 92.9 MW GE Model PG7111EA with a maximum heat input (LHV) of 1144 MMBtu/hr (No.2 fuel oil) and 1159 MMBtu/hour (natural gas). These units began commercial operation in 1992.

I HEREBY CERTIFY that the engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features) This draft permit was prepared under my direct supervision by Dr. Tom Cascio of my staff.

Alvaro A. Linero, P.E.

Registration Number: 26032

Permitting Authority:

Department of Environmental Protection

Bureau of Air Regulation Permitting South Section

111 South Magnolia Drive, Suite 4

Tallahassee, Florida 32301 Telephone: 850/488-0144

Fax: 850/922-6979

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# Department of Environmental Protection

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

Colleen M. Castille Secretary

October 13, 2004

#### CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Martin Drango Plant Manager Progress Energy Florida Post Office Box 14042, MAC DB44 St. Petersburg, Florida 33733

Re: DRAFT Air Construction Permit No. 1270028-006-AC DRAFT Title V Air Operation Permit Renewal No. 1270028-007-AV Progress Energy Florida - DeBary Facility

Dear Mr. Drango:

One copy of the combined Public Notice, the DRAFT Air Construction Permit, and the DRAFT Title V Air Operation Permit Renewal for the DeBary Facility located at 788 West Highbanks Road, DeBary, Volusia County, is enclosed. The purpose of the Air Construction Permit is to allow use of existing Acid Rain nitrogen oxides (NO<sub>X</sub>) continuous emission monitoring systems for compliance purposes at four of the ten units located at this facility. The applicant also requested the routine renewal of the facility Title V Operation Permit.

The Intent to Issue an Air Construction Permit and a Title V Operation Permit Renewal and the corresponding Public Notice are also included. The Public Notice must be published as soon as possible. Proof of publication, i.e., newspaper affidavit, must be provided to the permitting authority's office within 7 (seven) days of publication pursuant to Rule 62-110.106(5), F.A.C. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits pursuant to Rule 62-110.106(11), F.A.C.

An electronic version of the DRAFT Permit has been posted on the Division of Air Resource Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The web site address is:

#### http://www.dep.state.fl.us/air/eproducts/ards/default.asp

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to the Program Administrator, Permitting South Section, at the above letterhead address. If you have any other questions, please contact Tom Cascio, at 850/921-9526.

Sincerely,

Trina L. Vielhauer, Chief Bureau of Air Regulation

7und Viehan

Enclosures

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In the Matter of an Application for Permits by:

Progress Energy Florida Post Office Box 14042, MAC DB44 St. Petersburg, FL 33733 DRAFT Air Construction Permit No. 1270028-006-AC
DRAFT Title V Permit Renewal No. 1270028-007-AV
DeBary Facility
Volusia County

#### INTENT TO ISSUE AIR CONSTRUCTION PERMIT AND TITLE V AIR OPERATION PERMIT RENEWAL

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue an Air Construction Permit and a Title V Air Operation Permit Renewal (copies of the Draft Air Construction Permit and DRAFT Title V Air Operation Permit Renewal attached) for the Title V source detailed in the application(s) specified above, for the reasons stated below.

The applicant, Progress Energy Florida, applied on May 17, 2004 to the permitting authority, for the routine renewal to the Title V Air Operation Permit and on July 16, 2004 for an Air Construction Permit, for the DeBary Facility, located at 788 West Highbanks Road, DeBary, Volusia County.

The purpose of the Air Construction Permit is to allow use of existing Acid Rain nitrogen oxides  $(NO_X)$  continuous emission monitoring systems for compliance purposes at four of the ten units located at this facility. The new applicable conditions will be included in the routine renewal of the Title V Air Operation Permit.

The permitting authority has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-212 and 62-213. This source is not exempt from construction and Title V permitting procedures. The permitting authority has determined that an Air Construction Permit and a Title V Air Operation Permit Renewal are required to commence or continue operations at the described facility in the manner requested.

The permitting authority intends to issue the Air Construction Permit and the Title V Air Operation Permit Renewal based on the belief that reasonable assurances have been provided to indicate that the construction activity and operation of the source will not adversely impact air quality, and the source will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C.

Pursuant to Sections 403.815 and 403.087, F.S., and Rules 62-110.106 and 62-210.350(3), F.A.C., you (the applicant) are required to publish at your own expense the enclosed "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL." The notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the permitting authority at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax: 850/922-6879, within 7 (seven) days of publication pursuant to Rule 62-110.106(5), F.A.C. Failure to publish the notice and provide proof of publication may result in the denial of the permits pursuant to Rule 62-110.106(11), F.A.C.

The permitting authority will issue the Air Construction Permit and the PROPOSED Title V Air Operation Permit Renewal and subsequent FINAL Title V Air Operation Permit Renewal, in accordance with the conditions of the attached Draft Air Construction Permit and the DRAFT Title V Air Operation Permit Renewal unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Air Construction Permit issuance action for a period of 14 (fourteen) days from the date of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this Draft Air Construction Permit, the permitting authority shall issue a Revised Draft Air Construction Permit and require, if applicable, another Public Notice.

The permitting authority will accept written comments concerning the proposed Title V Air Operation Permit Renewal issuance action for a period of 30 (thirty) days from the date of publication of the "PUBLIC NOTICE OF INTENT TO"

DRAFT Air Construction Permit No. 1270028-006-AC DRAFT Title V Air Operation Permit Renewal No. 1270028-007-AV Page 2 of 4

ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Title V Air Operation Permit Renewal, the permitting authority shall issue a Revised DRAFT Title V Air Operation Permit Renewal and require, if applicable, another Public Notice.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, 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 of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the permits's (construction and renewal) applicant or any of the parties listed below must be filed within 14 (fourteen) 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 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the permitting authority for notice of agency action may file a petition within 14 (fourteen) 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, F.A.C.

A petition must contain the following information:

- a. The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number, and the county in which the project is proposed;
- b. A statement of how and when each petitioner received notice of the permitting authority's action or proposed action;
- c. A statement of how each petitioner's substantial interests are affected by the permitting authority's action or proposed action;
- d. A statement of the material facts disputed by the petitioner, if any;
- e. A statement of the facts that the petitioner contends warrant reversal or modification of the permitting authority's action or proposed action;
- f. A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the permitting authority's action or proposed action; and,
- g. A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the permitting authority to take with respect to the action or proposed action addressed in this notice of intent.

A petition that does not dispute the material facts upon which the permitting authority'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 permitting authority's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the permitting authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above. Mediation will not be available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply to the Department of Environmental Protection 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.

DRAFT Air Construction Permit No. 1270028-006-AC DRAFT Title V Air Operation Permit Renewal No. 1270028-007-AV Page 3 of 4

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department of Environmental Protection, 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 United States Environmental Protection Agency 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.

Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at 401 M. Street, SW, Washington, D.C. 20460.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Trina L. Vielhauer, Chief Bureau of Air Regulation DRAFT Air Construction Permit No. 1270028-006-AC
DRAFT Title V Air Operation Permit Renewal No. 1270028-007-AV
Page 4 of 4

#### **CERTIFICATE OF SERVICE**

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL (including the combined PUBLIC NOTICE, the Draft Air Construction Permit and the DRAFT Title V Air Operation Permit Renewal) were sent by U.S. mail on the same date to the person(s) listed or as otherwise noted:

Scott Osbourn, P.E., Golder Associates, Inc. Len Kozlov, P.E., DEP Central District Office (INTERNET E-mail) U.S. EPA, Region 4 (INTERNET E-mail)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency Clerk, receipt of which is hereby agrowledged.

Clerk)

Q

# PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT AND TITLE V AIR OPERATION PERMIT RENEWAL

# STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DRAFT Air Construction Permit No. 1270028-006-AC
DRAFT Title V Air Operation Permit Renewal No. 1270028-007-AV

Progress Energy DeBary Facility Volusia County

**Applicant**: The applicant for this project is Progress Energy Florida, Post Office Box 14042, MAC DB44, St. Petersburg, Florida 33733. The applicant's responsible official is Mr. Martin Drango, Plant Manager.

Facility Location: The applicant operates a 683 MW Power Plant, which is located at 788 West Highbanks Road, DeBary, in Volusia County, Florida.

**Project:** There will be no physical construction or emissions increases as a result of this project. The existing facility consists of ten natural gas and fuel oil-fired combustion turbine-electrical generators operating in the peaking mode. There are six nominal 51.9 MW units that started operation in 1975 and 1976. There are four nominal 92.9 megawatt units that were permitted under the Rules for the Prevention of Significant Deterioration (PSD) and which started operation in 1992. Pollution control is accomplished by water injection and the burning of clean fuels. This facility is subject to applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C.

The applicant submitted an application for an Air Construction Permit to allow use of existing nitrogen oxides (NO<sub>X</sub>) continuous emission monitoring systems (CEMS) at the four newest combustion turbine-electrical generators located at this facility for compliance purposes in lieu of tracking water-to-fuel ratios. The applicant also requested the routine renewal of the facility Title V Operation Permit for the ten units and simultaneous incorporation of the conditions from the requested air construction permit. Use of the very accurate CEMS will insure compliance and obviate development of a separate compliance assurance monitoring (CAM) plan based on the water-to-fuel ratio.

Permitting Authority: Applications for simultaneous processing of Air Construction and Title V Air Operation permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, 62-212, and 62-213 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and air permits are required to operate the facility in the manner requested. The Department of Environmental Protection, Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination regarding this project. The Permitting Authority's physical address is: Florida Department of Environmental Protection, Bureau of Air Regulation, 111 South Magnolia Drive, Suite 4, Tallahassee, Florida, 32301. The Permitting Authority's mailing address is: Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, Mail Station #5505. The Permitting Authority's telephone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Statement of Basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above or at the following email address: tom.cascio@dep.state.fl.us. A copy of the complete project file is also available at the Florida Department of Environmental Protection Central District Office, 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767. Telephone: 407/894-7555.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an Air Construction Permit and a Title V Air Operation Permit Renewal to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the facility will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Proposed Permit and subsequent Final Permit in accordance with the conditions of the Draft Permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the DRAFT Title V Air Operation Permit for a period of thirty (30) days from the date of publication of this Public Notice. Written comments must be provided to the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location on the Department's official web site for notices (http://tlhora6.dep.state.fl.us/onw/) and in a newspaper of general circulation in the area affected by

the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If written comments or comments received at a public meeting result in a significant change to the DRAFT Permit, the Permitting Authority shall revise the DRAFT Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

The permitting authority will accept written comments concerning the proposed Draft Air Construction Permit issuance action for a period of 14 (fourteen) days from the date of publication of this Notice. Written comments should be provided to the Permitting Authority at the above address. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this Draft Air Construction Permit, the permitting authority shall issue a Revised Draft Air Construction Permit and require, if applicable, another Public Notice.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. 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 this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority 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, F.A.C.

A petition that disputes the material facts on which the Permitting Authority'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; 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 rights will be affected by the agency determination; (c) A statement of how and when the 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 state; (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 the 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 Permitting Authority'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 Permitting Authority's final action may be different from the position taken by it in this Public Notice of intent. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.

Objections: In addition to the above right to petition, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within sixty (60) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V major source air operation permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the thirty (30) day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. For more information regarding objections, visit the EPA Region 4 web site at: <a href="https://www.epa.gov/region4/air/permits">www.epa.gov/region4/air/permits</a>.

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.  1. Article Addressed to:  Mr. Martin Drango Plant Manager Progress Energy Florida Post Office Box 14042, MAC DB44 St. Petersburg, Florida 33733  3. Service Type C. Signature  X  D. Is delivery edgress different from item in the property of the property o	SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
	<ul> <li>item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece or on the front if space permits.</li> <li>1. Article Addressed to:</li> <li>Mr. Martin Drango</li> <li>Plant Manager</li> <li>Progress Energy Florida</li> <li>Post Office Box 14042, MAC DB44</li> </ul>	C. Signature  X  D. Is delivery address different from item 12 Yes  If YES, enter delivery address below:  OCT 15 2004  3. Service Type  A Certified Mail  Registered  Insured Mail  C.O.D.

	U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)						
_		. ,				-	
0784	Mr. Martin Dra	ngo, Plant Mana	ger	Access to			
	Postage	\$					
7028	Certified Fee			Post			
	Return Receipt Fee (Endorsement Required)	·		He			
	Restricted Delivery Fee (Endorsement Required)						
<u>_</u>	Total Postage & Fees	\$					
2870	Sent To u Mr. Martin Drango, Plant Manager						
2000	Street, Apt. No.; or PO Box No. Post Office Box 14042, MAC DB44						
70	City, State, ZIP+4 St. Petersburg, Florida 33733						
	PS Form 3800, May 2000 See Reverse for Instructions						

#### STATEMENT OF BASIS

Progress Energy Florida
DeBary Facility
Volusia County

# DRAFT Air Construction Permit No. 1270028-006-AC

DRAFT Title V Air Operation Permit Renewal No. 1270028-007-AV

This Air Construction Permit and Title V Air Operation Permit Renewal are issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-212 and 62-213. The above named permittee is hereby authorized to operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

This facility consists of ten intermittent duty simple cycle combustion turbine-electrical generators, fuel oil storage tanks and ancillary equipment.

Six of the units pre-date 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines and are not subject to Acid Rain regulations. These six turbines (Units 1 through 6) fire new No. 2 or new No. 6 fuel oil with the sulfur content not to exceed 0.5% and 0.7% by weight, respectively. Each is a nominal 51.9 MW GE Model MS7000 combustion turbine-electrical generator with a maximum heat input (LHV) of 720 MMBtu/hr (No.6 fuel oil) and 825 MMBtu/hour (No. 2 fuel oil). Emissions are not controlled and each turbine exhausts through a separate stack. The emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. These units began commercial service in 1975-1976.

