

# Department of Environmental Protection

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

Colleen M. Castille Secretary

October 1, 2004

Wade A. Maye, General Manager H. L. Culbreath Bayside Power Station P.O. Box 111 Tampa, FL 33601-0111

Re:

H. L. Culbreath Bayside Power Station (Formerly the F. J. Gannon Station) Project No. 0570040-021-AC: Revision of Permit No. PSD-FL-301A Project No. 0570040-023-AV: Renewal of Title V Air Operation Permit

Dear Mr. Maye:

On February 26, 2004, the Department received your application to revise Condition 17 in air construction Permit No. PSD-FL-301A for the Bayside Power Station, which located at on Tampa's Port Sutton Road in Hillsborough County, Florida. The Department issued a draft permit on August 27, 2004. Based on recent comments, the Department is issuing a revised Draft Permit (PSD-FL-301B). Enclosed are the following related documents: "Technical Evaluation and Preliminary Determination" and "Draft Permit Revision". The "Technical Evaluation and Preliminary Determination" summarizes the Permitting Authority's technical review of the application and provides the rationale for making the preliminary determination to issue the permit. The "Draft Permit Revision" includes the specific changes to permit conditions that the Department intends to make.

On May 5, 2004, the Department received your application to revise the current Title V air operation permit to include the new Bayside Units 1 and 2. On July 2, 2004, the Department received your application to renew the existing Title V air operation permit for the re-powered H. L. Culbreath Bayside Power Station. Enclosed are the following related documents: "Statement of Basis" and "DRAFT Title V Permit". The "Statement of Basis" summarizes the Permitting Authority's technical review of the application and provides the rationale for making the preliminary determination to issue a DRAFT Permit. The proposed "DRAFT Permit" includes specific conditions that regulate the emissions units at this facility.

The Department is providing its preliminary determination to issue both of these permits at the same time. Enclosed are the following combined documents related to these projects: "Written Notice of Intent to Issue Revised Air Construction Permit/Title V Air Operation Permit" and "Public Notice of Intent to Issue Revised Air Construction Permit/Title V Air Operation Permit". These documents combine both projects so that the revised conditions of the air construction permit can be incorporated into the renewal Title V air operation permit. The "Written Notice" provides important information regarding: the Permitting Authority's intent to issue the permits; the requirements for publishing the Public Notice of the Permitting Authority's intent to issue the air permits; the procedures for submitting comments on the Draft Permits; the requirements for requesting a public meeting; the process for filing a petition for an administrative hearing; and the availability of mediation. The "Public Notice" is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project.

If you have any questions, please contact the Project Engineer, Jeff Koerner, at 850/921-9536.

Sincerely,

Trina Vielhauer, Chief Bureau of Air Regulation

Lin I Vichain

**Enclosures** 

"More Protection, Less Process"

Printed on recycled paper.

#### U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided) 747**8** Mr. Wade A. Maye, General Manager $\mathcal{S}$ 1,577 Postage Certified Fee 2000 **Postmark** Return Receipt Fee (Endorsement Required) Here Restricted Delivery Fee (Endorsement Required) ጌጌԿወ Total Postage & Fees Sent To

Mr. Wade A. Maye, General Manager Street, Apt. No.; or PO Box No. P.O. Box 111

City, State, ZIP+4
Tampa, Florida 336
PS Form 3800, January 2001

P.O. Box 111

33601-0111

See Reverse for Instructions

7007

# WRITTEN NOTICE OF INTENT TO ISSUE REVISED AIR CONSTRUCTION PERMIT/TITLE V AIR OPERATION PERMIT

In the Matter of an Application for Title V Air Operation Permit by:

Wade A. Maye, General Manager H. L. Culbreath Bayside Power Station Tampa Electric Company P.O. Box 111 Tampa, FL 33601-0111 Draft Air Construction Permit No. 0570040-021-AC (Revision of Condition 17, PSD-FL-301B)
DRAFT Title V Permit No. 0570040-023-AV (Renewal of Title V Air Operation Permit)
Hillsborough County, Florida

Facility Location: The H. L. Culbreath Bayside Power Station is located at 3602 Port Sutton Road in Tampa, Florida.

Revised Air Construction Permit Project: In accordance with Air Permit No. PSD-FL-301A, the applicant constructed the new H.L. Culbreath Bayside Power Station to re-power the existing coal-fired Gannon Station with combined cycle gas turbines firing natural gas. The project required the shutdown of all coal-fired units, which resulted in large reductions in annual pollutant emissions. The current permit allows limited amounts of continuous monitoring data to be excluded from the compliance average for specific operating periods including startup, shutdown, malfunction, cold steam turbine startups, and tuning. The applicant proposes the following changes: allow operation of the gas turbines below 50% base load without restriction, but in compliance with the standards; clarify that only equipment malfunctions resulting in emissions beyond the permitted rates must be reported within one day; retain the current restriction on data exclusion for cold steam turbine startups; add a provision for maximum data exclusion due to startup, shutdown, and malfunction for days with a startup following an unplanned forced outage; and allow the exclusion of all data collected during the following periods of maintenance: tuning the dry low-NOx combustion system, drying of the compressor blades following a water wash, and conducting an over speed trip test. These scenarios identify specific periods during which the gas turbines are not yet able to operate in full dry low-NOx combustion mode with the resulting low emission levels. As conditioned and restricted by the draft permit, these cases are limited in scope and impact. Details of the project are provided in the in the application and the enclosed "Technical Evaluation and Preliminary Determination".

Title V Air Operation Permit Project: The Tampa Electric Company operates the H. L. Culbreath Bayside Power Station, which is the re-powered F. J. Gannon Station. The coal-fired boilers have been permanently shut down. The new Bayside Station consists primarily of two "units": Bayside Unit 1 is comprised of three 169 MW gas turbines and three heat recovery steam generators that re-power a 239 MW existing steam turbine electrical generator; and Bayside Unit 2 is comprised of four 169 MW gas turbines and four heat recovery steam generators that re-power a 424 MW existing steam turbine electrical generator. The gas turbines fire natural gas as the exclusive fuel. Emissions of nitrogen oxides are reduced with dry low-NOx combustion and selective catalytic reduction. Emissions of carbon monoxide and nitrogen oxides are continuously monitored. Each gas turbine is subject to the New Source Performance Standards for stationary gas turbines, the Department's Best Available Control Technology determination (for emissions of carbon monoxide, particulate matter, and volatile organic compounds), and the Phase II acid rain program. Additional details of the project are provided in the in the application and the enclosed "Statement of Basis". The DRAFT Title V Air Operation permit incorporates new Bayside Units 1 and 2 and is a renewal of the initial Title V Air Operation Permit for this facility.

Permitting Authority: Applications for these permitting actions are subject to review in accordance with the provisions of Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-210, 62-212, 62-213 and 62-214 of the Florida Administrative Code (F.A.C.). The proposed projects are not exempt from air permitting requirements and air permits are required for the revised air construction permit and to operate the facility. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making permit determinations regarding these projects. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, in Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

**Project Files**: Complete project files are 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. For the Revised Air Construction Permit Project, the complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. For the Title V Air Operation Permit Project, the complete project file includes the DRAFT Permit, the Statement of Basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the DRAFT Permit and file electronic comments by visiting the following website: <a href="http://www.dep.state.fl.us/air/eproducts/ards/">http://www.dep.state.fl.us/air/eproducts/ards/</a>. Copies of the complete project

## WRITTEN NOTICE OF INTENT TO ISSUE REVISED AIR CONSTRUCTION PERMIT/TITLE V AIR OPERATION PERMIT

files are also available at the Air Resources Section of the Department's Southwest District Office at 3804 Coconut Palm Drive, Tampa, Florida 33619-8218 (Telephone: 813/744-6100). In addition, copies of the project files are available from the Air Management Division of the Hillsborough County Environmental Protection Commission at 1900 9th Avenue, Tampa, FL 33605 (Phone: 813/272-5530.)

Notice of Intent to Issue Air Permits: The Permitting Authority gives notice of its intent to issue the revised Draft Air Construction Permit and the DRAFT Title V Air Operation Permit to the applicant for the projects described above. The applicant has provided reasonable assurance that operation of the facility will not adversely impact air quality and that the projects will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C. For the Draft Air Construction Permit, the Permitting Authority will issue a Final Permit in accordance with the conditions of the Draft Permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions. For the DRAFT Title V Air Operation Permit, the Permitting Authority will issue a PROPOSED Permit and subsequent FINAL Permit in accordance with the conditions of the DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

**Public Notice**: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed "Public Notice of Intent to Issue Revised Air Construction Permit/Title V Air Operation Permit" (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 above 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 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 on the Revised Air Construction Permit Project: The Permitting Authority will accept written comments concerning the Revised Draft Air Construction Permit for a period of fourteen (14) days from the date of publication of the Public Notice. Written comments must be post-marked, and all e-mail or facsimile comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address, email or facsimile. If written comments result in a significant change to the Draft Permit, the Permitting Authority will issue a revised Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Comments on the DRAFT Title V Air Operation Permit Project: The Permitting Authority will accept written comments concerning the DRAFT Permit for a period of thirty (30) days from the date of publication of the Public Notice. Written comments must be post-marked, and all e-mail or facsimile comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address, email 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 on the Department's official web site for notices at <a href="http://tlhora6.dep.state.fl.us/onw">http://tlhora6.dep.state.fl.us/onw</a> and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If written comments or comments received at a public meeting result in a significant change to the DRAFT Permit, the Permitting Authority will 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 decisions 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, 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". 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", 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

# WRITTEN NOTICE OF INTENT TO ISSUE REVISED AIR CONSTRUCTION PERMIT/TITLE V AIR OPERATION PERMIT

constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so 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". Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on these applications 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 in this proceeding.

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

Executed in Tallahassee, Florida.

Trina Vielhauer, Chief Bureau of Air Regulation

# WRITTEN NOTICE OF INTENT TO ISSUE REVISED AIR CONSTRUCTION PERMIT/TITLE V AIR OPERATION PERMIT

#### **CERTIFICATE OF SERVICE**

Mr. Wade A. Maye, TECO\*

Ms. Greer Briggs, TECO (INTERNET E-mail Memorandum)

Ms. Raisa Calderon, TECO (INTERNET E-mail Memorandum)

Ms. Elena Vance, TECO (INTERNET E-mail Memorandum)

Mr. Tom Davis, P.E., ECT (INTERNET E-mail Memorandum)

Mr. Jerry Kissel, SWD Office (INTERNET E-mail Memorandum)

Mr. Jerry Campbell, HEPC (INTERNET E-mail Memorandum)

USEPA, Region 4 (INTERNET E-mail Memorandum)

Clerk Stamp

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

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

Florida Department of Environmental Protection
Revised Draft Air Construction Permit No. 0570040-021-AC (PSD-FL-301B)
DRAFT Title V Air Operation Permit No. 0570040-023-AV
H. L. Culbreath Bayside Power Station
Hillsborough County, Florida

**Applicant**: The applicant for this project is the Tampa Electric Company. The applicant's mailing address is P.O. Box 111, Tampa, Florida 33601-0111. The applicant's responsible official is Mr. Wade A. Maye, General Manager.

Facility Location: The H. L. Culbreath Bayside Power Station is located at 3602 Port Sutton Road in Tampa, Florida.

Revised Air Construction Permit Project: In accordance with original air construction Permit No. PSD-FL-301, the applicant constructed the new H.L. Culbreath Bayside Power Station to re-power the existing coal-fired Gannon Station with combined cycle gas turbines firing natural gas. The project required the shutdown of all coal-fired units, which resulted in large reductions in annual pollutant emissions. The current permit allows limited amounts of continuous monitoring data to be excluded from the compliance average for specific operating periods including startup, shutdown, malfunction, cold steam turbine startups, and tuning. The applicant proposes the following changes: allow operation of the gas turbines below 50% base load without restriction, but in compliance with the standards; clarify that only equipment malfunctions resulting in emissions beyond the permitted rates must be reported within one day; retain the current restriction on data exclusion for cold steam turbine startups; add a provision for maximum data exclusion due to startup, shutdown, and malfunction for days with a startup following an unplanned forced outage; and allow the exclusion of all data collected during maintenance periods to tune the dry low-NOx combustion system, dry the compressor blades following a water wash, and conduct over speed trip tests. These scenarios identify specific periods during which the gas turbines are not yet able to operate in full dry low-NOx combustion mode with the resulting low emission levels. As conditioned and restricted by the draft permit, these cases are limited in scope and impact.

Title V Air Operation Permit Project: The Tampa Electric Company operates the H. L. Culbreath Bayside Power Station, which is the re-powered F. J. Gannon Station. The coal-fired boilers have been permanently shut down. The new Bayside Station consists primarily of two "units": Bayside Unit 1 is comprised of three 169 MW gas turbines and three heat recovery steam generators that re-power a 239 MW existing steam turbine electrical generator; and Bayside Unit 2 is comprised of four 169 MW gas turbines and four heat recovery steam generators that re-power a 424 MW existing steam turbine electrical generator. The gas turbines fire natural gas as the exclusive fuel. Emissions of nitrogen oxides are reduced with dry low-NOx combustion and selective catalytic reduction. Emissions of carbon monoxide and nitrogen oxides are continuously monitored. Each gas turbine is subject to the New Source Performance Standards for stationary gas turbines, the Department's Best Available Control Technology determination (for emissions of carbon monoxide, particulate matter, and volatile organic compounds), and the Phase II acid rain program. The DRAFT Title V Air Operation permit incorporates new Bayside Units 1 and 2 and is a renewal of the initial Title V Air Operation Permit for this facility.

