

Department of **Environmental Protection**

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

Colleen M. Castille Secretary

P.E. Certification Statement

Permittee:

City of Tallahassee Arvah B. Hopkins Generating Station **DRAFT Permit No.:** 0730003-008-AV

Facility ID No.: 0730003

Project: Title V Air Operation Permit Revision to incorporate projects 0730003-005-AC and 0730003-010-AC. Project 005-AC authorized the construction of two new simple-cycle combustion turbines. Project 010-AC authorized changes to the excess emissions provisions of 005-AC.

I HEREBY CERTIFY that the engineering features described in the above referenced application and related additional information submittals, if any, and subject to the proposed permit conditions outlined in the "Statement of Basis" attached to this permit, 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).

And that 2

Registration Number: 0052664

Date

2/7/06

Permitting Authority:

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

Telephone: 850/488-0114

Fax: 850/922-6979

Memorandum

Florida Department of Environmental Protection

TO:

Trina Vielhauer, Chief - Bureau of Air Regulation

THROUGH:

Jeff Koerner, Air Permitting North

FROM:

Jonathan Holtom . H.

DATE:

12/06/06

SUBJECT:

Draft Title V Revision Permit No. 0730003-008-AV

Draft Construction Permit Modification No. 0730003-010-AC

City of Tallahassee – Hopkins Generating Station

Attached for your review are the following items:

• Intent to Concurrently Issue Permits and Public Notice Package;

- Draft Technical Evaluation;
- Draft Letter Modification to AC Permit;
- Statement of Basis;
- Draft Title V Permit; and
- P.E. Certification

This concurrent project is to modify the excess emissions condition of the original AC permit for recent simple cycle combustion turbines at the Hopkins generating station that were permitted by Mike H. in permit number 0730003-005-AC, and a Title V permit revision to incorporate the conditions of the AC permit into the Title V permit.

The Statement of Basis provides a detailed description of the differences between the most recent Title V permit and this revision. The most notable changes are the addition of subsection III.D., for the new turbines. Day #90 is December 10. I recommend your approval of the attached Draft Permits for this project.

Attachments



Department of Environmental Protection

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

Colleen M. Castille Secretary

December 7, 2006

Mr. Robert McGarrah Manager of Power Production City of Tallahassee 2602 Jackson Bluff Road Tallahassee, Florida 32304

Re:

Draft Air Construction Permit Modification No.: 0730003-010-AC DRAFT Title V Operation Permit Revision No.: 0730003-008-AV

Arvah B. Hopkins Generating Station

Dear Mr. McGarrah:

Enclosed is one copy of the Technical Evaluation and Preliminary Determination, Draft Air Construction Permit and Draft Title V Operation Permit Revision, for the Arvah B. Hopkins Generating Station located at 1125 Geddie Road, Tallahassee, Leon County, is enclosed. The Department's "INTENT TO CONCURRENTLY ISSUE AN AIR CONSTRUCTION PERMIT & TITLE V OPERATION PERMIT REVISION" and the "PUBLIC NOTICE OF INTENT TO CONCURRENTLY ISSUE AN AIR CONSTRUCTION PERMIT & TITLE V OPERATION PERMIT REVISION" are also included.

The "PUBLIC NOTICE OF INTENT TO CONCURRENTLY ISSUE AN AIR CONSTRUCTION PERMIT & TITLE V OPERATION PERMIT REVISION" must be published one time only, as soon as possible, the legal advertising section of a newspaper of general circulation in the area affected, pursuant to the requirements of Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit modification.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Mr. Jeff Koerner, P.E., Administrator, North Permitting Section at the above letterhead address. If you have any questions, please call Mr. Jonathan Holtom, P.E., at 850/921-9531.

Sincerely,

Trina Vielhauer, Chief Bureau of Air Regulation

Laura I Vulhaus

TLV/jk/jh

Enclosures

In the Matter of an Application for Permit by:

Mr. Robert McGarrah, Manager of Power Production City of Tallahassee 2602 Jackson Bluff Road Tallahassee, Florida 32304 Draft Air Construction Permit No.: 0730003-010-AC
DRAFT Title V Permit Project No.: 0730003-008-AV
Arvah B. Hopkins Generating Station
Leon County

WRITTEN NOTICE OF INTENT TO CONCURRENTLY ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V OPERATION PERMIT REVISION

Facility Location: City of Tallahassee operates the existing Arvah B. Hopkins Generating Station, which is located at 1125 Geddie Road, Tallahassee, in Leon County.

Project: The applicant, City of Tallahassee, applied on March 28, 2006 to the Department for a Title V air Operation Permit revision to incorporate the terms and conditions of Air Construction Permit number 0730003-005-AC, which authorized the construction of two new LM 6000 Combustion Turbines. During the processing of that application, an Air Construction Permit revision application was submitted to revise the excess emissions provisions of Air Construction Permit number 0730003-005-AC. Along with this revision application, a request was made by the City to concurrently issue the Air Construction and Title V revisions. The applicant did not request an increase in any of the current permitted allowable annual emission rates for any existing emissions unit. This revision process is also being used to replace the existing Appendix TV-4, Title V Conditions (version dated 02/12/02) with Appendix TV-6, Title V Conditions (version dated 06/23/06). These changes, as outlined in the Draft Title V Permit Revision, are the only portions of the Title V permit that are open for review and subject to Public Comment.

Permitting Authority: The application for these Permit revisions is subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210, 62-213 and 62-214, Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to operate the facility. The Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a Permit determination regarding this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114).

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Technical Evaluation and Preliminary Determination, Draft Air Construction Permit, Draft Title V Operation Permit Revision, the Statement of Basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the DRAFT Permit by visiting the following website: http://www.dep.state.fl.us/air/eproducts/ards/. A copy of the complete project file is also available at:

Permitting Authority:

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

Fax: 850/921-9533

Affected District:

Department of Environmental Protection Northwest District 160 Governmental Center Pensacola, Florida 32501-5794 Telephone: 850/595-8364

Fax: 850/595-8096

Notice of Intent to Issue An Air Permit: The Permitting Authority gives notice of its intent to concurrently issue an Air Construction permit and a Title V Air Operation Permit Revision to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the facility will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a PROPOSED Title V Permit and subsequent FINAL Air Construction and Title V Air Operation Permit revision in accordance with the conditions of the DRAFT Permits unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions

City of Tallahassee Arvah B. Hopkins Generating Station Page 2 of 4 DRAFT Permit Nos.: 0730003-010-AC & -008-AV Facility ID No.: 0730003

Public Notice: 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 "<u>PUBLIC NOTICE OF INTENT TO CONCURRENTLY ISSUE AN AIR CONSTRUCTION PERMIT & TITLE V OPERATION PERMIT REVISION</u>" (Public Notice). The Public 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 by this project. The newspaper used must meet 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 phone number. Pursuant to Rule 62-110.106(5), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within seven (7) days of publication. Failure to publish the Public Notice and provide proof of publication may result in the denial of the Permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the Draft Air Construction Permit for a period of fourteen (14) days from the date of publication of this Public Notice and will accept comments concerning the DRAFT Title V Air Operation Permit for a period of thirty (30) days from the date of publication of this Public Notice. Written comments must be post-marked, and all e-mail or facsimile comments must be received by the close of business (5 pm), on or before the end of the 14-day or 30-day periods by the Permitting Authority at the above address, e-mail or facsimile. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly (http://faw.dos.state.fl.us/) and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If written comments or comments received at a public meeting result in a significant change to the DRAFT Permits, the Permitting Authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

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

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner'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 state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Concurrently Issue an Air Construction & Title V Air Operation Permit. Persons whose substantial interests will be affected

City of Tallahassee Arvah B. Hopkins Generating Station Page 3 of 4 **DRAFT Permit Nos.:** 0730003-010-AC & -008-AV **Facility ID No.:** 0730003

by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.

