

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

David B. Struhs Secretary

May 30, 2002

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Terry E. Gish Managing Director, Southeast Operations Reliant Energy Osceola, L.L.C. 7800 South Highway US 1 Titusville, Florida 32780

Re: Request for Additional Information Regarding Title V Permit Application DEP File No. 0970071-004-AV Reliant Energy Osceola, L.L.C., Osceola County

Dear Mr. Gish:

Your Title V permit application for Reliant Energy Osceola, L.L.C. was received on April 1, 2002 and was found to be incomplete. In order to continue processing your application, the Department will need the below additional information pursuant to Rule 62-213.420(1)(b)2., F.A.C.

#### **Application Scope**

- 1. Is it the intent of Reliant Energy Osceola, L.L.C. to include the third combustion turbine in the Title V permit?
- 2. If no, the application is complete and no further information is required.
- 3. If yes, a compliance plan must be submitted. The plan must detail how and when compliance with the provisions of the permit to construct will be met for this emissions unit.

The Department must receive a response from you within 90 (ninety) days of receipt of this letter, unless you (the applicant) request additional time under Rule 62-213.420(1)(b)6., F.A.C.

If you should have any questions, please call Edward J. Svec at 850/921-8985.

Sincerely,

Scott M. Sheplak, P.E.

Administrator Title V Section

cc: L. Kozlov, P.E., DEP CD Stephen Alexander, P.E., ERMNC



Jeb Bush 2600 Blair Stone Road
Governor Tallahassee, Florida 32399-2400

David B. Struhs Secretary

#### P.E. Certification Statement

Permittee:

Reliant Energy Osceola, L.L.C.

**DRAFT Permit No.:** 0970071-004-AV

Project type: Initial Title V Air Operation Permit

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).

Scott M. Sheplak, P.E.

date

08/02

Registration Number: 48866

Permitting Authority:

Department of Environmental Protection Bureau of Air Regulation 111 South Magnolia Drive, Suite 4

Tallahassee, Florida 32301 Telephone: 850/921-9532

Fax: 850/922-6979



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

David B. Struhs Secretary

August 26, 2002

Mr. Terry E. Gish Managing Director, Southeast Operations Reliant Energy Osceola, L.L.C. 7800 South U.S. Highway 1 Titusville, Florida 32780

Re:

Title V Air Operation Permit

DRAFT Permit No.: 0970071-004-AV

Reliant Energy Osceola, L.L.C.

Dear Mr. Gish:

One copy of the DRAFT Title V Air Operation Permit for the Reliant Energy Osceola, L.L.C. facility, located at 5200 West Holopaw Road, St. Cloud, Osceola County, is enclosed. The permitting authority's "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" and the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" are also included.

The "<u>PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT</u>" 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 permit pursuant to Rule 62-110.106(11), F.A.C.

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to Scott M. Sheplak, P.E., Administrator, Title V Section, at the above letterhead address. If you have any other questions, please contact Edward J. Svec at 850/921-8985.

Sincerely,

6

C. H. Fancy, P.E., Chief,

Bureau of Air Regulation

CHF/es

Enclosures

"More Protection, Less Process"

Printed on recycled paper.

In the Matter of an Application for Permit by:

Reliant Energy Osceola, L.L.C. 7800 South U.S. Highway 1 Titusville, Florida 32780

DRAFT Permit No.: 0970071-004-AV Reliant Energy Osceola, L.L.C. Osceola County

#### **INTENT TO ISSUE TITLE V AIR OPERATION PERMIT**

The Department of Environmental Protection (Department) Bureau of Air Regulation (permitting authority) gives notice of its intent to issue a Title V air operation permit (copy of DRAFT Permit attached) for the Title V source detailed in the application specified above, for the reasons stated below.

The applicant, Reliant Energy Osceola, L.L.C., applied on April 1, 2002, to the permitting authority for a Title V Air Operation Permit for the Reliant Energy Osceola, L.L.C. facility, located at 5200 West Holopaw Road, St. Cloud, Osceola County.

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, and 62-213. This source is not exempt from Title V permitting procedures. The permitting authority has determined that a Title V Air Operation Permit is required to commence or continue operations at the described facility.

The permitting authority intends to issue this Title V Air Operation Permit based on the belief that reasonable assurances have been provided to indicate that 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 TITLE V AIR OPERATION PERMIT." 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 permitting authority's office, the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979), 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 permit pursuant to Rule 62-110.106, F.A.C.

The permitting authority will issue the PROPOSED Permit, and subsequent FINAL Permit, in accordance with the conditions of the attached DRAFT Permit 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 permit issuance action for a period of 30 (thirty) days from the date of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT." 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 Permit, the permitting authority shall issue a Revised DRAFT Permit 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

Page 2 of 5

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 permit applicant or any of the parties listed below must be filed within 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 fourteen days of publication of the public notice or within 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 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 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 interests will be affected by the agency determination;
- (c) A statement of how and when each petitioner received notice of the agency action or proposed action;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate:
- (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief;
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and,
- (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the 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

Page 3 of 5

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

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department 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

Page 4 of 5

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.

Executed in Tallahassee, Florida.

Department of Environmental Protection

C. H. Fancy, P.E. Chief

Bureau of Air Regulation

Page 5 of 5

#### **CERTIFICATE OF SERVICE**

Mr. Terry E. Gish, Managing Director, Southeast Operations, Reliant Energy Osceola, L.L.C.

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

Mr. Stephen Alexander, P.E., ERMNC U.S. EPA, Region 4 (INTERNET E-mail Memorandum) Mr. Len Kozlov, P.E., DEP CD

Clerk Stamp

acknowledged.

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

(Clerk)

(Date)

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

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRAFT Permit No.: 0970071-004-AV
Reliant Energy Osceola, L.L.C.
Osceola County

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V Air Operation Permit to Reliant Energy Osceola, L.L.C. for the Reliant Energy Osceola, L.L.C. facility, located at 5200 West Holopaw Road, St. Cloud, Osceola County. The applicant's name and address are: Mr. Terry E. Gish, Managing Director, Southeast Operations, Reliant Energy Osceola, L.L.C., 7800 South U.S. Highway 1, Titusville, Florida 32780

The permitting authority will issue the 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 significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments should be provided to the permitting authority's office at Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall issue a Revised DRAFT Permit 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, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 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 days of publication of the public notice or within fourteen days of receipt of the 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 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 applicable 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, Florida Administrative Code (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; 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 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, as well as the rules and statutes which entitle petitioner to relief;
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and,
- (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the 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 is not available for this proceeding.

In addition to the above, 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: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

#### Permitting Authority:

Department of Environmental Protection Bureau of Air Regulation 111 S. Magnolia Drive, Suite 4 Tallahassee, Florida, 32301 Telephone: 850/488-0114

Fax: 850/922-6979

Affected District and/or Local Program:
Department of Environmental Protection
Central District Office
3319Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767
Telephone: 407/894-7555

Fax: 407/897-5963

The complete project file includes the DRAFT Permit, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, Title V Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

#### STATEMENT OF BASIS

Reliant Energy Osceola, L.L.C. Reliant Energy Osceola, L.L.C. Facility ID No.: 0970071 Osceola County

Initial Title V Air Operation Permit **DRAFT Permit No.:** 0970071-004-AV

This Title V air operation permit 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.

This facility consists of three dual-fuel, simple cycle combustion turbines.

The emissions units are three dual-fuel nominal 170 megawatt (MW) General Electric PG7241FA combustion turbine-electrical generators with three 75-foot stacks. Emissions from the new CT's will be controlled by Dry Low NO<sub>X</sub> (DLN-2.6) combustors when operating on natural gas and wet injection when firing fuel oil. Inherently clean fuels and good combustion practices will be employed to control all pollutants. The emissions units are 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.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated December 28, 1999. The simple-cycle combustion turbines began operation in 2002.

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

Based on the initial Title V permit application received April 1, 2002, this facility is not a major source of hazardous air pollutants (HAPs).

Reliant Energy Osceola, L.L.C. Facility ID No.: 0970071
Osceola County

Initial Title V Air Operation Permit **DRAFT Permit No.:** 0970071-004-AV

#### Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Title V Section
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

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

#### Compliance Authority:

Department of Environmental Protection Central District Office 3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767 Telephone: 407/894-7555

Fax: 407/897-2966

## Initial Title V Air Operation Permit **DRAFT Permit No.:** 0970071-004-AV

#### **Table of Contents**

Section			Page Number
Placard Page	•••••		1
I. Facility Information			2 - 3
A. Facility Descript	ion.		
B. Summary of Em	issions	Unit ID No(s). and Brief Description(s).	
C. Relevant Docum	ents.		
П. Facility-wide Conditions	s		4 - 6
III. Emissions Units and Co	onditio	ıs	
A. Emissions Unit	-001	170 MW Simple-Cycle Combustion Turbine	
Emissions Unit	-002	170 MW Simple-Cycle Combustion Turbine	
Emissions Unit	-003	170 MW Simple-Cycle Combustion Turbine	7 - 25
IV. Acid Rain Part			
A. Acid Rain, Phase	е П		25 - 26



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

David B. Struhs Secretary

#### Permittee:

Reliant Energy Osceola, L.L.C. 7800 South Highway U.S. 1 Titusville, Florida 32780 **DRAFT Permit No.:** 0970071-004-AV

**Facility ID No.:** 0970071

SIC Nos.: 49, 4911

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

This permit is for the operation of the Reliant Energy Osceola, L.L.C. facility. This facility is located at 5200 West Holopaw Road, St. Cloud, Osceola County; UTM Coordinates: Zone 17, 490.43 km East and 3111.31 km North; and, Latitude: 28° 07' 44" North and Longitude: 81° 05' 50" West.

This Title V Air Operation Permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. 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 U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
APPENDIX TV-4, TITLE V CONDITIONS version dated 02/12/02
APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96
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 07/96
PHASE II ACID RAIN APPLICATION/COMPLIANCE PLAN (received November 30, 1999)
COMPLIANCE REPORT AND PLAN dated June 19, 2002

Effective Date: January 1, 2003

Renewal Application Due Date: July 5, 2007

Expiration Date: December 31, 2007

Howard L. Rhodes, Director Division of Air Resource Management

HLR/sms/ejs

**DRAFT Permit No.:** 0970071-004-AV

#### Section I. Facility Information.

#### Subsection A. Facility Description.

The regulated emissions units at the facility include three nominal 170 megawatts (MW) simple-cycle General Electric PG7241 FA combustion turbines. The turbines use low NO<sub>X</sub> technologies. The facility utilizes pipeline natural gas as its primary fuel source with distillate fuel oil serving as a backup fuel. The units operate in intermittent duty.

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

Based on the initial Title V permit application received April 1, 2002, this facility is not a major source of hazardous air pollutants (HAPs).

#### Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

<u>E.U.</u>	
ID No.	Brief Description
-001	170 MW Simple-Cycle Combustion Turbine
-002	170 MW Simple-Cycle Combustion Turbine
-003	170 MW Simple-Cycle Combustion Turbine

Unregulated Emissions Units and/or Activities

E.U.	
ID No.	Brief Description of Emissions Units and/or Activity
-xxx	Two, pipeline natural gas heaters

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

#### **DRAFT Permit No.:** 0970071-004-AV

#### 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:

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

Table 2-1, Summary of Compliance Requirements

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

Appendix H-1: Permit History/ID Number Changes

Statement of Basis

#### These documents are on file with permitting authority:

Initial Title V Permit Application received April 1, 2002 Revised Emissions Calculations received April 18, 2002 Additional Information Request dated May 30, 2002 Additional Information Response received June 25, 2002

#### Documents on file with USEPA

None.

#### Subsection D. Miscellaneous.

The use of 'Permitting Notes' throughout this permit are for informational purposes <u>only</u> and are not permit conditions.