Permitting Authority: Applications for these permitting actions are subject to review in accordance with the provisions of Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-210, 62-212, 62-213 and 62-214 of the Florida Administrative Code (F.A.C.). The proposed projects are not exempt from air permitting requirements and air permits are required for the revised air construction permit and to operate the facility. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making permit determinations regarding these projects. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, in Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Project Files: Complete project files are 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. For the Revised Air Construction Permit Project, the complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. For the Title V Air Operation Permit Project, the complete project file includes the DRAFT Permit, the Statement of Basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the Draft Permit documents and file electronic comments by visiting the following website: <a href="http://www.dep.state.fl.us/air/eproducts/ards/">http://www.dep.state.fl.us/air/eproducts/ards/</a>. Copies of the complete project files are also available at the Air Resources Section of the Department's Southwest District Office at 3804 Coconut Palm Drive, Tampa, Florida 33619-8218 (Telephone: 813/744-6100). In addition, copies of the project files are available from the Air Management Division of the Hillsborough County Environmental Protection Commission at 1900 9th Avenue, Tampa, FL 33605 (Phone: 813/272-5530.)

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

Notice of Intent to Issue Air Permits: The Permitting Authority gives notice of its intent to issue the Revised Draft Air Construction Permit and the DRAFT Title V Air Operation Permit to the applicant for the projects described above. The applicant has provided reasonable assurance that operation of the facility will not adversely impact air quality and that the projects will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C. For the Draft Air Construction Permit, the Permitting Authority will issue a Final Permit in accordance with the conditions of the Draft Permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions. For the DRAFT Title V Air Operation Permit, the Permitting Authority will issue a PROPOSED Permit and subsequent FINAL Permit in accordance with the conditions of the DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

Comments on the Revised Air Construction Permit Project: The Permitting Authority will accept written comments concerning the Revised Draft Air Construction Permit for a period of fourteen (14) days from the date of publication of the Public Notice. Written comments must be post-marked, and all e-mail or facsimile comments must be received by the close of business (5:00 p.m.), on or before the end of this 14-day period by the Permitting Authority at the above address, email or facsimile. If written comments result in a significant change to the Draft Permit, the Permitting Authority will issue a revised Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Comments on the DRAFT Title V Air Operation Permit Project: The Permitting Authority will accept written comments concerning the DRAFT Permit for a period of thirty (30) days from the date of publication of the Public Notice. Written comments must be post-marked, and all e-mail or facsimile comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address, email 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 on the Department's official web site for notices at <a href="http://tlhora6.dep.state.fl.us/onw">http://tlhora6.dep.state.fl.us/onw</a> and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If written comments or comments received at a public meeting result in a significant change to the DRAFT Permit, the Permitting Authority will 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 decisions 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, 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". 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", whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial 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.

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

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". Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on these applications 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 in this proceeding.

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

# STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

#### **NOTICE OF FINAL PERMIT REVISION**

In the Matter of an Application for Permit by:

Tampa Electric Company P. O. Box 111 Tampa, FL 33601-0111

Authorized Representative:

Mr. Wade A. Maye, General Manager H. L. Culbreath Bayside Power Station

Permit No. PSD-FL-301B Project No. 0570040-021-AC Bayside Power Station Revised Condition 17, Data Exclusion

Enclosed is the final revised air permit (No. PSD-FL-301B) for the Bayside Power Station, which modifies Condition 17 in Section IIIA regarding startups, shutdowns, malfunctions, low load operation, DLN tuning, compressor blade drying, and over speed trip testing. The existing plant is located on Tampa's Port Sutton Road in Hillsborough County, Florida. As noted in the attached Final Determination, only minor changes and clarifications were made. An explanation of the project is provided in the attached Technical evaluation and Preliminary Determination. This permit is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.

#### **DRAFT**

Michael G. Cooke, Director Division of Air Resource Management

#### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final

Permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on

to the persons listed:

Mr. Wade A. Maye, TECO\*

Ms. Greer Briggs, TEĈO

Ms. Raisa Calderon, TECO

Ms. Elena Vance, TECO

Mr. Tom Davis, ECT

Mr. Jerry Kissel, SWD Office

Mr. Jerry Campbell, EPC of Hillsborough County

USEPA, Region 4 (INTERNET E-mail Memorandum)

Mr. John Bunyak, National Park Service

Clerk Stamp

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

(Clerk)	(Date)

#### PERMIT HISTORY

On March 30, 2001, the Department issued Permit No. PSD-FL-301, which authorized construction of Bayside Units 1 and 2 to re-power existing coal-fired Gannon Units 5 and 6. On January 8, 2002, the Department modified that permit (PSD-FL-301A) to include construction of Bayside Units 3 and 4 to re-power existing Gannon Units 3 and 4. Bayside Units 1 and 2 have been constructed, demonstrated initial compliance, and are currently in operation. Construction of Bayside Units 3 and 4 has not yet commenced.

#### MODIFIED PERMIT CONDITIONS

Emissions units at the Bayside Power Station are subject to the existing terms and conditions as specified in Permit No. PSD-FL-301A unless otherwise revised below.

In Section IIIA of Permit No. PSD-FL-301A, Condition 17 is revised from:

- 17. Alternate Standards and CEMS Data Exclusion: The following permit conditions establish alternate standards or allow the exclusion of monitoring data for specifically defined periods of startup, shutdown, and documented malfunction of a gas turbine. These conditions apply only if operators employ the best operational practices to minimize the amount and duration of emissions during such incidents.
  - a. Opacity During Startup and Shutdown: During startup and shutdown, the opacity of the exhaust gases shall not exceed 10%, except for up to ten 6-minute averaging periods in a calendar day during which the opacity shall not exceed 20%. Data for each 6-minute averaging period shall be exclusive from other 6-minute averaging periods.
  - b. Low Load Operation: Excluding startup, shutdown, and documented malfunction, each gas turbine is allowed up to three hours of operation below 50% base load in any 24-hour block, providing: the gas turbine is firing natural gas; the CO and NOx CEMS are functioning properly during such periods and recording valid emissions data within the span range of the monitors; and the gas turbine remains in compliance with the CO and NOx emissions standards based on 24-hour block averages of valid CEMS data.
  - c. **CEMS Data Exclusion**: For the following identified operational periods, CO and NOx emissions data may be excluded from the 24-hour block compliance averages in accordance with the corresponding requirements.
    - (1) Startup, Shutdown, and Malfunction: Periods of data excluded for gas turbine startup (excluding steam turbine cold startup), shutdown, or documented malfunction shall not exceed four 1-hour emission averages in any 24-hour block due to all such episodes. Gas turbine startup is the commencement of operation of a gas turbine that has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, or pollution control device imbalances, which may result in elevated emissions. Shutdown is the process of bringing a gas turbine off line and ending fuel combustion. A malfunction is any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner. A documented malfunction is a malfunction that is documented within one working day of detection by contacting the Compliance Authority by telephone, facsimile transmittal, or electronic mail.
    - (2) Steam Turbine Cold Startup: Periods of data excluded for a steam turbine cold startup shall not exceed sixteen 1-hour emission averages in any 24-hour block. A "steam turbine cold startup" is defined as startup after the steam turbine has been offline for 24 hours or more or the first stage turbine metal temperature is 250° F or less. Based on actual operating data and experience, the Department may modify this period of data exclusion in the Title V air operation permit without modifying this PSD permit.

(3) Tuning: If the permittee provides at least five days advance notice prior to a major tuning session performed by the manufacturer's representative, monitoring data during tuning may be excluded from the 24-hour block compliance averages. Periods of data excluded for such episodes shall not exceed a total of three 1-hour averages in any 24-hour block. Tuning sessions must be performed in accordance with the manufacturer's recommendations. {Permitting Note: As an example, a major tuning session would occur after a combustor change-out. A tuning session may take a few hours each day over a few days. No more than two major tuning sessions would be expected during any year.}

If a CEMS reports emissions in excess of a CO or NOx standard, the permittee shall notify the Compliance Authority within one working day with a preliminary report 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 Compliance Authority may request a written summary report of the incident.

d. Startup and Shutdown Plan: A "steam turbine cold startup" is defined assistartup after the steam turbine has been offline for 24 hours or more or the first stage turbine metal temperature is 250° F or less. To minimize emissions, no more than one gas turbine for each Bayside Unit shall be operated during each steam turbine cold startup. The permittee shall notify the Compliance Authority at least 24 hours in advance of a steam turbine cold startup. For each Bayside Unit, the permittee shall provide a Startup and Shutdown Plan as part of the application for a Title V air operation permit. The plan shall identify startup and shutdown procedures, the duration of each procedure, and the methods used to minimize emissions during these periods. Within 90 days of completing eight steam turbine cold startups following commencement of commercial operation or within 90 days after 12 months of commercial operation (whichever occurs first), the permittee shall submit a revised plan to the Department based on actual operating data and experience. The Department shall review the actual operational data and determine whether data exclusion allowed for a steam turbine cold startup defined in Condition 23 of this section shall be modified to represent good operational practices. The Department shall also evaluate the operational information and determine whether a separate "warm startup" requirement shall be specified in the Title V operation permit for startup after the steam turbine has been offline for 24 hours or more, but less than 48 hours.

As provided by the authority in Rule 62-210.700(5), F.A.C., the above requirements are established in lieu of the provisions of Rule 62-210.700(1), F.A.C. [Design; Rules 62-210.700(5), 62-4.130, and Rule 62-212.400 (BACT), F.A.C.]

In Section IIIA of Permit No. PSD-FL-301A, Condition 17 is revised to:

- 17. Alternate Standards and CEMS Data Exclusion: The following permit conditions establish alternate standards or allow the exclusion of monitoring data for specifically defined periods of startup, shutdown, and malfunction. These conditions apply only if operators employ the best operational practices to minimize the amount and duration of emissions during such incidents.
  - a. Opacity During Startup and Shutdown: During startup and shutdown, the opacity of the exhaust gases shall not exceed 10%, except for up to ten 6-minute averaging periods in a calendar day during which the opacity shall not exceed 20%. Data for each 6-minute averaging period shall be exclusive from other 6-minute averaging periods.
  - b. Low Load Operation: Excluding startup, shutdown, malfunction, DLN tuning, compressor blade drying, and over speed trip tests, each gas turbine may operate below 50% base load providing: the gas turbine is firing natural gas and operating in full dry low-NOx combustion mode; the CO and NOx CEMS are functioning properly during such periods and recording valid emissions data within the span range of the monitors; and the gas turbine remains in compliance with the CO and NOx emissions

standards (24-hour block averages).

- c. CEMS Data Exclusion: For the following specified operational periods, CO and NOx emissions data may be excluded from the 24-hour block compliance averages in accordance with the corresponding requirements.
  - (1) Definitions: Rule 62-210.200(231), F.A.C. defines "shutdown" as the cessation of the operation of an emissions unit for any purpose. Rule 62-210.200(160), F.A.C. defines "malfunction" as any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner, Rule 62-210.200(246), F.A.C. defines "startup" as the commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
  - (2) Standard Startups, Shutdowns, and Malfunctions: For each gas turbine, no more than four 1-hour CEMS emission averages shall be excluded from any 24-hour block compliance average due to standard startups, shutdowns, and malfunctions (total).
  - (3) Cold Steam Turbine Startup: "Cold steam turbine startup" means a startup after the steam turbine has been offline for 24 hours or more, or the first stage turbine metal temperature is 250° F or less. To minimize emissions, no more than one gas turbine per Bayside Unit shall be operated during a cold steam turbine startup. No more than sixteen 1-hour CEMS emission averages shall be excluded from the 24-hour block compliance averages due to a cold steam turbine startup. In addition, no more than sixteen 1-hour CEMS emission averages shall be excluded from any 24-hour block compliance average due to cold steam turbine startup. In the event of a cold steam turbine startup and standard startups, shutdowns and/or malfunctions within the same 24 hour period, a total of sixteen 1-hour CEMS emissions averages may be excluded with no more than four of those sixteen 1-hour CEMS emissions averages being excluded due to standard startups, shutdowns, and malfunctions (total). This condition applies only to the gas turbine being used for the cold steam turbine startup. The permittee shall notify the Compliance Authority no later than 24 hours after beginning a cold steam turbine startup. Notification may be by phone, facsimile, email, or letter.
  - (4) Steam Turbine Startup Following an Unplanned Forced Outage: "Steam turbine startup following unplanned, forced outage" means startup when the first stage turbine metal temperature is 250° F or more and occurs within 24 hours after either (1) the steam turbine inadvertently trips offline, or (2) the plant is forced to take the steam turbine offline for repair. To minimize emissions, no more than one gas turbine per Bayside Unit shall be operated during a steam turbine startup following an unplanned forced outage. No more than eight 1-hour CEMS emissions averages shall be excluded from the 24-hour block compliance averages due to a steam turbine startup following an unplanned forced outage. In addition, no more than eight 1-hour CEMS emission averages shall be excluded from any 24-hour block compliance average due to steam turbine startups following an unplanned forced outage. In the event of a startup following an unplanned forced outage and standard startups, shutdowns and/or malfunctions within the same 24 hour period, a total of eight 1-hour CEMS emissions averages may be excluded with no more than four of those eight 1-hour CEMS emissions averages being excluded due to standard startups, shutdowns, and malfunctions (total). This condition applies only to the gas turbine being used for steam turbine startup following an unplanned forced outage. The permittee shall notify the Compliance Authority no later than 24 hours after beginning a steam turbine startup following an unplanned forced outage. Notification may be by phone, facsimile, email, or letter and shall include the reason for the unplanned forced outage.
  - (5) DLN Tuning: "DLN Tuning" means operating the gas turbine at intermittent loads throughout the

full load range in order to adjust and tune the dry low-NOx (DLN) combustion system. DLN tuning shall be conducted in accordance with manufacturer' recommendations. Emissions data collected during DLN tuning may be excluded from the 24-hour block compliance averages. {Permitting Note: For example, a major tuning session would occur after combustor change-out.}

- (6) Compressor Blade Drying: Following a compressor blade wash in accordance with the manufacturer's recommendations, the permittee may operate a gas turbine at very low loads to heat and dry the compressor blades. Emissions data collected while drying the compressor blades may be excluded from the 24-hour block compliance averages. {Permitting Note: A gas turbine would typically operate at approximately 10% of base load or less to perform compressor blade drying.}
- (7) Over Speed Trip Test: As a periodic maintenance practice, the permittee may perform over speed trip tests in accordance with the manufacturer's recommendations. Emissions data collected while conducting over speed trip tests may be excluded from the 24-hour block-compliance averages. {Permitting Note: During this test, the gas turbine is operated at full speed, no load (FSNL) for approximately 5 to 6 hours. The unit is gradually accelerated to 110% speed (3960 rpm) to initiate a trip and then coasts down normally. Over speed trip tests are typically performed after a long outage or a major component overhaul.}

To the extent practicable, the permittee shall minimize the amount and duration of emissions during periods of startup, shutdown, malfunction, DLN tuning, compressor blade drying, and over speed trip testing. If a CEMS reports emissions in excess of an emissions standard (24-hour block), the permittee shall notify the Compliance Authority within one working day with a preliminary report 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 Compliance Authority may request a written summary report of the incident. All emissions data allowed for exclusion shall be summarized in the Semiannual CEMS Report required in Condition 25 of this subsection.

d. Startup and Shutdown Plan: The permittee shall maintain on site a "Startup and Shutdown Plan" that describes procedures for startup and shutdown of the Bayside Units.