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

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Trina L. Vielhauer, Chief Bureau of Air Regulation City of Tallahassee Arvah B. Hopkins Generating Station Page 4 of 4 **DRAFT Permit Nos.:** 0730003-010-AC & -008-AV **Facility ID No.:** 0730003

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO CONCURRENTLY ISSUE AN AIR CONSTRUCTION & TITLE V OPERATION PERMIT REVISION (including the Draft Air Construction Permit & DRAFT Title V Operation Permit Revision) and all copies were sent electronically (with Received Receipt) before the close of business on to the person(s) listed below.

Mr. Robert McGarrah, Manager, City of Tallahassee (McGarraR@Talgov.com)

Mr. John Powell, P.E., City of Tallahassee (powellj@talgov.com)

Mr. Rick Bradburn, DEP - NWD (rick.bradburn@dep.state.fl.us)

Clerk Stamp

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

(Clerk)

(Date)

<u>PUBLIC NOTICE OF INTENT TO CONCURRENTLY ISSUE AN AIR CONSTRUCTION PERMIT & TITLE V</u> AIR OPERATION PERMIT REVISION

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Draft Air Construction Permit No. 0730003-010-AC
Draft Title V Operation Permit Revision No.: 0730003-008-AV

City of Tallahassee Arvah B. Hopkins Generating Station Leon County

Applicant: The applicant for this project is City of Tallahassee. The applicant's responsible official is: Mr. Robert McGarrah, Manager of Power Production, 2602 Jackson Bluff Road, Tallahassee, Florida 32304.

Facility Location: City of Tallahassee operates the existing Arvah B. Hopkins Generating Station, which is located at 1125 Geddie Road, Tallahassee, in Leon County.

Project: The applicant, City of Tallahassee, applied on March 28, 2006 to the Department for a Title V air Operation Permit revision to incorporate the terms and conditions of Air Construction Permit number 0730003-005-AC, which authorized the construction of two new LM 6000 Combustion Turbines. During the processing of that application, an Air Construction Permit revision application was submitted to revise the excess emissions provisions of Air Construction Permit number 0730003-005-AC. Along with this revision application, a request was made by the City to concurrently issue the Air Construction and Title V revisions. The applicant did not request an increase in any of the current permitted allowable annual emission rates for any existing emissions unit. This revision process is also being used to replace the existing Appendix TV-4, Title V Conditions (version dated 02/12/02) with Appendix TV-6, Title V Conditions (version dated 06/23/06). These changes, as outlined in the Draft Title V Permit Revision, are the only portions of the Title V permit that are open for review and subject to Public Comment.

Permitting Authority: Applications for Permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210, 62-213 and 62-214, Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and a Permit is required to operate the facility. The Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a Permit determination regarding this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is: 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. The complete project file includes the DRAFT Permits, the Statement of Basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed, above, or may view the DRAFT Permit by visiting the following website: http://www.dep.state.fl.us/air/eproducts/ards/. A copy of the complete project file is also available at:

Permitting Authority:

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

Fax: 850/921-9533

Affected District:

Department of Environmental Protection Northwest District 160 Governmental Center Pensacola, Florida 32501-5794 Telephone: 850/595-8364

Fax: 850/595-8096

Notice of Intent to Issue An Air Permit: The Permitting Authority gives notice of its intent to concurrently issue an Air Construction permit and a Title V Air Operation Permit Revision to the applicant for the project described above. The

applicant has provided reasonable assurance that operation of the facility will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a PROPOSED Title V Air Operation Permit and subsequent FINAL Air Construction and Title V Air Operation Permits in accordance with the conditions of the DRAFT Permits unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the Draft Air Construction Permit for a period of fourteen (14) days from the date of publication of this Public Notice and will accept comments concerning the DRAFT Title V Air Operation Permit for a period of thirty (30) days from the date of publication of this Public Notice. Written comments must be post-marked, and all e-mail or facsimile comments must be received by the close of business (5 pm), on or before the end of the 14-day or 30-day periods by the Permitting Authority at the above address, e-mail or facsimile. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly (http://faw.dos.state.fl.us/) and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If written comments or comments received at a public meeting result in a significant change to the DRAFT Permits, the Permitting Authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

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

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of how and when the petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation: Mediation is not available for this proceeding.

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

STATEMENT OF BASIS

City of Tallahassee
Arvah B. Hopkins Generating Station
Facility ID No.: 0730003
Leon County

Title V Air Operation Permit Revision **Permit No.:** 0730003-008-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 was issued a Title V Air Operation Permit renewal (Permit No. 0730003-003-AV) on January 1, 2003. The Department issued Air Construction (AC) Permit No. 0730003-006-AC concurrently with Draft Title V Air Operation Permit revision number 0730003-007-AV, which was the first revision to the renewed Title V Air Operation permit, on March 15, 2005.

This Title V Air Operation Permit revision incorporates the terms and conditions from Permit No. 0730003-005-AC (for the operation of two new combustion turbines HC3 and HC4) into the Title V Air Operation Permit. Also, issued concurrently with this Draft Title V Air Operation Permit revision is Air Construction Permit number 0730003-010-AC, which makes minor changes to the excess emissions provisions of permit number 0730003-005-AC.

This facility consists of two fossil fuel-fired steam generators, two older fossil fuel-fired combustion turbines, and two new simple cycle, inlet-chilled combustion turbines, complete with electrical generator sets. The two new gas turbines are capable of producing a nominal 100 MW of electricity. The two steam generators are Phase II Acid Rain Units. Boiler Number 2 is regulated under the Florida Electrical Power Plant Siting Act. The total (nominal) combined electrical generating capacity from the facility is 456.27 megawatts electric (MW), of which, 313 MW are provided by the two steam generators and 143.27 MW are provided by the four combustion turbines. The fuels used at this facility are natural gas, fuel oil and on-specification used oil. Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Emissions unit number -001 is a Foster-Wheeler Corporation fossil fuel fired steam generator (model number SF-5) designated as "Boiler Number 1". It is rated at a maximum heat input of 903 million Btu per hour (MMBtu/hour) when firing natural gas or fuel oil and a nominal 75 MW and 750,000 pounds of steam per hour.

Emissions unit number -004 is a Babcock & Wilcox steam generator (model number RB-533) designated as "Boiler Number 2". It is rated at a maximum heat input of 2,325 million Btu per hour (MMBtu/hour) when firing fuel oil and 2,500 MMBtu/hour when firing natural gas and a nominal 238 MW and 1,619,000 pounds of steam per hour.