**DRAFT Permit No.:** 0970071-004-AV

#### Section II.. Facility-wide Conditions.

#### The following conditions apply facility-wide:

- 1. APPENDIX TV-4, TITLE V CONDITIONS, 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. No person shall 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. [Rules 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 3346 Merrifield, VA 22116-3346 Telephone: 703/816-4434

and.

- **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>Unregulated Emissions Units and/or Activities.</u> Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit. [Rule 62-213.440(1), F.A.C.]
- 6. <u>Insignificant Emissions Units and/or Activities.</u> Appendix I-1, List of Insignificant Emissions 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.]

7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary

**DRAFT Permit No.:** 0970071-004-AV

and ordered by the Department. [Rule 62-296.320(1)(a), F.A.C.]

**8.** Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter.

[Rule 62-296.320(4)(c)2., F.A.C.]

{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4., F.A.C. (see Condition 57. of APPENDIX TV-4, TITLE V CONDITIONS.}

- 9. 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.]
- 10. <u>Statement of Compliance</u>. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C. [Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-4, TITLE V CONDITIONS.)

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

Department of Environmental Protection Central District Office 3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767 Telephone: 407/894-7555 Fax: 407/897-2966

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

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

United States Environmental Protection Agency

13. 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.

**DRAFT Permit No.:** 0970071-004-AV

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

#### Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit(s).

# E.U. ID No. -001 -002 -003 Brief Description 170 MW Simple-Cycle Combustion Turbine 170 MW Simple-Cycle Combustion Turbine 170 MW Simple-Cycle Combustion Turbine

The emissions units addressed in this subsection are three dual-fuel nominal 170 megawatt (MW) General Electric PG7241FA combustion turbine-electrical generators with three 75-foot stacks. Emissions from the new CT's will be controlled by Dry Low NO<sub>X</sub> (DLN-2.6) combustors when operating on natural gas and wet injection when firing fuel oil. Inherently clean fuels and good combustion practices will be employed to control all pollutants.

{Permitting note(s): The emissions units are 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.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated December 28, 1999. The simple-cycle combustion turbines began operation in 2002.}

#### The following specific conditions apply to the emissions unit(s) listed above:

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

A.1. Permitted Capacity. The maximum heat input rates, based on the lower heating value (LHV) of each fuel to each Unit (1-3) at ambient conditions of 19°F temperature, 60% relative humidity, 100% load, and 14.7 psi pressure shall not exceed 1,709 million Btu per hour (MMBtu/hr) when firing natural gas, nor 1,942 MMBtu/hr when firing No. 2 or superior grade of distillate fuel oil. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, PSD-FL-273]

**A.2.** Emissions Unit Operating Rate Limitation After Testing. See specific condition **A.31**. [Rule 62-297.310(2), F.A.C.]

#### A.3. Methods of Operation. Fuels.

Only pipeline natural gas or maximum 0.05 percent sulfur fuel oil No. 2 or superior grade of distillate fuel oil shall be fired in these units. [Applicant Request, Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)] {Note: The limitation of this specific condition is more stringent than the NSPS sulfur dioxide limitation and thus assures compliance with 40 CFR 60.333 and 60.334}. The amount of back-up fuel (fuel oil) burned at the site (in BTU's) shall not exceed the amount of natural gas (primary fuel) burned at the site (in BTU's) during any consecutive 12-month period. [Rules 62-212.400, 62-212.410, and 62-213.410, F.A.C.; and, PSD-FL-273]

**DRAFT Permit No.:** 0970071-004-AV

**A.4.** Hours of Operation. Each stationary gas turbine shall only operate up to 3,000 hours in any consecutive twelve month period, of which up to 750 hours may be on fuel oil. [Rule 62-210.200(PTE), F.A.C. and PSD-FL-273]

#### Control Technology

- **A.5.** Dry Low  $NO_X$  (DLN-2.6) combustors shall be installed on the stationary combustion turbine to control nitrogen oxides ( $NO_X$ ) emissions while firing natural gas. [PSD-FL-273]
- **A.6.** A water injection (WI) system shall be installed for use when firing No. 2 or superior grade distillate fuel oil for control of NO<sub>X</sub> emissions. [PSD-FL-273]
- A.7. The permittee shall provide manufacturer's emissions performance versus load diagrams for the DLN and wet injection systems prior to their installation. DLN systems shall each be tuned upon initial operation to optimize emissions reductions consistent with normal operation and maintenance practices and shall be maintained to minimize NO<sub>X</sub> emissions and CO emissions, consistent with normal operation and maintenance practices. Operation of the DLN systems in the diffusion-firing mode shall be minimized when firing natural gas.

  [PSD-FL-273]

#### **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.}

**A.8.** Pursuant to Rule 62-212.410, F.A.C., BACT, the maximum allowable emission limitations from each combustion turbine, when firing natural gas or No. 2 fuel oil, shall not exceed the following:

#### Nitrogen Oxides (NO<sub>X</sub>) Emissions:

- While firing Natural Gas: The emission rate of NO<sub>X</sub> in the exhaust gas shall not exceed 10.5 ppmvd @15% O<sub>2</sub> on a 24 hr block average as measured by the continuous emission monitoring system (CEMS). In addition, NO<sub>X</sub> emissions calculated as NO<sub>2</sub> shall not exceed 60 pounds per hour (at ISO conditions) and 9 ppmvd @15% O<sub>2</sub> to be demonstrated by the initial "new and clean" GE performance stack test.
- While firing Fuel oil: The concentration of NO<sub>X</sub> in the exhaust gas shall not exceed 42 ppmvd at 15% O<sub>2</sub> on the basis of a 3-hr average as measured by the continuous emission monitoring system (CEMS). In addition, NO<sub>X</sub> emissions calculated as NO<sub>2</sub> shall not exceed 323 lb/hr (at ISO conditions) and 42 ppmvd @15% O<sub>2</sub> to be demonstrated by stack test.

The permittee shall develop a NO<sub>X</sub> reduction plan when the hours of oil firing on any individual combustion turbine reaches 750 hours. This plan shall include a testing protocol designed to establish the maximum water injection rate and the lowest NO<sub>X</sub> emissions possible without affecting the actual performance of the gas turbine. The testing protocol shall set a range of water injection rates and attempt to quantify the corresponding NO<sub>X</sub> emissions for each rate and noting any problems with performance. Based on the test results, the plan shall recommend a new NO<sub>X</sub> emissions limiting standard and shall be submitted to the Department's Bureau of Air Regulation and Compliance Authority for review. If the Department determines that a lower NO<sub>X</sub> emissions standard is warranted for oil firing, this permit shall be revised.

<u>Carbon Monoxide (CO) Emissions</u>: The concentration of CO in the stack exhaust gas shall exceed neither 10.5 ppmvd and 36.2 lb/hr (at ISO conditions) while firing gas and neither 20 ppmvd and 70.0 lb/hr (at ISO conditions) while firing oil. The permittee shall demonstrate compliance with these limits by stack test using EPA Method 10.

<u>Volatile Organic Compounds (VOC) Emissions</u>: The concentration of VOC in the stack exhaust gas with the combustion turbine operating on natural gas shall exceed neither 1.5 ppmvw nor 3.0 lb/hr (ISO conditions) and neither 3.7 ppmvw nor 8.0 lb/hr (ISO conditions) while operating on oil to be demonstrated by initial stack test using EPA Method 18, 25 or 25A.

<u>Sulfur Dioxide (SO<sub>2</sub>) Emissions</u>: SO<sub>2</sub> emissions shall be limited by firing pipeline natural gas (sulfur content less than 2 grains per 100 standard cubic foot) or by firing No. 2 or superior grade distillate fuel oil with a maximum 0.05 percent sulfur for 750 hours per year per unit. Emissions of SO<sub>2</sub> (at ISO conditions) shall not exceed 1.1 lb/hr (natural gas) and 104.3 lb/hr (fuel oil) as measured by applicable compliance methods described below.

Particulate Matter (PM/PM<sub>10</sub>) PM/PM<sub>10</sub> emissions shall not exceed 18.0 lb/hr when operating on natural gas and shall not exceed 34.0 lb/hr when operating on fuel oil. Visible emissions testing shall serve as a surrogate for PM/PM<sub>10</sub> compliance testing.

<u>Visible Emissions (VE):</u> VE emissions shall serve as a surrogate for PM/PM<sub>10</sub> emissions and shall not exceed 10 opacity. [PSD-FL-273]

#### **Excess Emissions**

A.9. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided (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 in any 24 hour period unless specifically authorized by the Department for longer duration. Operation below 50% output shall be limited to 2 hours per unit cycle (breaker closed to breaker open). [Rule 62-210.700(1), F.A.C. and PSD-FL-273]

**DRAFT Permit No.:** 0970071-004-AV

- **A.10.** 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. These emissions shall be included in the 24-hr average for  $NO_X$ . [Rule 62-210.700(4), F.A.C. and PSD-FL-273]
- **A.11.** Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest. [Rule 62-210.700(5), F.A.C.]

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

#### **Monitoring of Operations**

**A.12.** 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 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 operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

**A.13.** Continuous Monitoring System: The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from these units. Upon request from EPA or DEP, the CEMS emission rates for NO<sub>X</sub> on these Units shall be corrected to ISO conditions to demonstrate compliance with the NO<sub>X</sub> standard established in 40 CFR 60.332.

[PSD-FL-273]

**DRAFT Permit No.:** 0970071-004-AV

A.14. 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<sub>X</sub> emissions shall operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ±5.0 percent and shall be approved by the Administrator. The NO<sub>X</sub> CEMS shall be used in lieu of the water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1998version). The calibration of the water/fuel monitoring device required in 40 CFR 60.335 (c)(2) (1998 version) will be replaced by the 40 CFR 75 certification tests of the NO<sub>X</sub> CEMS.

[40 CFR 60.334(a) and PSD-FL-273]

**A.15.** 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) & (2)]

#### A.16. 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.}

**DRAFT Permit No.:** 0970071-004-AV

**A.17.** To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Department to determine the nitrogen content of the fuel being fired.

[40 CFR 60.335(a)]

**A.18.** During performance tests to determine compliance, measured NO<sub>X</sub> emissions at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

 $NO_X = [NO_X \text{ obs}] [(P_{ref})^{0.5} / P_{obs}] e^{19} [H_{obs} - 0.00633] [288^{\circ} \text{ K} / T_{amb}] 1.53$  where:

 $NO_X$  = Emissions of  $NO_X$  at 15 percent oxygen and ISO standard ambient conditions.

 $NO_X$  obs = Measured  $NO_X$  emission at 15 percent oxygen, ppmv.

 $P_{ref}$  = Reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure.

 $P_{obs}$  = Measured combustor inlet absolute pressure at test ambient pressure.

e = Transcendental constant (2.718)

 $H_{obs}$  = Specific humidity of ambient air at test.

 $T_{amb}$  = Temperature of ambient air at test.

[40 CFR 60.335(c)(1)]

A.19. When determining compliance with 40 CFR 60.332, Subpart GG - Standards of Performance for Stationary Gas Turbines, the monitoring device of 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the permitted NO<sub>X</sub> standard at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

[40 CFR 60.335(c)(2)]

**A.20.** The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 as follows:

c. U.S. EPA Method 20 (40 CFR 60, Appendix A) shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The  $NO_X$  emissions shall be determined at each of the load conditions specified in 40 CFR 60.335(c)(2).