As provided by the authority in Rule 62-210.700(5), F.A.C., the above requirements are established in lieu of the provisions of Rule 62-210.700(1), F.A.C.

{Permitting Note: The durations for a cold steam turbine startup and a steam turbine startup following an unplanned forced outage are not typical for combined cycle units. The Bayside Units utilize the existing Gannon steam turbines. Operating procedures require one gas turbine to operate at low loads for extended periods to gradually warm the main and hot reheat steam lines to the steam turbine as well as the steam turbine. Some steam lines are in excess of 1700 feet. Such startups are expected to occur infrequently.} [Design; Rules 62-4.130, 62-210.700(5), and 62-212.400 (BACT), F.A.C.; Permit No. PSD-FL-301B]

Filename: PSD-FL-301Br - Draft Permit Revision

#### **PROJECT**

Draft Air Construction Permit No. PSD-FL-301B (Revision)
Project No. 0570040-021-AC
Revised Condition 17, Excluded Data

#### **COUNTY**

Hillsborough County, Florida

#### **APPLICANT**

Tampa Electric Company
H. L. Culbreath Bayside Power Station
ARMS Facility ID No. 0570040

## PERMITTING AUTHORITY

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



September 29, 2004 (Revision)

{Filename: PSD-FL-301Br - TEPD}

#### 1. GENERAL PROJECT INFORMATION

#### **Applicant Name and Address**

H. L. Culbreath Bayside Power Station (Formerly the F. J. Gannon Station)

P.O. Box 111

Tampa, FL 336601-0111

## **Processing Schedule**

02/26/04: Received the application for a minor source air pollution construction permit.

03/19/04: Department requested additional information.

04/09/04: Department mailed reminder for requested additional information.

06/21/04: Department received additional information; complete.

#### **Facility Description and Location**

The H. L. Culbreath Bayside Power Station is the re-powered F. J. Gannon Station located in Tampa, Florida. When fully constructed, the plant will have four combined cycle units consisting of gas turbines with heat recovery steam generators supplying four re-powered Gannon steam turbine electrical generators. Each combined cycle unit employs SCR to reduce NOx emissions. The Standard Industrial Classification Code is SIC No. 4911 for electric services. The UTM coordinates are: Zone 17, 360.00 km E, 3087.50 km N. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to a National Ambient Air Quality Standard (NAAQS).

#### **Regulatory Categories**

<u>Title III</u>: The existing Gannon Station was a major source of hazardous air pollutants (HAP). However, the repowered Bayside Station is no longer a major source of HAPs.

Title IV: The existing facility operates units subject to the acid rain provisions of the Clean Air Act.

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

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

NSPS: The existing facility operates units subject to the New Source Performance Standards of 40 CFR 60.

#### **Project Description**

The H. L. Culbreath Bayside Power Station is being constructed under Permit No. PSD-FL-301A issued on January 8, 2002. Bayside Units 1 and 2 have been constructed, demonstrated initial compliance, and are currently in operation. Construction of Bayside Units 3 and 4 has not yet commenced. Bayside Unit 1 consists of three gas turbines (169 MW each), three heat recovery steam generators, and the re-powered Gannon Unit 5 steam turbine (239 MW). Bayside Unit 2 consists of four gas turbines (169 MW each), three heat recovery steam generators, and the re-powered Gannon Unit 6 steam turbine (414 MW). Each gas turbine is a General Electric Model PG7241(FA) with an automated control system, an inlet air filtration system, an evaporative inlet air cooling system, and a single exhaust stack. All units fire natural gas as the exclusive fuel. See Figure 1, which is a schematic of Bayside Unit1.

Based on the actual operation of Bayside Units 1 and 2, the applicant requests several revisions to Specific Condition 17 regarding low load operation, startups, shutdowns, malfunctions, DLN tuning, compressor blade drying, and over speed trip testing. Each request is discussed in detail in Section 3 of this technical evaluation. Under separate applications, the Department is also reviewing the following additional requests for this plant: an initial simple cycle phase for the Bayside Unit 3 gas turbines with restricted oil firing; a revised Title V air operation permit to incorporate Bayside Units 1 and 2; and a renewal of the Title V air operation permit for the existing plant.

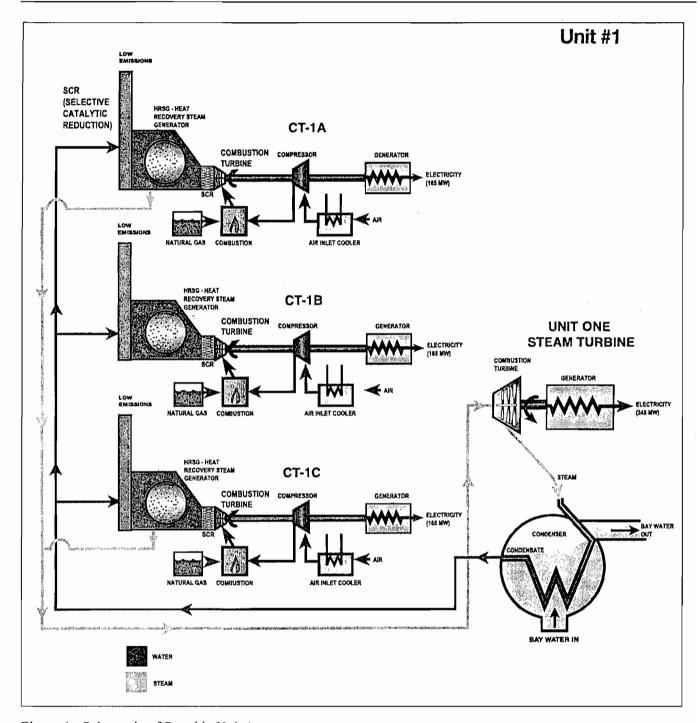


Figure 1. Schematic of Bayside Unit 1

#### 2. APPLICABLE REGULATIONS

#### State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). The units remain subject to the applicable provisions in Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the

Florida Administrative Code.

#### **Federal Regulations**

NSPS: The new gas turbines remain subject to the applicable provisions of Subpart GG in 40 CFR 60, which is the New Source Performance Standard for gas turbines.

<u>NESHAP</u>: The existing Gannon Station was a major source of hazardous air pollutants (HAPs). However, the Bayside gas turbine project did not trigger a 112(g) case-by-case determination of the Maximum Available Control Technology (MACT). The re-powered Bayside Station is not a major source of HAPs. The project to revise Condition 17 does not trigger any new NESHAP requirements.

## Prevention of Significant Deterioration (PSD) Preconstruction Review

The existing power plant is a PSD-major facility as defined in Rule 62-212.400, F.A.C. The original air construction permit project included shutdown of the existing coal-fired Gannon Units as well as the construction of the new Bayside Units. Based on the PSD netting analysis, the project was subject to PSD preconstruction review for emissions of carbon monoxide (CO), particulate matter (PM/PM10), and volatile organic compounds (VOC). The Department made determination of the Best Available Control Technology (BACT) for each of these pollutants. Emissions of nitrogen oxides (NOx) and sulfur dioxides netted out of PSD review with the shutdown of the existing coal-fired Gannon Units.

The re-powering project was part of settlement agreements with the Department and EPA, which alleged that major modifications had been performed on the Gannon Units without PSD preconstruction review. As a result, the netting analysis for this project considered "past actual emissions" to be those emissions that would have been generated if BACT-level controls had been installed. This is the reason that the combined cycle project triggered PSD review for emissions of particulate matter even though the gas turbines will emit much less particulate matter than the previous coal-fired boilers. All of the existing coal-fired Gannon Units have been permanently shut down. Bayside Units 1 and 2 have been constructed, tested, and are currently in operation. Construction has not yet begun on Bayside Units 3 and 4.

As conditioned in the draft permit, the changes are not expected to result in increased annual emissions for the following reasons.

- Removing the 3-hour restriction on operation below 50% based load: No increase in annual emissions is expected because the condition requires operation in full, dry low NOx combustion mode with compliance ensured by CEMS.
- Retaining the 16-hour data exclusion for cold startups: No increase in annual emissions is expected because the applicant has requested retaining the original limit.
- Adding a provision for 8-hours of data exclusion due to a steam turbine startup following an unplanned forced outage: It is possible that this additional provision could result in some increased annual emissions. However, the ability to use this provision is narrowly defined to periods when the steam turbine has inadvertently tripped off line or must be shut down for unscheduled maintenance or repair. In the past, such cases have been infrequent and beyond the control of the facility. Based on the Department's estimates, twelve such episodes would be well below the PSD significant emission rates. In addition, it is expected that these startups would actually replace several cold steam turbine startups.
- Removal of 3-hour restriction for DLN tuning: No increase in annual emissions is expected because a tuning session generally follows an extended period of shutdown to perform maintenance or repair. A gas turbine that is properly tuned will exhibit lower emissions. In addition, this is a necessary maintenance procedure that is required by the existing permit.
- Compressor blade drying: No increase in annual emissions is expected because compressor blade drying generally follows extended periods of shutdown to perform the maintenance activity. Such activities are typically less than two hours per occurrence. This necessary maintenance procedure will likely result in improved efficiency and lower actual emissions.

Over speed trip testing: No increase in annual emissions is expected because over speed trip testing
generally follows an extended period of shutdown to perform the maintenance activity. Such activities are
typically less than five hours per occurrence and are required by the manufacturer to prevent catastrophic
failure of the unit.

#### 3. MODIFICATION OF PERMIT CONDITIONS

The applicant requested several changes to Specific Condition 17 in Section III, Subsection A of Permit No. PSD-FL-301A. The following provides a discussion of each request and the Department's conclusion. The full text of the original condition and the revised condition follow this discussion.

#### b. Low Load Operation

Applicant's Request: The current permit limits operation below 50% base load to 3 hours in a 24-hour block. The applicant requests deletion of the 3-hour restriction because the installed General Electric gas turbines are capable of complying with the permit standards below 50% of base load. The change will offer some operational flexibility for these units while the installed CO and NOx CEMS will confirm that each gas turbine is operating in full dry low-NOx combustion mode in compliance with the permitted emission rates.

<u>Department's Review</u>: The applicant provided new additional information from the manufacturer that the Frame 7FA gas turbine can achieve full dry low-NOx combustion perhaps as low as 40% of base load. The installed CO and NOx CEMS will ensure that the gas turbine is operating in full, dry low-NOx combustion mode. Therefore, the 3-hour restriction is unnecessary and may be removed as requested.

#### c. CEMS Data Exclusion - Startup, Shutdown and Malfunction

<u>Applicant's Request</u>: This condition requires the operator to document a malfunction within one working day of detection by contacting the Compliance Authority. The applicant believes that reporting each malfunction within one day is burdensome and requests removal of the requirement.

Department's Review: The Department notes that Condition 16 in Section II of the permit requires the following in accordance with Rule 62-4.130, F.A.C., "If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify the Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations." Therefore, the similar requirement in Condition 17 of Section III is redundant and can be removed. Note that only malfunctions resulting in a failure to comply with permit conditions must be reported. The revised condition will also specify that excluded data must be summarized in the Semiannual CEMS Report as required by Condition 25 of the permit.

#### c. CEMS Data Exclusion - Steam Turbine Cold Startup

<u>Applicant's Request</u>: The permit allows the Department to review startup information and modify the provision allowing up to 16 hours of data exclusion for a steam turbine cold startup. Based on actual operational information, the applicant requests no revision of the current permit regarding cold steam turbine startups. In addition, the applicant requests removal of the requirement to provide 24-hour advance notice of a steam turbine cold startup because this could delay bringing the unit back on line.

<u>Department's Review</u>: The current PSD permit allows a single gas turbine to operate at low loads (~ 10% of base load) for extended periods when conducting a cold steam turbine startup. Operating procedures provide 11 hours of low load operation to warm the main and hot reheat steam lines, some of which are more than 1700 feet in length. Procedures also allow an additional 5 hours of low load operation to gradually warm up the steam turbine to a uniform temperature. Without an extended gradual warm up, thermal fatigue could cause failures

and decrease the life of the existing components. The actual amount of time needed depends on how long the steam turbine has actually been down and actual component temperatures.