The other four (Units 7 through 10) are subject to Subpart GG and were subject to the Rules for the Prevention of Significant Deterioration (PSD) and a determination of best available control technology (BACT). They are subject to the Acid Rain Phase II requirements of Title IV of the Clean Air Act. These four combustion turbine-electrical generator are fired with natural gas and/or new No. 2 fuel oil and equipped with inlet foggers. Each is a nominal 92.9 MW GE Model PG7111EA with a maximum heat input (LHV) of 1144 MMBtu/hr (No.2 fuel oil) and 1159 MMBtu/hour (natural gas). These units began commercial operation in 1992.

BACT for the four units consists of using clean fuels and good combustion to control particulate emissions (PM/PM<sub>10</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>) and volatile organic compounds (VOC). Nitrogen oxides (NO<sub>X</sub>) emissions are controlled by water injection to reduce the firing temperature. The BACT and Subpart GG require initial NO<sub>X</sub> testing calibration and calibration of the water-to-fuel injection ratio to insure subsequent continuous compliance. Annual compliance tests and calibration are required.

Based on the Title V Air Permit Renewal Application received on May 17, 2004 this facility is a major source of hazardous air pollutants (HAPs). It holds ORIS code 6046 under the federal Acid Rain Program.

The applicant submitted an application for an Air Construction Permit to allow use of existing nitrogen oxides  $(NO_X)$  continuous emission monitoring systems (CEMS) at the four newest combustion turbine-electrical generators located at this facility for compliance purposes in lieu of tracking water-to-fuel ratios. A recent revision to Subpart GG allows use of the very accurate

CEMS to insure compliance and obviates development of a separate compliance assurance monitoring (CAM) that would otherwise be required pursuant to 40 CFR 64.

The applicant requested that the CEMS also be used to demonstrate continuous compliance with the permitted BACT  $NO_X$  emission limits as revised in various permits issued subsequent to the initial PSD Permit.

The permitted  $NO_X$  limits for the four units are 25 parts per million, by volume, corrected to 15 percent oxygen (ppmvd @15%  $O_2$ ) when firing natural gas and 42 ppmvd @15%  $O_2$  when firing fuel oil. Progress Energy requested that compliance be determined on a 24-hour block (daily) basis and that two hours of excess emissions be allowed for each startup/shutdown cycle.

The Department reviewed hour-by-hour data from the EPA Air Markets Website that contains the CEMS electronic records submitted by companies subject to the Acid Rain regulations. The key findings are:

- The units can be down for months at a time due to their intermittent duty status.
- The units are used most often during the hottest months of the year.
- Most days that the units are used, they operate between two and 12 hours.
- On certain days, the units experienced two startups and shutdowns.
- The data show very consistent compliance with the applicable NO<sub>X</sub> emission limits on an hour-by-hour basis. Exceptions are usually related to startups and shutdowns.
- Compliance is consistently demonstrated when a four-hour averaging basis is used. Even fewer exceptions occur and these are usually related to blocks that include startups and shutdowns.

The Department concludes that a four hour averaging basis and the exclusion (if needed) of two hours per day of excess emissions is appropriate when using CEMS in lieu of the water-to-fuel ratio. The Department has determined that allowing more than two hours of excess emissions (such as four hours for two startup/shutdown cycles in a day) would render the process almost meaningless because so many days are characterized by few total hours of operation.

Information regarding the four GE PG7111EA indicates that startup occurs over a fairly short firing period of roughly 15 minutes. Shutdowns last on the order of five minutes. Presuming that each startup and each shutdown straddle two 15-minute blocks, no more than one hour of data would be excluded from the compliance calculation per startup/shutdown cycle.

Following are the key changes in DRAFT Title V Air Operation Permit Renewal (1270028-007-AV). They were primarily based on DRAFT Air Construction Permit 1270028-006-AC that is being processed together with the DRAFT Title V Air Operation Permit Renewal.

• The maximum heat input for Units 1, 2, 3, 4, 5, and 6 is adjusted to reflect the capabilities of the equipment at 20 degrees Fahrenheit (°F) instead of 59°F. There is no practical difference because the allowable heat input rates corresponding to operation at 20°F and 59°F lie on the same heat input curve. This revision will put the maximum heat input limitations on the same basis as those for the newer units (Units 7, 8, 9, and 10). The affected condition is Condition A.1. Compare with Condition B.1.

- The averaging time for the NO<sub>X</sub> emission limits for Units 7, 8, 9, and 10 given in Condition B.7 is set to 4 hours on a rolling basis. Compliance is determined using the Acid Rain CEMS.
- The latest version of 40 CFR 60, Subpart GG Standards of Performance for Stationary Gas Turbines is incorporated as Condition C.8. This latest version of Subpart GG provides for use of CEMS in lieu of water-to-fuel ratio for compliance with the NOx emissions standard given in Subpart GG and for excess emissions reporting.
- The permitting note related to heat input was removed for the four units permitted under the rules for the Prevention of Significant Deterioration (Condition B.1) but not for the six units that preexisted the program (Conditions A.1)
- The number of SO2 allowances allocated by EPA was increased from 699 tons per year (TPY) to 705 TPY in accordance with Table 2 Phase II Allowance Allocations (September 28, 1998, Federal Register/Volume 63, No.187) from 699 TPY to 705 TPY.
- The condition requiring testing at 95 percent of capacity was changed. The new requirement is 90 percent, after which units may operate up to 110 percent of the tested capacity, but not to exceed permitted capacity. The new conditions are in Condition C.3

For the most part, the resulting DRAFT Title V Air Operation Permit Renewal mirrors the previous version with the exceptions indicated above. The basis for each condition is referenced immediately following each condition.

This statement of basis shall also serve as the Technical Evaluation for DRAFT Air Construction Permit No.1270028-006-AC distributed concomitantly with the DRAFT Title V Air Operation Permit Renewal.

# **DRAFT PERMIT**

#### PERMITTEE:

Progress Energy Florida Post Office Box 14042 MAC DB44 St. Petersburg, Florida 33733

Authorized Representative:
Martin Drango, Plant Manager

Progress Energy DeBary Facility Air Permit No. 1270028-006-AC Facility ID No. 1270028 SIC No. 4911 (Electric Services) Permit Expires: July 1, 2005

#### PROJECT AND LOCATION

Progress Energy Florida operates the existing DeBary Facility, which is an electrical generating plant located at 788 West Highbanks Road in DeBary, Volusia County, Florida. The UTM coordinates are: Zone 17, 467.5 km E, and 3197.2 km N. The primary purpose of this air construction permit is to establish the existing continuous emissions monitoring systems as the federally enforceable methods for determining compliance with the NOx emissions standards for Combustion Turbine Peaking Unit Nos. 7 through 10 at the DeBary Facility.

#### STATEMENT OF BASIS

This federally enforceable 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.). The permittee is authorized to perform the work and make the necessary changes 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.

# **CONTENTS**

Section 1. General Information

Section 2. Administrative Requirements

Section 3. Emissions Units Specific Conditions

(DRAFT)

Michael G. Cooke, Director (Date)

Division of Air Resource Management

#### **FACILITY DESCRIPTION**

Progress Energy Florida operates the DeBary Facility located in Volusia County, Florida. This facility consists of ten simple cycle, intermittent duty, combustion turbine peaking units, fuel oil storage tanks and ancillary support equipment. Six peaking units began operation in 1975/1976 and pre-date the federal New Source Performance Standards (NSPS) for gas turbines (Subpart GG). The four newer peaking units were constructed in accordance with Permit No. PSD-FL-167 and began operation in 1992. The newer peaking units are also subject to NSPS Subpart GG and the Phase II Acid Rain requirements. This air construction permit affects only the following emissions units.

EU No.	Description
015	Combustion TurbineUnit No. 7
016	Combustion Turbine Unit No. 8
017	Combustion Turbine Unit No. 9
018	Combustion Turbine Unit No. 10

This permit specifies the NOx CEMS as the compliance method for Unit Nos. 7 – 10 in order to avoid a CAM Plan for NOx emissions. It also reestablishes the maximum heat input rates for Unit Nos. 1 - 6 at 20° F. This permit is being issued simultaneously with the renewal of the Title Vair operation permit for this facility.

#### REGULATORY CLASSIFICATION

<u>Title III</u>: The existing facility is identified as a potential major source of hazardous air pollutants (HAP). In particular the facility is subject to 40 CFR 63, Subpart YYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

<u>Title IV</u>: The existing facility operates units (ARMS Units 15, 16, 17, and 018) subject to the acid rain provisions of the Clean Air Act.

<u>Title V:</u> The existing facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

PSD: The existing facility is a PSD-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The existing facility operates units subject to the New Source Performance Standards of 40 CFR 60. In particular Combustion Turbine Units 7 10 (ARMS Units 15, 16, 17, and 018) are subject to 40 CFR 60, Subpart GG – Standards of Performance for Stationary Gas Turbines.

# RELEVANT DOCUMENTS

The permit application received on May 17, 2004 and additional information received to make it complete are not a part of this permit; however, the information is specifically related to this permitting action and is on file with the Department. The documents listed below are not a part of this permit, but are specifically related to this permitting action and are on file with the Department.

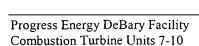
- The "Statement of Basis" accompanying the Draft Title V Permit Renewal also provides the Department's technical review for this air construction permit.
- Application Information (complete on July 29, 2004).
- Permit No. PSD-FL-167 (AC64-191015) issued on October 18, 1991.
- Subsequent modifications to Permit No. PSD-FL-167 issued on 11/23/92, 04/08/93, 06/29/93, 06/30/93, 08/03/93, 08/11/93, 08/30/93, 09/21/94, 05/06/97, and 03/31/00.
- Title V Operation Air Permit 1270028-001-AV effective January 1, 2000 and Revisions effective June 11, 2000 and June 26, 2001.

• Statement of Basis distributed with Draft Title V Air Operation Permit 1270028-007-AV and Draft Air Construction Permit 1270028-006-AC.



#### **SECTION 2. ADMINISTRATIVE REQUIREMENTS**

- 1. <u>Permitting Authority</u>: All documents related to applications for permits to construct, modify, or operate emissions units regulated by this permit shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. Copies of all applications shall be sent to each Compliance Authority.
- 2. <u>Compliance Authority</u>: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Resources Section of the Department's Central District Office at 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767.
- 3. <u>General Conditions</u>: The permittee shall comply with the applicable General Conditions specified in Rule 62-4.160, F.A.C.
- 4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit 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 Title 40, Part 60 of the Code of Federal Regulations (CFR), adopted by reference in Rule 62-204.800, F.A.C. The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. 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 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.]
- 5. 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.]
- 6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. 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.]
- 7. <u>Title V Permit</u>: This air construction permit was issued simultaneously with the Title V air operation permit.



#### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### A. Combustion Turbine Unit Nos. 7 to 10

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

EU No	Description	
015	Combustion Turbine Unit No. 7	
016	Combustion Turbine Unit No. 8	
017	Combustion Turbine Unit No. 9	
018	Combustion Turbine Unit No. 10	

Each unit is a General Electric Model PG7111EA simple cycle gas turbine capable of firing natural gas or distillate oil. Based on the lower heating value of each fuel and a compressor inlet temperature of 20° F, each unit is capable of firing approximately 1159 MMBtu per hour of natural gas or 1144 MMBtu per hour of distillate oil. Each unit utilizes water injection to reduce emissions of nitrogen oxides (NOx) and employs a continuous emissions monitoring system (CEMS) for monitoring NOx emissions. Each unit is subject to NSPS Subpart GG for gas turbines and the federal Phase II acid rain requirements.

#### **NEW SPECIFIC CONDITIONS**

- 1. <u>Supplemental Permit</u>: This air construction permit supplements all other existing air construction and operation permits for the emissions units identified above. Unless otherwise stated in this permit, the emissions units remain subject to the emissions standards and specific conditions of all other applicable air construction and operation permits. [Rule 62-4.070(3), F.A.C.]
- 2. <u>NOx CEMS for Compliance Monitoring</u>: For each unit, the permittee shall demonstrate compliance with the following NOx emissions standards by data collected from the existing acid rain continuous emissions monitoring systems (CEMS).
  - a. When firing natural gas, NOx emissions shall not exceed 25.0 ppmvd corrected to 15% oxygen based on a 4-hour rolling average of all valid data collected from the continuous emissions monitoring system (CEMS).
  - b. When firing distillate oil, NOx emissions shall not exceed 42.0 ppmvd corrected to 15% oxygen based on a 4-hour rolling average of all valid data collected from the CEMS.

Excess emissions resulting from startup, shutdown and malfunction of any emissions unit shall be permitted providing: (1) best operational practices to minimize emissions are adhered to, and (2) the duration of excess emissions shall be minimized but in no case exceed two hours (total) in any 24 hour period unless specifically authorized by the Department for longer duration. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.

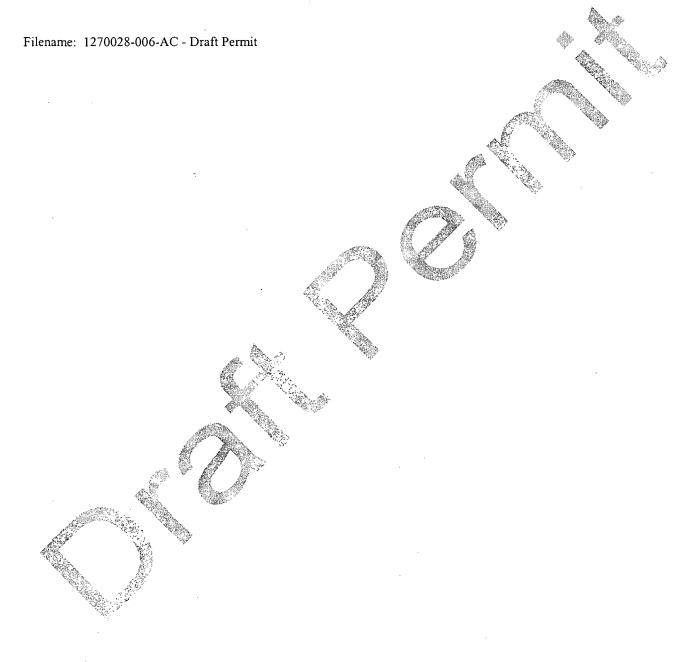
Compliance with the above standards ensures compliance with applicable NOx standards specified in the previously issued air construction permits for these units. Because compliance will be demonstrated continuously, an annual stack test will not be required. However, the Department reserves the right to require a "special compliance test" in accordance with Rule 62-297.310(7)(b), F.A.C. The existing NOx CEMS shall remain subject to all existing installation, calibration, certification, and operation requirements.