Emissions unit number -002 is a combustion turbine manufactured by Westinghouse (model number W191G) and is designated as "Combustion Turbine Number 1". It is rated at a maximum heat input of 228 million Btu per

hour (MMBtu/hour) while being fueled by natural gas and/or No. 2 fuel oil with a maximum fuel oil sulfur content of 0.4%, by weight. Emissions unit number -003 is a combustion turbine manufactured by Westinghouse (model number W251G) and is designated as "Combustion Turbine Number 2". It is rated at a maximum heat input of 446 million Btu per hour (MMBtu/hour) while being fueled by natural gas and/or No. 2 fuel oil with a maximum fuel oil sulfur content of 0.4%, by weight. Combustion Turbine Number 1 runs a nominal 16.47 MW generator and Combustion Turbine Number 2 runs a nominal 26.8 MW generator. Emissions from the combustion turbines are uncontrolled.

DRAFT Permit No.: 0730003-008-AV

Facility ID No.: 0730003

Emissions unit numbers -031 and -032 are General Electric LM 6000 Sprint simple cycle, inlet-chilled combustion turbines, complete with electrical generator sets. The gas turbines are capable of producing a nominal 100 MW of electricity (50 MW each). The turbines are permitted to fire 0.05% sulfur oil with natural gas as a back-up fuel. The units are equipped with selective catalytic reduction (SCR) systems for the reduction of Nitrogen Oxides (NO_X) emissions and oxidation catalysts for the reduction of Carbon Monoxide (CO), Volatile Organic Compounds (VOC), formaldehyde and Non-Methane/Non-Ethane emissions. The initial startup date for these units was July 31, 2005.

Based on the Title V permit renewal application received July 1, 2002, this facility is a major source of hazardous air pollutants (HAPs).

The changes that are being made to the previously revised Title V Permit No. 0730003-007-AV for the Arvah B. Hopkins Generating Station as a result of this permitting action are described below.

- All occurrences of Appendix TV-4 have been updated to Appendix TV-6, and Appendix TV-6 has been added to the permit.
- Facility-wide Condition 3. was updated to reflect that the applicant has submitted a Risk Management Plan.
- Subsection D has been added to incorporate the requirements for the two combustions turbines authorized by Air Construction Permit number 0730003-005-AC / PSD-FL-343.
- Specific Condition D.19. has been updated to reflect the changes to the excess emissions provisions of Air Construction Permit number 0730003-005-AC / PSD-FL-343 that are being authorized in Air Construction Permit number 0730003-010-AC / PSD-FL-343A, which is being issued concurrently with this Title V Air Operation Permit Revision.
- Appendix GG Standards of Performance for Stationary Gas Turbines has been added as a referenced attachment to the permit.
- The unregulated 750 KW Emergency Diesel Generator identified in Air Construction Permit number 0730003-005-AC has been added to Appendix U-1, List of Unregulated Emissions Units and/or Activities, as emissions unit -034.

No Charge to Sections III A, B, C. and Acid Rain.

City of Tallahassee Arvah B. Hopkins Generating Station Facility ID No.: 0730003 Leon County

Title V Air Operation Permit Revision

DRAFT Permit No.: 0730003-008-AV

(2nd Revision of Title V Air Operation Permit No.: 0730003-003-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

Title V Air Operation Permit Revision

DRAFT Permit No.: 0730003-008-AV

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Department of Environmental Protection

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

Colleen M. Castille Secretary

Permittee:

City of Tallahassee 300 South Adams Street Tallahassee, Florida 32301 **DRAFT Permit No.:** 0730003-008-AV

Facility ID No.: 0730003

SIC Nos.: 49, 4911

Project: Title V Air Operation Permit Revision

This permit revision is for the operation of the Arvah B. Hopkins Generating Station. This facility is located at 1125 Geddie Road, Tallahassee, Leon County. This Title V Air Operation Permit revision incorporates the terms and conditions from Permit No. 0730003-005-AC (for the operation of two new combustion turbines HC3 and HC4) into the Title V Air Operation Permit. Also, issued concurrently with this Draft Title V Air Operation Permit revision is Air Construction Permit number 0730003-010-AC, which makes minor changes to the excess emissions provisions of permit number 0730003-005-AC.

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 I-1, List of Insignificant Emissions Units and/or Activities Appendix U-1, List of Unregulated Emissions Units and/or Activities Phase II Acid Rain Permit Application/Compliance Plan Received July 1, 2002 Appendix GG, Standards of Performance for Stationary Gas Turbines Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96) Appendix TV-6, Title V Conditions (version dated 6/23/06) ASP Number 97-B-01 Scrivener's Order Correcting ASP Number 97-B-01 (dated July 9, 1997) Table 297.310-1 Calibration Schedule

Effective Date: January 1, 2003

1st Revision Effective Date: March 3, 2005 2nd Revision Effective Date: (Day 55)

Renewal Application Due Date: July 5, 2007

Expiration Date: December 31, 2007

Joseph Kahn, P.E., Director,
Division of Air Resource Management

JK/tlv/jk/jh

"More Protection, Less Process"

Section I. Facility Information.

DRAFT Permit No.: 0730003-008-AV

Facility ID No.: 0730003

Subsection A. Facility Description.

This facility consists of two fossil fuel-fired steam generators, two older fossil fuel-fired combustion turbines, and two new simple cycle, inlet-chilled combustion turbines, complete with electrical generator sets. The two new gas turbines are capable of producing a nominal 100 MW of electricity. The two steam generators are Phase II Acid Rain Units. Boiler Number 2 is regulated under the Florida Electrical Power Plant Siting Act. The total (nominal) combined electrical generating capacity from the facility is 456.27 megawatts electric (MW), of which, 313 MW are provided by the two steam generators and 143.27 MW are provided by the four combustion turbines. The fuels used at this facility are natural gas, fuel oil and on-specification used oil.

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

Based on the Title V permit renewal application received July 1, 2002, this facility is a major source of hazardous air pollutants (HAPs).

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

Regulated Emissions Units:

E.U. ID No.	Brief Description
-001	Boiler Number 1: 903 MMBtu/hour (Phase II Acid Rain Unit)
-002	Combustion Turbine Number 1: 228 MMBtu/hour
-003	Combustion Turbine Number 2: 446 MMBtu/hour
-004	Boiler Number 2: 2,325 - 2,500 MMBtu/hour (Phase II Acid Rain Unit)
-031	Combustion Turbine HC3: 445 MMBtu/hour
-032	Combustion Turbine HC4: 445 MMBtu/hour

Unregulated emissions Units and/or Activities (See Appendix U-1):

<u>E.U. ID</u> <u>No.</u>	Brief Description
-005	Fugitive VOC Sources - Painting Operations
-006	General Purpose Engines
-007	Emergency Generators
-034	750 KW Emergency Diesel Generator

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

City of Tallahassee, Electric Department Arvah B. Hopkins Generating Station DRAFT Permit No.: 0730003-008-AV

Facility ID No.: 0730003

Subsection C. Relevant Documents.