Condition 17 currently allows up to 16 hours of monitoring data exclusion due to a cold steam turbine startup because the gas turbine cannot achieve full dry low-NOx combustion at such low loads. This is related to the unique design of the re-powered plant and is not typical for new combined cycle plants. Such new units may require less than four hours for a cold steam turbine startup. However, re-powered plants present unusual circumstances such as long steam lines or older steam turbines that necessitate extended startups. For example, the re-powered FPL Fort Myers and Sanford plants allow up to 12 hours for cold steam turbine startups for reasons similar to the Bayside Units.

Based on the operating information provided, it does not appear that the plant has had an excessive number of cold steam turbine startups. The Bayside plant has averaged about one steam turbine cold startup per month between the two units. The average duration of a steam turbine cold startup has been about 8 hours with the longest being 13 hours. For additional details see the discussion in "Review of Operating Data" which follows this section of the technical evaluation. The Department agrees to retain the current provision regarding cold steam turbine startups. However, the revised condition will also add a limit of 16 hours of excluded data due to all startups, shutdowns, and malfunctions. Note that each gas turbine must always meet the current requirement that, "No more than four, 1-hour CEMS emission averages shall be excluded from any 24-hour block compliance average due to standard startups, shutdowns, and malfunctions (total)." These four hours of excluded data are included within the 16 hours of excluded data.

### c. CEMS Data Exclusion - DLN Tuning

Applicant's Request: "Tuning" involves stepping the gas turbine through various loads while gathering operational and emissions data and adjusting the dry low-NOx combustion system accordingly. Such data allows fine-tuning of the control system to ensure low emissions with dry low-NOx combustion throughout the operational load range. Major tuning sessions are required after the replacement of combustors or other critical equipment. Minor tuning sessions may be necessary after other repairs or maintenance. The applicant notes that tuning sessions are typically determined by General Electric.

The permit currently allows for up to 3 hours of CEMS data to be excluded during any 24-hour block due to tuning with a 5-day advance notice. The applicant requests the ability to exclude all tuning data from the compliance demonstration because of the possibility of higher than normal emission levels. After an overhaul or repair, the gas turbine must be "tuned" to reestablish the low emissions profile. During a tuning session, elevated emissions are somewhat beyond the operator's control due to a new or repaired component as well as the requirement to operate at some low load levels to gather data. The applicant also requests removal of the 5-day advance notice because tuning is often the result of a repair needed to return the units to service as soon as possible.

<u>Department's Review</u>: General Electric's dry low-NOx combustion system must be properly tuned to achieve low emissions of CO and NOx. Such tuning sessions generally occur after a period of shutdown and require operation throughout the load range including very low loads. Elevated CO and NOx emissions may occur, but this information is used to adjust the combustion and control systems as necessary. During these periods, the unit is unable to respond to demands from the electrical grid. So, it is in the best interest of the plant to minimize such tuning sessions in order to rapidly return the units to service.

The applicant provided emissions information for three tuning sessions involving two different gas turbines. The first was conducted on 05/11/03 and resulted in approximately 13 hours of data collected during tuning. The second tuning session occurred on 10/31/03 and lasted approximately 8 hours. The third session went from 11/05/03 through 11/06/03 and covered roughly 26 hours of tuning. Note that not all of the data collected during tuning shows elevated emissions. However, it is possible to show low NOx emissions with high CO emissions (and vice versa) before the system is properly tuned. Data collected during tuning sessions also represents only a small fraction of actual operation of the gas turbines.

The Department agrees that tuning is an important part of maintaining low emissions for the gas turbine systems and is required by the permit. During these tuning sessions, low emissions are not completely within the control of the operators and the unit is unable to respond to demands from the grid. Also, it is difficult to estimate the frequency and duration of tuning sessions throughout the year. Therefore, this condition will be revised to allow the exclusion of tuning data with a requirement to summarize this activity in the Semiannual CEMS Report as required by Condition 25 of the permit.

#### c. CEMS Data Exclusion - New Startup Following an Unplanned Forced Outage

Applicant's Request: The applicant requests a new provision in the permit to address a "warm steam turbine startup". Such a startup would be defined as startup after the steam turbine is shutdown for less than 24 hours and the first stage metal temperature is more than 250° F. The applicant requests up to 8 hours of data exclusion for a warm steam turbine startup during which a gas turbine will operate at low loads to gradually warm up the steam lines and steam turbine. The applicant believes that the request is justified based on the actual operational data provided and Condition 17d which states, "The Department shall also evaluate the operational information and determine whether a separate "warm startup" requirement shall be specified in the Title V operation permit for startup after the steam turbine has been offline for 24 hours or more, but less than 48 hours." This would provide operational flexibility to quickly restart the unit after the steam turbine accidentally trips offline or is taken off line for a quick repair of the steam turbine. On a few occasions, the plant delayed restarting the steam turbine so that the startup would occur after the steam turbine had been down for at least 24 hours. The startup would then qualify as a cold steam turbine startup and provide the necessary period of data exclusion for restart.

Department's Review: The Department agrees that the original permit allows the evaluation of a "warm steam turbine startup". Further discussions with the applicant suggest that there have been a handful of incidents when the steam turbine tripped off line, a corrective action was taken, and the steam turbine was ready to return to service within 24 hours. However, the plant was concerned that the restart would take longer than allowed by permit. The Department agrees to add a provision for the following two limited cases: (1) the steam turbine inadvertently trips off line, or (2) the plant is forced to take the steam turbine off line for repair. This will be referred to as a "startup following an unplanned forced outage". For such incidents, up to eight hours of excluded data due to *all* startups, shutdowns, and malfunctions will be allowed. These cases are narrow in scope and may replace a few steam turbine cold startups. Note that each gas turbine must always meet the current requirement that, "No more than four, 1-hour CEMS emission averages shall be excluded from any 24-hour block compliance average due to standard startups, shutdowns, and malfunctions (total)." These four hours of excluded data are included within the 16 hours of excluded data.

#### c. CEMS Data Exclusion - New Compressor Blade Drying

Applicant's Request: Over time, compressor blades become fouled, which reduces power output and increases fuel consumption as well as costs. Approximately six times each year, each gas turbine is shut down and the compressor blades are washed with water. After a compressor blade wash, General Electric requires operating the gas turbine at very low loads (< 10% base load) to heat and dry the compressor blades. At such loads, the gas turbine is not operating in dry low-NOx combustion mode and the HRSG temperature is not sufficient to initiate operation of the SCR system. Drying is typically complete well within two hours. The applicant requests exclusion of CEMS data from the compliance demonstration due to low-load operation performed to dry compressor blades after a wash.

<u>Department's Review</u>: A compressor blade wash is a necessary maintenance procedure during which the gas turbine is shutdown for a considerable period of time. After completing the wash, the manufacturer requires operators to follow strict procedures at low loads to gradually heat and dry the compressor. This is to prevent damage to the compressor blades due to thermal expansion while drying. Based on the expected maintenance schedule, it is estimated that this activity would result in a negligible amount of data exclusion. Therefore, the Department agrees to add a provision for excluding data collected during compressor blade drying after a wash.

#### c. CEMS Data Exclusion - New Over Speed Trip Test

Applicant's Request: To ensure that the turbine is protected from over speed (i.e, 3960 rpm), an "over speed trip test" is performed. The turbine reaches a speed of 3600 rpm and then speed is gradually increased to 3960 rpm (110%) until a trip is initiated. During this test, the gas turbine is operated at full speed, no load (FSNL) and CO and NOx emissions may be elevated. The over speed trip test is usually conducted for each gas turbine at least once each year, but may also be required after a long outage or a major overhaul. The applicant requests the exclusion of 6 hours of emissions data due to an over speed trip test.

<u>Department's Review</u>: The applicant provided information from General Electric regarding the over speed trip test requirement. According to General Electric, the gas turbine operates at FSNL for approximately 4 hours to thermally and mechanically stabilize the rotor before initiating the turbine trip. The internal gas vanes are then positioned to 88° and the gas turbine is run for an additional 45 minutes. This procedure is intended to provide adequate blade clearance and prevent "rubs". The Department agrees that the over speed trip test is a necessary maintenance activity and will allow the exclusion of monitoring data from the 24-hour compliance averages.

## d. Startup and Shutdown Plan

<u>Applicant's Request</u>: The permit requires submittal of a Startup and Shutdown Plan to consider a revision of the condition regarding cold steam turbine startups. As part of this project, the applicant has submitted these plans and requests removal of the requirement to submit this information.

<u>Department's Review</u>: The Department acknowledges that the requirement to submit startup and shutdown plans has been met. A discussion of the emissions from startups is provided in "Review of Operating Data" which follows this section of the report. The Department agrees to revise this condition to require the plant to maintain the startup and shutdown plan on site.

#### **Review of Operating Data**

Since beginning operation, Bayside Units 1 and 2 have had approximately 16 cold steam turbine startups, which is an average of about one such startup per month for one of the units. To evaluate emissions resulting from cold steam turbine startups, the Department reviewed operational and emissions data from nine specific startups involving most of the Bayside gas turbines. The average duration is 8 hours, but at least two cold steam turbine startups lasted 13 hours. Again, the extended periods of low load operation are needed to heat the very long main and hot reheat steam lines as well as gradually warm up the steam turbine to a uniform temperature. This plant's unique operating procedures are due to the physical configuration of the re-powered units.

Predicted emissions from these startups averaged about 400 pounds of CO per hour and about 100 pounds of NOx per hour. For comparison, potential emissions from the gas turbines operating in full dry low NOx combustion mode without add on controls are approximately 30 pounds of CO per hour and approximately 60 pounds of NOx per hour. The applicant's request for a separate provision to cover startups following an unplanned forced outage is expected to result in similar hourly emission rates. Using the average emissions rates, the following table summarizes the expected range of emissions from 12 cold steam turbine startups and from 12 steam turbine startups following a "forced, unplanned outage".

Pollutant lb/hr, avg.		12 Cold S	ST Startups	12 Unplanned, Forced Outages		
		Hours	TPY	Hours	TPY	
СО	400	8	19.2	4	9.6	
CQ.	400	16	38.4	8	19.2	
NOx	- 100	8	4.8	4	2.4	
NOx	100	16	9.6	8	4.8	

Although the actual data shows that individual hourly emissions may be high, annual impacts are predicted to be relatively low based on the actual frequency. In fact, it is expected that the few steam turbine startups following an unplanned forced outage will replace several cold steam turbine startups.

The Department also reviewed the amount of data being excluded due to startups, shutdowns, and malfunctions. The following table summarizes this information for three quarters of operation.

Table 3B. Summary of Data Exclusion (Hours)

Quarter	Unit	CT1A	CT1B	CT1C	CT2A	CT2B	CT2C	CT2D
	Total Operation	1461	1376	1424				
2 <sup>nd</sup>	Startup/Shutdown	37	35	58				
Quarter	Malfunctions	4	2	1				
2003	Tuning	0	. 0	0				
2003	Total Exclusion	41	37	59				
	% Excluded	3%	3%	4%				
	Total Operation	1666	1601	1714	***			
3 <sup>rd</sup>	Startup/Shutdown	116	76	106				
	Malfunctions	24	0	5				
Quarter 2003	Tuning -	0	0	0				
2003	Total Exclusion	140	76	111				
	% Excluded	8%	5%	6%				
	Total Operation	1666	1601	1714	71	79	82	78
4 <sup>th</sup>	Startup/Shutdown	107	134	124	6	5	8	4
_	Malfunctions	1	0	0	0	0	0	0
Quarter 2003	Tuning	19	0	0	0	0	0	0
2003	Total Exclusion	127	134	124	6	5	8	4
	% Excluded	8%	8%	7%	8%	6%	10%	5%

#### Table Notes:

- 1. Based on the information provided, Bayside Unit 1 had the following operation from 07/01/03 through 12/31/03: CT1A (3331.4 hours); CT1B (3201.75 hours); and CT1C (3428.25 hours). The Department assumed similar operation for each calendar quarter in preparing this table.
- 2. Bayside Unit 2 began operation in the 4<sup>th</sup> quarter of 2003.

Reported malfunctions that affect emission levels have been infrequent. In general, only a few malfunctions have been reported that appear to be directly related to the combined cycle gas turbine units. For example, a review of 3 quarters of data for Bayside Unit 1 (3 gas turbines) indicated that there were 37, 1-hour emissions rates reported as "excluded" due to malfunctions. However, 20 of these were reported in the same quarter for the same gas turbine and were not related to "process equipment". This indicates approximately 2 hours of excluded data per gas turbine per quarter related to malfunctions of the gas turbine systems and/or controls. The few incidents reported as "malfunctions" show that the plant is properly interpreting and applying this provision.

The data also indicates that the number of startups/shutdowns has increased since Bayside Unit 1 first commenced operation. Note that only a few of the reported startup hours resulted from cold steam turbine startups. For the remainder of the "normal" startups, it appears that one or more gas turbines are being taken offline at night during periods of low electrical energy demands and then "restarted" the following day. The remaining gas turbines are used to maintain the operating temperature of the steam turbine. The increased startups are likely the result of higher natural gas prices combined with the fact that Bayside Unit 2 came on line in the 4<sup>th</sup> quarter of 2003 and displaces some of the power production at the plant.

A closer look at emissions from Bayside Unit CT1A shows the following for 92 days of operation during the 3<sup>rd</sup> quarter of 2003.

• There were 80 daily NOx compliance averages of 3.0 ppmvd @ 15% oxygen or less.

- There were 12 daily NOx compliance averages between 3.1 to 3.5 ppmvd @ 15% oxygen.
- There were 76 daily CO compliance averages of 1.0 ppmvd @ 15% oxygen or less.
- There were 16 daily CO compliance averages between 1.1 and 2.0 ppmvd @ 15% oxygen.