[40 CFR 60.335(c)(3)]

**A.21.** Initial performance tests (for both fuels) shall be performed on each unit while firing natural gas as well as while firing oil. Initial tests shall also be conducted after any modifications (and shake down period not to exceed 100 days after re-starting the CT) of air pollution control equipment such as change or tuning of combustors. The following reference methods shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing. [PSD-FL-273]

**DRAFT Permit No.:** 0970071-004-AV

- A.22. Volatile Organic Compounds. The initial test method for volatile organic compounds shall be EPA Method 18, 25 and/or 25A, incorporated by reference in Chapter 62-297, F.A.C. An initial test is required to demonstrate compliance with the VOC emission limit. Thereafter, the CO emission limit and periodic tuning data will be employed as surrogate and no annual testing is required. [PSD-FL-273]
- **A.23.** Carbon Monoxide. The initial and annual test method for carbon monoxide shall be EPA Method 10, incorporated by reference in Chapter 62-297, F.A.C. An initial test for CO shall be conducted concurrently with the initial  $NO_X$  test, as required. The initial  $NO_X$  and CO test results shall be the average of three valid one-hour runs. Annual compliance testing for CO may be conducted at less than capacity when compliance testing is conducted concurrent with the annual RATA testing for the  $NO_X$  CEMS required pursuant to 40 CFR 75 [PSD-FL-273]
- **A.24.** PM/PM10. Visible emissions testing shall serve as a surrogate for PM/PM<sub>10</sub> compliance testing. [PSD-FL-273]
- A.25. Nitrogen Oxides. The initial and annual test method for NO<sub>X</sub> shall be EPA Method 20 or EPA Method 7E, incorporated by reference in Chapter 62-297, F.A.C. Initial test only for compliance with 40CFR60 Subpart GG and short-term NO<sub>X</sub> BACT limits (EPA reference Method 7E, "Determination of Nitrogen Oxides Emissions from Stationary Sources" or RATA test data may be used to demonstrate compliance for annual test requirements). Annual compliance demonstration via EPA Method 7E shall not be required upon satisfactory demonstration that the emission unit is operating at 9 ppmvd NO<sub>X</sub> emissions or less. This demonstration shall consist of an average of each of all valid CEMS 24-hour block average compliance periods (described in Specific Condition A.35.) for which the unit operated on natural gas since the last compliance test requirement. This demonstration shall be provided within the test notification letter (described in Specific Condition A.37.), but does not relieve the permittee of the annual CEMS RATA requirement.

  [PSD-FL-273]

A.26. The owner or operator shall determine compliance with the liquid fuel sulfur content standard of 0.05 percent, by weight, and the gaseous fuel sulfur dioxide standard as follows: ASTM D 2880-96, or the latest edition shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92, 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.

[40 CFR 60.335(d)]

**DRAFT Permit No.:** 0970071-004-AV

A.27. SO<sub>2</sub> and PM/PM10. Not withstanding the requirements of Rule 62-297.340, F.A.C., the use of pipeline natural gas, is the method for determining compliance for SO<sub>2</sub> and PM<sub>10</sub>. For the purposes of demonstrating compliance with the 40 CFR 60.333 SO<sub>2</sub> standard, ASTM methods D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA-approved custom fuel monitoring schedule or natural gas supplier data may be submitted or the natural gas sulfur content referenced in 40 CFR 75 Appendix D may be utilized. However, the applicant is responsible for ensuring that the procedures in 40 CFR60.335 or 40 CFR75 are used when determination of fuel sulfur content is made. 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 pursuant to 40 CFR 60.335(e) (1998 version).

[PSD-FL-273]

**A.28.** Natural Gas Monitoring Schedule: A custom fuel monitoring schedule pursuant to 40 CFR 75 Appendix D for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2), see Specific Condition **A.15.**, provided the following requirements are met:

- The permittee shall apply for an Acid Rain permit within the deadlines specified in 40 CFR 72.30.
- The permittee shall submit a monitoring plan, certified by signature of the Designated Representative, that commits to using a primary fuel of pipeline supplied natural gas (sulfur content less than 2 gr/100 scf pursuant to 40 CFR 75.11(d)(2)).
- Each unit shall be monitored for SO<sub>2</sub> emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.

This custom fuel monitoring schedule will only be valid when pipeline natural gas is used as a primary fuel. If the primary fuel for these units is changed to a higher sulfur fuel, SO<sub>2</sub> emissions must be accounted for as required pursuant to 40 CFR 75.11(d).

[PSD-FL-273]

**A.29.** Fuel Oil Monitoring Schedule: The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 fuel oil received at this facility an analysis which reports the sulfur content and nitrogen content of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d), see Specific Condition **A.26.** [PSD-FL-273]

A.30. <u>Visible Emissions</u>. The initial and annual test method for visible emissions shall be EPA Method 9, incorporated by reference in Chapter 62-297, F.A.C. [PSD-FL-273]

**DRAFT Permit No.:** 0970071-004-AV

- A.31. Operating Rate During Testing. Testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 110 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Procedures for these tests shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapters 62-204 and 62-297, F.A.C. [Rule 62-297.310(2), F.A.C.; and, PSD-FL-273]
- **A.32.** 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)]

A.33. 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.]

A.34. <u>Calculation of Emission Rate.</u> 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.]

DRAFT Permit No.: 0970071-004-AV

#### **A.35.** 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 either EPA Method 9 or DEP 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:
    - 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 to this permit. [Rule 62-297.310(4), F.A.C.]
- A.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.]

**A.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.

**DRAFT Permit No.:** 0970071-004-AV

- (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, if there is an applicable standard;
    - 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
    - c. Each NESHAP pollutant, if there is an applicable emission standard.
  - 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
  - 8. Any combustion turbine that does not operate for more than 400 hours per year shall term of its air operation permit.
  - 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. 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.

DRAFT Permit No.: 0970071-004-AV

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

#### **Continuous Monitoring Requirements**

A.38. Continuous compliance with the NO<sub>x</sub> emission limits: Continuous compliance with the NO<sub>x</sub> emission limits shall be demonstrated with the CEM system based on the applicable averaging time of 24-hr block average (DLN). Based on CEMS data, a separate compliance determination is conducted at the end of each operating day and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous operating day. A valid hourly emission rate shall be calculated for each hour in which at least two NO<sub>x</sub> concentrations are obtained at least 15 minutes apart. Valid hourly emission rates shall not include periods of start up, shutdown, or malfunction unless prohibited by 62-210.700 F.A.C. These excess emissions periods shall be reported as required in Conditions A.9. and A.10.

[PSD-FL-273]

- A.39. A performance evaluation of the CEMS shall be conducted during any required performance test or within 30 days thereafter in accordance with the applicable performance specifications of 40 CFR 60, Appendix B and at other times as required by the Administrator. [40 CFR 60.13(c)]
- A.40. The zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts shall be checked at least once daily in accordance with a written procedure. The zero and span shall, at a minimum, be adjusted whenever the 24-hour zero drift or 24hour span drift exceeds two times the limits of the applicable performance specifications of 40 CFR 60, Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified. [40 CFR 60.13(d)(1)]
- A.41. (1) Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(2) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

[40 CFR 60.13(d)(1) and (2)] see A.41.

**DRAFT Permit No.:** 0970071-004-AV

- A.42. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:
- (1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
- (2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

  [40 CFR 60.13(e)(1) and (2)]
- A.43. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used.

  [40 CFR 60.13(f)]
- A.44. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdown, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g. ppm pollutant and percent O<sub>2</sub> or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in the subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit. (e.g. rounded to the nearest 1 percent opacity). [40 CFR 60.13(h)]

#### Record Keeping and Reporting Requirements

**A.45.** The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

**DRAFT Permit No.:** 0970071-004-AV

- (4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

  [40 CFR 60.7(a)(4)]
- A.46. Excess Emissions Report: If excess emissions occur due to malfunction, the owner or operator shall notify DEP's Central District within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Following the NSPS format, 40 CFR 60.7 Subpart A, periods of startup, shutdown, malfunction, shall be monitored, recorded, and reported as excess emissions when emission levels exceed the permitted standards listed in Specific Condition A.8.

  [PSD-FL-273]
- A.47. The owner or operator subject to the provisions of 40 CFR 60 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)]
- **A.48.** 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 62-296.800, F.A.C. and 40 CFR 60.334(c)(1)]

A.49. 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).

**DRAFT Permit No.:** 0970071-004-AV

(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.

Written reports of excess emissions shall include the following information:

- (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)]
- **A.50.** 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) & (2)]

**DRAFT Permit No.:** 0970071-004-AV

- **A.51.** (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 noncomplying 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)]
- **A.52.** CEMS for reporting excess emissions: Periods when NO<sub>X</sub> emissions (ppmvd @ 15% oxygen) are above the BACT standards, listed in Specific Condition **A.8.**, shall be reported to the DEP Central District within one working day (verbally) followed up by a written explanation not later than three (3) working days (alternatively by facsimile within one working day). [PSD-FL-273]
- A.53. <u>Malfunction Reporting.</u> In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 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.]

**A.54.** All recorded data shall be maintained on file by the Source for a period of five years. [Rule 62-213.440, F.A.C.]

A.55. Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, 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; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection.

[40 CFR 60.7(f)]

**DRAFT Permit No.:** 0970071-004-AV

**A.56.** Hours of Operation and Fuel Usage: Reliant shall maintain records on-site of each CT's "hours of operation by fuel type" and "BTU input by fuel type" for each month. These shall be tabulated for each consecutive 12-month period (as per specific permit conditions identified herein) and made available upon request for Department use. Additionally, this data shall be submitted annually with the AOR. [PSD-FL-273]

#### A.57. 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.

- **DRAFT Permit No.:** 0970071-004-AV
- 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.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

#### Miscellaneous Requirements.

- **A.58.** <u>Definitions.</u> For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee.

  [40 CFR 60.2; and, Rule 62-204.800(7)(a), F.A.C.]
- **A.59.** 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]
- **A.60.** Compliance Plan. The permittee shall comply with the provisions of the attached COMPLIANCE REPORT AND PLAN dated June 19, 2002. [Rule 62-213.440, F.A.C.]

Section IV. This section is the Acid Rain Part.

Operated by: Reliant Energy Osceola

**ORIS code:** 55192

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

The emissions units listed below are regulated under Acid Rain, Phase II.

#### E.U. ID

No.	Brief Description
-001	170 MW Simple-Cycle Combustion Turbine
-002	170 MW Simple-Cycle Combustion Turbine
-003	170 MW Simple-Cycle Combustion Turbine

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

**DRAFT Permit No.:** 0970071-004-AV

a. DEP Form No. 62-210.900(1)(a)

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

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

E.U. ID No.	EPA ID	Year	2003	2004	2005	2006	2007
-001	**OSC1	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	0*	0*	0*	0*	0*
-002	**OSC2	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	0*	0*	0*	0*	0*
-003	**OSC3	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	0*	0*	0*	0*	0*

<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 or 3 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.

**DRAFT Permit No.:** 0970071-004-AV

- 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.** Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.

[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, Definitions - Applicable Requirements, F.A.C.]

#### Appendix U-1, List of Unregulated Emissions Units and/or Activities.

Reliant Energy, Osceola, L.L.C.

Reliant Energy, Osceola, L.L.C.

DRAFT Permit No.: 0970071-004-AV

Facility ID No.: 0970071

<u>Unregulated Emissions Units and/or Activities</u>. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither 'regulated emissions units' nor 'insignificant emissions units'.

E.U. ID No. Brief Description of Emissions Units and/or Activity

-xxx Pipeline natural gas heaters (2)

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

Reliant Energy, Osceola, L.L.C. Reliant Energy, Osceola, L.L.C.

DRAFT Permit No.: 0970071-004-AV Facility ID No.: 0970071

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 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 Rule 62-210.300(3)(a), 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 Rule 62.210.300(3)(a), 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.