The following documents are part of this permit:

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

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

Phase II Acid Rain Permit Application/Compliance Plan Received July 1, 2002

Appendix GG, Standards of Performance for Stationary Gas Turbines

Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96)

Appendix TV-6, Title V Conditions (version dated 6/23/06)

ASP Number 97-B-01

Scrivener's Order Correcting ASP Number 97-B-01 (dated July 9, 1997)

Table 297.310-1 Calibration Schedule

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

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

Appendix H-1, Permit History / ID Number Changes

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 2/5/97)

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

Table 2-1, Summary of Compliance Requirements

Statement of Basis

These documents are on file with the permitting authority:

Title V Permit Renewal Application received July 1, 2002

Department's request for additional information letter dated July 24, 2002

City of Tallahassee letter received July 31, 2002

Response to request for additional information received August 16, 2002

Additional information regarding insignificant emissions units received September 3, 2002

Title V Permit Revision Application Received September 10, 2004

0730003-006-AC issued December 7, 2004

Title V Permit Revision Application Received March 28, 2006

Response to request for additional information received June 16, 2006

Air Construction Permit application received September 11, 2006

0730003-010-AC issued MM/DD/YY

Section II. Facility-wide Conditions.

DRAFT Permit No.: 0730003-008-AV

Facility ID No.: 0730003

The following conditions apply facility-wide:

- 1. Appendix TV-6, Title V Conditions (version dated 6/23/06), is a part of this permit. {Permitting note: Appendix TV-6, Title V Conditions is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}
- 2. Not federally enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
- 3. Prevention of Accidental Releases (Section 112(r) of CAA).
 - a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
 - b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.
 - c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S. and Rule 9G-21, F.A.C.

Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to:

Department of Community Affairs
Division of Emergency Management
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100

Telephone: 850/413-9921, Fax: 850/488-1739

Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

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

Any required reports to be sent to the National Response Center, should be sent to:

National Response Center
EPA Office of Solid Waste and Emergency Response
USEPA (5305 W)
401 M Street, SW
Washington, D.C. 20460

Telephone: 1/800/424-8802

Send the required annual registration fee using approved forms made payable to:

Cashier

Department of Community Affairs
State Emergency Response Commission
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2149

[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

- 4. Insignificant Emissions Units and/or Activities. 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.]
- 5. Unregulated Emissions Units and/or Activities. 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. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

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

{Permitting Note: No vapor emission control devices or systems are deemed necessary nor ordered by the Department as of the issuance date of this permit.}

- 7. 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.]
- 8. Not federally enforceable. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

- a. Concrete mixing in the portable concrete mixer shall be operated on an as-needed basis. Reasonable precautions include enclosing the activity wherever practical.
- b. Abrasive blasting activities that are associated with normal maintenance and corrosion control activities shall be enclosed where practical.
- c. Unconfined emissions associated with the limited on-site traffic shall be controlled by limiting vehicle speeds and unnecessary traffic within the plant grounds.
- d. Aggregate storage piles occur on a temporary basis associated with miscellaneous construction activities. Water is applied on an as-needed basis to control unconfined emissions from the handling and storage of the aggregate materials where practical.
- e. Spray applications of surface coatings are associated with normal maintenance and corrosion activities. The activities are enclosed whenever practicable.

[Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by applicant in Title V permit renewal application received July 1, 2002.]

{Permitting note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4., F.A.C. (see Condition No. 57. of APPENDIX TV-6, 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. The Department's Northwest District Branch Office (Tallahassee) telephone number for reporting problems, malfunctions or exceedances under this permit is 850/488-3704, day or night, and for emergencies involving a significant threat to human health or the environment is 850/413-9911. The Department's Northwest District Office (Pensacola) telephone number for routine business, including compliance test notifications, is 850/444-8364 during normal working hours.
- 11. The permittee shall submit all compliance-related notifications and reports required of this permit (other than Acid Rain Program Information) to the Department's Northwest District office:

Department of Environmental Protection Northwest District Office 160 Governmental Center Pensacola, Florida 32501-5794 Telephone: 850/595-8364 Fax: 850/595-8096

Acid Rain Program Information shall be submitted, as necessary, to:

Department of Environmental Protection 2600 Blair Stone Road Mail Station #5510 Tallahassee, Florida 32399-2400 Telephone: 850/488-0114

Fax: 850/922-6979

12. Any reports, data, notifications, certifications, and requests (other than Acid Rain Program Information) 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 30303-8960
Telephone: 404/562-9155; Fax: 404/562-9163

Reporting Requirements.

13. 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-6, TITLE V CONDITIONS).}"

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

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

Subsection D. This section addresses the following emissions units.

E.U. ID No. Brief Description

- -031 Combustion Turbine Unit Number HC3
- -032 Combustion Turbine Unit Number HC4

This section adresses two General Electric LM 6000 Sprint simple cycle, inlet-chilled combustion turbines, complete with electrical generator sets. The gas turbines are capable of producing a nominal 100 MW of electricity (50 MW each). The turbines are permitted to fire 0.05% sulfur oil with natural gas as a back-up fuel. The units are equipped with selective catalytic reduction (SCR) systems for the reduction of Nitrogen Oxides (NO_X) emissions and oxidation catalysts for the reduction of Carbon Monoxide (CO), Volatile Organic Compounds (VOC), formaldehyde and Non-Methane/Non-Ethane emissions. The initial startup date for these units was July 31, 2005.

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Facility ID No.: 0730003

{Permitting notes: These emissions units are regulated under NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines (1997 version), adopted and incorporated by reference in Rule 62-204.800(7)(b)38., F.A.C; Air Construction Permit No. 0730003-005-AC; PSD-FL-343, Prevention of Significant Deterioration (PSD), in Rule 62-212.400, F.A.C.; and, Best Available Control Technology (BACT), in Rule 62-212.410, F.A.C. Stack height = 85 feet; exit diameter = 10 feet; exit temperature = 825°F; actual volumetric flow rate = 601,200 acfm.

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

General

- **D.1.** <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.]
- **D.2.** <u>Circumvention</u>. 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. The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly.

[40 CFR 60.12; Rule 62-210.650, F.A.C.; and, 0730003-005-AC / PSD-FL-343]

D.3. Modifications. The permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change.

[40 CFR 60.14; and, 0730003-005-AC / PSD-FL-343]

- **D.4.** NSPS Requirements. In addition to the emissions limits, record keping, and reporting requirements listed below, the permittee is also required to comply with all applicable requirements of 40 CFR 60, adopted by reference in Rule 62-204.800(7)(b), F.A.C.
- (a) Subpart A, General Provisions, including:
 - 40 CFR 60.7, Notification and Record Keeping
 - 40 CFR 60.8, Performance Tests
 - 40 CFR 60.11, Compliance with Standards and Maintenance Requirements
 - 40 CFR 60.12, Circumvention
 - 40 CFR 60.13, Monitoring Requirements
 - 40 CFR 60.19, General Notification and Reporting Requirements
- (b) Subpart GG, Standards of Performance for Stationary Gas Turbines: These provisions include a requirement to correct test data to ISO conditions; however, such correction is not used for compliance determinations with the BACT standards. (See attached Appendix GG Standards of Performance for Stationary Gas Turbines.)

[40 CFR 60, Subpart GG; and, 62-213.440, F.A.C.]