In addition, the CEMS data availability has been reported as 95% or greater for all units for each quarter of operation. For each gas turbine, excluded data represents less than 8% of the total operation in each quarter. In summary, the installed units appear to be reliable and operating well with low emissions profiles during normal combined cycle operation. The proposed changes will not result in significant emissions from startups, shutdowns, malfunctions, DLN tuning, compressor blade drying, or over speed trip testing.

#### **Revised Specific Condition 17**

Based on the applicant's requests and the Department's conclusions, Condition 17 will be revised from:

- 17. <u>Alternate Standards and CEMS Data Exclusion</u>: The following permit conditions establish alternate standards or allow the exclusion of monitoring data for specifically defined periods of startup, shutdown, and documented malfunction of a gas turbine. These conditions apply only if operators employ the best operational practices to minimize the amount and duration of emissions during such incidents.
  - (a) Opacity During Startup and Shutdown: During startup and shutdown, the opacity of the exhaust gases shall not exceed 10%, except for up to ten 6-minute averaging periods in a calendar day during which the opacity shall not exceed 20%. Data for each 6-minute averaging period shall be exclusive from other 6-minute averaging periods.
  - (b) Low Load Operation: Excluding startup, shutdown, and documented malfunction, each gas turbine is allowed up to three hours of operation below 50% base load in any 24-hour block, providing: the gas turbine is firing natural gas; the CO and NOx CEMS are functioning properly during such periods and recording valid emissions data within the span range of the monitors; and the gas turbine remains in compliance with the CO and NOx emissions standards based on 24-hour block averages of valid CEMS data.
  - (c) **CEMS Data Exclusion**: For the following identified operational periods, CO and NOx emissions data may be excluded from the 24-hour block compliance averages in accordance with the corresponding requirements.
    - (1) Startup, Shutdown, and Malfunction: Periods of data excluded for gas turbine startup (excluding steam turbine cold startup), shutdown, or documented malfunction shall not exceed four 1-hour emission averages in any 24-hour block due to all such episodes. Gas turbine startup is the commencement of operation of a gas turbine that has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, or pollution control device imbalances, which may result in elevated emissions. Shutdown is the process of bringing a gas turbine off line and ending fuel combustion. A malfunction is any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner. A documented malfunction is a malfunction that is documented within one working day of detection by contacting the Compliance Authority by telephone, facsimile transmittal, or electronic mail.
    - (2) Steam Turbine Cold Startup: Periods of data excluded for a steam turbine cold startup shall not exceed sixteen 1-hour emission averages in any 24-hour block. A "steam turbine cold startup" is defined as startup after the steam turbine has been offline for 24 hours or more or the first stage turbine metal temperature is 250° F or less. Based on actual operating data and experience, the Department may modify this period of data exclusion in the Title V air operation permit without modifying this PSD permit.
    - (3) *Tuning*: If the permittee provides at least five days advance notice prior to a major tuning session performed by the manufacturer's representative, monitoring data during tuning may be excluded

from the 24-hour block compliance averages. Periods of data excluded for such episodes shall not exceed a total of three 1-hour averages in any 24-hour block. Tuning sessions must be performed in accordance with the manufacturer's recommendations. {Permitting Note: As an example, a major tuning session would occur after a combustor change-out. A tuning session may take a few hours each day over a few days. No more than two major tuning sessions would be expected during any year.}

If a CEMS reports emissions in excess of a CO or NOx standard, the permittee shall notify the Compliance Authority within one working day with a preliminary report 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 Compliance Authority may request a written summary report of the incident.

(d) Startup and Shutdown Plan: A "steam turbine cold startup" is defined as startup after the steam turbine has been offline for 24 hours or more or the first stage turbine metal temperature is 250° F or less. To minimize emissions, no more than one gas turbine for each Bayside Unit shall be operated during each steam turbine cold startup. The permittee shall notify the Compliance Authority at least 24 hours in advance of a steam turbine cold startup. For each Bayside Unit, the permittee shall provide a Startup and Shutdown Plan as part of the application for a Title V air operation permit. The plan shall identify startup and shutdown procedures, the duration of each procedure, and the methods used to minimize emissions during these periods. Within 90 days of completing eight steam turbine cold startups following commencement of commercial operation or within 90 days after 12 months of commercial operation (whichever occurs first), the permittee shall submit a revised plan to the Department based on actual operating data and experience. The Department shall review the actual operational data and determine whether data exclusion allowed for a steam turbine cold startup defined in Condition 23 of this section shall be modified to represent good operational practices. The Department shall also evaluate the operational information and determine whether a separate "warm startup" requirement shall be specified in the Title V operation permit for startup after the steam turbine has been offline for 24 hours or more, but less than 48 hours.

As provided by the authority in Rule 62-210.700(5), F.A.C., the above requirements are established in lieu of the provisions of Rule 62-210.700(1), F.A.C. [Design; Rules 62-210.700(5), 62-4.130, and Rule 62-212.400 (BACT), F.A.C.]

#### To:

- 17. <u>Alternate Standards and CEMS Data Exclusion</u>: The following permit conditions establish alternate standards or allow the exclusion of monitoring data for specifically defined periods of startup, shutdown, and malfunction. These conditions apply only if operators employ the best operational practices to minimize the amount and duration of emissions during such incidents.
  - a. Opacity During Startup and Shutdown: During startup and shutdown, the opacity of the exhaust gases shall not exceed 10%, except for up to ten 6-minute averaging periods in a calendar day during which the opacity shall not exceed 20%. Data for each 6-minute averaging period shall be exclusive from other 6-minute averaging periods.
  - b. Low Load Operation: Excluding startup, shutdown, malfunction, DLN tuning, compressor blade drying, and over speed trip tests, each gas turbine may operate below 50% base load providing: the gas turbine is firing natural gas and operating in full dry low-NOx combustion mode; the CO and NOx CEMS are functioning properly during such periods and recording valid emissions data within the span range of the monitors; and the gas turbine remains in compliance with the CO and NOx emissions standards (24-hour block averages).
  - c. CEMS Data Exclusion: For the following specified operational periods, CO and NOx emissions data may be excluded from the 24-hour block compliance averages in accordance with the corresponding requirements.

- (1) Definitions: Rule 62-210.200(231), F.A.C. defines "shutdown" as the cessation of the operation of an emissions unit for any purpose. Rule 62-210.200(160), F.A.C. defines "malfunction" as any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner. Rule 62-210.200(246), F.A.C. defines "startup" as the commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
- (2) Standard Startups, Shutdowns, and Malfunctions: For each gas turbine, no more than four 1-hour CEMS emission averages shall be excluded from any 24-hour block compliance average due to standard startups, shutdowns, and malfunctions (total).
- (3) Cold Steam Turbine Startup: "Cold steam turbine startup" means a startup after the steam turbine has been offline for 24 hours or more, or the first stage turbine metal temperature is 250° F or less. To minimize emissions, no more than one gas turbine per Bayside Unit shall be operated during a cold steam turbine startup. No more than sixteen 1-hour CEMS emission averages shall be excluded from the 24-hour block compliance averages due to a cold steam turbine startup. In addition, no more than sixteen 1-hour CEMS emission averages shall be excluded from any 24-hour block compliance average due to cold steam turbine startup. In the event of a cold steam turbine startup and standard startups, shutdowns and/or malfunctions within the same 24 hour period, a total of sixteen 1-hour CEMS emissions averages may be excluded with no more than four of those sixteen 1-hour CEMS emissions averages being excluded due to standard startups, shutdowns, and malfunctions (total). This condition applies only to the gas turbine being used for the cold steam turbine startup. The permittee shall notify the Compliance Authority no later than 24 hours after beginning a cold steam turbine startup. Notification may be by phone, facsimile, email, or letter.
- (4) Steam Turbine Startup Following an Unplanned Forced Outage: "Steam turbine startup following unplanned, forced outage" means startup when the first stage turbine metal temperature is 250° F or more and occurs within 24 hours after either (1) the steam turbine inadvertently trips offline, or (2) the plant is forced to take the steam turbine offline for repair. To minimize emissions, no more than one gas turbine per Bayside Unit shall be operated during a steam turbine startup following an unplanned forced outage. No more than eight 1-hour CEMS emissions averages shall be excluded from the 24-hour block compliance averages due to a steam turbine startup following an unplanned forced outage. In addition, no more than eight 1-hour CEMS emission averages shall be excluded from any 24-hour block compliance average due to steam turbine startups following an unplanned forced outage. In the event of a startup following an unplanned forced outage and standard startups, shutdowns and/or malfunctions within the same 24 hour period, a total of eight 1-hour CEMS emissions averages may be excluded with no more than four of those eight 1-hour CEMS emissions averages being excluded due to standard startups, shutdowns, and malfunctions (total). This condition applies only to the gas turbine being used for steam turbine startup following an unplanned forced outage. The permittee shall notify the Compliance Authority no later than 24 hours after beginning a steam turbine startup following an unplanned forced outage. Notification may be by phone, facsimile, email, or letter and shall include the reason for the unplanned forced outage.
- (5) DLN Tuning: "DLN Tuning" means operating the gas turbine at intermittent loads throughout the full load range in order to adjust and tune the dry low-NOx (DLN) combustion system. DLN tuning shall be conducted in accordance with manufacturer' recommendations. Emissions data collected during DLN tuning may be excluded from the 24-hour block compliance averages. {Permitting Note: For example, a major tuning session would occur after combustor change-out.}
- (6) Compressor Blade Drying: Following a compressor blade wash in accordance with the manufacturer's recommendations, the permittee may operate a gas turbine at very low loads to heat

and dry the compressor blades. Emissions data collected while drying the compressor blades may be excluded from the 24-hour block compliance averages. {Permitting Note: A gas turbine would typically operate at approximately 10% of base load or less to perform compressor blade drying.}

(7) Over Speed Trip Test: As a periodic maintenance practice, the permittee may perform over speed trip tests in accordance with the manufacturer's recommendations. Emissions data collected while conducting over speed trip tests may be excluded from the 24-hour block compliance averages. {Permitting Note: During this test, the gas turbine is operated at full speed, no load (FSNL) for approximately 5 to 6 hours. The unit is gradually accelerated to 110% speed (3960 rpm) to initiate a trip and then coasts down normally. Over speed trip tests are typically performed after a long outage or a major component overhaul.}

To the extent practicable, the permittee shall minimize the amount and duration of emissions during periods of startup, shutdown, malfunction, DLN tuning, compressor blade drying, and over speed trip testing. If a CEMS reports emissions in excess of an emissions standard (24-hour block), the permittee shall notify the Compliance Authority within one working day with a preliminary report 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 Compliance Authority may request a written summary report of the incident. All emissions data allowed for exclusion shall be summarized in the Semiannual CEMS Report required in Condition 25 of this subsection.

d. Startup and Shutdown Plan: The permittee shall maintain on site a "Startup and Shutdown Plan" that describes procedures for startup and shutdown of the Bayside Units.

As provided by the authority in Rule 62-210.700(5), F.A.C., the above requirements are established in lieu of the provisions of Rule 62-210.700(1), F.A.C.

{Permitting Note: The durations for a cold steam turbine startup and a steam turbine startup following an unplanned forced outage are not typical for combined cycle units. The Bayside Units utilize the existing Gannon steam turbines. Operating procedures require one gas turbine to operate at low loads for extended periods to gradually warm the main and hot reheat steam lines to the steam turbine as well as the steam turbine. Some steam lines are in excess of 1700 feet. Such startups are expected to occur infrequently.} [Design; Rules 62-4.130, 62-210.700(5), and 62-212.400 (BACT), F.A.C.; Permit No. PSD-FL-301B]

#### 4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Jeff Koerner is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

#### STATEMENT OF BASIS

#### Title V Permit Project

Project: Title V Air Operation Permit Renewal

DRAFT Permit No. 0570040-023-AV Applicant: Tampa Electric Company

Plant: H. L. Culbreath Bayside Power Station

Facility ID No. 0570040

Location: 3602 Port Sutton Road in Tampa, Hillsborough County, Florida

The purpose of this permit is to renew the Title V air operation permit for this facility, include the new Bayside Units 1 and 2 constructed pursuant to original Permit No. PSD-FL-301, and to incorporate the revised conditions of air construction Permit No. PSD-FL-301B (which is being issued simultaneously with this DRAFT Title V air operation permit). The PSD air construction permit authorized the re-powering of the existing F. J. Gannon steam turbine-electrical generators with combined cycle gas turbines firing natural gas. The associated coal-fired boilers have been permanently shut down. The new gas turbines for Bayside Units 1 and 2 have been constructed and are in operation. For a discussion of the revisions included in Permit No. PSD-FL-301B, see the Technical Evaluation and Preliminary Determination included in this package.

#### **Facility Description**

The H. L. Culbreath Bayside Power Station is an electric power plant consisting of Bayside Units 1 and 2. Bayside Unit 1 is a "3-on-1" combined cycle gas turbine system with a nominal generating capacity of 746 MW. Bayside Unit 2 is a "4-on-1" combined cycle gas turbine system with a nominal generating capacity of 1090 MW. Based on the application to renew the Title V air operation permit received on July 2, 2004:

Title III: The facility is not a major source of hazardous air pollutants (HAPs).

Title IV: The gas turbines are subject to the Phase II Acid Rain program.

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.

PSD: The facility is a PSD-major facility pursuant to Rule 62-212.400, F.A.C.

PPSC: The facility is not subject to power plant site certification.

NESHAP: The gas turbines are considered "existing units" with regard to National Emissions Standard for Hazardous Air Pollutants for stationary combustion turbines in Subpart YYYY of 40 CFR 63.

NSPS: The gas turbines are subject to the New Source Performance Standards for stationary gas turbines in Subpart GG of 40 CFR 60.

#### **New Emissions Units**

The new units are described as follows.