When requested by the Department, the CEMS emission rates for NOx on these units shall be corrected to ISO conditions to demonstrate compliance with the NOx standards established in 40 CFR 60.332. With regard to NSPS Subpart GG, the NOx CEMS data shall also be used to report excess emissions in accordance with 40 CFR 60.334(j)(1)(iii) and 40 CFR 60.7(c).

[Rules 62-4.070(3) and 62-210.700, F.A.C.]

#### A. Combustion Turbine Unit Nos. 7 to 10

3. Water-to-Fuel Ratio Monitoring: The permittee shall continuously monitor the water-to-fuel ratio for the water injection system on each unit. The water injection control system shall be set to continuously achieve a NOx emissions level not to exceed 25.0 ppmvd corrected to 15% oxygen when firing natural gas and 42.0 ppmvd corrected to 15% oxygen when firing distillate oil. In the event that the NOx CEMS is not available or providing valid data, the water-to-fuel ratio monitoring data shall be used to support the demonstration of compliance with the NOx standards. [Rule 62-4.070(3), F.A.C.]



# Progress Energy Florida

# **DeBary Facility**

Facility ID No. 1270028

Volusia County

Title V Air Operation Permit Renewal

DRAFT Permit No. 1270028-007-AV

# Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Permitting South Section

Mail Station #5505 2600 Blair Stone Road Tallahassee, Florida 32399-2400

> Telephone: 850/488-0114 Fax: 850/922-6979

# Compliance Authority

Central District Office 3319 Maguire Boulevard, Suite 232 Orlando, FL 32803-3767

> Telephone: 407/894-7555 Fax: 407/897-2966

# Title V Air Operation Permit Renewal DRAFT Permit No. 1270028-007-AV

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Permittee:

Progress Energy Florida Post Office Box 14042 MAC DB44 St. Petersburg, FL 33733 **DRAFT Permit No.** 1270028-007-AV **Facility ID No.** 1270028

**SIC Nos.:** 49

**Project:** Title V Air Operation Permit Renewal

This permit is for the operation of the DeBary Facility. This facility is located at 788 West Highbanks Road, DeBary, Volusia County; UTM Coordinates: Zone 17, 467.5 km East and 3197.2 km North; Latitude: 28° 54' 17" North and Longitude: 81° 19' 55" West.

This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

# Referenced attachments made a part of this permit:

Appendix I-1, List of Insignificant Emissions Units and/or Activities

Appendix H-1, Permit History

Appendix TV-4, TITLE V CONDITIONS (version dated 02/12/02)

Appendix GG, NSPS for Stationary Gas Turbines

Appendix YYYY, NESHAP for Stationary Combustion Turbines

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

Statement of Basis

TABLE 297.310-1, CALIBRATION SCHEDULE (version dated 10/07/96)

FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION

AND MONITORING SYSTEM PERFORMANCE REPORT (version dated 7/96)

Phase II Acid Rain Part Application Renewal signed by the Designated Representative on April 26, 2004

Permit Effective Date: January 1, 2005 Renewal Application Due Date: July 5, 2009

Expiration Date: December 31, 2009

Michael G. Cooke, Director Division of Air Resource Management

MGC/th

#### Section I. Facility Information.

# Subsection A. Facility Description.

This facility consists of ten peaking combustion gas turbines.

Six of them (P1, P2, P3, P4, P5, and P6) are each 51.9 megawatt simple cycle units manufactured by General Electric Model MS7000. These combustion turbines are fired with new No. 6 or new No. 2 fuel oil.

The latter four combustion turbines (P7, P8, P9, P10) are each 92.9 megawatt simple cycle units manufactured by General Electric (Model PG7111EA). The units are fired with natural gas and/or new No. 2 fuel oil containing an average of 0.3 percent (%) sulfur, by weight, and a maximum of 0.5 % sulfur, by weight. Annual hours of operation are limited to an equivalent of 3,390 or less based on a sliding scale related to the fuel sulfur content. Control measures and equipment consists of firing relatively clean fuel, good combustion practices, and water injection.

Also, included in this permit are miscellaneous insignificant emissions units and/or activities.

Based on the Title V permit renewal application received on May 17, 2004, this facility is a major source of hazardous air pollutants (HAPs).

# Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions.

<u>E.U.</u>	
ID No.	Brief Description
-003	Peaking Combustion Turbine Unit No. 1
-005	Peaking Combustion Turbine Unit No. 2
-007	Peaking Combustion Turbine Unit No. 3
-009	Peaking Combustion Turbine Unit No. 4
-011	Peaking Combustion Turbine Unit No. 5
-013	Peaking Combustion Turbine Unit No. 6
-015	Combustion Turbine Unit No. 7
-016	Combustion Turbine Unit No. 8
-017	Combustion Turbine Unit No. 9
-018	Combustion Turbine Unit No. 10

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

#### Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

# These documents are provided to the permittee for information purposes only:

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

# These documents are on file with the permitting authority:

FINAL Title V Permit Revision No. 1270028-005-AV issued on July 11, 2001.

Title V Permit Renewal Application received on May 17, 2004.

Acid Rain Phase II Part Application Renewal signed by the Designated Representative on April 26, 2004.

Additional Information Request Dated July 14, 2004.

Additional Information Responses Received July 19, July 22, and 29, 2004.

# Section II. Facility-wide Conditions.

# The following conditions apply facility-wide:

- 1. APPENDIX TV-4, TITLE V CONDITIONS, (version dated 02/12/02) is a part of this permit. {Permitting note: APPENDIX TV-4, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}
- 2. Not federally enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
- 3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
  [Rule 62-296.320(4)(b)1. & 4., F.A.C.]
- 4. Prevention of Accidental Releases (Section 112(r) of CAA).
- a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center Post Office Box 1515 Lanham-Seabrook, Maryland 20703-1515 Telephone: 301/429-5018

- **b.** The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C. [40 CFR 68]
- 5. <u>Insignificant Emissions Units and or Activities.</u> Appendix I List of insignificant emission units and/or activities, is a part of this permit. [Rules 62-213.440(1), 62-213.430 (6) and 62-4.040 (1)(b), F.A.C.]

- 6. Not federally enforceable. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. {Permitting Note: No vapor emissions control devices or systems are deemed necessary nor ordered by the Department as of the issuance date of this permit.} [Rule 62-296.320(1)(a), F.A.C.]
- 7. Not federally enforceable. <u>Unconfined emissions of Particulate Matter</u>. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any emissions unit whatsoever, including, but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrially related activities such as loading, unloading, storing or handling, without taking reasonable precautions to prevent such emission.

Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

- a. Paving and maintenance of roads, parking areas and yards.
- b. Landscaping or planting of vegetation.
- c. Limiting access to plant property by unnecessary vehicles. [Rule 62-296.320(4)(c)1. & 3., F.A.C.; and, proposed by applicant in the initial Title V permit application received June 14, 1996.]
- 8. <u>Timely Recording, Monitoring and Reporting</u>: When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

  [Rule 62-213.440, F.A.C.]
- 9. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year, using DEP Form No. 62-213.900(7). {See condition 51., APPENDIX TV-4, TITLE V CONDITIONS}

{See condition 51., APPENDIX TV-4, TITLE V CONDITIONS} [Rule 62-214.420(11), F.A.C.]

10. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Central District Office:

Central District Office 3319 Maguire Boulevard, Suite 232 Orlando, FL 32803-3767 Telephone: 407/894-7555

Fax: 407/897-2966

11. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

> United States Environmental Protection Agency Region 4 Air, Pesticides & Toxics Management Division Air and EPCRA Enforcement Branch Air Enforcement Section 61 Forsyth Street Atlanta, Georgia 30303

> Telephone: 404/562-9155, Fax: 404/562-9164

12. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.

[Rule 62-213.420(4), F.A.C.]

#### Section III. Emissions Unit and Conditions.

#### Subsection A. This section addresses the following emissions units.

<u>E.U.</u>	•
ID No.	Brief Description
-003	Peaking Combustion Turbine Unit No. 1
-005	Peaking Combustion Turbine Unit No. 2
-007	Peaking Combustion Turbine Unit No. 3
-0.09	Peaking Combustion Turbine Unit No. 4
-011	Peaking Combustion Turbine Unit No. 5
-013	Peaking Combustion Turbine Unit No. 6

Each of the six peaking combustion turbines (PCT) is a General Electric, Model MS 7000. The output is rated at 51,900 KW. New No. 2 or new No. 6 fuel oil is allowed to be fired, with the sulfur content not to exceed 0.5% and 0.7% by weight, respectively. Commercial operation began on February 6, 1976; March 20, 1976; December 31, 1975; April 14, 1976; December 22, 1975; and April 30, 1975, respectively for PCT Units 1 through 6.

Regulations: Since this facility is a major source of hazardous air pollutants, these units are subject to applicable requirements of 40 CFR 63 - Subpart YYYY, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, adopted and incorporated by reference in Rule 62-204.800(11), F.A.C., and NESHAP 40 CFR 63, Subpart A-General Provisions (Refer to Appendix YYYY).

#### The following specific conditions apply to the emissions units listed above:

#### **Essential Potential to Emit (PTE) Parameters**

- **A.1.** Permitted Capacity. The operation rate for each PCT shall not exceed:
- a. 720 MMBtu/hr (LHV) at 20 °F using new No. 6 fuel oil, or
- b. 825 MMBtu/hr (LHV) at 20 °F using new No. 2 fuel oil.

{Permitting note: The previous permit reflected heat input at 59°F.}

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

{Permitting note: The heat input and fuel consumption can vary with ambient temperature in accordance with the design curves. The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 - 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. See Specific Condition C.3.}

# **A.2.** Methods of Operation - Fuels.

- a. Startup: The only fuels allowed to be burned are new No. 2 or new No. 6 fuel oil.
- b. Normal: The only fuels allowed to be burned are new No. 2 or new No. 6 fuel oil.

New No. 2 fuel oil shall not be co-fired with new No. 6 fuel oil.

[Rule 62-213.410, F.A.C.]

**A.3.** Hours of Operation. Each PCT is allowed to operate continuously, i.e., 8,760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

# **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting note: Unless otherwise specified, the averaging times for Specific Conditions **A.4.** through **A.6.** are based on the specific averaing time of the applicable test method.}

**A.4.** Sulfur Content No.2 Fuel Oil. The maximum sulfur content of the new No. 2 fuel oil shall not exceed 0.5 percent by weight.

[AO64-207447 and proposed by applicant in the initial Title V permit application received June 14, 1996]

**A.5.** Sulfur Content No. 6 Fuel Oil. The maximum sulfur content of the new No. 6 fuel oil shall not exceed 0.7 percent by weight.

[AC64-2116, AC64-2117, AC64-2118, AC64-2119, AC64-2120, AC64-2121, AO64-207447 and proposed by applicant in the initial Title V permit application received June 14, 1996]

**A.6.** <u>Visible emissions.</u> Visible emissions from each PCT unit shall not be equal to or greater than 20 percent opacity.

[Rule 62-296.320(4)(b)1., F.A.C. and AO64-207447]

# **Monitoring of Operations**

**A.7.** The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor upon each fuel delivery. See **Specific Condition A.9.** 

[Rule 62-213.440, F.A.C.]

# A.8. 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.
- (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), F.A.C.]

#### **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- **A.9.** The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-94, ASTM D4294-90(95), or both ASTM D4057-88 and ASTM D129-95 or the latest edition of the above ASTM methods. [Rules 62-213.440 and 62-297.440, F.A.C.]
- **A.10.** The test method for visible emissions shall be EPA Method 9, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.

[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

- **A.11.** PCT Units No. 1 through 6 shall be tested in accordance with EPA Method 9 within 10 days after being placed back in operation using new No. 6 fuel oil. [AO64-207447]
- **A.12.** PCT Units No. 1 through 6 shall be tested for visible emissions annually on or within 60 days prior to April 1. [Rule 62-297.310(7), F.A.C.]
- **A.13.** Opacity Compliance Tests. When EPA Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
- a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
- b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes. [Rule 62-297.310(4)(a)2., F.A.C.]

# A.14. (a) General Compliance Testing.

- 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
  - a. Did not operate; or
- b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
- 4. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
  - a. Visible emissions:
- 8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.

{Permitting Note: The owner or operator shall conduct testing for visible emissions while firing fuel oil for each combustion turbine upon that turbine's exceeding 400 hours of operation on fuel oil in any given federal fiscal year (October 1 through September 30). Regardless of the number of hours of operation on fuel oil, at least one compliance test shall be conducted on all ten combustion turbines every five years, coinciding with the term of the operation permit for these turbines.} [Rule 62-297.310(7), F.A.C.]

A.15. <u>Common Conditions</u>. These emissions units are also subject to conditions contained in **Subsection C. Common Conditions**.