Essential Potential to Emit (PTE) Parameters

D.5. Permitted Capacity. The heat input to each combustion turbine from firing natural gas shall not exceed 445 MMBtu per hour based on the following: 100% base load, a lower heating value (LHV) for natural gas and a compressor inlet air temperature of 29° F. The heat input to each combustion turbine from firing No. 2 fuel oil shall not exceed 434 MMBtu per hour based on the following: 100% base load, LHV and a compressor inlet air temperature of 29° F. The permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial compliance testing. Heat input rates will vary depending upon compressor conditions and the combustion turbine characteristics. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves on file with the Department.

[Design, Rule 62-210.200, F.A.C. (Definition - PTE); and, 0730003-005-AC / PSD-FL-343]

D.6. Simple Cycle, Intermittent Operation. Each combustion turbine shall operate only in simple cycle mode not to exceed the permitted hours of operation allowed by this permit. This restriction is based on the permittee's request, which formed the basis of the PSD applicability and BACT determination and resulted in the emission standards specified in this permit. For any request to convert this unit to combined cycle operation by installing/connecting to heat recovery steam generators or increasing the allowable hours of operation, including changes to the fuel quality or quantity which may cause an increase in short or long-term emissions, the permittee may be required submit a full PSD permit application complete with a new proposal of the best available control technology as if the unit had never been built.

[Rules 62-212.400(2)(g) and 62-212.400(6)(b), F.A.C.; and, 0730003-005-AC / PSD-FL-343]

D.7. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition **D.34**. [Rule 62-297.310(2), F.A.C.]

D.8. Methods of Operation - Allowable Fuels. Each combustion turbine shall only be fired with natural gas containing no more than 2 grains of sulfur per 100 dry standard cubic feet of gas (monthly average) and 0.05% sulfur distillate oil (or superior). The permittee shall demonstrate compliance with the fuel sulfur limit by keeping the records specified in this permit.

[Rule 62-210.200, F.A.C. (Definition - PTE); and, 0730003-005-AC / PSD-FL-343]

D.9. Hours of Operation. Each combustion turbine shall operate no more than 5840 hours during any consecutive 12-month period, 4,000 of which may be on distillate fuel oil. The permittee shall have installed, shall keep calibrated, and shall operate and maintain a monitoring system to measure and accumulate the hours of operation.

[Rule 62-212.400, F.A.C. (BACT); Rule 62-210.200, F.A.C. (PTE); and, 0730003-005-AC / PSD-FL-343]

Emissions Controls

- **D.10.** Water Injection Technology. The permittee shall install, calibrate, tune, operate, and maintain a water injection system for the unit. The system shall be designed and operated so as to ensure that NO_X emissions prior to the SCR are sufficient to achieve the NO_X emission limits in Specific Condition **D.11.** [Rule 62-4.070(3); Rule 62-212.400, F.A.C. (BACT; and, 0730003-005-AC / PSD-FL-343)]
- **D.11.** SCR/Oxidation Catalyst. To control NO_X and CO emissions, the combustion turbine shall include an SCR system and an oxidation catalyst. The catalyst systems shall be designed in order to achieve the following emissions, regardless of fuel being combusted: 5 ppmvd NO_X @ 15% O_2 and 6 ppmvd CO @ 15% O_2 .

[Design and Rule 62-212.400, F.A.C.; and, 0730003-005-AC / PSD-FL-343]

Emission Limitations and Standards

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

{Permitting note: The averaging times for Specific Conditions D.12. - D.17. are based on the specified averaging time of the applicable test method.}

{Permitting note: The following table summarizes the emissions standards for each pollutant and total emissions in lb/hr and TPY for informational and convenience purposes (PTE) only. This table does not supersede any of the terms or conditions of this permit.

Pollutant	Emission Standard	CT Emissions (lb/hr)		One CT	TPY for 2
		OIL	GAS	(lb/year)	CT's
NO_X	5 ppmvd @ 15% O ₂	8.67	8.62	50,541	50.5
CO	6 ppmvd @ 15% O ₂	6.35	6.27	36,937	36.9
SO_2	NG & 0.05% S oil	10.31	1.13	43,319	43.4
PM_{10}	VE	14.94	2.45	64,268	64.2

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Facility ID No.: 0730003

Pollutant	Emission Standard	CT Emissions (lb/hr)		CT Emissions (lb/hr) One CT		TPY for 2
		OIL	GAS	(lb/year)	CT's	
PM	VE	14.94	2.45	64,268	64.2	
VOC	3 ppmvd @ 15% O ₂	2.66	1.79	13,934	13.9	
SAM	NG & 0.05% S oil	9.66	1.15	40,756	40.8	

Note: Annual emissions, for the purposes of this table only, are based on 4000 hours of oil operation and 1840 hours of natural gas operation.

(End of Permitting Note).}

D.12. Carbon Monoxide (CO). CO emissions from the combustion turbine shall not exceed 6.0 ppmvd corrected to 15% oxygen for each fuel. The permittee shall demonstrate compliance with this standard by conducting performance tests and emissions monitoring in accordance with EPA Method 10 and the requirements of this permit.

[Rule 62-212.400, F.A.C. (PSD Avoidance); and, 0730003-005-AC/PSD-FL-343]

- **D.13.** Nitrogen Oxides (NO_X). NO_X emissions from the combustion turbine shall not exceed 5.0 ppmvd corrected to 15% oxygen for each fuel. The permittee shall demonstrate compliance with this standard by conducting performance tests and emissions monitoring in accordance with 40 CFR Part 60 Subpart GG and based on a 24-hour block average for data collected from the continuous emissions monitor. [Rule 62-212.400, F.A.C. (BACT)]
- **D.14.** Ammonia. The ammonia slip rate shall be limited to 10 ppmvd @ 15% O₂. [Rule 62-212.400, F.A.C. (BACT); and, 0730003-005-AC / PSD-FL-343]
- **D.15.** Particulate Matter (PM/PM₁₀), Sulfuric Acid Mist (SAM) and Sulfur Dioxides (SO₂). Fuel Specifications. Emissions of PM, PM₁₀, SAM, and SO₂ shall be limited by the use of pipeline-quality natural gas containing no more than 2 grain per standard cubic feet, the use of 0.05% Sulfur oil, and good combustion techniques as specified in this permit. The permittee shall demonstrate compliance with the fuel sulfur limit by maintaining the records specified by this permit.

[Rule 62-212.400, F.A.C. (PSD Applicability); and, 0730003-005-AC / PSD-FL-343]

- **D.16.** <u>Visible Emissions</u>. Visible emissions from the combustion turbine shall not exceed 10% opacity, based on a 6-minute average. This work practice standard is established as a means of ensuring the non-applicability of BACT. The permittee shall demonstrate compliance with this standard by conducting tests in accordance with EPA Method 9 and the performance testing requirements of this permit. [Rule 62-212.400, F.A.C. (PSD Applicability)]; and, 0730003-005-AC / PSD-FL-343
- **D.17.** Volatile Organic Compounds (VOC). VOC emissions from the combustion turbine shall not exceed 3.0 ppmvd corrected to 15% oxygen for each fuel. The VOC emissions shall be measured and reported in terms of methane. The permittee shall demonstrate compliance with these standards by conducting initial tests in accordance with EPA Methods 25 and/or 25A and the performance testing requirements of this permit. Optional testing in accordance with EPA Method 18 may be conducted to account for the actual methane fraction of the measured VOC emissions.