#### Brief Description of Emissions Units and/or Activities

- 1. Emergency diesel fire water pump
- 2. Distillate fuel oil truck unloading equipment
- 3. Two, 1.5 million gallon distillate fuel oil storage tank subject, only, to the recordkeeping requirements of 40CFR60, Subpart Kb
- 4. Oil/water separators (2)
- 5. Percolation pond
- 6. Underground storage tanks for turbine wash water (3)
- 7. Underground storage tanks for distillate fuel oil, turbine cold startup/trip out (3)
- 8. Cooling towers (3)
- 9. Miscellaneous oil-filled transformers

[electronic file name: 0970071g.doc]

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

Reliant Energy Osceola, L.L.C.

Reliant Energy Osceola, L.L.C. Facility

**DRAFT Permit No.:** 0970071-004-AV

Facility ID No.: 0970071

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]	170 MW Simple-Cycle Combustion Turbine
[-002]	170 MW Simple-Cycle Combustion Turbine
[-003]	170 MW Simple-Cycle Combustion Turbine

			Allowable Emissions	· ·		Equivalent Emissions*		
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour	TPY	// lbs:/hour // 你有机PY可谓	Regulatory Citation(s)	See permit condition(s)
VE	All	3,000	10% Opacity				PSD-FL-273	III.A.8.
NO <sub>x</sub>	Gas	3,000	9 ppmvd	60.0		90:0	PSD-FL-273	III.A.8.
NO <sub>x</sub>	Oil	750	42 ppmvd	323		12.1	PSD-FL-273	III.A.8.
voc	Gas	3,000	1.5 ppmvw	3.0		4.5	PSD-FL-273	III.A.8.
voc	Oil	750	3.7 ppmvw	8.0		0.3	PSD-FL-273	III.A.8.
co	Gas	3,000	10.5 ppmvd	36.2		54.3	PSD-FL-273	III.A.8.
co ·	Oil	750	20 ppmvd	70.0		2.6	PSD-FL-273	111.A.8.
PM / PM <sub>10</sub>	Gas	3,000		18.0		27.0	PSD-FL-273	III.A.8.
PM / PM <sub>10</sub>	Oil	750		34.0		1.2	PSD-FL-273	III.A.8.
SO <sub>2</sub>	Gas	3,000	2 gr./ 100 cf	1.1		1.65	PSD-FL-273	III.A.8.
SO <sub>2</sub>	Oil	750	0.05% Sulfur	104.3		3.9	PSD-FL-273	III.A.8.

Notes:

[electronic file name: 09700711.xls]

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

#### **Table 2-1, Summary of Compliance Requirements**

Reliant Energy Osceola, L.L.C.

Reliant Energy Osceola, L.L.C. Facility

**DRAFT Permit No.:** 0970071-004-AV

Facility ID No.: 0970071

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]	170 MW Simple-Cycle Combustion Turbine
[-002]	170 MW Simple-Cycle Combustion Turbine
[-003]	170 MW Simple-Cycle Combustion Turbine

			Testing	Frequency	Min. Compliance		
Pollutant Name		Compliance	Time	Base	Test		
or Parameter	Fuel(s)	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
NO <sub>x</sub>	All	EPA Method 20 or 7E	Annual	5/22/02	1-hour	Yes	III.A.25.
SO <sub>2</sub>	Gas	ASTM Methods		5/22/02			III.A.27.
SO₂ % Sulfur	. Oil	ASTM Methods	Fuel Transfer	5/22/02			III.A.26.
voc	All	Compliance with CO	Annual	5/22/02			III.A.22.
co	All	EPA Method 10	Annual	5/22/02	Annual		iii.A.23.
PM / PM <sub>10</sub>	All	EPA Method 9	Annual	5/22/02	30-minutes		III.A.24.
VE	Ali	EPA Method 9	Annual	5/22/02	30-minutes		III.A.30.
				·			

#### Notes:

[electronic file name: 09700712.xls]

<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

## Phase II Permit Application

Page 1

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: X New

Compliance

Plan

Revised

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

Plant Name	Reliant Energy Osceola	State	<u>FL</u> O	RIS Code	<u>55192</u>

STEP 2 Enter the boiler ID# from NADB for each affected unit and indicate whether a repowering plan is being submitted for the unit by entering "yes" or "no" at column c. For new units, enter the requested information in columns d and e.

Boiler ID#	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	Repowering Plan	New Units  Commence Operation Date	New Units  Monitor Certification Deadline
OSC1	Yes		12/1/01	2/28/02
OSC2	Yes		12/1/01	2/28/02
OSC3	Yes		12/1/01	2/28/02
	Yes			
	Yes			_
	Yes			
	Yes			
	Yes			

STEP 3 Check the box if the response in column c of Step 2 is "Yes for any unit

For each unit that will be repowered, the Repowering Extension Plan form is included and the Repowering Technology Petition form has been submitted or will be submitted by June 1, 1997.

#### Plant Name (from Step 1) Reliant Energy Osceola

#### STEP 4 Read the standard requirements and certification, enter the name of the designated representative, and sign

and date

#### Standard Requirements

#### Permit 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, 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 permitting authority determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain permit;
- 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 permitting authority: and
  - (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 Program.
- (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)) 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.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (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 shall 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)(i) 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 permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 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.
- (2) 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 Administrator or permitting authority:
  - (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;
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program;

DEP Form No. 62-210.900(1)(a) - Form

Effective: 7-1-95

#### Plant Name (from Step 1) Reliant Energy Osceola

#### 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.

#### Liability.

- (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 a written 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, submission, 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 except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other 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, 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 a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title 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 title 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) Requining 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.

#### 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 submission 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 Walter F. McGuire			
	<del>i</del>		
Signature Date <u>11/23/99</u>	Signature	Din	Date <u>11/23/99</u>

DEP Form No. 62-210.900(1)(a) - Form

Effective: 7-1-95

STEP 5 (optional)	
Enter the source AIRS	,
FINDS identification	

AIRS	
FINDS	

# Acid Rain Program Instructions for Phase II Permit Application (40 CFR 72.30- 72.31 and Rule 62-214.320, F.A.C.)

The Acid Rain Program regulations require the designated representative to submit an Acid Rain part application for Phase II for each source with an Acid Rain unit. A complete Phase II part application is binding on the owners and operators of the Acid Rain source and is enforceable in the absence of a permit until the permitting authority either issues a permit with an Acid Rain part to the source or disapproves the application.

Please type or print. The alternate designated representative may sign in lieu of the designated representative. If assistance is needed, contact the permitting authority.

- STEP 1 NADB is the National Allowance Data Base for the Acid Rain Program. To obtain the database on diskette, call the Acid Rain Hotline at (202) 233-9620. This data file is in dBase format for use on an IBM-compatible PC. It requires 2 megabytes of hard drive memory. If the unit is not listed in NADB, use the plant name, ORIS Code, and Boiler ID listed on the certificate of representation for the plant.
- STEP 2 The monitor certification deadline is determined in accordance with 40 CFR 75.4. If the commence operation date or monitor certification date changes after the Phase II permit is issued, the source must submit a request for an administrative permit amendment.
- STEP 5 "AIRS" is the Aerometric Information Retrieval System operated by EPA's Office of Air Quality Planning and Standards. The AIRS number for a source has 12 digits. "FINDS" is the Facility Indexing System. It provides an Agency-wide ID number to cross-identify facilities in all EPA data systems. Please enter these numbers if they are available; this step is optional.

#### **Submission Instructions**

For initial Phase II permit applications: If, by November 15, 1995, the State or local jurisdiction (e.g., District, County, or City) in which the source is located has both (1) an acid rain program identified in a Federal Register notice as acceptable to the Administrator and (2) an operating permits program granted full or interim approval by the Administrator in a Federal Register notice, mail this form and three copies to that state or local authority. If not, mail this form and one copy to the EPA regional office and two copies to the State or local jurisdiction in which the source is located.

If you have questions regarding this form, contact your local, State, or EPA regional representative, or call EPA's Acid Rain Hotline at (202) 233-9620.

DEP Form No. 62-210.900(1)(a) - Instructions

Effective: 7-1-95

#### COMPLIANCE REPORT AND PLAN

#### Title V Permit Application Holopaw Peaking Units Reliant Energy Osceola, LLC June 19, 2002

Reliant Energy Osceola, LLC (Reliant Energy) completed initial CEM certification testing and filed CEM certification applications for Units 1 and 2 in January 2002. Due to the subsequent discovery of failed CEMS stack probes, Reliant Energy is currently in the process of recertifying the CEMS on Units 1 and 2. The permittee will submit the Acid Rain 40 CFR Part 75 CEM recertification application for Units 1 and 2 within 45 days of test completion for each of these two units.

Within the time periods specified in Table 1, the facility and emissions units identified in this application will be in compliance with the applicable regulations identified in this application form. Compliance with the conditions set forth in this operation permit will be certified on an annual basis by the submittal of the Statement of Compliance – Title V Source DEP Form No. 62-213.900(7). This report will be submitted by March 1 of each year for the prior calendar year.

Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate, but no later than 180 days of initial operation of the facility, and annually thereafter as indicated in the construction permit.

Permittee will submit a properly signed and sealed certification from the permittee's Professional Engineer stating that 1) the construction of the facility was completed in accordance with the construction permit and 2) the facility's emissions units have been tested and compliance with the terms and conditions contained within the construction permit has been demonstrated within 45 days after completion of all of the initial performance tests. [Rules 62-212.400(7)(b), 62-213.440(2), and 62-213.420(1)(a)2[F.A.C.]

Based on Rule 62-213.420(1)(a)2., FAC and the Department's interpretation, the submittal of Reliant Energy's entire Title V application (including the Acid Rain application) is considered timely.

#### **CEM RECERTIFICATION APPLICATION FOR UNIT 1**

Recertification field testing for this unit was performed from about 6/9/02 to 6/21/02. Field data is being processed and the CEM recertification application will be submitted to the FDEP and EPA, as appropriate, within 45 days of the test completion.

#### **CEM RECERTIFICATION APPLICATION FOR UNIT 2**

Recertification field testing for this unit was performed from about 05/23/02 to 6/7/02. Field data is being processed and the CEM recertification application will be submitted to the FDEP and EPA, as appropriate, within 45 days of the test completion.

#### **CEM CERTIFICATION APPLICATION FOR UNIT 3**

Recertification field testing for this unit was performed from about 5/17/02 to 5/23/02. Field data is being processed and the CEM certification application will be submitted to the FDEP and EPA, as appropriate, within 45 days of the test completion

#### **COMPLIANCE TEST REPORT FOR UNIT 3**

Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate, but not later than 180 days of initial operation of the unit, and annually thereafter as indicated in the air construction permit.

Compliance stack testing for this unit was performed on or about 5/21/02 for natural gas and 5/22/02 for fuel oil combustion. Field data is being processed and the compliance test report will be submitted to the FDEP within 45 days of the test completion.

Construction will be completed and compliance testing will be initiated by July 1, 2002 (expiration of the air construction permit). Authority to construct will not be extended beyond this expiration without further authorization.

Table 1. Reliant Energy Osceola Compliance Plan

Item	Testing	FDEP Report Submittal
	Dates	Date
UNIT 1 CEM	6/9/02 –	Within 45 days of test
RECERTIFICATION	6/21/02	completion
UNIT 2 CEM	5/23/02 -	Within 45 days of test
RECERTIFICATION	6/7/02	completion
UNIT 3	5/21/02 gas	Within 45 days of test
COMPLIANCE TESTS	5/22/02 fuel oil	completion
UNIT 3	5/7/02 -	Within 45 days of test
CEM	5/23/02	completion
CERTIFICATION	3/23/02	completion
CORRECTED		
EMISSION	•	
MONITORING	NA	Tuly 21 2002
REPORTS FOR UNITS	INA	July 31, 2002
1 AND 2, 1ST		
QUARTER 2002		

#### **COMPLIANCE CERTIFICATION**

Title V Permit Application **Holopaw Peaking Units** Reliant Energy Osceola, LLC

"I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete."