EU No.	Bayside Gas	Turbine (GT)	Steam Turbines (ST)		Total	
EU NO.	Unit No.	MW, Shaft	Unit No.	MW, Steam	10141	
020	CT-1A	169 MW				
021	CT-1B	169 MW	No. 5	239	746	
022	CT-1C	169 MW				
023	CT-2A	169 MW	No. 6	<u> </u>		
024	CT-2B	169 MW		414	1090	
025	CT-2C	169 MW		414	1090	
026	CT-2D	169 MW				
Totals	7 GTs	1183 MW	2 STs	653	1836	

Description: Each emissions unit consists of a General Electric Model PG7241(FA) gas turbine-electrical generator set, an automated gas turbine control system, an inlet air filtration system, an evaporative inlet air cooling system, an unfired heat recovery steam generator (HRSG), a single exhaust stack, and associated support equipment. The project also includes electric fuel heaters and cooling towers.

#### STATEMENT OF BASIS

Stack: Each gas turbine has a single exhaust stack that is 150 feet tall and 19.0 feet in diameter. Exhaust gases exit the stack with a volumetric flow rate of approximately 1,030,000 acfm at 220° F.

Heat Input: Natural gas is the exclusive fuel. At a compressor inlet air temperature of 59° F and firing 1842 MMBtu (HHV) per hour of natural gas, each unit produces a nominal 169 MW of shaft-driven electricity.

Generating Capacity: The nameplate generating capacity is shown above for the steam turbine-electrical generators (ST). The final design may not fully utilize the nameplate generating capacity.

Controls: The efficient combustion of natural gas at high temperatures minimizes the emissions of carbon monoxide (CO), particulate matter (PM/PM10), and volatile organic compounds (VOC). Firing natural gas as the exclusive fuel minimizes emissions of sulfuric acid mist (SAM) and sulfur dioxide (SO2) because natural gas contains only small amounts of sulfur. A selective catalytic reduction (SCR) system combined with dry low-NOx (DLN) combustion technology reduces nitrogen oxides (NOx) emissions. A Continuous Assurance Monitoring (CAM) Plan is not required for the SCR systems because NOx is continuously monitored for compliance.

Continuous Monitors: Each gas turbine is equipped with continuous emissions monitoring systems (CEMS) to measure and record CO and NOx emissions as well as flue gas carbon dioxide content.

CAM Plan: There is a standard for CO emissions, but there is no add-on control device required. Although an SCR system is operated to achieve the NOx standard, compliance is continuously demonstrated by CEMS. Therefore, a Compliance Assurance Monitoring (CAM) Plan is not required for these units.

{Permitting Notes: These emissions units are regulated under: NSPS Subpart GG (Gas Turbines) in 40 CFR 60 adopted and incorporated by reference in Rule 62-204.800, F.A.C.; the Prevention of Significant Deterioration (PSD) as specified in Permit No. PSD-FL-301 (as modified) and Rule 212.400, F.A.C.; the Best Available Control Technology (BACT) for carbon monoxide (CO), particulate matter (PM/PM10), and volatile organic compounds (VOC) as specified in Permit No. PSD-FL-301 (as modified) and Rule 62-212.400(6), F.A.C.; and the Phase II Acid Rain Program as specified in Section IV of this permit.}

#### **Previously Existing Emissions Units**

This facility consists of the following emissions unit remaining from the F. J. Gannon Station.

EU No.	Description
800	F. J. Gannon Station Fuel Yard

Description: Activities related to the existing fuel yard include: barge unloading of coal (clamshell and continuous); railcar unloading of coal; truck, barge, and train unloading of flux; and the transfer and storage of these materials.

Fugitive Emissions Control: Loading and unloading activities are controlled by enclosures and dust suppressants. Rotoclones control two conveyors. Water sprays or chemical wetting agents and stabilizers are used coal storage piles as necessary.

Primary Regulatory Requirements: These activities are subject to the following requirements: Rule 62-296.711, F.A.C. (Materials Handling, Sizing, Screening, Crushing and Grinding Operation); and Rule 62-296.700, F.A.C. (Reasonably Available Control Technology (RACT) for Particulate Matter). The existing fuel yard equipment served F. J. Gannon Station Units 1 through 6. The coal-fired boilers are permanently shut down. The coal yard is not currently in operation.

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

#### Conclusion

Based on reasonable assurances of compliance provided by the applicant and the Responsible Official's certification of compliance, the Department intends to issue this DRAFT Title V Air Operation Permit under the provisions of Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-210, 62-213 and 62-214 of the Florida Administrative Code (F.A.C.). The permit authorizes operation of the facility shown on the application and approved drawings, plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

# TITLE V AIR OPERATION PERMIT DRAFT PERMIT NO. 0570040-023-AV

#### Permittee

Facility ID No. 0570040
Tampa Electric Company
H. L. Culbreath Bayside Power Station
3602 Port Sutton Road in Tampa
Hillsborough County, Florida

## Permitting Authority

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

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

## Compliance Authority

Environmental Protection Commission of Hillsborough County 1410 North 21st Street Tampa, Florida 33605

> Telephone: 813/272-5530 Fax: 813/272-5605

## Title V Air Operation Permit Draft Permit No. 0570040-023-AV

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#### TITLE V AIR OPERATION PERMIT

#### Permittee:

Tampa Electric Company P.O. Box 111 Tampa, Florida 33601-0111 H. L. Culbreath Bayside Power Station Facility ID No. 0570040

Draft Permit No. 0570040-023-AV

This Title V air permit authorizes operation of the H. L. Culbreath Bayside Power Station, which is located in Hillsborough County at Port Sutton Road in Tampa, Hillsborough County, Florida. The permit is a renewal of the initial Title V air operation permit for this existing facility (formerly the F. J. Gannon Station) as well as a revision to incorporate the new Bayside combined cycle gas turbine Units 1 and 2. The Standard Industrial Classification (SIC) code for this electric power plant is 4911. The UTM Coordinates are: Zone 17, 360.1 km East and 3087.5 km North (Latitude: 28° 02' 31" North and Longitude: 82° 25' 31" West).

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

#### **Appendices**

The following appendices are a part of this permit:

Appendix A-1. Citation Formats

Appendix AR. Phase II Acid Rain Permit Application/Compliance Plan

Appendix BD. Final BACT Determinations and Emissions Standards (Gas Turbines)

Appendix CD. Consent Decree (U.S. EPA vs. TECO)

Appendix CFJ. Consent Final Judgment (DEP vs. TECO)

Appendix CT. Common Compliance Test Requirements

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

Appendix GG. NSPS Subpart GG Requirements for Stationary Gas Turbines

Appendix TV-4. Title V Conditions

Appendix XS. Semi-Annual Continuous Monitor Systems Report

Effective Date: January 1, 2005
Renewal Application Due Date: July 5, 2009
Expiration Date: December 31, 2009

(DRAFT)

Michael G. Cooke, Director Division of Air Resource Management

#### Subsection A. Facility Description

The H. L. Culbreath Bayside Power Station is an electric power plant primarily consisting of Bayside Units 1 and 2. Bayside Unit 1 is a "3-on-1" combined cycle gas turbine system with a nominal generating capacity of 746 MW. Bayside Unit 2 is a "4-on-1" combined cycle gas turbine system with a nominal generating capacity of 1090 MW. These units fire natural gas as the exclusive fuel and employ selective catalytic reduction (SCR) to reduce emissions of nitrogen oxides.

Based on the application to renew the Title V air operation permit received on July 2, 2004:

Title III: The facility is not a major source of hazardous air pollutants (HAPs).

Title IV: The gas turbines are subject to the Phase II Acid Rain requirements.

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.

PSD: The facility is a PSD-major facility pursuant to Rule 62-212.400, F.A.C.

PPSC: The facility is not subject to power plant site certification.

<u>NESHAP</u>: No regulated units are subject to a National Emissions Standard for Hazardous Air Pollutants. The gas turbines are considered "existing units" in accordance with Subpart YYYY of 40 CFR 63.

NSPS: The gas turbines are subject to the New Source Performance Standards in Subpart GG of 40 CFR 60.

#### Subsection B. Emissions Units Summary

This permit specifically regulates the following emissions units.

EU No.	Brief Description				
008	F. J. Gannon Station Fuel Yard				
Bayside Unit 1 - Three combined cycle gas turbines with one steam-electrical generator (746 MW, total)					
020	CT-1A - Combined cycle gas turbine (169 MW, shaft)				
021	CT-1B - Combined cycle gas turbine (169 MW, shaft)				
022	CT-1C - Combined cycle gas turbine (169 MW, shaft)				
Bayside U	nit 2 - Four combined cycle gas turbines with one steam-electrical generator (1090 MW, total)				
023	CT-2A - Combined cycle gas turbine (169 MW, shaft)				
024	CT-2B Combined cycle gas turbine (169 MW, shaft)				
025	CT-2C - Combined cycle gas turbine (169 MW, shaft)				
026	CT-2D Combined cycle gas turbine (169 MW, shaft)				

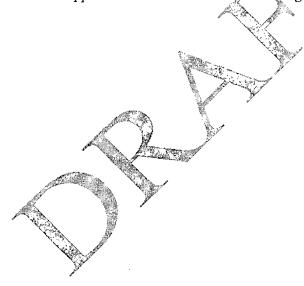
Other than the fuel yard identified above, the F. J. Gannon Units 1 - 6 and other emissions units associated with the coal-fired boilers are permanently shut down (Emissions Units 001 through 007 and 009 through 019). This facility also includes other miscellaneous insignificant emissions units and activities. Please reference the permit number, facility identification number, and the corresponding emissions unit identification numbers on all correspondence, test submittals, applications, etc.

#### Subsection C. Relevant Documents

The following documents are not a part of this permit; however, they are specifically related to this permitting action and are on file with permitting authority

- Application to revise the Title V air operation permit to incorporate Units 1 and 2 received on May 5, 2004;
- EPCHC comments dated May 26, 2004;
- Department's request for additional information dated June 4, 2004;
- Additional information from TECO submitted on September 2, 2004;
- Application to renew Title V air operation permit received July 2, 2004;
- Phase II Acid Rain Part Application dated July 2, 2004;
- Risk Management Plan submitted to the RMP Reporting Center dated June 18, 2004.
- Department's request for additional information dated August 27, 2004;
- EPCHC comments dated August 24, 2004;
- The applicant's response to the request for additional information dated (placeholder);
- U.S. EPA comments dated (placeholder);
- Public notice published on (placeholder);
- Proposed Title V Permit posted for U.S. EPA review on (placeholder);
- Final Title V Permit issued (placeholder); and
- Statements of Basis provided with draft, proposed, and final permits.

{Permitting Note: An application for permit revision to incorporate Bayside Units 1 and 2 into the existing Title V air operation permit for the F. J. Gannon Station was received on May 5, 2004. An application to renew the Title V air operation permit was received on July 2, 2004. Because of the substantial changes at this facility, these two applications were combined into a single project to renew the Title V air operation permit.}



The following conditions apply facility-wide.

#### **ADMINISTRATIVE REQUIREMENTS**

- II.1 <u>Title V Conditions</u>: The Title V Conditions in Appendix TV-4 are a part of this permit, but are distributed only to the permittee. Other persons shall be provided a copy when requested or otherwise appropriate. [Florida Administrative Code]
- II.2 <u>Insignificant Emissions Units and/or Activities.</u> Insignificant emissions units and/or activities are identified in Appendix I-1, which is a part of this permit. [Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]
- II.3 Settlement Agreements: The Consent Final Judgment (DEP vs. TECO, dated December 6, 1999) and the Consent Decree (U.S. vs. TECO, dated February 29, 2000) are made a part of this permit and attached as Appendices CFJ and CD, respectively. The permittee shall comply with the Consent Final Judgment and the Consent Decree. If this conditions of this permit conflict with the Consent Decree, the terms and conditions of the Consent Decree control. Upon expiration of the Consent Decree the Title V permit shall be modified to incorporate any terms and conditions that are deemed necessary by the permitting authority for the continued operation of the facility. [Rules 62-4.070(3), (5) and 62-213.440, F.A.C.]
- II.4 <u>Date of Records</u>: When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one. [Rule 62-213.440, F.A.C.]
- II.5 <u>Statement of Compliance</u>: The annual statement of compliance shall be submitted to the Department and EPA within sixty (60) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C. {Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2 and 3, F.A.C. See also Condition 51 in Appendix TV-4.} [Rule 62-213.440(3)(a)2, F.A.C.]
- II.6 Certification by Responsible Official (R.O.): 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.]
- II.7 <u>Compliance Authority</u>: The permittee shall submit all compliance related notifications and reports required of this permit to the Air Management Division of the Environmental Protection Commission of Hillsborough County at 1410 North 21st Street, Tampa, Florida 33605. The telephone number is 813/272-5530 and the fax number is 813/272-5605.
- II.8 Permitting Authority: All documents related to applications for permits to construct, operate or modify an emissions unit shall be submitted to the Florida Department of Environmental Protection's Bureau of Air Regulation at 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The telephone number is 850/488-0114 and the fax number is 850/922-6979. Copies of all applications shall also be provided to the Compliance Authority and the EPA Region 4 Office.
- II.9 EPÁ Region 4 Office: Any reports, data, notifications, certifications, and requests required to be sent to the EPA Region 4 Office 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. The telephone number is 404/562-9155 and the fax number is 404/562-9163.

- II.10 <u>Prevention of Accidental Releases</u>: The Responsible Official has certified that the Risk Management Plan was submitted to the RMP Reporting Center.
  - 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.
  - d. 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. The telephone number is 850/413-9921 and the fax number is 850/488-1739.

Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 3346, Merrifield, VA 22116-3346. The telephone number is 703/816-4434.

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. The telephone number is 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.