# Subsection B. This section addresses the following emissions units.

<u>E.U.</u>	
ID No.	Brief Description
-015	Combustion Turbine Unit No. 7
-016	Combustion Turbine Unit No. 8
-017	Combustion Turbine Unit No. 9
-018	Combustion Turbine Unit No. 10

Each simple cycle combustion turbine (CT) is a General Electric PG7111EA model with a nameplate rating of 92.9 MW at ISO conditions. Each CT is allowed to burn new No. 2 fuel oil and/or natural gas. NO<sub>X</sub> emissions are controlled by water-injection. These emissions units began commercial operation on November 1, 1992.

Regulations: Each CT is regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; NSPS 40 CFR 60 Subpart A; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); and Rule 62-212.400(6), F.A.C. Best Available Control Technology (BACT) Determination, dated October 16, 1991. Since this facility is a major source of hazardous air pollutants, these units are subject to applicable requirements of 40 CFR 63 - Subpart YYYY, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, adopted and incorporated by reference in Rule 62-204.800(11), F.A.C., and NESHAP 40 CFR 63 Subpart A, General Provisions (see Appendix YYYY).

{Permitting Note: These units are permitted under PSD-FL-167 (AC64-191015) issued on October 18, 1991 and subsequent modifications including re-issued Permit PSD-FL-167I (1270028-002-AC) dated May 6, 1997 and re-issued Permit PSD-FL-167J (1270028-004-AC) dated March 31, 2000.}

The following specific conditions apply to the emissions units listed above:

# Essential Potential to Emit (PTE) Parameters

- **B.1.** Permitted Capacity. The operation rate for each CT shall not exceed:
- a. 1,144 MMBtu/hr/unit (LHV) at 20°F using new No. 2 oil, or
- b. 1,159 MMBtu/hr/unit (LHV) at 20°F using natural gas.

[Rules 62-4.160(2), 62-210.200(PTE), F.A.C., AC64-191015, PSD-FL-167 and 1270028-002-AC ]

#### **B.2.** Methods of Operation.

- a. Fuels.
  - 1. Startup: The only fuels allowed to be burned are natural gas and/or new No. 2 fuel.

- 2. Normal: The only fuels allowed to be burned are natural gas and/or new No. 2 fuel.
- b. <u>Inlet Foggers</u>. The inlet foggers installed at the compressor inlet to each of the four simple cycle combustion turbines may operate up to 4,900 hours per year in aggregate (average 1,225 hours per unit per year).

[Rule 62-213.410, F.A.C.; AC64-191015(B); 1270028-003-AV; and, 1270028-004-AC]

- **B.3.** Fuel Consumption. The maximum fuel consumption for the 4 CTs at 59 °F shall not exceed:
- a. 106,133,333 gal/yr of new No. 2 fuel oil.
- b. 14,212 (million cubic feet)/yr of natural gas.

[PSD-FL-167I (1270028-002-AC) and, proposed by applicant in the initial Title V permit application amendment received August 29, 1997]

**B.4.** Capacity Factor. The capacity factor shall be limited to 33% based on a weighted 12-month rolling average sulfur content of 0.30%. However, if the weighted rolling average sulfur content of the fuel oil is less than 0.30%, the capacity factor may be adjusted using the following table:

Percent Average	% Capacity	Cumulative Hours/Year for any four CT
Sulfur Content	<u>Factor</u>	
0.30 - 0.295	33	11,564 (based on an average of 2891 hr/CT/yr)
0.29 - 0.285	34.4	12,056 (based on an average of 3014 hr/CT/yr)
0.28 - 0.275	35.8	12,544 (based on an average of 3136 hr/CT/yr)
0.27 - 0.265	37.2	13,036 (based on an average of 3259 hr/CT/yr)
0.26 - or less	38.7	13,560 (based on an average of 3390 hr/CT/yr)
[AC64-191015]		

**B.5.** Hours of Operation. The cumulative hours of operation for any CT combination shall not exceed 13,560 hours/year, at 38.7% capacity factor. **See specific Condition B.4.** [Rules 62-210.200(PTE) and 62-4.160(2), F.A.C.]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting note: Unless otherwise specified, the averaging times for Specific Conditions **B.6.** through **B.14.** are based on the specific averaging time of the applicable test method.}

**B.6.** Emissions Limits. All emission limits in **Specific Conditions B.7.** through **B.14.** are based on operation at 59 °F and 15%  $O_2$ . [PSD-FL-167 (AC64-191015)]

# B.7. Nitrogen Oxides.

- a. When firing natural gas, NOx emissions shall exceed neither 25.0 ppmvd corrected to 15% oxygen nor 107 pounds per hour based on a 4-hour rolling average of all valid data collected from the continuous emissions monitoring system (CEMS).
- b. When firing distillate oil, NOx emissions shall exceed neither 42.0 ppmvd corrected to 15% oxygen based nor 182 pounds per hour on a 4-hour rolling average of all valid data collected from the NOx CEMS.
- c. Excess emissions resulting from startup, shutdown and malfunction of any emissions unit shall be permitted providing: (1) best operational practices to minimize emissions are adhered to, and (2) the duration of excess emissions shall be minimized but in no case exceed two hours (total) in any 24 hour period unless specifically authorized by the Department for longer duration. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.
- d. Compliance with the above standards ensures compliance with applicable NOx standards specified in the previously issued air construction permits for these units. Because compliance will be demonstrated continuously, an annual stack test will not be required. However, the Department reserves the right to require a "special compliance test" in accordance with Rule 62-297.310(7)(b), F.A.C. The existing NOx CEMS shall remain subject to all existing installation, calibration, certification, and operation requirements.
- e. When requested by the Department, the CEMS emission rates for NOx on these units shall be corrected to ISO conditions to demonstrate compliance with the NOx standards established in 40 CFR 60.332. With regard to NSPS Subpart GG, the NOx CEMS data shall also be used to report excess emissions in accordance with 40 CFR 60.334(j)(1)(iii) and 40 CFR 60.7(c).

{Permitting Note: The purpose of this permit is to authorize the use of the existing NOx CEMS to demonstrate compliance with the applicable NOx standards. Pursuant to 40 CFR 64.2(b)(1)(vi), this will allow each unit to avoid a Compliance Assurance Monitoring (CAM) Plan for NOx emissions.}

[PSD-FL-167 (AC64-191015), Rule 62-212.400(BACT), F.A.C, BACT Determination dated October 16, 1991, PSD-FL-167I issued 5/6/97, 1270028-006-AC, and 40 CFR 60.332]

**B.7.1.** The permittee shall continuously monitor the water-to-fuel ratio for the water injection system on each unit. The water injection control system shall be set to continuously achieve a NOx emissions level not to exceed 25.0 ppmvd corrected to 15% oxygen when firing natural gas and 42.0 ppmvd corrected to 15% oxygen when firing distillate oil. In the event that the NOx CEMS is not available or providing valid data, the water-to-fuel ratio monitoring data shall be used to support the demonstration of compliance with the NOx standards. [Rule 62-4.070(3), F.A.C.]

**B.8.** Sulfur Dioxide. The new No. 2 fuel oil's sulfur content by weight shall not exceed 0.30 percent average, based upon a weighted 12 month rolling average, and 0.5 percent maximum (555 lb/hr/unit and 1,925 TPY, total for all 4 CTs). [PSD-FL-167 (AC64-191015) and BACT Determination dated October 16, 1991]

**B.9.** Sulfur Dioxide. The sulfur content of the natural gas shall not exceed 0.8 percent by weight.

[40 CFR 60.333(b)]

**B.10.** Particulate Matter. PM/PM<sub>10</sub> emissions shall not exceed 0.015 lb/MMBtu (15.0 lb/hr/unit and 102 TPY, for all 4 CTs).

[PSD-FL-167 (AC64-191015) and BACT Determination dated October 16, 1991]

**B.11.** Volatile Organic Compounds. VOC emissions shall not exceed 5 lb/hr/unit and 34 TPY, for all 4 CTs.

[PSD-FL-167 (AC64-191015) and BACT Determination dated October 16, 1991]

**B.12.** Carbon Monoxide. CO emissions shall not exceed 54 lb/hr/unit and 365 TPY, for all 4 CTs.

[PSD-FL-167 (AC64-191015) and BACT Determination dated October 16, 1991]

**B.13.** Sulfuric Acid Mist. The sulfur content by weight shall not exceed 0.30 percent, based upon a weighted 12-month rolling average, and 0.5 percent maximum (69 lb/hr/unit and 469 TPY, 12-month rolling average, for all 4 CTs).

[PSD-FL-167 (AC64-191015) and BACT Determination dated October 16, 1991]

**B.14.** <u>Visible Emissions</u>. Visible emissions shall not exceed 20 percent opacity except at full load, in which case visible emissions shall not exceed 10 percent opacity. [PSD-FL-167 (AC64-191015)]

# **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**B.15.** As required by this permit, compliance tests shall be conducted each federal fiscal year (October 1 – September 30) for the pollutants listed in **Specific Conditions B.16.** through **B.23.**, below.

[Rule 62-297.310(7), F.A.C.]

**B.16.** Nitrogen Oxides. The test method for  $NO_X$  emissions shall be EPA Method 20. See Specific Condition **B.7.** 

[PSD-FL-167 (AC64-191015)]

- **B.16.1**. If conducted at permitted capacity, the annual NO<sub>X</sub> continuous monitor RATA required pursuant to 40 CFR 75 may be substituted for the annual compliance stack test. [Applicant Request dated April 7, 2004.]
- **B.17.** Sulfur Dioxide. The owner or operator shall determine compliance with the sulfur content standard in **Specific Conditions B.8.** and **B.9.** as follows: Fuel analysis as specified in ASTM D 2880-94, or the latest edition, shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, D 3246-81, or the latest edition, shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 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.

[AC64-191015 and 40 CFR 60.335(d)]

**B.18.** Particulate Matter. The test method for PM/PM<sub>10</sub> shall be EPA Method 5 or Method 17.

[PSD-FL-167 (AC64-191015)]

- **B.19.** A one hour opacity test for each CT with opacity values no greater than 10% at full load, may serve as the annual particulate matter test. If however, opacity values from any CT are over 10% at full load, then a Method 5 or Method 17 particulate test must be conducted on the CT(s) to prove compliance with the particulate matter standard. [PSD-FL-167 (AC64-191015)]
- **B.20.** Volatile Organic Compounds. The test method for VOC shall be EPA Method 25A. Testing is not required if compliance with CO limit is shown.

  [PSD-FL-167 (AC64-191015)]
- **B.21.** Carbon Monoxide. The test method for CO shall be EPA Method 10. [PSD-FL-167 (AC64-191015)]
- **B.22.** <u>Visible Emissions.</u> The test method for visible emissions shall be EPA Method 9. [PSD-FL-167 (AC64-191015)]
- **B.23.** Sulfuric Acid Mist. The test method for sulfuric acid mist shall be EPA Method 8 or fuel analysis as specified in ASTM D 2880-94 or the latest edition. [PSD-FL-167 (AC64-191015) and 40 CFR 60.335(d)]
- **B.24.** Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the

applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 CFR 60.8(c)]

- **B.25.** Compliance with standards in 40 CFR 60, other than opacity, shall be determined in accordance with performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.
- [40 CFR 60.11(a)]
- **B.26.** At all times, including periods of startup, shutdown, and malfunction, owners and operators 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 Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operation and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

- **B.27.** Credible Evidence. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR 60, nothing in 40 CFR 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

  [40 CFR 60.11(g)].
- **B.28.** Circumvention. No owner or operator subject to the provisions of 40 CFR 60 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.

  [40 CFR 60.12]
- **B.29.** To compute the nitrogen oxide 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 determine the nitrogen content of the fuel being fired.

  [40 CFR 60.335(a)]
- **B.30.** In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR 60 or other methods and procedures as specified in this permit, except as provided for in 40

CFR 60.8(b). Acceptable alternative methods and procedures are given in paragraph 40 CFR 60.335(f).

[40 CFR 60.335(b)]

- **B.31.** To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the methods specified in 40 CFR 60.335(a) and 40 CFR 60.335(d) of 40 CFR 60.335 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. [40 CFR 60.335(e)]
- **B.32.** Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

**B.33.** Calculation of Emission Rate. 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.]

## **B.34.** 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.
- 2. Opacity Compliance Tests. When EPA Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period

shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

- a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
- b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
- c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) <u>Required Flow Rate Range</u>. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached.
- (e) <u>Allowed Modification to EPA Method 5</u>. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

[Rule 62-297.310(4), F.A.C.]

## **B.35.** 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.
- (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), F.A.C.]
- **B.36.** The permittee shall comply with the requirements contained in APPENDIX SS-1, Stack Sampling Facilities, attached to this permit. [Rule 62-297.310(6), F.A.C.]

**B.37.** Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

## (a) General Compliance Testing.

- 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
  - a Did not operate; or
- b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
- 4. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
  - a. Visible emissions;
- b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
- 10. An annual compliance test conducted for visible emissions shall not be required for units exempted from permitting at Rule 62-210.300(3)(a), F.A.C., or units permitted under the General Permit provisions at Rule 62-210.300(4), F.A.C.
- (b) 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 may 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.
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7) b, F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C. and SIP approved]

{Permitting Note: The owner or operator shall conduct testing for visible emissions while firing fuel oil for each combustion turbine upon that turbine's exceeding 400 hours of operation on fuel oil in any given federal fiscal year (October 1 through September 30). Regardless of the number of hours of operation on fuel oil, at least one compliance test shall be conducted on all ten combustion turbines every five years, coinciding with the term of the operation permit for these turbines.}

{Permitting Note: The annual NO<sub>X</sub> and SO<sub>2</sub> tests that are required by Rule 62-297.310(7), F.A.C., can be done during the annual RATA as satisfaction of this requirement, provided all other testing requirements specified in the permit are met.}

## **Monitoring of Operations**

- **B.38**. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG 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 40 CFR 60.334(b).