[Application, Design, Rule 62-4.070(3), F.A.C.; and, 0730003-005-AC / PSD-FL-343]

Excess Emissions

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

D.18. Excess Emissions Prohibited. Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited. These emissions shall be included in the calculation of the 24-hour averages to demonstrate compliance with the continuous NO_X emissions standard. [Rule 62-210.700(4), F.A.C.; and, 0730003-005-AC / PSD-FL-343]

- **D.19.** Excess Emissions Allowed: Providing the permittee adheres to best operational practices to minimize the amount and duration of excess emissions, the following conditions shall apply:
- (a) During startup and shutdown, visible emissions excluding water vapor shall not exceed 20% opacity for more than 120 minutes in any 24-hour period.
- (b) The continuous emissions monitoring system (CEMS) shall monitor and record emissions during all periods of operation including startups, shutdowns, fuel switches, tuning sessions, and malfunctions.
- (c) Up to 45 minutes of NO_X CEMS data may be excluded due to a startup when demonstrating compliance with the NO_X BACT emissions standard.
- (d) Up to 15 minutes of NO_X CEMS data may be excluded due to a shutdown when demonstrating compliance with the NO_X BACT emissions standard.
- (e) Up to 15 minutes of NO_X CEMS data may be excluded due to a fuel switch when demonstrating compliance with the NO_X BACT emissions standard.
- (f) To maintain efficient operation, it is necessary to periodically tune the dry low-NOx combustion, water injection, and/or selective catalytic reduction (SCR) systems. Provided the tuning sessions are performed according to manufacturer or industry specifications, NO_X CEMS data may be excluded due to such tuning sessions. A tuning session would occur after equipment replacement, repair, or as required to maintain proper operation of the combustor, water injection or SCR systems. At least one day prior to performing a tuning session, the permittee shall notify the Compliance Authority with details of the activity and the proposed schedule. The notice may be made by telephone, facsimile transmittal, or electronic mail.
- (g) Up to 120 minutes of NO_X CEMS data during any 24-hour period may be excluded due to documented malfunctions when demonstrating compliance with the NO_X BACT emissions standard. A documented malfunction means a malfunction that is documented within one working day of detection by contacting the Compliance Authority by telephone, facsimile, or electronic mail. In case of malfunctions, the permittee shall notify the Compliance Authorities within one working day. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

As limited above, only those periods of data directly attributable to startup, shutdown, malfunction, fuel switching, or tuning shall be excluded from any compliance demonstration. No monitoring data shall be excluded when demonstrating compliance with the NSPS Subpart GG emissions standards. All valid data shall be used to report annual emissions.

[Rules 62-210.700(1) & (5), 62-4.130, F.A.C ; 0730003-005-AC / PSD-FL-343; and 0730003-010-AC / PSD-FL-343A]

. D.20. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

Continuous Monitoring Requirements

D.21. NO_X CEMS: The permittee shall have installed and calibrated, and shall operate and maintain a CEMS to measure and record NO_X and oxygen concentrations in the combustion turbine exhaust stack. A monitor for carbon dioxide may be used in place of the oxygen monitor, but the system shall be capable of correcting the emissions to 15% oxygen. The NO_X monitoring devices shall comply with the requirements of 40 CFR 60.334(b) for 40 CFR Part 75 monitoring systems. A monitoring plan shall be provided to the Department's Emissions Monitoring Section Administrator, EPA Region 4, and the Compliance Authority for review no later than 45 days prior to the first scheduled certification test pursuant to 40 CFR 75.62. The plan shall consist of data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location.

[Rule 62-212.400, F.A.C. (BACT); 40 CFR 75; and, 0730003-005-AC / PSD-FL-343]

D.22. NO_x CEMS Data Requirements:

- (a) Installation. The CEMS shall be installed, calibrated, and properly functioning prior to the initial performance tests. Each device shall comply with the applicable monitoring system requirements of 40 CFR 60.7(a)(5), 40 CFR 60.13, and 40 CFR 60.334(b).
- (b) Data Collection. Emissions shall be monitored and recorded at all times including startup, operation, shutdown, and malfunction except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments. Each valid 1-hour average shall be calculated using at least two valid data points at least 15 minutes apart.
- (c) Data Reporting: Data collected by the CEMS shall be used to demonstrate compliance with the emissions standards specified for each 24-hour block average. Emissions shall be reported in units of ppmvd corrected to 15% oxygen for each hour of operation. The compliance averages shall be determined by calculating the arithmetic average of a 24-hour block of valid hourly emission rates. When a monitoring system reports emissions in excess of the standards allowed by this permit, the permittee shall notify the Compliance Authority within one (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. The Department may request a written report summarizing the excess emissions incident. The permittee shall also report excess emissions in a quarterly report as required in Specific Condition D.43. of this permit.
- (d) Data Exclusion. Unless prohibited by 62-210.700 F.A.C., valid hourly emission rates shall not include periods of start up, shutdown, or documented malfunction as described under the excess emissions

requirements of this permit.

[Rules 62-4.130, 62-4.160(8), 62-204.800, 62-210.700, 62-297.520, F.A.C.; 40 CFR 60.7; and, 0730003-005-AC / PSD-FL-343]

Required Tests, 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.}

D.23. Annual Performance Tests. To demonstrate compliance with the emission standards specified in this permit, the permittee shall conduct annual performance tests for NO_X, CO, and visible emissions from the combustion turbine for each fuel. Testing for ammonia slip is required during the first scheduled annual performance tests after the cumulative hours of operation on each combustion turbine exceed 1,500 hours of oil firing or 5,000 hours of gas firing starting from the initial installation of the SCR catalysts. Thereafter, ammonia testing is required during the first scheduled annual performance tests after subsequent cumulative 1,500 hours of oil firing and 5,000 hours of gas firing in each combustion turbine or after regeneration, replacement or addition to the SCR catalyst system. If conducted at permitted capacity, NO_X emissions data collected during the annual NO_X continuous monitor RATA required pursuant to 40 CFR 75 may be substituted for the required annual performance test. Tests required on an annual basis shall be conducted at least once during each federal fiscal year (October 1st to September 30th). In the event that the operation of the CT is less than 400 hours per year on natural gas or distillate oil, annual testing is not required for that year and that fuel.

[Rule 62-297.310(7)(a), F.A.C.; and, 0730003-005-AC / PSD-FL-343]

D.24. Tests Prior to Permit Renewal. Prior to renewing the air operation permit, the permittee shall conduct performance tests for CO, NO_X, and visible emissions from the combustion turbine. VOC emission tests are not required prior to permit renewal provided the CO emission standards are met. Testing for ammonia slip meeting the requirements of Specific Condition D.23., Annual Performance Tests, will meet the requirements of this condition. These tests shall be conducted within the 12-month period prior to renewing the air operation permit. For pollutants required to be tested annually, the permittee may submit the most recent annual compliance test to satisfy the requirements of this provision.