**Managing Director, SE Operations** 



Jeb Bush Governor

## Department of Environmental Protection

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

David B. Struhs Secretary

#### PROPOSED Permit Electronic Posting Courtesy Notification

Reliant Energy Osceola, L.L.C. Facility ID No.: 0970071
Osceola County

Initial Title V Air Operation Permit **PROPOSED Permit No.:** 0970071-004-AV

The electronic version of the PROPOSED permit was posted on the Division of Air Resources Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review on November 14, 2002.

USEPA's review period ends on the 45th day after the permit posting date. Day 45 is December 28, 2002. If an objection (veto) is received from USEPA, the permitting authority will provide a copy of the objection to the applicant.

Provided an objection is not received from USEPA, the PROPOSED permit will become a FINAL permit by operation of law on the 55th day after the permit posting date. Day 55 is January 7, 2003.



### Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400 November 12, 2002

David B. Struhs Secretary

CERTIFIED MAIL - Return Receipt Requested

Mr. Terry E. Gish Managing Director, Southeast Operations Reliant Energy Osceola, L.L.C. 7800 South U.S. Highway 1 Titusville, Florida 32780

Re:

Title V Air Operation Permit

PROPOSED Permit No.: 0970071-004-AV

Reliant Energy Osceola, L.L.C.

Dear Mr. Gish:

One copy of the "PROPOSED Determination" for the Title V Air Operation Permit for the Reliant Energy Osceola, L.L.C. facility, located at 5200 West Holopaw Road, St. Cloud, Osceola County, is enclosed. This letter is only a courtesy to inform you that the DRAFT Permit has become a PROPOSED Permit.

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED Permit is made by the USEPA within 45 days, the PROPOSED permit will become a FINAL Permit no later than 55 days after the date on which the PROPOSED permit was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED Permit, the FINAL Permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

If you have any questions, please contact Mr. Edward J. Svec at 850/921-8985.

Sincerely,

Trina Vielhauer, Chief Bureau of Air Regulation

) run IV ielhau

TV/es

**Enclosures** 

copy furnished to:

Mr. Thomas W. Davis, PE, Environmental Consulting & Technology, Inc.

Mr. Len Kozlov, PE, DEP CD

U.S. EPA, Region 4 (INTERNET E-mail Memorandum)

"More Protection, Less Process"

Printed on recycled paper.

PROPOSED Permit No.: 0970071-004-AV

Page 1 of 8

#### I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" to Reliant Energy Osceola, L.L.C. for the Reliant Energy Osceola, L.L.C. facility, located at 5200 West Holopaw Road, St. Cloud, Osceola County was clerked on August 27, 2002. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was published in the Orlando Sentinel on September 30, 2002. The DRAFT Title V Air Operation Permit was available for public inspection at the Department's Central District office in Orlando and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was received on October 10, 2002.

#### II. Public Comment(s).

Comments were received and the DRAFT Permit was changed. The comments were not considered significant enough to reissue the DRAFT Permit and require another Public Notice. Comments were received from two respondents during the 30 (thirty) day public comment period. Listed below is each comment letter in the chronological order of receipt and a response to each comment in the order that the comment was received. The comment(s) will not be restated. Where duplicative comments exist, the original response is referenced.

A. Letter from Mr. Vincent Brisini dated October 1, 2002, and received on October 2, 2002.

General Comment Response: The Florida Title V program requires the inclusion of all applicable requirements in its permits. Because a facility's PSD permit failed to include applicable NSPS monitoring requirements, does not mean these applicable NSPS requirements will be excluded from a Title V permit. When alternate monitoring requirements are authorized, all applicable monitoring requirements will be stated in Florida's Title V permits. Finally, Florida's permitting is based on rule making, not guidance.

1. Response: The Department agrees with the comment and the following change will be made to the permitting note following the emissions unit description of Section III, Subsection A:

From: The simple-cycle combustion turbines began operation in 2002.

To: Emissions Units -001 and -002 began operation in 2001, Emissions Unit -003 began operation in 2002.

2. Response: The Department agrees with the comment and the following change will be made to Specific Condition A.8.:

From: A.8. Pursuant to Rule 62-212.410, F.A.C., BACT, the maximum allowable emission limitations from each combustion turbine, when firing natural gas or No. 2 fuel oil, shall not exceed the following:

<u>Visible Emissions (VE)</u>: VE emissions shall serve as a surrogate for PM/PM<sub>10</sub> emissions and shall not exceed 10 opacity.

[PSD-FL-273]

To: : A.8. Pursuant to Rule 62-212.410, F.A.C., BACT, the maximum allowable emission limitations from each combustion turbine, when firing natural gas or No. 2 fuel oil, shall not exceed the following:

<u>Visible Emissions (VE):</u> VE emissions shall serve as a surrogate for PM/PM<sub>10</sub> emissions and shall not exceed 10 percent opacity.

[PSD-FL-273]

PROPOSED Permit No.: 0970071-004-AV

Page 2 of 8

- 3. Response: See the response to the general comment, above. No change will be made to Specific Condition A.11.
- 4. Response: See the response to the general comment, above. Specific Condition A.15. will remain in the permit. However, the Department will change the condition, as follows:
  - **From:** A.15. 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) & (2)]
  - **To:** A.15. 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).

See Specific Conditions A.28. and A.29.

[40 CFR 60.334(b)(1) & (2)]

- 5. Response: Condition A.17. is a rule requirement and will remain in the permit. However, guidance from the EPA allows the use of a nitrogen oxides continuous emissions monitor to satisfy this requirement. The following change will be made to Specific Condition A.17.:
  - From: A.17. To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Department to determine the nitrogen content of the fuel being fired.

    [40 CFR 60.335(a)]
  - To: A.17. To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Department to determine the nitrogen content of the fuel being fired. This requirement is satisfied through the use of the nitrogen oxides continuous emissions monitor. See Specific Condition A.38.

    [40 CFR 60.335(a) and guidance from EPA Region 4 dated May 26, 2000]

PROPOSED Permit No.: 0970071-004-AV

Page 3 of 8

**6. Response:** This is a rule requirement that must be satisfied during each compliance test. Because the nitrogen oxides continuous emissions monitor is used for compliance, the following change is made:

**From:** A.18. During performance tests to determine compliance, measured NO<sub>X</sub> emissions at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

$$NO_X = [NO_X \text{ obs}] [(P_{ref})^{0.5} / P_{obs}] e^{19} [H_{obs} - 0.00633] [288^{\circ} \text{ K} / T_{amb}] 1.53$$
 where:

NO<sub>X</sub> = Emissions of NO<sub>X</sub> at 15 percent oxygen and ISO standard ambient conditions.

NOX obs = Measured NOX emission at 15 percent oxygen, ppmv.

Pref = Reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure.

Pobs = Measured combustor inlet absolute pressure at test ambient pressure.

e = Transcendental constant (2.718)

Hobs = Specific humidity of ambient air at test.

 $T_{amb}$  = Temperature of ambient air at test.

[40 CFR 60.335(c)(1)]

To: A.18. During performance tests to determine compliance, measured NO<sub>X</sub> emissions at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

$$NO_X = [NO_X \text{ obs}] [(P_{ref})^{0.5} / P_{obs}] e^{19} [H_{obs} - 0.00633] [288^{o} \text{ K} / T_{amb}] 1.53$$
 where:

 $NO_X$  = Emissions of  $NO_X$  at 15 percent oxygen and ISO standard ambient conditions.

 $NO_X$  obs = Measured  $NO_X$  emission at 15 percent oxygen, ppmv.

Pref = Reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure.

 $P_{\mbox{obs}}$  = Measured combustor inlet absolute pressure at test ambient pressure.

e = Transcendental constant (2.718)

 $H_{obs}$  = Specific humidity of ambient air at test.

Tamb = Temperature of ambient air at test.

See Specific Condition A.38.

[40 CFR 60.335(c)(1)]

7. Response: The Department agree that a reference to Specific Condition A.14. is appropriate and the following change is made:

From: A.19. When determining compliance with 40 CFR 60.332, Subpart GG - Standards of Performance for Stationary Gas Turbines, the monitoring device of 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the permitted NO<sub>X</sub> standard at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

[40 CFR 60.335(c)(2)]

To: A.19. When determining compliance with 40 CFR 60.332, Subpart GG - Standards of Performance for Stationary Gas Turbines, the monitoring device of 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the permitted NO<sub>X</sub> standard at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer. See Specific Condition A.14.

[40 CFR 60.335(c)(2)]

PROPOSED Permit No.: 0970071-004-AV

Page 4 of 8

**8. Response:** The Department disagrees with the comment, this condition is a rule requirement and annual compliance testing is required. The condition will remain and the following change will be made to remove confusion:

From: A.20. The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 as follows:

c. U.S. EPA Method 20 (40 CFR 60, Appendix A) shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NO<sub>x</sub> emissions shall be determined at each of the load conditions specified in 40 CFR 60.335(c)(2).

[40 CFR 60.335(c)(3)]

To: A.20. The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 as follows:

c. U.S. EPA Method 20 (40 CFR 60, Appendix A) shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NO<sub>x</sub> emissions shall be determined at each of the load conditions specified in 40 CFR 60.335(c)(2).

See Specific Condition **A.38**. [40 CFR 60.335(c)(3)]

- 9. Response: The department disagrees with the comment. Specific Condition A.24. states that the visible emissions test is the surrogate for particulate testing, while Specific Condition A.30. establishes EPA Method 9 as the test method for visible emissions. The conditions will remain, as noticed.
- 10. Response: Specific Condition A.21. states "Initial tests shall also be conducted after any modifications (and shake down period not to exceed 100 days after re-starting the CT) of air pollution control equipment such as change or tuning of combustors." This implies the possibility of future initial tests. The conditions will remain, as noticed.
- 11. Response: The Department agrees with the comment and will change Specific Condition A.26., as follows:

From: A.26. The owner or operator shall determine compliance with the liquid fuel sulfur content standard of 0.05 percent, by weight, and the gaseous fuel sulfur dioxide standard as follows: ASTM D 2880-96, or the latest edition shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92, 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.

[40 CFR 60.335(d)]

To: A.26. The owner or operator shall determine compliance with the liquid fuel sulfur content standard of 0.05 percent, by weight, and the gaseous fuel sulfur dioxide standard as follows: ASTM D 2880-96, or the latest edition shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92, 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. See Specific Condition A.27.

[40 CFR 60.335(d)]

PROPOSED Permit No.: 0970071-004-AV

Page 5 of 8

- 12. Response: Specific Condition A.29. requires the fuel oil vendor to provide the nitrogen and sulfur content of each fuel delivery. This requirement was established through the PSD process. If the permittee wishes the requirement removed or altered, a change must be made to the PSD permit.
- 13. Response: Florida's approved State Implementation Plan requires annual compliance testing. For emissions units regulated by 40 CFR 60, Florida utilizes these compliance requirements for the annual compliance demonstrations.
- 14. Response: A September 22, 1993 memorandum from John Rasnic, Director of the Stationary Source Compliance Division, the EPA Region Air Directors addressed the use of Acid Rain CEMs as NSPS CEMs. The memorandum states that the Acid Rain CEMs can be accepted as NSPS CEMs, "provided that the utility demonstrates compliance with all applicable NSPS regulations." Specific Conditions A.40., A.41. and A.42. are NSPS applicable regulations. The following changes will be made to eliminate duplicated language and references to continuous opacity monitors:
  - From: A.41. (1) Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.
  - (2) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

    [40 CFR 60.13(d)(1) and (2)] see A.41.
  - A.42. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:
  - (1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
  - (2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

    [40 CFR 60.13(e)(1) and (2)]

PROPOSED Permit No.: 0970071-004-AV

Page 6 of 8

#### To: A.41. Reserved

- A.42. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:
- (2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

  [40 CFR 60.13(e)(2)]
- 15. Response: The rule requirement will remain in the permit, with the following change:

From: A.48. 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 62-296.800, F.A.C. and 40 CFR 60.334(c)(1)]

To: A.48. 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). See Specific Condition A.14.