  [40 CFR 60.334(b)(1) and (2)]
- **B.39.** The permittee shall monitor sulfur content and nitrogen content of the new No. 2 fuel oil and sulfur content of natural gas. These values may be provided by the vendor and the sulfur content, for compliance purposes, shall be based on a weighted 12 month rolling average from fuel delivery receipts. The frequency of determinations of these values shall be as follows:

## A. New No. 2 Fuel Oil

The values, sulfur and nitrogen content, shall be determined on each occasion that fuel is transferred to the storage tanks from any other source. The sulfur content of the fuel oil shall be based on a weighted 12 month rolling average and shall not exceed 0.3%. The maximum weighted sulfur content of the fuel oil shall not exceed 0.5% at any time. Records of these values shall be kept by the facility for a five year period for regulatory agency inspection purposes.

## B. Natural Gas

Pursuant to 40 CFR 60.344(b)(2), a custom fuel monitoring schedule for the determination of these values shall be followed for the natural gas fired at this facility and shall be as follows:

## Custom Fuel Monitoring Schedule for Natural Gas

1. Monitoring of fuel nitrogen content shall not be required when firing natural gas.

## 2. Sulfur Monitoring:

- a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are ASTM D1072-80; ASTM D3031-81; ASTM D3246-81; and ASTM D4084-82, or the latest edition of the above ASTM methods as referenced in 40 CFR 60.335(d).
- b. This custom fuel monitoring schedule became effective on October 25, 1997. Sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333 and the conditions of this permit, then sulfur monitoring shall be conducted once per quarter for six quarters. If monitoring data is provided by the applicant which demonstrates consistent compliance with the requirements herein the applicant may begin monitoring as per the requirements of 2.c.
- c. If after the monitoring required in item 2.b. above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333 and the conditions of this permit, sample analysis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarter of each calendar year.
- d. Should any sulfur analysis as required in items 2.b. or 2.c. above indicate noncompliance with 40 CFR 60.333 and the conditions of this permit, the owner or operator shall notify the Department of such excess emissions and the custom schedule shall be re-examined by the Environmental Protection Agency. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
- 3. If there is a change in fuel supply, the owner or operator must notify the Department of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be

conducted weekly during the interim period when this custom schedule is being reexamined.

4. Records of samples analysis and fuel supply pertinent to this custom schedule shall be retained for a period of five years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

[Rule 62-4.070(3), F.A.C., AC64-191015(B) and EPA's October 25, 1997 approval letter]

{Permitting Note: The above requirements are applicable when demonstrating compliance with the NSPS limits. Proper maintenance and use of the Acid Rain NO<sub>X</sub> CEMs is an acceptable alternative for monitoring compliance with the BACT limits specified in condition B.7.}

## **Continuous Monitoring Requirements**

- **B.40.** The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:
- (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report. [40 CFR 60.7(c)(1), (2), (3), (4)]
- **B.41.** The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using water injection to control  $NO_X$  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  $\pm 5.0$  percent and shall be approved by the Administrator. [40 CFR60.334(a)]

## Recordkeeping and Reporting Requirements

- **B.42.** For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:
- a. *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 the permitted nitrogen oxide standard by the initial performance test required in 40 CFR 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 initial performance test. 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 40 CFR 60.335(a). [Rule 62-204.800, F.A.C.; 40 CFR 60.334(c)(1)]

{Permitting Note: A properly installed and maintained NO<sub>X</sub> CEMS may be used as an acceptable alternative to measure periods of excess emissions.}

- **B.43.** The permittee shall maintain records of the 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.

  [40 CFR 60.7(b)]
- **B.44.** The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
- (1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
- (2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

[40 CFR 60.7(d)(1) and (2)]

**B.45.** (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

- (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
- (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
- (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).
- (2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the non-complying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

  [40 CFR 60.7(e)]
- **B.46.** The permittee shall maintain a file of all measurements, including continuous monitoring systems, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

  [40 CFR 60.7(f)]

**B.47.** The permittee shall record on a monthly basis in a written log the number of hours of operation for each evaporative cooling system, and the total combined hours of operation for the previous 12 months for all evaporative cooling systems. [Rule 62-4.160(15), F.A.C.; and, 1270028-004-AC]

**B.48.** These emissions units are also subject to conditions contained in **Subsection C.** Common Conditions.

## Subsection C. Common Conditions.

<u>Ľ.U.</u>	
ID No.	Brief Description
-003	Peaking Combustion Turbine Unit No. 1
-005	Peaking Combustion Turbine Unit No. 2
-007	Peaking Combustion Turbine Unit No. 3
-009	Peaking Combustion Turbine Unit No. 4
-011	Peaking Combustion Turbine Unit No. 5
-013	Peaking Combustion Turbine Unit No. 6
-015	Combustion Turbine Unit No. 7
-016	Combustion Turbine Unit No. 8
-017	Combustion Turbine Unit No. 9
-018	Combustion Turbine Unit No. 10

## The following specific conditions apply to the emissions units listed above:

## **Excess Emissions**

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of an NSPS or NESHAP provision.}

- C.1. Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- **C.2.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

## **Test Methods and Procedures**

C.3. Permitted Capacity. Testing of emissions shall be conducted with the source operating at permitted capacity. Permitted capacity is defined as 90 - 100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then sources may be tested at less than capacity. In such cases, the entire heat input vs. inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 110 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report.

[Rule 62-297.310(2), F.A.C. and AC64-191015(B)]

C.3. Testing of emissions shall be conducted with the source operating at permitted capacity. Permitted capacity is defined as 90 - 100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then sources may be tested at less than capacity. In such cases, the entire heat input vs. inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 110 percent of the value reached during the test, but not to exceed permitted capacity. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report. [Rule 62-297.310(2), F.A.C. and AC64-191015(B)]

## Notification, Recordkeeping and Reporting Requirements

**C.4.** In case of excess emissions resulting from malfunctions, Progress Energy shall notify the Department's Central District Office in accordance with 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

[Rule 62-210.700(6), F.A.C.]

**C.5**. The owner or operator shall notify the Central District Office of the Department, in writing, at least 15 days prior to the date on which each test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

[Rule 62-297.310(7)(a)9., F.A.C.]

#### C.6. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
  - 1. The type, location, and designation of the emissions unit tested.
  - 2. The facility at which the emissions unit is located.
  - 3. The owner or operator of the emissions unit.
  - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
  - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
  - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total

- operating current and GPM scrubber water), and their operating parameters during each test run.
- 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
- 8. The date, starting time and duration of each sampling run.
- 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- 10. The number of points sampled and configuration and location of the sampling plane.
- 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- 12. The type, manufacturer and configuration of the sampling equipment used.
- 13. Data related to the required calibration of the test equipment.
- 14. Data on the identification, processing and weights of all filters used.
- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

- **C.7.** Recordkeeping for Periodic Monitoring. The owner or operator is required to maintain monthly logs of all 12-month rolling averages. [Rule 62-213.440, F.A.C.]
- C.7.1. Appendix GG. Peaking Combustion Gas Turbines No. 7 through No.10 (92.9 MW each) are subject to 40 CFR 60 Subpart GG, New Stationary Source Performance Standards (NSPS) for Stationary Gas Turbines (attached as Appendix GG).

  [40 CFR 60, Subpart GG and Rule 62-204, 800 (7) F.A.C]

C.7.2. Appendix YYYY. This facility is subject 40 CFR 63 - Subpart YYYY, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines (attached as Appendix YYYY). However, all stationary combustion turbines at this facility are existing units (construction was commenced before January 14, 2003). [40 CFR 63, Subpart YYYY and Rule 62-204.800 F.A.C.]

## Section IV. This section is the Acid Rain Part.

Operated by: Progress Energy Florida

ORIS code: 6046

## Subsection A. This subsection addresses Acid Rain, Phase II.

The emissions units listed below are regulated under Phase II of the federal Acid Rain Program.

E.U. ID No.	Brief E.U. Description	
-015	Combustion Turbine Unit No. 7	
-016	Combustion Turbine Unit No. 8	
-017	Combustion Turbine Unit No. 9	
-018	Combustion Turbine Unit No. 10	

A.1. The Phase II part application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain unit(s) must comply with the standard requirements and special provisions set forth in the application(s) listed below:

a. DEP Form No. 62-210.900(1)(a), signed by the Designated Representative on April 26, 2004. [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO<sub>2</sub>) allowance allocations for each Acid Rain unit are as follows:

E.U. ID	EPA ID	Year	2005	2006	2007	2009	2009
No.		·					
		SO2					
		allowances,			,		
-015	07	under	705*	705*	705*	705*	705*
		Table 2 of					
		40 CFR					
		Part 73					
		SO2					
		allowances,					
-016	08	under	705*	705*	705*	705*	705*
		Table 2 of					
		40 CFR					
		Part 73					

E.U. ID	EPA ID	Year	2005	2006	2007	2008	2009
No.							
-017	09	SO2 allowances, under Table 2 of 40 CFR Part 73	705*	705*	705*	705*	705*
-018	10	SO2 allowances, under Table 2 of 40 CFR Part 73	705*	705*	705*	705*	705*

<sup>\*</sup>The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2 of 40 CFR 73.

- **A.3.** Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.
- 1. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
- 2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
- 3. Allowances shall be accounted for under the Federal Acid Rain Program. [Rule 62-213.440(1)(c), F.A.C.]
- **A.4.** Fast-Track Revisions of Acid Rain Parts. Those Acid Rain sources making a change described at Rule 62-214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, Fast-Track Revisions of Acid Rain Parts. [Rule 62-213.413, F.A.C.]
- A.5. Comments, Notes, and Justifications: None

## Section IV. Referenced Attachments

Phase II Acid Rain Part Renewal Application signed by the Designated Representative on April 26, 2004.

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History

Appendix I-1, List of Insignificant Emissions Units and/or Activities

Appendix SS-1, Stack Sampling Facilities (Version Dated 10/07/96)

Appendix TV-4, Title V Conditions (version dated 02/12/02)

Figure 1 - Summary Report-Gaseous And Opacity Excess Emission And Monitoring

System Performance Report (version Dated 7/96)

Table 297.310-1, Calibration Schedule (Version Dated 10/07/96)

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

## Appendix H-1, Permit History

Progress Energy Florida **DeBary Facility** 

DRAFT Title V Permit Renewal No. **1270028-007-AV**Facility ID No. 1270028

**Regulated Emissions Units:** 

E.U. ID No.	Brief Emission Unit Description
-003	51.9 MW Peaking Combustion Turbine Unit No. 1
-005	51.9 MW Peaking Combustion Turbine Unit No. 2
-007	51.9 MW Peaking Combustion Turbine Unit No. 3
-009	51.9 MW Peaking Combustion Turbine Unit No. 4
-011	51.9 MW Peaking Combustion Turbine Unit No. 5
-013	51.9 MW Peaking Combustion Turbine Unit No. 6
-015	92.9 MW Peaking Combustion Turbine Unit No. 7
-016	92.9 MW Peaking Combustion Turbine Unit No. 8
-017	92.9 MW Peaking Combustion Turbine Unit No. 9
-018	92.9 MW Peaking Combustion Turbine Unit No. 10

Permit History (for tracking purposes):

E.U. ID No.	Brief Project Description	Permit No.	Effective Date	Expiration Date
-015 – -018	To construct/install six 92.9 MW, oil fired simple cycle peaking combustion turbines.	PSD-FL-167 AC64- 191015	10/18/91	January 31, 1993.
-015018	To extend permit expiration date to March 31, 1993	PSD-FL-167A AC64- 191015A	11/23/92	March 31, 1993
-015018	To extend permit expiration date to June 30, 1993	PSD-FL-167B AC64 191015B	4/8/93	June 30, 1993
-015 – -018	To extend expiration date to July 30, 1993. Letter of approval revised on July 7, 1993.	PSD-FL-167C AC64- 191015C	6/29/93	July 30, 1993
-015 – -018	To change EPA Method 3 to 3A	PSD-FL-167D AC64- 191015D	6/30/93	July 30, 1993
-015018	To extend permit expiration date to August 31, 1993	PSD-FL-167E AC64- 191015E	8/3/93	August 31, 1993
-015 – -018	To replace trace element limits with use of low sulfur oil	PSD-FL-167F AC64- 191015F	8/11/93	
-015 – -018	To correct PM basis and SAM emission limits	PSD-FL-167G AC64- 191015G	8/30/93	
-015 – -018	To incorporate heat input curves	PSD-FL-167H AC64- 191015H	9/21/94	

E.U. ID No.	Brief Project Description	Permit No.	Effective Date	Expiration Date
All	Initial Title V Permit	1270028-001-AV	1/1/00 (Iss. 6/14/99)	12/31/04
-015018	Construction permit modification to add natural gas combustion to turbines 7, 8, 9 & 10	1270028-002-AC PSD-FL-167I	5/6/97	12/31/97
All	Title V Permit Revision #1 - changes the continuous monitoring method for NO <sub>X</sub> to CEMs; and, allows the use of RATA in lieu of additional Method 20 NO <sub>X</sub> stack test.	1270028-003-AV	6/11/00	12/31/04
-015018	Construction permit modification to install inlet foggers on turbines 7, 8, 9 & 10	1270028-004 <b>-</b> AC PSD-FL-167J	3/31/00	3/31/05
-015 – -018	Title V Permit Revision #2 – to incorporate the inlet fogging conditions of 1270028-004-AC	1270028-005-AV	6/26/01	12/31/04
015 – -018	Construction permit modification to incorporate conditions related to the use of the Acid Rain CEMS for CAM /Water-to-fuel ratio/BACTLimits Compliance	1270028-006-AC PSD-FL-167K		
All	1 <sup>st</sup> Title V Permit Renewal	1270028-007-AV		