[Rule 62-297.310(7)(a)3., F.A.C.; and, 0730003-005-AC / PSD-FL-343]

- **D.25.** Tests After Major Repairs or Replacements. The Department may require that additional compliance testing be conducted within 90 days after major repairs or replacements are performed. [Rule 62-297.310(7)(a)4., F.A.C.; and, 0730003-005-AC / PSD-FL-343]
- **D.26.** Performance Test Methods. Compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A, and adopted by reference in Chapter 62-204.800, F.A.C.
- (a) EPA Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources;
- (b) EPA Method 10 Determination of Carbon Monoxide Emissions from Stationary Sources;
- (h) EPA Method 7e Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure); or EPA Method 20 - Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines; or ASTM D6522-00 Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide and Oxygen Concentrations in Emissions from

Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers and Process Heaters Using Portable Analyzers, as specified in 40 CFR 60.335;

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- (i) EPA Method 25 or 25A Determination of Volatile Organic Concentrations. (EPA Method 18 may be conducted to account for the non-regulated methane portion of the VOC emissions); and
- (j) Conditional Test Method 027 Measurement of Ammonia Slip

No other test methods may be used for compliance testing unless prior DEP approval is received, in writing, from the DEP Emissions Monitoring Section Administrator in accordance with an alternate sampling procedure specified in Rule 62-297.620, F.A.C. [0730003-005-AC / PSD-FL-343]

- **D.27.** Nitrogen Oxides. 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).]
- **D.28.** Nitrogen and Sulfur Contents. To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the methods specified in 40 CFR 60.335(a) and 40 CFR 60.335(d) of 40 CFR 60.335 to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

 [40 CFR 60.335(e).]

D.29. General. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard. [40 CFR 60.11(a).]

D.30. 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).]

- **D.31.** The owner or operator shall provide, or cause to be provided, stack sampling and performance testing facilities as follows:
 - (1) Sampling ports adequate for test methods applicable to such facilities.
 - (2) Safe sampling platform(s).
 - (3) Safe access to sampling platform(s).
 - (4) Utilities for sampling and testing equipment.

[40 CFR 60.8(e)(1), (2), (3) & (4).]

D.32. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.

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[Rule 62-297.310(6), F.A.C.; and, 0730003-005-AC / PSD-FL-343]

D.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.]

- **D.34.** Combustion Turbine Testing Capacity. Performance tests for compliance with standards specified in this permit shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. However, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for inlet temperature) and 110 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Emissions performance tests shall meet all applicable requirements of Chapters 62-204 and 62-297, F.A.C. [Rule 62-297.310(2), F.A.C.; and, 0730003-005-AC / PSD-FL-343]
- **D.35.** 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 separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.; and, 0730003-005-AC / PSD-FL-343]

D.36. 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. The minimum observation period for a visible emissions compliance test shall be sixty (60) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.

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(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>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).

[Rule 62-297.310(4), F.A.C.; and, 0730003-005-AC / PSD-FL-343]

D.37. 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.; and, 0730003-005-AC / PSD-FL-343]
- **D.38.** 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 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,
 - Each NESHAP pollutant, if there is an applicable emission standard.
 - 8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
 - 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.

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

D.39. <u>Test Notification</u>. The permittee shall notify the Compliance Authority in writing at least 30 days prior to initial NSPS performance tests and at least 15 days prior to any other required tests. [40 CFR 60.7, 40 CFR 60.8; Rule 62-297.310(7)(a)9., F.A.C.; and, 0730003-005-AC / PSD-FL-343]

Recordkeeping and Reporting Requirements

D.40. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request.

[Rules 62-4.160(14) & 62-213.440(1)(b)2., F.A.C.; and, 0730003-005-AC / PSD-FL-343]

- **D.41.** Fuel Records: The permittee shall demonstrate compliance with the fuel sulfur limits for natural gas and fuel oil specified in this permit by maintaining records required by 40 CFR 60.334 and 60.335. [Rules 62-4.070(3) & 62-4.160(15), F.A.C.; and, 0730003-005-AC / PSD-FL-343]
- **D.42.** Monthly Operations Summary: By the fifth calendar day of each month, the permittee shall record the hours of operation and amount of each fuel fired for the combustion turbine. The information shall be recorded in a written or electronic log and shall summarize the previous month of operation and the previous 12 months of operation. All hours of operation shall be included in the demonstration of compliance with the 12-month fuel usage limitations. Information recorded and stored as an electronic file shall be available for inspection and/or printing within at least one day of a request from the Compliance Authority. [Rule 62-4.160(15), F.A.C.; and, 0730003-005-AC / PSD-FL-343]
- **D.43.** Excess Emissions Reporting and Semi-annual Reports: If excess NO_X or visible emissions occur due to malfunction, the permittee shall notify the Compliance Authority within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct

the problem. In addition, the Department may request a written summary report of the incident. Following the NSPS format in 40 CFR 60.7(c), Subpart A, periods of startup, shutdown and malfunction, shall be monitored, recorded and reported as excess emissions when emission levels exceed the standards specified in this permit. Within thirty (30) days following each calendar semi-annual period, the permittee shall submit a report on any periods of excess emissions that occurred during the previous semi-annual to the Compliance Authority. [Rules 62-4.130, 62-204.800 & 62-210.700(6), F.A.C.; 40 CFR 60.7; and, 0730003-005-AC / PSD-FL-343]

- **D.44.** The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:
- (4) A notification of any <u>physical or operational change</u> 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).]

- **D.45.** 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).]
- **D.46.** 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 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), and (4).]

- **D.47.** 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.

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(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

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

{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance}

D.48. Notification.

- (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)(1).]

D.49. The 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. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records.

[40 CFR 60.7(f); and, Rule 62-213.440(1)(b)2.b., F.A.C.]

D.50. 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.]

D.51. 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 Method 9 test, shall provide the following information:
 - The type, location, and designation of the emissions unit tested. 1.
 - 2. The facility at which the emissions unit is located.
 - The owner or operator of the emissions unit. 3.
 - 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.
 - 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.

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

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

D.52. In each compliance test report, submit the maximum input/production rate at which each emissions unit was operated since the most recent compliance test. [Rule 62-213.440, F.A.C.]

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

City of Tallahassee, Electric Utilities Arvah B. Hopkins Generating Station DRAFT Permit No.: 0730003-008-AV Facility ID No.: 0730003

Unregulated Emissions Units and/or Activities. 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 'exempt emissions units'.

E.U. ID No.	Brief Description of Emissions Units and/or Activity
-005	Fugitive VOC Sources - Painting Operations
-006	General Purpose Internal Combustion Engines
-007	Emergency Generators
-034	750KW Emergency Diesel Generator

- -005 Fugitive VOC Emissions. Fugitive VOC emissions are generated from the painting operations associated with normal plant maintenance. SCC: 4-90-999-98, Miscellaneous Volatile Organic Compound Evaporation.
- -006 General Purpose Internal Combustion Engines.

 Located for use at this source is (1) Welding Generator. SCC: 2-03-003-01.

 Diesel Driven Fire Pump (Associated With the Hydrant Main). SCC: 2-03-001-01.