{Permitting Note: This facility handles and stores anhydrous ammonia.} [Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

#### **EMISSIONS AND CONTROLS**

- II.11 Excess Emissions Allowed: Unless otherwise specified in this permit, excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- II.12 <u>Excess Emissions Prohibited</u>: 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. [Rule 62-210.700(4), F.A.C.]
- II.13 <u>Excess Emissions Notification</u>: In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program 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.]
- II.14 <u>VOC or OS Emissions</u>: No person shall 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. Nothing

- was deemed necessary and ordered at this time. [Rule 62-296.320(1)(a), F.A.C.; application for Title V permit renewal received July 2, 2004]
- II.15 Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Permit No. PSD-FL-301A; Rules 62-296.320(2) and62-210.200(203), F.A.C.]
- II.16 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 opacity of which is equal to or greater than 20 percent. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. [Rule 62-296.320(4)(b)] and 4, F.A.C.]
- II.17 Emissions of Unconfined Particulate Matter: The following activities may result in unconfined particulate matter: vehicular traffic on paved and unpaved roads; wind blown dust from yard areas; and periodic abrasive blasting. The following reasonable precautions shall be taken as necessary to control the emissions of unconfined particulate matter: applying chemicals or water to unpaved roads and unpaved yard areas; paving and maintenance of roads, parking areas, and yards; landscaping or planting of vegetation; and confining abrasive blasting when possible. Other techniques may be deemed appropriate as necessary. See also Condition 57 in Appendix TV-4. [Rule 62-296.320(4)(c), F.A.C.; Application for Title V permit renewal received July 2, 2004]



# Subsection A. Combined Cycle Gas Turbines

#### **DESCRIPTION OF EMISSIONS UNITS**

The specific conditions in this subsection apply to the following emissions units.

Emissions Units 020 – 026: Combined Cycle Gas Turbines

EU No.	Bayside Ga	s Turbine (GT)	Steam Tu	urbines (ST)	Total			
EO No.	Unit No. MW, Shaft Unit No. MW, Steam	10141	* *					
020	CT-1A	169 MW	No. 5	No. 5				
021	CT-1B	169 MW			239	746		
022	CT-1C	169 MW						
023	CT-2A	169 MW	No. 6					
024	CT-2B	169 MW		414	1090			
025	CT-2C	169 MW		414	1090			
026	CT-2D	169 MW			À			
Totals	7 GTs	1183 MW	2 STs	653	1836			

Description: Each emissions unit consists of a General Electric Model PG7241(FA) gas turbine-electrical generator set, an automated gas turbine control system, an inlet air filtration system, an evaporative inlet air cooling system, an unfired heat recovery steam generator (HRSG), a single exhaust stack, and associated support equipment. The project also includes electric fuel heaters and cooling towers.

Stack: Each gas turbine has a single exhaust stack that is 150 feet tall and 19.0 feet in diameter. Exhaust gases exit the stack with a volumetric flow rate of approximately 1,030,000 acfm at 220° F.

Heat Input: Natural gas is the exclusive fuel. At a compressor inlet air temperature of 59° F and firing 1842 MMBtu (HHV) per hour of natural gas, each unit produces a nominal 169 MW of shaft-driven electricity.

Generating Capacity: The nameplate generating capacity is shown above for the steam turbine-electrical generators (ST). The final design may not fully utilize the nameplate generating capacity.

Controls: The efficient combustion of natural gas at high temperatures minimizes the emissions of carbon monoxide (CO), particulate matter (PM/PMio), and volatile organic compounds (VOC). Firing natural gas as the exclusive fuel minimizes emissions of sulfuric acid mist (SAM) and sulfur dioxide (SO2) because natural gas contains only small amounts of sulfur. A selective catalytic reduction (SCR) system combined with dry low-NOx (DLN) combustion technology reduces nitrogen oxides (NOx) emissions. A Continuous Assurance Monitoring (CAM) Plan is not required for the SCR systems because NOx is continuously monitored for compliance.

Continuous Monitors: Each gas turbine is equipped with continuous emissions monitoring systems (CEMS) to measure and record CO and NOx emissions as well as flue gas carbon dioxide content.

CAM Plan: There is a standard for CO emissions, but there is no add-on control device required. Although an SCR system is operated to achieve the NOx standard, compliance is continuously demonstrated by CEMS. Therefore, a Compliance Assurance Monitoring (CAM) Plan is not required for these units.

{Permitting Notes: These emissions units are regulated under: NSPS Subpart GG (Gas Turbines) in 40 CFR 60 adopted and incorporated by reference in Rule 62-204.800, F.A.C.; the Prevention of Significant Deterioration (PSD) as specified in Permit No. PSD-FL-301 (as modified) and Rule 212.400, F.A.C.; the Best Available Control Technology (BACT) for carbon monoxide (CO), particulate matter (PM/PM10), and volatile organic compounds (VOC) as specified in Permit No. PSD-FL-301 (as modified) and Rule 62-212.400(6), F.A.C.; and the Phase II Acid Rain Program as specified in Section IV of this permit.}

# Subsection A. Combined Cycle Gas Turbines

# **EQUIPMENT AND MODIFICATIONS**

A.1 <u>Modifications</u>: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Permit No. PSD-FL-301A; Rules 62-210.200 and 62-210.300(1), F.A.C.]

# ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

- A.2 Permitted Capacity: The maximum heat input rate to each gas turbine shall not exceed 1842 MMBtu per hour while producing approximately 169 MW (shaft). The maximum heat input rate is based on operation at 100% load, a compressor inlet air temperature of 59° F, the higher heating value (HHV) of natural gas and expected performance levels. Heat input rates will vary depending upon gas turbine characteristics, ambient conditions, and evaporative cooling. The permittee shall provide the 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. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department. [Permit No. PSD-FL-301A; Rules 62-4.160(2), 62-210.200(PTE), and 62-212.400(BACT), F.A.C.]
- A.3 Allowable Fuels: Each gas turbine shall fire only pipeline-quality natural gas. The fuel sulfur content shall not exceed 2 grains per 100 SCF of natural gas based on a 12-month rolling average. Compliance shall be demonstrated each month by compiling the daily fuel sulfur analyses provided by the pipeline vendor. Methods for determining the sulfur content of the natural gas shall be ASTM methods D4084-82, D3246-81 or equivalent methods. No other fuels are allowed. [Permit No. PSD-FL-301A; Rules 62-210.200(PTE) and 62-213.410, F.A.C.; DEP/TEC Consent Final Judgment; EPA/TEC Consent Decree]
- A.4 Hours of Operation: The hours of operation for each gas turbine are not limited (8760 hours per year). [Permit No. PSD-FL-301A; Rule 62-210.200(PTE), F.A.C.]
- A.5 Operating Procedures: The Best Available Control Technology (BACT) determinations established by this permit rely on "good operating practices" to minimize emissions. Therefore, all operators and supervisors shall be properly trained to operate and maintain the gas turbines and pollution control systems in accordance with the guidelines and procedures established by the manufacturer. The training shall include good operating practices as well as methods to minimize emissions during startup and shutdown. [Permit No. PSD-FL-301A; Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

# AIR POLLUTION CONTROL EQUIPMENT

- A.6 <u>DLN Combustion Technology</u>: The permittee shall install, tune, operate and maintain the General Electric dry low-NOx combustion system (DLN 2.6 or better) to provide efficient lean premix combustion. Prior to the initial emissions performance tests for each gas turbine, the DLN combustors and automated gas turbine control system shall be tuned to reduce CO and NOx emissions. Thereafter, each system shall be maintained and tuned in accordance with the manufacturer's recommendations. [Permit No. PSD-FL-301A; Rule 62-212.400(BACT), F.A.C.]
- A.7 SCR System: The permittee shall install, tune, operate and maintain a selective catalytic reduction (SCR) system to reduce NOx emissions from each combined cycle gas turbine. The SCR system shall consist of an ammonia injection grid, catalyst, ammonia storage, a monitoring and control system, electrical system, piping, and other ancillary equipment. The SCR system shall be designed to reduce NOx emissions while minimizing ammonia slip within the permitted levels. {Permitting Note: In general, the SCR system is placed in service once the exhaust gas temperature reaches 446° F.} [Permit No. PSD-FL-301A; DEP/TEC Consent Final Judgment; EPA/TEC Consent Decree; Rule 62-4.070(3), F.A.C.]

# Subsection A. Combined Cycle Gas Turbines

#### **EMISSION LIMITATIONS AND STANDARDS**

- A.8 Emissions Standards Based on Performance Tests: The following standards apply to each combined cycle gas turbine as determined by emissions performance tests conducted at permitted capacity. The mass emission limits are based on a compressor inlet temperature of 59° F. The permittee shall provide the 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. Operating data shall be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department.
  - a. Ammonia Slip: Subject to the requirements of Condition A.15 in this section, each SCR system shall be designed and operated for an ammonia slip target of less than 5 ppmvd corrected to 15% oxygen based on the average of three test runs. [Rule 62-4.070(3), F.A.C.]
  - b. Carbon Monoxide (CO): CO emissions shall not exceed 28.7 pounds per hour and 7.8 ppmvd corrected to 15% oxygen based on the average of three test runs as determined by EPA Method 10. [Rule 62-212.400(BACT), F.A.C.]
  - c. Nitrogen Oxides (NOx): NOx emissions shall not exceed 23.1 pounds per hour and 3.5 ppmvd corrected to 15% oxygen based on the average of three test runs as determined by EPA Method 7E. NOx emissions are defined as oxides of nitrogen reported as NO2. [DEP/TEC Consent Final Judgment; EPA/TEC Consent Decree; 40 CFR 60.332]
  - d. Particulate Matter (PM/PM10): The exclusive firing of pipeline-quality natural gas combined with the efficient combustion design and operation of each gas turbine represent the Best Available Control Technology (BACT) requirements for particulate matter emissions. Compliance with carbon monoxide and visible emissions standards shall serve as continuous indicators of efficient combustion to minimize particulate matter emissions. No performance tests are required. [Rule 62-212.400(BACT), F.A.C.]
  - e. Sulfuric Acid Mist (SAM) and Sulfur Dioxide (SO2): The exclusive firing of pipeline-quality natural gas effectively limits potential emissions of SO2 and SAM. No performance tests are required. [Design; DEP/TEC Consent Final Judgment; EPA/TEC Consent Decree; 40 CFR 60.333]
  - f. Visible Emissions: Visible emissions shall not exceed 10% opacity, based on a 6-minute average as determined by EPA Method 9. Except as allowed by Condition No. A.11 of this section, this standard applies to all loads. [Rule 62-212.400(BACT), F.A.C.]
  - g. Volatile Organic Compounds (VOC): The exclusive firing of pipeline-quality natural gas combined with the efficient combustion design and operation of each gas turbine represent the Best Available Control Technology (BACT) requirements for VOC emissions. Compliance with carbon monoxide standards shall serve as a continuous indicator of efficient combustion to minimize VOC emissions.

    No performance tests are required. [Permit No. PSD-FL-301A; Rule 62-212.400(BACT), F.A.C.]
- A.9 <u>Emissions Standards Based on CEMS Data</u>: The following standards apply to each gas turbine based on data collected from each required Continuous Emissions Monitoring System (CEMS).
  - a. Carbon Monoxide (CO): CO emissions shall not exceed 9.0 ppmvd corrected to 15% oxygen based on a 24-hour block average of CEMS data.
  - b. Nitrogen Oxides (NOx): NOx emissions shall not exceed 3.5 ppmvd corrected to 15% oxygen based on a 24-hour block average of CEMS data.

Each 24-hour block average shall start at midnight each operating day and shall be calculated from 24 consecutive 1-hour averages. If a unit operates less than 24 hours during the block, the 24-hour block average shall be the average of the available valid 1-hour averages. [Permit No. PSD-FL-301A; Rules

# Subsection A. Combined Cycle Gas Turbines

62-212.400(BACT) and 62-4.070(3), F.A.C.]