## Appendix I-1, List of Insignificant Emissions Units and/or Activities.

Progress Energy Florida

DeBary Facility

DRAFT Title V Permit Renewal No. **1270028-007-AV**Facility ID No. 1270028

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

- 1. Comfort heating < 1 MMBtu/hr
- 2. Sand blaster
- 3. Non-industrial vacuum cleaning
- 4. Refrigeration equipment
- 5. Degreasing units using heavier-than-air vapors exclusively, except any such unit using or emitting any substance classified as a hazardous air pollutant.
- 6. Sanders < 5 sq.ft.
- 7. Lab equipment used for chemical or physical analyses
- 8. Brazing, soldering or welding equipment
- 9. Emergency generators
- 10. General purpose engines
- 11. Fire and safety equipment
- 12. Surface coating
- 13. Space heating equipment (non-boilers)
- 14. Petroleum lubrication systems
- 15. Vehicle refueling operations and associated fuel storage
- 16. One 13,309,800 (nominal) gallon storage tank for new No. 2 fuel oil
- 17. One 2,185,218 (nominal) gallon storage tank for new No. 2 fuel oil
- 18. One 180 (nominal) gallon storage tank for diesel equipment
- 19. One 300 (nominal) gallon storage tank for unleaded gasoline
- 20. Ten 546 (nominal) gallon storage tanks for waste oil
- 21. One 2700 (nominal) gallon surge tank for lube oil
- 22. One 500 (nominal) gallon storage tank for diesel
- 23. One 500 (nominal) gallon storage surge tank
- 24. One overboard tank
- 25. Truck unloading
- 26. Non-halogenated solvent storage and cleaning operations, provided the solvents contain none of the hazardous air pollutants listed at Rule 62-210.200, F.A.C.
- 27. Diesel Generator (Detroit Diesel Allison-PTA-1SD-50)
- 28. Diesel/Caterpillar 3500/2500 hp/ 1879 kW

## Table 1-1, Summary of Air Pollutant Standards and Terms

Progress Energy Florida

DeBary Facility

DRAFT Permit No. 1270028-007-AV Facility ID No. 1270028

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

## E.U. ID No. Brief Description

-001

Peaking Combustion Turbine (PCT) Units 1, 2, 3, 4, 5 and 6

			Allowable Emissions		Equivalen	t Emissions'		
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour	TPY lbs:/hour	TPY	Regulatory Citation(s	See permit condition(s)
SO2	No. 2 fuel oil	8760	0.5% sulfur by weight					III.A.4
SO2	No. 6 fuel oil	8760	0.7% sulfur by weight					III.A.5
VE	No. 2 or No. 6 fuel oil	8760	20% opacity		-			III.A.6

#### Notes:

<sup>\*</sup> The "Equivalent Emissions" listed are for informational purposes only.

## Table 1-1, Summary of Air Pollutant Standards and Terms

Progress Energy of Florida DeBary Facility DRAFT Permit No.: 1270028-007-AV

Facility ID No.: 1270028

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

## E.U. ID No. Brief Description

-002

Combustion Turbine (CT) Units 7, 8, 9 and 10

			Allowable Emissions		_	Equivalen	t Emissions'		
Pollutant Name	Fuel(s)	Hours/Year**	Standard(s)	lbs./hour	TPY (4 CTs)	lbs:/hour	TPY	Regulatory Citation(s	See permit condition(s)
NOx	No. 2 fuel oil	3390 (equivalent)	42 ppmvd @15% O2	182/unit	1,234				III.B.7.
	gas	3390 (equivalent)	25 ppmd @ 15% O2	107/unit	726				
SO2	No. 2 fuel oil	3390 (equivalent)	0.3% avg. sulfur by weight	555/unit	1,925				III.B.8.
	gas	3390 (equivalent)	0.8% sulfur by weight						III.B.9.
VE	No. 2 fuel oil	3390 (equivalent)	20% opacity below						III.B.14.
	and gas		full load and	*					
			10% opacity at full load						
PM/PM10	No. 2 fuel oil	3390 (equivalent)	0.015 lb/MMBtu	15.0/unit	102				III.B.10.
	and gas								
voc	No. 2 fuel oil	3390 (equivalent)		5.0/unit	34				III.B.11.
	and gas								
co	No. 2 fuel oil	3390 (equivalent)		54/unit	365				III.B.12.
	and gas								,
H2SO4 Mist	No. 2 fuel oil	3390 (equivalent)	0.3% sulfur by weight	69/unit	469				III.B.13.
	and gas							•	

#### Notes

<sup>\*</sup> The "Equivalent Emissions" listed are for informational purposes only.

<sup>\*\*</sup> At 38.7 capacity factor, each turbine may operate up to an equivalent of 3,390 hours and 13,560 hours for any combination.

## Table 2-1, Summary of Compliance Requirements

Progress Energy Florida **DeBary Facility** 

DRAFT Permit No. 1270028-007-AV Facility ID No. 1270028

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

## E.U. ID No. Brief Description

-001

Peaking Combustion Turbine (PCT) Units 1, 2, 3, 4, 5 and 6

			Testing	Frequency	Min. Compliance		
Pollutant Name		Compliance	Time	Base	Test ·		,
or Parameter	Fuel(s)	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
SO2	No. 2 or	Fuel oil analysis	Each Delivery				III.A.7.
	No. 6 fuel oil						
VE	No. 2 or	EPA Method 9	Annually	1-Apr			III.A.10., 11 and 12
	No. 6 fuel oil		,	. ,			
-		7					
		•					·
					·		,
	*						
				•		,	
							·

#### Notes:

<sup>\*</sup> The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

<sup>\*\*</sup>CMS [=] continuous monitoring system

## Table 2-1, Summary of Compliance Requirements

Progress Energy of Florida DeBary Facility DRAFT Permit No.: 1270028-007-AV

Facility ID No.: 1270028

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

## E.U. ID No. Brief Description

-002 Combustion Turbine (CT) Units 7, 8, 9 and 10

			Testing	Frequency	Min. Compliance		
Pollutant Name		Compliance	Time	Base	Test		•
or Parameter	Fuel(s)	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
NOx	No. 2 fuel	EPA Method 20	annually	1-Apr	1 hour	yes	III.B.7., B.16.
*	and gas						
SO2	No. 2 fuel	EPA Method 6 or tests	see custom fuel				III.B.17, 38 and 39
	and gas	methods in ASTM D 2880-94	monitoring plan				
PM/PM10	No. 2 fuel	EPA Method 5	annually	1-Apr	1 hour		III.B.18, and 19,
	and gas						
VOC	No. 2 fuel	EPA Method 25A	annually	1-Apr	1 hour		III.B.20.
•	and gas						
co	No. 2 fuel	EPA Method 10	annually	1-Apr	1 hour		III.B.21.
•	and gas				_		
·VE	No. 2 fuel	EPA Method 9	annually	1-Apr	1 hour	,	III.B.22.
	and gas						Ī
H2SO4	No. 2 fuel	EPA Method 8 or tests	annually	1-Apr	1 hour		III.B.23.
	and gas	methods in ASTM D 2880-94					
Water/fuel						yes	III.B.41and B.42
fuel consumption						yes	III.B.41. and B.42

#### Notes:

<sup>\*</sup> The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

<sup>\*\*</sup>CMS [=] continuous monitoring system

## APPENDIX GG NSPS for Gas Combustion Turbines

## **Updated 7/8/04**

Source [44 FR 52798, Sept. 10, 1979, as amended at 52 FR 42434, Nov. 5, 1987; 65 FR 61759, Oct. 17, 2000; 69 FR 41346, July 8, 2004]

### Subpart GG-Standards of Performance for Stationary Gas Turbines

### § 60.330 Applicability and designation of affected facility.

- (a) The provisions of this subpart are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired.
- (b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of this part except as provided in paragraphs (e) and (j) of § 60.332.

## § 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.
- (c) Regenerative cycle gas turbine means any stationary gas turbine which recovers heat from the gas turbine exhaust gases to preheat the inlet combustion air to the gas turbine.
- (d) Combined cycle gas turbine means any stationary gas turbine which recovers heat from the gas turbine exhaust gases to heat water or generate steam.
- (e) *Emergency gas turbine* means any stationary gas turbine which operates as a mechanical or electrical power source only when the primary power source for a facility has been rendered inoperable by an emergency situation.
- (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 fuel.

# APPENDIX GG NSPS for Gas Combustion Turbines

- (i) *Peak load* means 100 percent of the manufacturer's design capacity of the gas turbine at ISO standard day conditions.
- (j) Base load means the load level at which a gas turbine is normally operated.
- (k) Fire-fighting turbine means any stationary gas turbine that is used solely to pump water for extinguishing fires.
- (1) Turbines employed in oil/gas production or oil/gas transportation means any stationary gas turbine used to provide power to extract crude oil/natural gas from the earth or to move crude oil/natural gas, or products refined from these substances through pipelines.
- (m) A Metropolitan Statistical Area or MSA as defined by the Department of Commerce.
- (n) Offshore platform gas turbines means any stationary gas turbine located on a platform in an ocean.
- (o) Garrison facility means any permanent military installation.
- (p) Gas turbine model means a group of gas turbines having the same nominal air flow, combuster inlet pressure, combuster inlet temperature, firing temperature, turbine inlet temperature and turbine inlet pressure.
- (q) *Electric utility stationary gas turbine* 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.
- (r) *Emergency fuel* is a fuel fired by a gas turbine only during circumstances, such as natural gas supply curtailment or breakdown of delivery system, that make it impossible to fire natural gas in the gas turbine.
- (s) Unit operating hour means a clock hour during which any fuel is combusted in the affected unit. If the unit combusts fuel for the entire clock hour, it is considered to be a full unit operating hour. If the unit combusts fuel for only part of the clock hour, it is considered to be a partial unit operating hour.
- (t) Excess emissions means a specified averaging period over which either:
  - (1) The  $NO_x$  emissions are higher than the applicable emission limit in Sec. 60.332;
- (2) The total sulfur content of the fuel being combusted in the affected facility exceeds the limit specified in Sec. 60.333; or
- (3) The recorded value of a particular monitored parameter is outside the acceptable range specified in the parameter monitoring plan for the affected unit.
- (u) Natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Equivalents of this in other units are as follows: 0.068 weight percent total sulfur, 680 parts per million by weight (ppmw) total sulfur, and 338 parts per million by volume (ppmv) at 20 degrees Celsius total sulfur. Additionally, natural gas must either be composed of at least 70 percent methane by

## **NSPS** for Gas Combustion Turbines

volume or have a gross calorific value between 950 and 1100 British thermal units (Btu) per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.

- (v) Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary gas turbine, internal combustion engine, kiln, etc., to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a heat recovery steam generating unit.
- (w) Lean premix stationary combustion turbine means any stationary combustion turbine where the air and fuel are thoroughly mixed to form a lean mixture for combustion in the combustor. Mixing may occur before or in the combustion chamber. A unit which is capable of operating in both lean premix and diffusion flame modes is considered a lean premix stationary combustion turbine when it is in the lean premix mode, and it is considered a diffusion flame stationary combustion turbine when it is in the diffusion flame mode.
- (x) Diffusion flame stationary combustion turbine means any stationary combustion turbine where fuel and air are injected at the combustor and are mixed only by diffusion prior to ignition. A unit which is capable of operating in both lean premix and diffusion flame modes is considered a lean premix stationary combustion turbine when it is in the lean premix mode, and it is considered a diffusion flame stationary combustion turbine when it is in the diffusion flame mode.
- (y) Unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

#### § 60.332 Standard for nitrogen oxides.

- (a) On and after the date on which the performance test required by § 60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraphs (b), (c), and (d) of this section shall comply with one of the following, except as provided in paragraphs (e), (f), (g), (h), (i), (j), (k), and (l) 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 ISO corrected (if required as given in Sec. 60.335(b)(1)) NO<sub>X</sub> emission concentration (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, and

## **NSPS** for Gas Combustion Turbines

 $F = NO_X$  emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section.

(2) 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:

$$STD = 0.0150 \frac{(14.4)}{Y} + F$$

#### where:

STD = allowable ISO corrected (if required as given in Sec. 60.335(b)(1)) NO<sub>X</sub> emission concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = manufacturer's rated heat rate at manufacturer's rated peak 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, and F = NOX emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section.

- (3) The use of F in paragraphs (a)(1) and (2) of this seciton is optional. That is, the owner or operator may choose to apply a  $NO_X$  allowance for fuel-bound nitrogen and determine the appropriate F-value in accordance with paragraph (a)(4) of this section or may accept an F-value of zero.
- (4) If the owner or operator elects to apply a  $NO_X$  emission allowance for fuel-bound nitrogen, F shall be defined according to the nitrogen content of the fuel during the most recent performance test required under Sec. 60.8 as follows:

Fuel-bound nitrogen (% by w	eight) F (NO <sub>X</sub> % by volume)	
N<0.015	. 0	
0.015 <n<0.1< td=""><td>. 0.04(N)</td><td></td></n<0.1<>	. 0.04(N)	
0.1 <n<u>&lt;0.25</n<u>	. 0.004+0.0067(N-0.1)	
N>0.25	. 0.005	

### Where:

N = the nitrogen content of the fuel (percent by weight).or:

Manufacturers may develop and submit to EPA custom fuel-bound nitrogen allowances for each gas turbine model they manufacture. These fuel-bound nitrogen allowances shall be substantiated with data and must be approved for use by the Administrator before the initial performance test required by Sec. 60.8. Notices of approval of custom fuel-bound nitrogen allowances will be published in the Federal Register.

(b) Electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with the provisions of paragraph (a)(1) of this section.