 Portable Diesel Pump. SCC: 2-03-001-01.
- -007 Emergency Generators.

 Located for use at this source is (1) Stationary Emergency Generator. SCC: 2-03-001-01.

 (3) Portable Emergency Generators. SCC: 2-03-003-01.
- -034 750 KW Emergency Diesel Generator.

 Located for use at this source in conjuction with units -031 and -032 is (1) 750 KW Stationary Emergency Diesel Generator. SCC: 2-01-001-02.

Appendix H-1, Permit History/ID Number Changes

City of Tallahassee Arvah B. Hopkins Generating Station **DRAFT Permit No.**: 0730003-008-AV

Facility ID No.: 0730003

Permit History (for tracking purposes):

E.U. <u>ID No</u>	Description	Permit No.	Issue / Effective Date	Expiration Date	Extended Date ^{1,2}	Revised Date(s)
-001	Boiler Hopkins #1	AO37-242825	03/08/94	03/01/99	=	
-002	Combustion Turbine Hopkins #1	AO37-242824	03/08/94	12/31/98		06/10/94, 06/24/94
-003	Combustion Turbine Hopkins #2	AO37-242824	03/08/94	12/31/98		06/10/94, 06/24/94
-004	Unit #2 Boiler	PA74-03D	05/20/75			05/18/94, 10/27/86
All	Initial Title V Permit	0730003-001-AV	01/01/98	12/31/02	•	
All	Admin Correction To Update	0730003-002-AV	01/02/98	12/31/02		
	Appendix TV-1 to TV-2					
All	Title V Permit Renewal	0730003-003-AV	01/01/03	12/31/07		
-002	Establish excess VE for minor	0730003-006-AC	12/7/04	5/31/05		
	load change			•		
-002	Title V revision to incorporate	0730003-007-AV	3/15/05	12/31/07		
	0730003-006-AC		•			
-031 & -	Title V revision to incorporate	0730003-008-AV	??????.	12/31/07		
032	0730003-005-AC					

Referenced Attachments

DRAFT Permit No.: 0730003-007-AV

Facility ID No.: 0730003

Phase II Acid Rain Application/Compliance Plan

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

Appendix GG, Standards of Performance for Stationary Gas Turbines

Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96)

Appendix TV-6, Title V Conditions (version dated 6/23/06

ASP Number 97-B-01
(With Scrivener's Order Dated July 9, 1997)

Table 297.310-1 Calibration Schedule

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

Table 2-1, Compliance Requirements

To:

McGarraR@Talgov.com; 'PowellJ@talgov.com'; Bradburn, Rick

Cc:

Holtom, Jonathan

Subject:

DRAFT Title V Permit Revision No.: 0730003-008-AV/0730003-010-AC - City of Tallahassee -

Arvah B. Hopkins Generating Station

Attachments: 0730003.008.AV.D_pdf[1].zip; 0730003.010.AC.D_pdf[1].zip

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

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Thank you,

DEP, Bureau of Air Regulation

From:

System Administrator

To:

Bradburn, Rick

Sent:

Thursday, December 07, 2006 2:59 PM

Subject:

Delivered: DRAFT Title V Permit Revision No.: 0730003-008-AV/0730003-010-AC - City of

Tallahassee - Arvah B. Hopkins Generating Station

Your message

·To:

'McGarraR@Talgov.com'; 'PowellJ@talgov.com'; Bradburn, Rick

Cc:

Holtom, Jonathan

Subject:

DRAFT Title V Permit Revision No.: 0730003-008-AV/0730003-010-AC - City of Tallahassee - Arvah B. Hopkins Generating Station

Sent:

12/7/2006 2:58 PM

was delivered to the following recipient(s):

Bradburn, Rick on 12/7/2006 2:59 PM

From:

Mcgarrah, Rob [McGarraR@talgov.com]

To:

Sent:

Subject:

Friday, Barbara
Thursday, December 07, 2006 3:21 PM
Read: DRAFT Title V Permit Revision No.: 0730003-008-AV/0730003-010-AC - City of

Tallahassee - Arvah B. Hopkins Generating Station

Your message

To:

McGarraR@talgov.com

Subject:

was read on 12/7/2006 3:21 PM.

From:

System Administrator

To:

Mcgarrah, Rob

Sent:

Thursday, December 07, 2006 3:00 PM

Subject:

Delivered Delivery Status Notification (Success)

Your message

To:

Subject:

McGarraR@talgov.com; PowellJ@talgov.com
DRAFT Title V Permit Revision No.: 0730003-008-AV/0730003-010-AC - City of Tallahassee - Arvah B. Hopkins Generating Station

was delivered to the following recipient(s):

Mcgarrah, Rob on 12/7/2006 3:02 PM

From:

Bradburn, Rick

To:

Friday, Barbara

Sent:

Thursday, December 07, 2006 5:11 PM

Subject:

Read: DRAFT Title V Permit Revision No.: 0730003-008-AV/0730003-010-AC - City of

Tallahassee - Arvah B. Hopkins Generating Station

Your message

To:

'McGarraR@Talgov.com'; 'PowellJ@talgov.com'; Bradburn, Rick

Cc:

Holtom, Jonathan

Subject:

DRAFT Title V Permit Revision No.: 0730003-008-AV/0730003-010-AC - City of Tallahassee - Arvah B. Hopkins Generating Station

Sent:

12/7/2006 2:58 PM

was read on 12/7/2006 5:11 PM.

From:

System Administrator

To:

Powell, John

Sent:

Thursday, December 07, 2006 3:00 PM

Subject:

Delivered Delivery Status Notification (Success)

Your message

To:

McGarraR@talgov.com; PowellJ@talgov.com

Subject:

DRAFT Title V Permit Revision No.: 0730003-008-AV/0730003-010-AC - City of Tallahassee - Arvah B. Hopkins Generating Station

was delivered to the following recipient(s):

Powell, John on 12/7/2006 3:02 PM

From:

Powell, John [PowellJ@talgov.com]

To:

Friday, Barbara

Sent:

Sunday, December 10, 2006 7:32 PM

Subject:

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Tallahassee - Arvah B. Hopkins Generating Station

Your message

To:

PowellJ@talgov.com

Subject:

was read on 12/10/2006 7:32 PM.

From: Mcgarrah, Rob [McGarraR@talgov.com]

Sent: Monday, December 11, 2006 7:18 AM

To: Friday, Barbara; Powell, John; Bradburn, Rick

Cc: Holtom, Jonathan

Subject: RE: DRAFT Title V Permit Revision No.: 0730003-008-AV/0730003-010-AC - City of Tallahassee -

Arvah B. Hopkins Generating Station

Tallahassee has received this e-mail

----Original Message-----

From: Friday, Barbara [mailto:Barbara.Friday@dep.state.fl.us]

Sent: Thursday, December 07, 2006 2:58 PM **To:** Mcgarrah, Rob; Powell, John; Bradburn, Rick

Cc: Holtom, Jonathan

Subject: DRAFT Title V Permit Revision No.: 0730003-008-AV/0730003-010-AC - City of Tallahassee -

Arvah B. Hopkins Generating Station

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Thank you,

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