[Rule 62-296.800, F.A.C. and 40 CFR 60.334(c)(1)]

**16. Response:** The Department agrees that the facility has satisfied the compliance plan addressed in the DRAFT permit and will make the following changes:

From: Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
APPENDIX TV-4, TITLE V CONDITIONS version dated 02/12/02
APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96
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 07/96
PHASE II ACID RAIN APPLICATION/COMPLIANCE PLAN (received November 30, 1999)
COMPLIANCE REPORT AND PLAN dated June 19, 2002

PROPOSED Permit No.: 0970071-004-AV

Page 7 of 8

#### To: Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
APPENDIX TV-4, TITLE V CONDITIONS version dated 02/12/02
APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96
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 07/96
PHASE II ACID RAIN APPLICATION/COMPLIANCE PLAN (received November 30, 1999)

**Delete: A.60.** Compliance Plan. The permittee shall comply with the provisions of the attached COMPLIANCE REPORT AND PLAN dated June 19, 2002. [Rule 62-213.440, F.A.C.]

- 17. Response: The Department agrees with the comment and will change the  $NO_X$  standard for natural gas and correct the equivalent emissions values in tons per year for all pollutants, when burning oil. By addressing this comment, it was noted that there is an obsolete requirement in Specific Condition A.8. This condition will be changes, as follows:
  - From: A.8. Pursuant to Rule 62-212.410, F.A.C., BACT, the maximum allowable emission limitations from each combustion turbine, when firing natural gas or No. 2 fuel oil, shall not exceed the following:

Nitrogen Oxides (NO<sub>X</sub>) Emissions:

- While firing Natural Gas: The emission rate of NO<sub>X</sub> in the exhaust gas shall not exceed 10.5 ppmvd @15% O<sub>2</sub> on a 24 hr block average as measured by the continuous emission monitoring system (CEMS). In addition, NO<sub>X</sub> emissions calculated as NO<sub>2</sub> shall not exceed 60 pounds per hour (at ISO conditions) and 9 ppmvd @15% O<sub>2</sub> to be demonstrated by the initial "new and clean" GE performance stack test.
  - **To:** A.8. Pursuant to Rule 62-212.410, F.A.C., BACT, the maximum allowable emission limitations from each combustion turbine, when firing natural gas or No. 2 fuel oil, shall not exceed the following:

Nitrogen Oxides (NO<sub>X</sub>) Emissions:

- While firing Natural Gas: The emission rate of NO<sub>X</sub> in the exhaust gas shall not exceed 10.5 ppmvd @15% O<sub>2</sub> on a 24 hr block average as measured by the continuous emission monitoring system (CEMS). In addition, NO<sub>X</sub> emissions calculated as NO<sub>2</sub> shall not exceed 60 pounds per hour.
- 18. Response: The Department has changed the minimum compliance test duration for CO to read 1-hour rather than annual. A testing frequency was not specified for the sulfur content of the natural gas since the PSD permit did not specify a frequency.
- B. Letter from Mr. Vincent Brisini dated October 29, 2002, and received on October 30, 2002.
- 1. Response: Specific Condition A.21. is taken directly from Condition III.29 of permit PSD-FL-273 and, as such, is an applicable requirement of the Title V permit. No change can be made to Specific Condition A.21., at this time.

PROPOSED Permit No.: 0970071-004-AV

Page 8 of 8

#### III. Conclusion.

The permitting authority hereby issues the PROPOSED Permit, No. 0970071-004-AV, with any changes noted above.

#### STATEMENT OF BASIS

Reliant Energy Osceola, L.L.C. Reliant Energy Osceola, L.L.C. Facility ID No.: 0970071 Osceola County

Initial Title V Air Operation Permit **PROPOSED Permit No.:** 0970071-004-AV

This Title V air operation permit 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.

This facility consists of three dual-fuel, simple cycle combustion turbines.

The emissions units are three dual-fuel nominal 170 megawatt (MW) General Electric PG7241FA combustion turbine-electrical generators with three 75-foot stacks. Emissions from the new CT's will be controlled by Dry Low NO<sub>X</sub> (DLN-2.6) combustors when operating on natural gas and wet injection when firing fuel oil. Inherently clean fuels and good combustion practices will be employed to control all pollutants. The emissions units are 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.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated December 28, 1999. The simple-cycle combustion turbines began operation in 2002.

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

Based on the initial Title V permit application received April 1, 2002, this facility is not a major source of hazardous air pollutants (HAPs).

## Reliant Energy Osceola, L.L.C. Facility ID No.: 0970071 Osceola County

Initial Title V Air Operation Permit **PROPOSED Permit No.:** 0970071-004-AV

# Permitting Authority: State of Florida Department of Environmental Protection Division of Air Resources Management Bureau of Air Regulation Title V Section Mail Station #5505

2600 Blair Stone Road Tallahassee, Florida 32399-2400 Telephone: 850/488-0114

Fax: 850/922-6979

#### Compliance Authority:

Department of Environmental Protection Central District Office 3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767 Telephone: 407/894-7555

Fax: 407/897-2966

## Initial Title V Air Operation Permit **PROPOSED Permit No.:** 0970071-004-AV

#### **Table of Contents**

Section	Page Number
Placard Page	1
I. Facility Information	2 - 3
A. Facility Description.	
B. Summary of Emissions Unit ID No(s). and Brief Description(s).	
C. Relevant Documents.	
II. Facility-wide Conditions	4 - 6
III. Emissions Units and Conditions	
A. Emissions Unit -001 170 MW Simple-Cycle Combustion Turbine	
Emissions Unit -002 170 MW Simple-Cycle Combustion Turbine	
Emissions Unit -003 170 MW Simple-Cycle Combustion Turbine	7 - 24
IV. Acid Rain Part	
A. Acid Rain, Phase II	25 - 26



## Department of Environmental Protection

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

David B. Struhs Secretary

#### Permittee:

Reliant Energy Osceola, L.L.C. 7800 South Highway U.S. 1 Titusville, Florida 32780

PROPOSED Permit No.: 0970071-004-AV

Facility ID No.: 0970071

**SIC Nos.:** 49, 4911

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

This permit is for the operation of the Reliant Energy Osceola, L.L.C. facility. This facility is located at 5200 West Holopaw Road, St. Cloud, Osceola County; UTM Coordinates: Zone 17, 490.43 km East and 3111.31 km North; and, Latitude: 28° 07' 44" North and Longitude: 81° 05' 50" West.

This Title V Air Operation Permit 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 U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
APPENDIX TV-4, TITLE V CONDITIONS version dated 02/12/02
APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96
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 07/96
PHASE II ACID RAIN APPLICATION/COMPLIANCE PLAN (received November 30, 1999)

Effective Date: January 1, 2003

Renewal Application Due Date: July 5, 2007

Expiration Date: December 31, 2007

Howard L. Rhodes, Director Division of Air Resource Management

HLR/sms/ejs

"More Protection, Less Process"

PROPOSED Permit No.: 0970071-004-AV

#### Section I. Facility Information.

#### Subsection A. Facility Description.

The regulated emissions units at the facility include three nominal 170 megawatts (MW) simple-cycle General Electric PG7241 FA combustion turbines. The turbines use low NO<sub>X</sub> technologies. The facility utilizes pipeline natural gas as its primary fuel source with distillate fuel oil serving as a backup fuel. The units operate in intermittent duty.

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

Based on the initial Title V permit application received April 1, 2002, this facility is not a major source of hazardous air pollutants (HAPs).

#### Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

<u>E.U.</u>	
ID No.	Brief Description
-001	170 MW Simple-Cycle Combustion Turbine
-002	170 MW Simple-Cycle Combustion Turbine
-003	170 MW Simple-Cycle Combustion Turbine

Unregulated Emissions Units and/or Activities

_	<b>T</b> T

T II

ID No.	Brief Description of Emissions Units and/or Activity
-xxx	Two pipeline natural gas heaters

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

#### PROPOSED Permit No.: 0970071-004-AV

#### 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:

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

Table 2-1, Summary of Compliance Requirements

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

Appendix H-1: Permit History/ID Number Changes

Statement of Basis

#### These documents are on file with permitting authority:

Initial Title V Permit Application received April 1, 2002 Revised Emissions Calculations received April 18, 2002 Additional Information Request dated May 30, 2002 Additional Information Response received June 25, 2002 Letter received October 2, 2002, from Mr. Vincent Brisini.

Documents on file with USEPA

None.

#### PROPOSED Permit No.: 0970071-004-AV

#### Section II. Facility-wide Conditions.

#### The following conditions apply facility-wide:

- 1. APPENDIX TV-4, TITLE V CONDITIONS, 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. No person shall 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. [Rules 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 3346 Merrifield, VA 22116-3346 Telephone: 703/816-4434

and,

- **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>Unregulated Emissions Units and/or Activities.</u> Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit. [Rule 62-213.440(1), F.A.C.]
- 6. <u>Insignificant Emissions Units and/or Activities.</u> Appendix I-1, List of Insignificant Emissions 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.]

7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

PROPOSED Permit No.: 0970071-004-AV

[Rule 62-296.320(1)(a), F.A.C.]

**8.** Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter.

[Rule 62-296.320(4)(c)2., F.A.C.]

{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4., F.A.C. (see Condition 57. of APPENDIX TV-4, TITLE V CONDITIONS).}

- 9. 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.]
- 10. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C. [Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-4, TITLE V CONDITIONS).}

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

Department of Environmental Protection Central District Office 3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767 Telephone: 407/894-7555 Fax: 407/897-2966

12. 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

13. 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.

PROPOSED Permit No.: 0970071-004-AV

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

PROPOSED Permit No.: 0970071-004-AV

#### Section III. Emissions Unit(s) and Conditions.

#### Subsection A. This section addresses the following emissions unit(s).

## E.U. ID No. -001 -002 -003 Brief Description 170 MW Simple-Cycle Combustion Turbine 170 MW Simple-Cycle Combustion Turbine 170 MW Simple-Cycle Combustion Turbine

The emissions units addressed in this subsection are three dual-fuel nominal 170 megawatt (MW) General Electric PG7241FA combustion turbine-electrical generators with three 75-foot stacks. Emissions from the new CT's will be controlled by Dry Low NO<sub>X</sub> (DLN-2.6) combustors when operating on natural gas and wet injection when firing fuel oil. Inherently clean fuels and good combustion practices will be employed to control all pollutants.

{Permitting note(s): The emissions units are 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.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated December 28, 1999. Emissions Units -001 and -002 began operation in 2001, Emissions Unit -003 began operation in 2002.}

#### The following specific conditions apply to the emissions unit(s) listed above:

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

A.1. Permitted Capacity. The maximum heat input rates, based on the lower heating value (LHV) of each fuel to each Unit (1-3) at ambient conditions of 19°F temperature, 60% relative humidity, 100% load, and 14.7 psi pressure shall not exceed 1,709 million Btu per hour (MMBtu/hr) when firing natural gas, nor 1,942 MMBtu/hr when firing No. 2 or superior grade of distillate fuel oil. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, PSD-FL-273]

**A.2.** Emissions Unit Operating Rate Limitation After Testing. See specific condition **A.31**. [Rule 62-297.310(2), F.A.C.]