## **NSPS for Gas Combustion Turbines**

- (c) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired, shall comply with the provisions of paragraph (a)(2) of this section.
- (d) Stationary gas turbines with a manufacturer's rated base load at ISO conditions of 30 megawatts or less except as provided in § 60.332(b) shall comply with paragraph (a)(2) of this section.
- (e) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired and that have commenced construction prior to October 3, 1982 are exempt from paragraph (a) of this section.
- (f) Stationary gas turbines using water or steam injection for control of  $NO_X$  emissions are exempt from paragraph (a) when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine.
- (g) Emergency gas turbines, military gas turbines for use in other than a garrison facility, military gas turbines installed for use as military training facilities, and fire fighting gas turbines are exempt from paragraph (a) of this section.
- (h) Stationary gas turbines engaged by manufacturers in research and development of equipment for both gas turbine emission control techniques and gas turbine efficiency improvements are exempt from paragraph (a) on a case-by-case basis as determined by the Administrator.
- (i) Exemptions from the requirements of paragraph (a) of this section will be granted on a case-by-case basis as determined by the Administrator in specific geographical areas where mandatory water restrictions are required by governmental agencies because of drought conditions. These exemptions will be allowed only while the mandatory water restrictions are in effect.
- (j) Stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour that commenced construction, modification, or reconstruction between the dates of October 3, 1977, and January 27, 1982, and were required in the September 10, 1979, Federal Register (44 FR 52792) to comply with paragraph (a)(1) of this section, except electric utility stationary gas turbines, are exempt from paragraph (a) of this section.
- (k) Stationary gas turbines with a heat input greater than or equal to 10.7 gigajoules per hour (10 million Btu/hour) when fired with natural gas are exempt from paragraph (a)(2) of this section when being fired with an emergency fuel.
- (l) Regenerative cycle gas turbines with a heat input less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) are exempt from paragraph (a) of this section.

## § 60.333 Standard for sulfur dioxide.

On and after the date on which the performance test required to be conducted by § 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:

## APPENDIX GG NSPS for Gas Combustion Turbines

- (a) 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 sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis.
- (b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw).

### § 60.334 Monitoring of operations.

- (a) Except as provided in paragraph (b) of this section, the owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water or steam injection to control  $NO_X$  emissions shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine.
- (b) The owner or operator of any stationary gas turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which uses water or steam injection to control NO<sub>X</sub> emissions may, as an alternative to operating the continuous monitoring system described in paragraph (a) of this section, install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO<sub>X</sub> and O2 monitors. As an alternative, a CO2 monitor may be used to adjust the measured NO<sub>X</sub> concentrations to 15 percent O2 by either converting the CO2 hourly averages to equivalent O2 concentrations using Equation F-14a or F-14b in appendix F to part 75 of this chapter and making the adjustments to 15 percent O2, or by using the CO2 readings directly to make the adjustments, as described in Method 20. If the option to use a CEMS is chosen, the CEMS shall be installed, certified, maintained and operated as follows:
- (1) Each CEMS must be installed and certified according to PS 2 and 3 (for diluent) of 40 CFR part 60, appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. Appendix F, Procedure 1 is not required. The relative accuracy test audit (RATA) of the  $NO_X$  and diluent monitors may be performed individually or on a combined basis, i.e., the relative accuracy tests of the CEMS may be performed either:
  - (i) On a ppm basis (for NO<sub>X</sub>) and a percent O2 basis for oxygen; or
  - (ii) On a ppm at 15 percent O2 basis; or
- (iii) On a ppm basis (for  $NO_X$ ) and a percent CO2 basis (for a CO2 monitor that uses the procedures in Method 20 to correct the  $NO_X$  data to 15 percent O2).
- (2) As specified in Sec. 60.13(e)(2), during each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour.
- (3) For purposes of identifying excess emissions, CEMS data must be reduced to hourly averages as specified in Sec. 60.13(h).
- (i) For each unit operating hour in which a valid hourly average, as described in paragraph (b)(2) of this section, is obtained for both  $NO_X$  and diluent, the data acquisition and handling system must calculate and record the hourly  $NO_X$  emissions in the

## **NSPS for Gas Combustion Turbines**

units of the applicable  $NO_X$  emission standard under Sec. 60.332(a), i.e., percent  $NO_X$  by volume, dry basis, corrected to 15 percent O2 and International Organization for Standardization (ISO) standard conditions (if required as given in Sec. 60.335(b)(1)). For any hour in which the hourly average O2 concentration exceeds 19.0 percent O2, a diluent cap value of 19.0 percent O2 may be used in the emission calculations.

- (ii) A worst case ISO correction factor may be calculated and applied using historical ambient data. For the purpose of this calculation, substitute the maximum humidity of ambient air (Ho), minimum ambient temperature (Ta), and minimum combustor inlet absolute pressure (Po) into the ISO correction equation.
- (iii) If the owner or operator has installed a  $NO_X$  CEMS to meet the requirements of part 75 of this chapter, and is continuing to meet the ongoing requirements of part 75 of this chapter, the CEMS may be used to meet the requirements of this section, except that the missing data substitution methodology provided for at 40 CFR part 75, subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required in Sec. 60.7(c).
- (c) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which does not use steam or water injection to control  $NO_X$  emissions, the owner or operator may, for purposes of determining excess emissions, use a CEMS that meets the requirements of paragraph (b) of this section. Also, if the owner or operator has previously submitted and received EPA or local permitting authority approval of a petition for an alternative procedure of continuously monitoring compliance with the applicable  $NO_X$  emission limit under Sec. 60.332, that approved procedure may continue to be used, even if it deviates from paragraph (a) of this section.
- (d) The owner or operator of any new turbine constructed after July 8, 2004, and which uses water or steam injection to control NO<sub>X</sub> emissions may elect to use either the requirements in paragraph (a) of this section for continuous water or steam to fuel ratio monitoring or may use a NO<sub>X</sub> CEMS installed, certified, operated, maintained, and quality-assured as described in paragraph (b) of this section.
- (e) The owner or operator of any new turbine that commences construction after July 8, 2004, and which does not use water or steam injection to control NO<sub>X</sub> emissions may elect to use a NO<sub>X</sub> CEMS installed, certified, operated, maintained, and quality-assured as described in paragraph (b) of this section. An acceptable alternative to installing a CEMS is described in paragraph (f) of this section.
- (f) The owner or operator of a new turbine who elects not to install a CEMS under paragraph (e) of this section, may instead perform continuous parameter monitoring as follows:
- (1) For a diffusion flame turbine without add-on selective catalytic reduction controls (SCR), the owner or operator shall define at least four parameters indicative of the unit's NO<sub>X</sub> formation characteristics and shall monitor these parameters continuously.
- (2) For any lean premix stationary combustion turbine, the owner or operator shall continuously monitor the appropriate parameters to determine whether the unit is operating in the lean premixed (low- $NO_X$ ) combustion mode.
- (3) For any turbine that uses SCR to reduce  $NO_X$  emissions, the owner or operator shall continuously monitor appropriate parameters to verify the proper operation of the emission controls.

## **APPENDIX GG NSPS for Gas Combustion Turbines**

- (4) For affected units that are also regulated under part 75 of this chapter, if the owner or operator elects to monitor  $NO_X$  emission rate using the methodology in appendix E to part 75 of this chapter, or the low mass emissions methodology in Sec. 75.19 of this chapter, the requirements of this paragraph (f) may be met by performing the parametric monitoring described in section 2.3 of appendix E or in Sec. 75.19(c)(1)(iv)(H) of this chapter.
- (g) The steam or water to fuel ratio or other parameters that are continuously monitored as described in paragraphs (a), (d) or (f) of this section shall be monitored during the performance test required under Sec. 60.8, to establish acceptable values and ranges. The owner or operator may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. The owner or operator shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NO<sub>x</sub> emission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information shall be included in the monitoring plan. For affected units that are also subject to part 75 of this chapter and that use the low mass emissions methodology in Sec. 75.19 of this chapter or the NO<sub>x</sub> emission measurement methodology in appendix E to part 75, the owner or operator may meet the requirements of this paragraph by developing and keeping on-site (or at a central location for unmanned facilities) a quality-assurance plan, as described in Sec. 75.19 (e)(5) or in section 2.3 of appendix E and section 1.3.6 of appendix B to part 75 of this chapter.
- (h) The owner or operator of any stationary gas turbine subject to the provisions of this subpart:
- (1) Shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in paragraph (h)(3) of this section. The sulfur content of the fuel must be determined using total sulfur methods described in Sec. 60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86 (all of which are incorporated by reference-see Sec. 60.17), which measure the major sulfur compounds may be used; and
- (2) Shall monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen (i.e., if an F-value greater than zero is being or will be used by the owner or operator to calculate STD in Sec. 60.332). The nitrogen content of the fuel shall be determined using methods described in Sec. 60.335(b)(9) or an approved alternative.
- (3) Notwithstanding the provisions of paragraph (h)(1) of this section, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in Sec. 60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:
- (i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
- (ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

## **NSPS for Gas Combustion Turbines**

- (4) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and for which a custom fuel monitoring schedule has previously been approved, the owner or operator may, without submitting a special petition to the Administrator, continue monitoring on this schedule.
- (i) The frequency of determining the sulfur and nitrogen content of the fuel shall be as follows:
- (1) Fuel oil. For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of appendix D to part 75 of this chapter (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank). If an emission allowance is being claimed for fuel-bound nitrogen, the nitrogen content of the oil shall be determined and recorded once per unit operating day.
- (2) Gaseous fuel. Any applicable nitrogen content value of the gaseous fuel shall be determined and recorded once per unit operating day. For owners and operators that elect not to demonstrate sulfur content using options in paragraph (h)(3) of this section, and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded once per unit operating day.
- (3) Custom schedules. Notwithstanding the requirements of paragraph (i)(2) of this section, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in paragraphs (i)(3)(i) and (i)(3)(ii) of this section, custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in Sec. 60.333.
- (i) The two custom sulfur monitoring schedules set forth in paragraphs (i)(3)(i)(A) through (D) and in paragraph (i)(3)(ii) of this section are acceptable, without prior Administrative approval:
- (A) The owner or operator shall obtain daily total sulfur content measurements for 30 consecutive unit operating days, using the applicable methods specified in this subpart. Based on the results of the 30 daily samples, the required frequency for subsequent monitoring of the fuel's total sulfur content shall be as specified in paragraph (i)(3)(i)(B), (C), or (D) of this section, as applicable.
- (B) If none of the 30 daily measurements of the fuel's total sulfur content exceeds 0.4 weight percent (4000 ppmw), subsequent sulfur content monitoring may be performed at 12 month intervals. If any of the samples taken at 12-month intervals has a total sulfur content between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), follow the procedures in paragraph (i)(3)(i)(C) of this section. If any measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section.
- (C) If at least one of the 30 daily measurements of the fuel's total sulfur content is between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), but none exceeds 0.8 weight percent (8000 ppmw), then:
- (1) Collect and analyze a sample every 30 days for three months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, follow the procedures in paragraph (i)(3)(i)(C)(2) of this section.
- (2) Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, follow the procedures in paragraph (i)(3)(i)(C)(3) of this section.

## **NSPS for Gas Combustion Turbines**

- (3) Begin monitoring at 12-month intervals. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, continue to monitor at this frequency.
- (D) If a sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), immediately begin daily monitoring according to paragraph (i)(3)(i)(A) of this section. Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur content no greater than 0.8 weight percent (8000 ppmw), are obtained. At that point, the applicable procedures of paragraph (i)(3)(i)(B) or (C) of this section shall be followed.
- (ii) The owner or operator may use the data collected from the 720-hour sulfur sampling demonstration described in section 2.3.6 of appendix D to part 75 of this chapter to determine a custom sulfur sampling schedule, as follows:
- (A) If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 scf (i.e., the maximum total sulfur content of natural gas as defined in Sec. 60.331(u)), no additional monitoring of the sulfur content of the gas is required, for the purposes of this subpart.
- (B) If the maximum fuel sulfur content obtained from any of the 720 hourly samples exceeds 20 grains/100 scf, but none of the sulfur content values (when converted to weight percent sulfur) exceeds 0.4 weight percent (4000 ppmw), then the minimum required sampling frequency shall be one sample at 12 month intervals.
- (C) If any sample result exceeds 0.4 weight percent sulfur (4000 ppmw), but none exceeds 0.8 weight percent sulfur (8000 ppmw), follow the provisions of paragraph (i)(3)(i)(C) of this section.
- (D) If the sulfur content of any of the 720 hourly samples exceeds 0.8 weight percent (8000 ppmw), follow the provisions of paragraph (i)(3)(i)(D) of this section.
- (j) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content under this subpart, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with Sec. 60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under Sec. 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:
  - (1) Nitrogen oxides.
    - (i) For turbines using water or steam to fuel ratio monitoring:
- (A) An excess emission shall be any unit operating hour for which the average steam or water to fuel ratio, as measured by the continuous monitoring system, falls below the acceptable steam or water to fuel ratio needed to demonstrate compliance with Sec. 60.332, as established during the performance test required in Sec. 60.8. Any unit operating hour in which no water or steam is injected into the turbine shall also be considered an excess emission.
- (B) A period of monitor downtime shall be any unit operating hour in which water or steam is injected into the turbine, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid.
- (C) Each report shall include the average steam or water to fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), gas turbine load, and (if applicable) the nitrogen content of the fuel during each excess emission. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in Sec. 60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of Sec. 60.335(b)(1).

## **NSPS for Gas Combustion Turbines**

(ii) If the owner or operator elects to take an emission allowance for fuel bound nitrogen, then excess emissions and periods of monitor downtime are as described in paragraphs (j)(1)(ii)(A) and (B) of this section.

(A) An excess emission shall be the period of time during which the fuel-bound nitrogen (N) is greater than the value measured during the performance test required in Sec. 60.8 and used to determine the allowance. The excess emission begins on the date and hour of the sample which shows that N is greater than the performance test value, and ends with the date and hour of a subsequent sample which shows a fuel nitrogen content less than or equal to the performance test value.