PROPOSED Permit No.: 0970071-004-AV

#### **A.3.** Methods of Operation. Fuels.

Only pipeline natural gas or maximum 0.05 percent sulfur fuel oil No. 2 or superior grade of distillate fuel oil shall be fired in these units. [Applicant Request, Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)] {Note: The limitation of this specific condition is more stringent than the NSPS sulfur dioxide limitation and thus assures compliance with 40 CFR 60.333 and 60.334}. The amount of back-up fuel (fuel oil) burned at the site (in BTU's) shall not exceed the amount of natural gas (primary fuel) burned at the site (in BTU's) during any consecutive 12-month period. [Rules 62-212.400, 62-212.410, and 62-213.410, F.A.C.; and, PSD-FL-273]

**A.4.** Hours of Operation. Each stationary gas turbine shall only operate up to 3,000 hours in any consecutive twelve month period, of which up to 750 hours may be on fuel oil. [Rule 62-210.200(PTE), F.A.C.; and, PSD-FL-273]

#### **Control Technology**

- **A.5.** Dry Low  $NO_X$  (DLN-2.6) combustors shall be installed on the stationary combustion turbine to control nitrogen oxides ( $NO_X$ ) emissions while firing natural gas. [PSD-FL-273]
- **A.6.** A water injection (WI) system shall be installed for use when firing No. 2 or superior grade distillate fuel oil for control of NO<sub>X</sub> emissions. [PSD-FL-273]
- **A.7.** The permittee shall provide manufacturer's emissions performance versus load diagrams for the DLN and wet injection systems prior to their installation. DLN systems shall each be tuned upon initial operation to optimize emissions reductions consistent with normal operation and maintenance practices and shall be maintained to minimize NO<sub>x</sub> emissions and CO emissions, consistent with normal operation and maintenance practices. Operation of the DLN systems in the diffusion-firing mode shall be minimized when firing natural gas.

  [PSD-FL-273]

#### **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.}

PROPOSED Permit No.: 0970071-004-AV

**A.8.** Pursuant to Rule 62-212.410, F.A.C., BACT, the maximum allowable emission limitations from each combustion turbine, when firing natural gas or No. 2 fuel oil, shall not exceed the following:

### Nitrogen Oxides (NO<sub>X</sub>) Emissions:

- While firing Natural Gas: The emission rate of NO<sub>X</sub> in the exhaust gas shall not exceed 10.5 ppmvd @15% O<sub>2</sub> on a 24 hr block average as measured by the continuous emission monitoring system (CEMS). In addition, NO<sub>X</sub> emissions calculated as NO<sub>2</sub> shall not exceed 60 pounds per hour (at ISO conditions).
- While firing Fuel oil: The concentration of NO<sub>X</sub> in the exhaust gas shall not exceed 42 ppmvd at 15% O<sub>2</sub> on the basis of a 3-hr average as measured by the continuous emission monitoring system (CEMS). In addition, NO<sub>X</sub> emissions calculated as NO<sub>2</sub> shall not exceed 323 lb/hr (at ISO conditions) and 42 ppmvd @15% O<sub>2</sub> to be demonstrated by stack test.

The permittee shall develop a NO<sub>X</sub> reduction plan when the hours of oil firing on any individual combustion turbine reaches 750 hours. This plan shall include a testing protocol designed to establish the maximum water injection rate and the lowest NO<sub>X</sub> emissions possible without affecting the actual performance of the gas turbine. The testing protocol shall set a range of water injection rates and attempt to quantify the corresponding NO<sub>X</sub> emissions for each rate and noting any problems with performance. Based on the test results, the plan shall recommend a new NO<sub>X</sub> emissions limiting standard and shall be submitted to the Department's Bureau of Air Regulation and Compliance Authority for review. If the Department determines that a lower NO<sub>X</sub> emissions standard is warranted for oil firing, this permit shall be revised.

Carbon Monoxide (CO) Emissions: The concentration of CO in the stack exhaust gas shall exceed neither 10.5 ppmvd and 36.2 lb/hr (at ISO conditions) while firing gas and neither 20 ppmvd and 70.0 lb/hr (at ISO conditions) while firing oil. The permittee shall demonstrate compliance with these limits by stack test using EPA Method 10.

<u>Volatile Organic Compounds (VOC) Emissions</u>: The concentration of VOC in the stack exhaust gas with the combustion turbine operating on natural gas shall exceed neither 1.5 ppmvw nor 3.0 lb/hr (ISO conditions) and neither 3.7 ppmvw nor 8.0 lb/hr (ISO conditions) while operating on oil to be demonstrated by initial stack test using EPA Method 18, 25 or 25A.

<u>Sulfur Dioxide (SO<sub>2</sub>) Emissions</u>: SO<sub>2</sub> emissions shall be limited by firing pipeline natural gas (sulfur content less than 2 grains per 100 standard cubic foot) or by firing No. 2 or superior grade distillate fuel oil with a maximum 0.05 percent sulfur for 750 hours per year per unit. Emissions of SO<sub>2</sub> (at ISO conditions) shall not exceed 1.1 lb/hr (natural gas) and 104.3 lb/hr (fuel oil) as measured by applicable compliance methods described below.

<u>Particulate Matter (PM/PM<sub>10</sub>)</u> PM/PM<sub>10</sub> emissions shall not exceed 18.0 lb/hr when operating on natural gas and shall not exceed 34.0 lb/hr when operating on fuel oil. Visible emissions testing shall serve as a surrogate for PM/PM<sub>10</sub> compliance testing.

<u>Visible Emissions (VE):</u> VE emissions shall serve as a surrogate for PM/PM<sub>10</sub> emissions and shall not exceed 10 percent opacity.

[PSD-FL-273]

# PROPOSED Permit No.: 0970071-004-AV

#### **Excess Emissions**

- A.9. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided (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 in any 24 hour period unless specifically authorized by the Department for longer duration. Operation below 50% output shall be limited to 2 hours per unit cycle (breaker closed to breaker open). [Rule 62-210.700(1), F.A.C.; and, PSD-FL-273]
- **A.10.** 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. These emissions shall be included in the 24-hr average for  $NO_X$ . [Rule 62-210.700(4), F.A.C.; and, PSD-FL-273]
- **A.11.** Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest. [Rule 62-210.700(5), F.A.C.]

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

#### **Monitoring of Operations**

A.12. 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 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 operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

**A.13.** Continuous Monitoring System: The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from these units. Upon request from EPA or DEP, the CEMS emission rates for NO<sub>X</sub> on these Units shall be corrected to ISO conditions to demonstrate compliance with the NO<sub>X</sub> standard established in 40 CFR 60.332.

[PSD-FL-273]

**A.14.** 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 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. The  $NO_X$  CEMS shall be used in lieu of the water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1998version). The calibration of the water/fuel monitoring device required in 40 CFR 60.335 (c)(2) (1998 version) will be replaced by the 40 CFR 75

PROPOSED Permit No.: 0970071-004-AV

certification tests of the NO<sub>X</sub> CEMS. [40 CFR 60.334(a); and, PSD-FL-273]

- **A.15.** 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).

See Specific Conditions **A.28**. and **A.29**. [40 CFR 60.334(b)(1) & (2)]

#### A.16. 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.]

## PROPOSED Permit No.: 0970071-004-AV

#### **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.17. To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Department to determine the nitrogen content of the fuel being fired. This requirement is satisfied through the use of the nitrogen oxides continuous emissions monitor. See Specific Condition A.38.

[40 CFR 60.335(a); and, guidance from EPA Region 4 dated May 26, 2000]

**A.18.** During performance tests to determine compliance, measured  $NO_X$  emissions at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

 $NO_X = [NO_X \text{ obs}] [(P_{ref})^{0.5} / P_{obs}] e^{19} [H_{obs} - 0.00633] [288^{\circ} \text{ K} / T_{amb}] 1.53$  where:

 $NO_X$  = Emissions of  $NO_X$  at 15 percent oxygen and ISO standard ambient conditions.

 $NO_X$  obs = Measured  $NO_X$  emission at 15 percent oxygen, ppmv.

 $P_{ref}$  = Reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure.

 $P_{obs}$  = Measured combustor inlet absolute pressure at test ambient pressure.

e = Transcendental constant (2.718)

 $H_{obs}$  = Specific humidity of ambient air at test.

 $T_{amb}$  = Temperature of ambient air at test.

See Specific Condition A.38.

[40 CFR 60.335(c)(1)]

- A.19. When determining compliance with 40 CFR 60.332, Subpart GG Standards of Performance for Stationary Gas Turbines, the monitoring device of 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the permitted NO<sub>X</sub> standard at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer. See Specific Condition A.14. [40 CFR 60.335(c)(2)]
- **A.20.** The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 as follows:
- c. U.S. EPA Method 20 (40 CFR 60, Appendix A) shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The  $NO_X$  emissions shall be determined at each of the load conditions specified in 40 CFR 60.335(c)(2). See Specific Condition A.38. [40 CFR 60.335(c)(3)]

A.21. Initial performance tests (for both fuels) shall be performed on each unit while firing natural gas as well as while firing oil. Initial tests shall also be conducted after any modifications (and shake down period not to exceed 100 days after re-starting the CT) of air pollution control equipment such as change or tuning of combustors. The following reference methods shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing.

[PSD-FL-273]

- A.22. Volatile Organic Compounds. The initial test method for volatile organic compounds shall be EPA Method 18, 25 and/or 25A, incorporated by reference in Chapter 62-297, F.A.C. An initial test is required to demonstrate compliance with the VOC emission limit. Thereafter, the CO emission limit and periodic tuning data will be employed as surrogate and no annual testing is required.

  [PSD-FL-273]
- **A.23.** Carbon Monoxide. The initial and annual test method for carbon monoxide shall be EPA Method 10, incorporated by reference in Chapter 62-297, F.A.C. An initial test for CO shall be conducted concurrently with the initial  $NO_X$  test, as required. The initial  $NO_X$  and CO test results shall be the average of three valid one-hour runs. Annual compliance testing for CO may be conducted at less than capacity when compliance testing is conducted concurrent with the annual RATA testing for the  $NO_X$  CEMS required pursuant to 40 CFR 75. [PSD-FL-273]
- **A.24.** PM/PM10. Visible emissions testing shall serve as a surrogate for PM/PM<sub>10</sub> compliance testing. [PSD-FL-273]
- A.25. Nitrogen Oxides. The initial and annual test method for NO<sub>X</sub> shall be EPA Method 20 or EPA Method 7E, incorporated by reference in Chapter 62-297, F.A.C. Initial test only for compliance with 40CFR60 Subpart GG and short-term NO<sub>X</sub> BACT limits (EPA reference Method 7E, "Determination of Nitrogen Oxides Emissions from Stationary Sources" or RATA test data may be used to demonstrate compliance for annual test requirements). Annual compliance demonstration via EPA Method 7E shall not be required upon satisfactory demonstration that the emission unit is operating at 9 ppmvd NO<sub>X</sub> emissions or less. This demonstration shall consist of an average of each of all valid CEMS 24-hour block average compliance periods (described in Specific Condition A.35.) for which the unit operated on natural gas since the last compliance test requirement. This demonstration shall be provided within the test notification letter (described in Specific Condition A.37.), but does not relieve the permittee of the annual CEMS RATA requirement.

**A.26.** The owner or operator shall determine compliance with the liquid fuel sulfur content standard of 0.05 percent, by weight, and the gaseous fuel sulfur dioxide standard as follows: ASTM D 2880-96, or the latest edition shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92, 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. See Specific Condition **A.27**. [40 CFR 60.335(d)]

PROPOSED Permit No.: 0970071-004-AV

**A.27.** <u>SO<sub>2</sub></u> and <u>PM/PM10.</u> Not withstanding the requirements of Rule 62-297.340, F.A.C., the use of pipeline natural gas, is the method for determining compliance for SO<sub>2</sub> and PM<sub>10</sub>. For the purposes of demonstrating compliance with the 40 CFR 60.333 SO<sub>2</sub> standard, ASTM methods D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA-approved custom fuel monitoring schedule or natural gas supplier data may be submitted or the natural gas sulfur content referenced in 40 CFR 75 Appendix D may be utilized. However, the applicant is responsible for ensuring that the procedures in 40 CFR60.335 or 40 CFR75 are used when determination of fuel sulfur content is made. 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 pursuant to 40 CFR 60.335(e) (1998 version).