(B) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour that a required sample is taken, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.

(iii) For turbines using NO<sub>X</sub> and diluent CEMS:

(A) An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average  $NO_X$  concentration exceeds the applicable emission limit in Sec. 60.332(a)(1) or (2). For the purposes of this subpart, a "4-hour rolling average  $NO_X$  concentration" is the arithmetic average of the average  $NO_X$  concentration measured by the CEMS for a given hour (corrected to 15 percent O2 and, if required under Sec. 60.335(b)(1), to ISO standard conditions) and the three unit operating hour average  $NO_X$  concentrations immediately preceding that unit operating hour.

(B) A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either  $NO_X$  concentration or diluent (or both).

(C) Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period and (if the owner or operator has claimed an emission allowance for fuel bound nitrogen) the nitrogen content of the fuel during the period of excess emissions. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in Sec. 60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of Sec. 60.335(b)(1).

(iv) For turbines required under paragraph (f) of this section to monitor combustion parameters or parameters that document proper operation of the  $NO_X$  emission controls:

(A) An excess emission shall be a 4-hour rolling unit operating hour average in which any monitored parameter does not achieve the target value or is outside the acceptable range defined in the parameter monitoring plan for the unit.

(B) A period of monitor downtime shall be a unit operating hour in which any of the required parametric data are either not recorded or are invalid.

- (2) Sulfur dioxide. If the owner or operator is required to monitor the sulfur content of the fuel under paragraph (h) of this section:
- (i) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.
- (ii) If the option to sample each delivery of fuel oil has been selected, the owner or operator shall immediately switch to one of the other oil sampling options (i.e., daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur

# APPENDIX GG NSPS for Gas Combustion Turbines

content of a delivery exceeds 0.8 weight percent. The owner or operator shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and shall evaluate excess emissions according to paragraph (j)(2)(i) of this section. When all of the fuel from the delivery has been burned, the owner or operator may resume using the as-delivered sampling option.

- (iii) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.
- (3) *Ice fog.* Each period during which an exemption provided in § 60.332(f) is in effect shall be reported in writing to the Administrator quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.
- (4) Emergency fuel. Each period during which an exemption provided in § 60.332(k) is in effect shall be included in the report required in § 60.7(c). For each period, the type, reasons, and duration of the firing of the emergency fuel shall be reported.
- (5) All reports required under Sec. 60.7(c) shall be postmarked by the 30th day following the end of each calendar quarter.

## Sec. 60.335 Test methods and procedures.

- (a) The owner or operator shall conduct the performance tests required in Sec. 60.8, using either
  - (1) EPA Method 20,
  - (2) ASTM D6522-00 (incorporated by reference, see Sec. 60.17), or
- (3) EPA Method 7E and either EPA Method 3 or 3A in appendix A to this part, to determine  $NO_X$  and diluent concentration.
- (4) Sampling traverse points are to be selected following Method 20 or Method 1, (non-particulate procedures) and sampled for equal time intervals. The sampling shall be performed with a traversing single-hole probe or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.
- (5) Notwithstanding paragraph (a)(4) of this section, the owner or operator may test at few points than are specified in Method 1 or Method 20 if the following conditions are met:
  - (i) You may perform a stratification test for  $NO_X$  and diluent pursuant to
    - (A) [Reserved]
    - (B) The procedures specified in section 6.5.6.1(a) through (e)

appendix A to part 75 of this chapter.

- (ii) Once the stratification sampling is completed, the owner or operator may use the following alternative sample point selection criteria for the performance test:
- (A) If each of the individual traverse point NO<sub>X</sub> concentrations, normalized to 15 percent O2, is within 10 percent of the mean normalized concentration for all traverse points, then you may use 3 points (located either 16.7, 50.0, and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The 3 points shall be located along the

## **APPENDIX GG NSPS for Gas Combustion Turbines**

measurement line that exhibited the highest average normalized NO<sub>X</sub> concentration during the stratification test; or

(B) If each of the individual traverse point  $NO_X$  concentrations, normalized to 15 percent O2, is within 5 percent of the mean normalized concentration for all traverse points, then you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid.

- (6) Other acceptable alternative reference methods and procedures are given in paragraph (c) of this section.
- (b) The owner or operator shall determine compliance with the applicable nitrogen oxides emission limitation in Sec. 60.332 and shall meet the performance test requirements of Sec. 60.8 as follows:
- (1) For each run of the performance test, the mean nitrogen oxides emission concentration ( $NO_{Xo}$ ) corrected to 15 percent O2 shall be corrected to ISO standard conditions using the following equation. Notwithstanding this requirement, use of the ISO correction equation is optional for: Lean premix stationary combustion turbines; units used in association with heat recovery steam generators (HRSG) equipped with duct burners; and units equipped with add-on emission control devices:

$$NO_X = (NO_{Xo})(P_r/P_o)^{0.5} e^{19} (H_o^{-0.00633}) (288[deg]K/Ta)^{1.53}$$

Where:

 $NO_X$  = emission concentration of  $NO_X$  at 15 percent O2 and ISO standard ambient conditions, ppm by volume, dry basis,

 $NO_{Xo}$  = mean observed  $NO_X$  concentration, ppm by volume, dry basis, at 15 percent O2,

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

P<sub>o</sub> = observed combustor inlet absolute pressure at test, mm Hg,

 $H_0$  = observed humidity of ambient air, g H2O/g air,

e = transcendental constant, 2.718, and

 $T_a = \text{ambient temperature, } [\text{deg}]K$ .

- (2) The 3-run performance test required by Sec. 60.8 must be performed within 5 percent at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. If the turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel. Notwithstanding these requirements, performance testing is not required for any emergency fuel (as defined in Sec. 60.331).
- (3) For a combined cycle turbine system with supplemental heat (duct burner), the owner or operator may elect to measure the turbine  $NO_X$  emissions after the duct burner rather than directly after the turbine. If the owner or operator elects to use this alternative sampling location, the applicable  $NO_X$  emission limit in Sec. 60.332 for the combustion turbine must still be met.
- (4) If water or steam injection is used to control  $NO_X$  with no additional post-combustion  $NO_X$  control and the owner or operator chooses to monitor the steam or water to fuel ratio in accordance with Sec. 60.334(a), then that monitoring system must be operated concurrently with each EPA Method 20, ASTM D6522-00 (incorporated by reference, see Sec. 60.17), or EPA Method 7E run and shall be used to determine the fuel consumption and the

## **NSPS** for Gas Combustion Turbines

steam or water to fuel ratio necessary to comply with the applicable Sec.  $60.332 \text{ NO}_X$  emission limit.

- (5) If the owner operator elects to claim an emission allowance for fuel bound nitrogen as described in Sec. 60.332, then concurrently with each reference method run, a representative sample of the fuel used shall be collected and analyzed, following the applicable procedures described in Sec. 60.335(b)(9). These data shall be used to determine the maximum fuel nitrogen content for which the established water (or steam) to fuel ratio will be valid.
- (6) If the owner or operator elects to install a CEMS, the performance evaluation of the CEMS may either be conducted separately (as described in paragraph (b)(7) of this section) or as part of the initial performance test of the affected unit.
- (7) If the owner or operator elects to install and certify a  $NO_X$  CEMS under Sec. 60.334(e), then the initial performance test required under Sec. 60.8 may be done in the following alternative manner:
- (i) Perform a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load.
- (ii) Use the test data both to demonstrate compliance with the applicable NO<sub>X</sub> emission limit under Sec. 60.332 and to provide the required reference method data for the RATA of the CEMS described under Sec. 60.334(b).
  - (iii) The requirement to test at three additional load levels is waived.
- (8) If the owner or operator is required under Sec. 60.334(f) to monitor combustion parameters or parameters indicative of proper operation of NO<sub>X</sub> emission controls, the appropriate parameters shall be continuously monitored and recorded during each run of the initial performance test, to establish acceptable operating ranges, for purposes of the parameter monitoring plan for the affected unit, as specified in Sec. 60.334(g).
- (9) To determine the fuel bound nitrogen content of fuel being fired (if an emission allowance is claimed for fuel bound nitrogen), the owner or operator may use equipment and procedures meeting the requirements of:
- (i) For liquid fuels, ASTM D2597-94 (Reapproved 1999), D6366-99, D4629-02, D5762-02 (all of which are incorporated by reference, see Sec. 60.17); or
- (ii) For gaseous fuels, shall use analytical methods and procedures that are accurate to within 5 percent of the instrument range and are approved by the Administrator.
- (10) If the owner or operator is required under Sec. 60.334(i)(1) or (3) to periodically determine the sulfur content of the fuel combusted in the turbine, a minimum of three fuel samples shall be collected during the performance test. Analyze the samples for the total sulfur content of the fuel using:
- (i) For liquid fuels, ASTM D129-00, D2622-98, D4294-02, D1266-98, D5453-00 or D1552-01 (all of which are incorporated by reference, see Sec. 60.17); or
- (ii) For gaseous fuels, ASTM D1072-80, 90 (Reapproved 1994); D3246-81, 92, 96; D4468-85 (Reapproved 2000); or D6667-01 (all of which are 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 prior approval of the Administrator.
- (11) The fuel analyses required under paragraphs (b)(9) and (b)(10) of this section 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.
- (c) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

# **APPENDIX GG NSPS for Gas Combustion Turbines**

(1) Instead of using the equation in paragraph (b)(1) of this section, manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in Sec. 60.8 to ISO standard day conditions.

## Appendix YYYY

Source: Federal Register dated 3/5/04

## Subpart YYYY--National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

## **What This Subpart Covers**

63.6080 What is the purpose of subpart YYYY?

63.6085 Am I subject to this subpart?

**63.6090** What parts of my plant does this subpart cover?

63.6092 Are duct burners and waste heat recovery units covered by subpart YYYY?

63.6095 When do I have to comply with this subpart?

## **Emission and Operating Limitations**

63.6100 What emission and operating limitations must I meet?

## **General Compliance Requirements**

63.6105 What are my general requirements for complying with this subpart?

## **Testing and Initial Compliance Requirements**

63.6110 By what date must I conduct the initial performance tests or other initial compliance demonstrations?

**63.6115** When must I conduct subsequent performance tests?

63.6120 What performance tests and other procedures must I use?

63.6125 What are my monitor installation, operation, and maintenance requirements?

63.6130 How do I demonstrate initial compliance with the emission and operating limitations?

## **Continuous Compliance Requirements**

63.6135 How do I monitor and collect data to demonstrate continuous compliance?

**63.6140** How do I demonstrate continuous compliance with the emission and operating limitations?

### Notifications, Reports, and Records

**63.6145** What notifications must I submit and when?

**63.6150** What reports must I submit and when?

63.6155 What records must I keep?

**63.6160** In what form and how long must I keep my records?

## Other Requirements and Information

**63.6165** What parts of the General Provisions apply to me?

**63.6170** Who implements and enforces this subpart?

**63.6175** What definitions apply to this subpart?

## Tables to Subpart YYYY of Part 63

Table 1 to Subpart YYYY of Part 63.--Emission Limitations

Table 2 to Subpart YYYY of Part 63.--Operating Limitations

**Table 3 to Subpart YYYY of Part 63.-**-Requirements for Performance Tests and Initial Compliance Demonstrations

Table 4 to Subpart YYYY of Part 63.--Initial Compliance with Emission Limitations

Table 5 to Subpart YYYY of Part 63.--Continuous Compliance with Operating Limitations

## Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31 and Chapter 62-214, F.A.C.

This submission is:

Renewal

STEP 1 Identify the source by plant name, State, and ORIS code

Plant Name	DeBary	Sta	te	FI.	ORIS Code	6046	

STEP 2

Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a." For new units, enter the requested information in columns "c" and "d."

Unit ID#	Unit will hold allowances in accordance with 40 CFR 72.9©(1)	New Units  Commence Operation Date	New Units  Monitor Certification Deadline
7	Yes	No	
8	Yes	No	
9	Yes	· No	
10	Yes	No	
	Yes		

DeBary		
Plant Name (from Step	1)	

#### STEP 3 Read the standard requirements

#### Acid Rain Part Requirements

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall: (i) Submit a complete Acid Rain part application (including a compliance plan) under 40 CFR part 72 and Rules 62-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and (ii) Submit in a timely manner any supplemental information that the Department determines is necessary in order to review an Acid Rain
- part application and issue or deny an Acid Rain part; The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain part issued by the Department;
  - (ii) Have an Acid Rain Part.

#### Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, and Rule 62-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the

#### Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
- (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows: (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or

  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shalf be held in deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain part application, the Acid Rain part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

#### Excess Emissions Requirements

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

#### Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the Department:
  - (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply:
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program;

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Debary	·	 
Plant Name (from Step 1)		 

STEP 3, Cont'd.

#### Recordkeeping and Reporting Requirements (cont)

- (iv) Copies of all documents used to complete an Acid Rain part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

#### Ljability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, aubmission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source, (6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.15, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

#### Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7or 72.8 shall be construed as:

- (1) Except as expressly provided in tille IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of little I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Read the certification statement, sign, and date

#### Certification

I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the aubmission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	J. Michael Kennedy Q.E.P.		
Signature	2. mikuel & f	Date	4/26/04

DEP Form No. 62-210.900(1)(a) - Form Effective. 06/16/03

Message Page 1 of 1

## Friday, Barbara

To: Kozlov, Leonard; sosbourn@golder.com

Cc: Cascio, Tom

Subject: DRAFT Title V Permit Renewal No. 1270028006AC/1270028007AV - Progress Energy Florida -

DeBary

Find attached the zip file for subject DRAFT Title V Permit Renewal for your information and files.

If I may be of further assistance, please feel free to contact me.

Barbara J. Friday Planner II Bureau of Air Regulation (850)921-9524 Barbara.Friday@dep.state.fl.us