[PSD-FL-273]

A.28. Natural Gas Monitoring Schedule: A custom fuel monitoring schedule pursuant to 40 CFR 75 Appendix D for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2), see Specific Condition A.15., provided the following requirements are met:

- The permittee shall apply for an Acid Rain permit within the deadlines specified in 40 CFR 72.30.
- The permittee shall submit a monitoring plan, certified by signature of the Designated Representative, that commits to using a primary fuel of pipeline supplied natural gas (sulfur content less than 2 gr/100 scf pursuant to 40 CFR 75.11(d)(2)).
- Each unit shall be monitored for SO<sub>2</sub> emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.

This custom fuel monitoring schedule will only be valid when pipeline natural gas is used as a primary fuel. If the primary fuel for these units is changed to a higher sulfur fuel, SO<sub>2</sub> emissions must be accounted for as required pursuant to 40 CFR 75.11(d).

[PSD-FL-273]

**A.29.** Fuel Oil Monitoring Schedule: The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 fuel oil received at this facility an analysis which reports the sulfur content and nitrogen content of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d), see Specific Condition **A.26**. [PSD-FL-273]

PROPOSED Permit No.: 0970071-004-AV

- **A.30.** <u>Visible Emissions.</u> The initial and annual test method for visible emissions shall be EPA Method 9, incorporated by reference in Chapter 62-297, F.A.C. [PSD-FL-273]
- A.31. Operating Rate During Testing. Testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 110 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Procedures for these tests shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapters 62-204 and 62-297, F.A.C. [Rule 62-297.310(2), F.A.C.; and, PSD-FL-273]
- A.32. 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)]

A.33. 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.]

**A.34.** 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.]

PROPOSED Permit No.: 0970071-004-AV

#### A.35. 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 either EPA Method 9 or DEP 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:
    - 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) <u>Minimum Sample Volume</u>. 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 to this permit. [Rule 62-297.310(4), F.A.C.]
- **A.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.]

- **A.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, if there is an applicable standard;
    - 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
    - c. Each NESHAP pollutant, if there is an applicable emission standard.
  - 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
  - 8. Any combustion turbine that does not operate for more than 400 hours per year shall term of its air operation permit.
  - 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. 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

PROPOSED Permit No.: 0970071-004-AV

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]

#### **Continuous Monitoring Requirements**

**A.38.** Continuous compliance with the  $NO_X$  emission limits: Continuous compliance with the  $NO_X$  emission limits shall be demonstrated with the CEM system based on the applicable averaging time of 24-hr block average (DLN). Based on CEMS data, a separate compliance determination is conducted at the end of each operating day and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous operating day. A valid hourly emission rate shall be calculated for each hour in which at least two  $NO_X$  concentrations are obtained at least 15 minutes apart. Valid hourly emission rates shall not include periods of start up, shutdown, or malfunction unless prohibited by 62-210.700 F.A.C. These excess emissions periods shall be reported as required in Conditions **A.9.** and **A.10.** [PSD-FL-273]

**A.39.** A performance evaluation of the CEMS shall be conducted during any required performance test or within 30 days thereafter in accordance with the applicable performance specifications of 40 CFR 60,

Appendix B and at other times as required by the Administrator.

[40 CFR 60.13(c)]

A.40. The zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts shall be checked at least once daily in accordance with a written procedure. The zero and span shall, at a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications of 40 CFR 60, Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified.

[40 CFR 60.13(d)(1)]

. , , ,

A.41. Reserved.

- **A.42.** Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:
- (2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

  [40 CFR 60.13(e)(2)]
- **A.43.** All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used. [40 CFR 60.13(f)]
- A.44. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdown, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g. ppm pollutant and percent O<sub>2</sub> or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in the subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit. (e.g. rounded to the nearest 1 percent opacity). [40 CFR 60.13(h)]

#### Record Keeping and Reporting Requirements

**A.45.** The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

PROPOSED Permit No.: 0970071-004-AV

- (4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

  [40 CFR 60.7(a)(4)]
- A.46. Excess Emissions Report: If excess emissions occur due to malfunction, the owner or operator shall notify DEP's Central District within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Following the NSPS format, 40 CFR 60.7 Subpart A, periods of startup, shutdown, malfunction, shall be monitored, recorded, and reported as excess emissions when emission levels exceed the permitted standards listed in Specific Condition A.8.

  [PSD-FL-273]
- **A.47.** The owner or operator subject to the provisions of 40 CFR 60 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)]
- **A.48.** For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:
  - b. 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). See Specific Condition A.14.

[Rule 62-296.800, F.A.C.; and, 40 CFR 60.334(c)(1)]

A.49. 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)]
- **A.50.** 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) & (2)]

- **A.51.** (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 noncomplying 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).
- A.52. CEMS for reporting excess emissions: Periods when NO<sub>X</sub> emissions (ppmvd @ 15% oxygen) are above the BACT standards, listed in Specific Condition A.8., shall be reported to the DEP Central District within one working day (verbally) followed up by a written explanation not later than three (3) working days (alternatively by facsimile within one working day).

  [PSD-FL-273]
- A.53. <u>Malfunction Reporting.</u> In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 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.]

**A.54.** All recorded data shall be maintained on file by the Source for a period of five years. [Rule 62-213.440, F.A.C.]

**A.55.** Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, 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; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection.

[40 CFR 60.7(f)]

PROPOSED Permit No.: 0970071-004-AV

A.56. Hours of Operation and Fuel Usage: Reliant shall maintain records on-site of each CT's "hours of operation by fuel type" and "BTU input by fuel type" for each month. These shall be tabulated for each consecutive 12-month period (as per specific permit conditions identified herein) and made available upon request for Department use. Additionally, this data shall be submitted annually with the AOR. [PSD-FL-273]

#### A.57. 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.

PROPOSED Permit No.: 0970071-004-AV

- 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.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

#### Miscellaneous Requirements.

- **A.58.** <u>Definitions.</u> For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee.

  [40 CFR 60.2; and, Rule 62-204.800(7)(a), F.A.C.]
- **A.59.** 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]

PROPOSED Permit No.: 0970071-004-AV

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

Operated by: Reliant Energy Osceola

**ORIS code:** 55192

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

The emissions units listed below are regulated under Acid Rain, Phase II.

## E.U. ID

No.	Brief Description
-001	170 MW Simple-Cycle Combustion Turbine
-002	170 MW Simple-Cycle Combustion Turbine
-003	170 MW Simple-Cycle Combustion Turbine

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

a. DEP Form No. 62-210.900(1)(a).

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

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

E.U. ID No.	EPA ID	Year	2003	2004	2005	2006	2007
-001	**OSC1	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	0*	0*	0*	0*	0*
-002	**OSC2	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	0*	0*	0*	0*	0*
-003	**OSC3	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	0*	. 0*	0*	0*	0*

<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 or 3 of 40 CFR 73.

PROPOSED Permit No.: 0970071-004-AV

- **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.** Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.

[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, Definitions - Applicable Requirements, F.A.C.]

## Appendix U-1, List of Unregulated Emissions Units and/or Activities.

Reliant Energy, Osceola, L.L.C. Reliant Energy, Osceola, L.L.C. PROPOSED Permit No.: 0970071-004-AV

**Facility ID No.:** 0970071

<u>Unregulated Emissions Units and/or Activities</u>. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither 'regulated emissions units' nor 'insignificant emissions units'.

E.U. ID No. Brief Description of Emissions Units and/or Activity

-xxx Pipeline natural gas heaters (2)

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

Reliant Energy, Osceola, L.L.C.

PROPOSED Permit No.: 0970071-004-AV

Reliant Energy, Osceola, L.L.C.

**Facility ID No.:** 0970071

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 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 Rule 62-210.300(3)(a), 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 Rule 62.210.300(3)(a), 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.

## Brief Description of Emissions Units and/or Activities

- 1. Emergency diesel fire water pump
- 2. Distillate fuel oil truck unloading equipment
- 3. Two, 1.5 million gallon distillate fuel oil storage tank subject, only, to the recordkeeping requirements of 40CFR60, Subpart Kb
- 4. Oil/water separators (2)
- 5. Percolation pond
- 6. Underground storage tanks for turbine wash water (3)
- 7. Underground storage tanks for distillate fuel oil, turbine cold startup/trip out (3)
- 8. Cooling towers (3)
- 9. Miscellaneous oil-filled transformers

[electronic file name: 0970071g.doc]

## Table 2-1, Summary of Compliance Requirements

Reliant Energy Osceola, L.L.C. Reliant Energy Osceola, L.L.C. Facility PROPOSED Permit No.: 0970071-004-AV

Facility ID No.: 0970071

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]	170 MW Simple-Cycle Combustion Turbine
[-002]	170 MW Simple-Cycle Combustion Turbine
[-003]	170 MW Simple-Cycle Combustion Turbine

			Testing	Frequency	Min. Compliance		
Pollutant Name		Compliance	Time	Base	Test		
or Parameter	Fuel(s)	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
NO <sub>x</sub>	All	EPA Method 20 or 7E	Annual	5/22/02	1-hour	Yes	III.A.25.
SO <sub>2</sub>	Gas	ASTM Methods		5/22/02			III.A.27.
SO <sub>2</sub> % Sulfur	Oil	ASTM Methods	Fuel Transfer	5/22/02			III.A.26.
voc	ΑII	Compliance with CO	Annual	5/22/02			iii.A.22.
co	All	EPA Method 10	Annual .	5/22/02	1-hour		III.A.23.
PM / PM <sub>10</sub>	ΑIJ	EPA Method 9	Annual	5/22/02	30-minutes		III.A.24.
VE	All	EPA Method 9	Annual	5/22/02	30-minutes		III.A.30.
				<b> </b>  -			

#### Notes:

[electronic file name: 09700712.xls]

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

Reliant Energy Osceola, L.L.C. Reliant Energy Osceola, L.L.C. Facility PROPOSED Permit No.: 0970071-004-AV

Facility ID No.: 0970071

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]	170 MW Simple-Cycle Combustion Turbine
[-002]	170 MW Simple-Cycle Combustion Turbine
[-003]	170 MW Simple-Cycle Combustion Turbine

		Allowable Emissions			Equivalent Emissions*				
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour	TPY	lbs/hour	TPY	Regulatory Citation(s)	See permit condition(s)
VE	All	3,000	10% Opacity					PSD-FL-273	III.A.8.
NO <sub>x</sub>	Gas	3,000	10.5 ppmvd	60.0			90.0	PSD-FL-273	III.A.8.
NO <sub>X</sub>	Oil	750	42 ppmvd	323			121.1	PSD-FL-273	III.A.8.
voc	Gas	3,000	1.5 ppmvw	3.0			4.5	PSD-FL-273	III.A.8.
voc	Oil	750	3.7 ppmvw	8.0			3.0	PSD-FL-273	III.A.8.
co	Gas	3,000	10.5 ppmvd	36.2			54.3	PSD-FL-273	III.A.8.
co	Oil	750	20 ppmvd	70.0			26.3	PSD-FL-273	III.A.8.
PM / PM <sub>10</sub>	Gas	3,000		18.0			27.0	PSD-FL-273	III.A.8.
PM / PM <sub>10</sub>	Oil	750		34.0			12.8	PSD-FL-273	III.A.8.
so₂	Gas	3,000	2 gr./ 100 cf	1.1			1.65	PSD-FL-273	111.A.8.
SO₂	Oil	750	0.05% Sulfur	104.3			39.1	PSD-FL-273	III.A.8.

#### Notes:

[electronic file name: 09700711.xls]

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