# STARTUP, SHUTDOWN, MALFUNCTION, AND LOW LOAD OPERATION

- A.10 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. All such preventable emissions shall be included in the compliance averages determined from the CO and NOx CEMS data. [Permit No. PSD-FL-301A; Rule 62-210.700(4), F.A.C.]
- A.11 <u>Alternate Standards and CEMS Data Exclusion</u>: The following permit conditions establish alternate standards or allow the exclusion of monitoring data for specifically defined periods of startup, shutdown, and malfunction. These conditions apply only if operators employ the best operational practices to minimize the amount and duration of emissions during such incidents.
  - a. Opacity During Startup and Shutdown: During startup and shutdown, the opacity of the exhaust gases shall not exceed 10%, except for up to ten 6-minute averaging periods in a calendar day during which the opacity shall not exceed 20%. Data for each 6-minute averaging period shall be exclusive from other 6-minute averaging periods.
  - b. Low Load Operation: Excluding startup, shutdown, malfunction, DLN tuning, compressor blade drying, and over speed trip tests, each gas turbine may operate below 50% base load providing: the gas turbine is firing natural gas and operating in full dry low-NOx combustion mode; the CO and NOx CEMS are functioning properly during such periods and recording valid emissions data within the span range of the monitors; and the gas turbine remains in compliance with the CO and NOx emissions standards (24-hour block averages).
  - c. **CEMS Data Exclusion**: For the following specified operational periods, CO and NOx emissions data may be excluded from the 24-hour block compliance averages in accordance with the corresponding requirements.
    - (1) Definitions: Rule 62-210.200(231), F.A.C. defines "shutdown" as the cessation of the operation of an emissions unit for any purpose. Rule 62-210.200(160), F.A.C. defines "malfunction" as any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner. Rule 62-210.200(246), F.A.C. defines "startup" as the commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
    - (2) Standard Startups, Shutdowns, and Malfunctions: For each gas turbine, no more than four 1-hour CEMS emission averages shall be excluded from any 24-hour block compliance average due to standard startups, shutdowns, and malfunctions (total).
    - Gold Steam Turbine Startup: "Cold steam turbine startup" means a startup after the steam turbine has been offline for 24 hours or more, or the first stage turbine metal temperature is 250°. For less. To minimize emissions, no more than one gas turbine per Bayside Unit shall be operated during a cold steam turbine startup. No more than sixteen 1-hour CEMS emission averages shall be excluded from the 24-hour block compliance averages due to a cold steam turbine startup. In addition, no more than sixteen 1-hour CEMS emission averages shall be excluded from any 24-hour block compliance average due to cold steam turbine startup. In the event of a cold steam turbine startup and standard startups, shutdowns and/or malfunctions within the same 24 hour period, a total of sixteen 1-hour CEMS emissions averages may be excluded with no more than four of those sixteen 1-hour CEMS emissions averages being

# Subsection A. Combined Cycle Gas Turbines

- excluded due to standard startups, shutdowns, and malfunctions (total). This condition applies only to the gas turbine being used for the cold steam turbine startup. The permittee shall notify the Compliance Authority no later than 24 hours after beginning a cold steam turbine startup. Notification may be by phone, facsimile, email, or letter.
- (4) Steam Turbine Startup Following an Unplanned Forced Outage: "Steam turbine startup following unplanned, forced outage" means startup when the first stage turbine metal temperature is 250° F or more and occurs within 24 hours after either (1) the steam turbine inadvertently trips offline, or (2) the plant is forced to take the steam turbine offline for repair. To minimize emissions, no more than one gas turbine per Bayside Unit shall be operated during a steam turbine startup following an unplanned forced outage. No more than eight 1-hour CEMS emissions averages shall be excluded from the 24-hour block compliance averages due to a steam turbine startup following an unplanned forced outage. In addition, no more than eight 1-hour CEMS emission averages shall be excluded from any 24-hour block compliance average due to steam turbine startups following an unplanned forced outage. In the event of a startup following an unplanned forced outage and standard startups, shutdowns and/or malfunctions within the same 24 hour period, a total of eight 4 hour CEMS emissions averages may be excluded with no more than four of those eight 1-hour CEMS emissions averages being excluded due to standard startups, shutdowns, and malfunctions (total). This condition applies only to the gas turbine being used for steam turbine startup following an unplanned forced outage. The permittee shall notify the Compliance Authority no later than 24 hours after beginning a steam turbine startup following an unplanned forced outage. Notification may be by phone, facsimile, email, or letter and shall include the reason for the unplanned forced outage.
- (5) DLN Tuning: "DLN Tuning" means operating the gas turbine at intermittent loads throughout the full load range in order to adjust and tune the dry low-NOx (DLN) combustion system. DLN tuning shall be conducted in accordance with manufacturer' recommendations. Emissions data collected during DLN tuning may be excluded from the 24-hour block compliance averages. {Permitting Note: For example, a major tuning session would occur after combustor change-out.}
- (6) Compressor Blade Drying: Following a compressor blade wash in accordance with the manufacturer's recommendations, the permittee may operate a gas turbine at very low loads to heat and dry the compressor blades. Emissions data collected while drying the compressor blades may be excluded from the 24-hour block compliance averages. {Permitting Note: A gas turbine would typically operate at approximately 10% of base load or less to perform compressor blade drying.}
- (7) Over Speed Trip Test: As a periodic maintenance practice, the permittee may perform over speed trip tests in accordance with the manufacturer's recommendations. Emissions data collected while conducting over speed trip tests may be excluded from the 24-hour block compliance averages. (Permitting Note: During this test, the gas turbine is operated at full speed, no load (FSNL) for approximately 5 to 6 hours. The unit is gradually accelerated to 110% speed (3960 rpm) to initiate a trip and then coasts down normally. Over speed trip tests are typically performed after a long outage or a major component overhaul.)

To the extent practicable, the permittee shall minimize the amount and duration of emissions during periods of startup, shutdown, malfunction, DLN tuning, compressor blade drying, and over speed trip testing. If a CEMS reports emissions in excess of an emissions standard (24-hour block), the permittee shall notify the Compliance Authority within one working day with a preliminary report 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 Compliance Authority may request a

# Subsection A. Combined Cycle Gas Turbines

written summary report of the incident. All emissions data allowed for exclusion shall be summarized in the Semiannual CEMS Report required in Condition 25 of this subsection.

d. **Startup and Shutdown Plan**: The permittee shall maintain on site a "Startup and Shutdown Plan" that describes procedures for startup and shutdown of the Bayside Units.

As provided by the authority in Rule 62-210.700(5), F.A.C., the above requirements are established in lieu of the provisions of Rule 62-210.700(1), F.A.C.

{Permitting Note: The durations for a cold steam turbine startup and a steam turbine startup following an unplanned forced outage are not typical for combined cycle units. The Bayside Units utilize the existing Gannon steam turbines. Operating procedures require one gas turbine to operate at low loads for extended periods to gradually warm the main and hot reheat steam lines to the steam turbine as well as the steam turbine. Some steam lines are in excess of 1700 feet. Such startups are expected to occur infrequently.} [Design; Rules 62-4.130, 62-210.700(5), and 62-212.400 (BACT), F.A.C., Permit No. PSD-FL-301B]

#### **TEST METHODS AND PROCEDURES**

A.12 Test Methods: Any test required shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
CTM-027	Procedure for Collection and Analysis of Ammonia in Stationary Source: This is an EPA conditional test method. The minimum detection limit shall be 1 ppm.
5	Determination of Particulate Matter Emissions from Stationary Sources: The minimum sampling time shall be two hours per run and the minimum sampling volume shall be 60 dscf per run.
<b>7</b> E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources: The method shall use a continuous sampling train.
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography: EPA Method 18 may be used concurrently with EPA Method 25A to deduct emissions of methane and ethane from the measured VOC emissions.
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines
25A	Determination of Volatile Organic Concentrations

Except for Method CTM-027, the above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. Method CTM-027 is published on EPA's Technology Transfer Network Web Site at "http://www.epa.gov/ttn/emc/ctm.html". Although no specific tests are required for emissions of particulate matter and volatile organic compounds, the test methods are included for completeness. No other methods may be used for compliance testing unless prior written approval is received from the Department. [Permit No. PSD-FL-301A; Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

A.13 Operating Rate During Testing: Emissions performance testing shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate 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 purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Permit No.

# Subsection A. Combined Cycle Gas Turbines

PSD-FL-301A; Rule 62-297.310(2), F.A.C.]

- A.14 Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), each gas turbine shall be tested to demonstrate compliance with the emission standards for ammonia slip and visible emissions. The test results for ammonia slip shall also report the CO and NOx emissions recorded by the CEMS during each test run. {Permitting Note: Continuous compliance with the CO and NOx standards will be demonstrated with certified CEMS data.} [Permit No. PSD-FL-301A; Rules 62-212.400(BACT) and 62-297.310(7)(a)4, F.A.C.]
- A.15 Additional Ammonia Slip Testing: If the tested ammonia slip rate for a gas turbine exceeds 5 ppmvd corrected to 15% oxygen when firing natural gas during the annual test, the permittee shall:
  - a. Begin testing and reporting the ammonia slip for each subsequent calendar quarter;
  - b. Before the ammonia slip exceeds 7 ppmvd corrected to 15% oxygen, take corrective actions that result in lowering the ammonia slip to less than 5 ppmvd corrected to 15% oxygen; and
  - c. Test and demonstrate that the ammonia slip is less than 5 ppmvd corrected to 15% oxygen within 15 days after completing the corrective actions.

Corrective actions may include, but are not limited to, adding catalyst, replacing catalyst, or other SCR system maintenance or repair. After demonstrating that the ammonia slip level is less than 5 ppmvd corrected to 15% oxygen, testing and reporting shall resume on an annual basis. [Permit No. PSD-FL-301A; Rules 62-4.070(3) and 62-297.310(7)(b), F.A.C.]

A.16 <u>Common Compliance Testing Requirements</u>: Appendix CT of this permit identifies other compliance testing requirements commonly applicable to the emissions units in this subsection. [Florida Administrative Code]

# MONITORING REQUIREMENTS

- A.17 Monitoring of Operations: To demonstrate compliance with the gas turbine capacity requirements, the permittee shall monitor and record the operating rate of each gas turbine on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown and malfunction). Such monitoring shall be made using a monitoring component of the CEMS required above, or by monitoring daily rates of consumption and heat content of natural gas in accordance with the provisions of 40 CFR 75 Appendix D. [Permit No. PSD-FL-301A; Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]
- A.18 Ammonia Monitoring Requirements: The permittee shall install, calibrate, maintain and operate, in accordance with the manufacturer's specifications, an ammonia flow meter to measure and record the ammonia injection rate through each SCR system. The permittee shall document the general range of ammonia flow rates required to meet emissions limitations over the range of gas turbine load conditions allowed in this permit by comparing NOx emissions recorded by the NOx monitor with ammonia flow rates recorded using the ammonia flow meter. During NOx monitor downtimes or malfunctions, the permittee shall operate at the ammonia flow rate that is consistent with the documented flow rate for the gas turbine load. [Permit No. PSD-FL-301A; Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]
- A.19 Continuous Emissions Monitoring Systems: The permittee shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) in the exhaust stack of each emissions unit to measure and record emissions of CO and NOx in a manner sufficient to demonstrate compliance with the CEMS emission standards of this permit. The carbon dioxide (CO2) content of the flue gas shall also be monitored at the location where CO and NOx are monitored to correct the measured emissions rates to 15% oxygen. The oxygen content of the flue gas shall be calculated by the CEMS using the CO2 content of the flue gas and an F-factor that is appropriate for natural gas.

# Subsection A. Combined Cycle Gas Turbines

- a. Emission Averages. Compliance with the 24-hour standards for CO and NOx emissions shall be based on data collected by the required CEMS. The 24-hour block shall start at midnight of each operating day and consist of 24 consecutive 1-hour blocks. If a unit operates continuously throughout the day, the 24-hour block average shall be the average of 24 consecutive 1-hour emission averages. If a unit operates less than 24 hours during the day, the 24-hour block average shall be the average of available valid 1-hour emission averages collected during operation. If monitoring data is authorized for exclusion (due to startup, shutdown, malfunction, or tuning), the 24-hour block average shall be the average of the remaining available valid 1-hour emission averages collected during operation. Upon a request from the Compliance Authority, the NOx emission rate shall be corrected to ISO conditions to demonstrate compliance with the applicable standards of 40 CFR 60.332.
- b. Data Collection. The CEMS shall be designed and operated to sample, analyze, and record CO, CO<sub>2</sub>, and NOx data evenly spaced over the hour. Each 1-hour emission average shall be computed using at least one data point in each fifteen minute quadrant of the 1-hour block during which the unit combusted fuel. Notwithstanding this requirement, each 1-hour emission average shall be computed from at least two data points separated by a minimum of 15 minutes. If the unit does not operate in more than one quadrant of a 1-hour block, the data is insufficient to determine a 1-hour emission average and shall be ignored. (Example: Unit begins startup with only ten minutes remaining in the 1-hour block. Data is insufficient to determine a 1-hour average and is ignored.) All valid measurements or data points collected during a 1-hour block shall be used to calculate the 1-hour emission averages. If the CEMS measures concentration on a wet basis, the CEMS shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, a curve of the flue gas moisture content versus load may be developed through manual stack test measurements and used in an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). The CO and NOx CEMS shall express the 1-hour emission averages and the 24-hour block averages in terms of "ppmvd corrected to 15% oxygen".
- c. Data Exclusion. CO, CO2, and NOx emissions data shall be recorded by the CEMS at all times including episodes of startup, shutdown, malfunction, and tuning. CO and NOx emissions data recorded during such episodes may be excluded from the 24-hour block compliance averages in accordance with the requirements of Condition No. A.11 of this section. All periods of data excluded due to startup, shutdown or malfunction shall be consecutive for each episode. The permittee shall minimize the duration of data excluded for startup, shutdown and malfunctions, to the extent practicable. Data recorded during startup, shutdown or malfunction shall not be excluded if the episode was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented. Best operational practices shall be used to minimize hourly emissions that occur during startup, shutdown and malfunction. Emissions of any quantity or duration that occur entirely or in part from poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited. Excluded emissions shall be summarized in the required semiannual report.
- d. NOx Certification. The NOx monitor shall be certified pursuant to 40 CFR Part 75 and shall be operated and maintained in accordance with the applicable requirements of 40 CFR Part 75, Subparts B and C. For purposes of determining compliance with the CEMS emission standards of this permit, missing data shall not be substituted. Instead the 24-hour block average shall be determined using the remaining hourly data in the 24-hour block. Record keeping and reporting shall be conducted pursuant to 40 CFR Part 75, Subparts F and G. The RATA tests required for the NOx monitor shall be performed using EPA Method 7E or 20 as defined in Appendix A of 40 CFR 60. The span for the NOx monitor shall not be greater than 10 ppmvd corrected to 15% O2. A dual span monitor may be used.

# Subsection A. Combined Cycle Gas Turbines

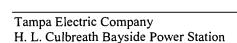
- e. CO and CO2 Certification. The CO2 monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 3. The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4. Quality assurance procedures for each monitor shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of Section 7 shall be made each calendar quarter, and reported semi-annually to the Compliance Authority. The RATA tests required for the CO2 monitor shall be performed using EPA Method 3A, of Appendix A in 40 CFR 60. The RATA tests required for the CO monitor shall be performed using EPA Method 10, of Appendix A in 40 CFR 60. The Method 10 analysis shall use a continuous sampling train. The span for the CO monitor shall not be greater than 25 ppm corrected to 15% oxygen. A dual span CO monitor may be used.
- f. Monitor Availability. Monitor availability shall not be less than 95% in any calendar quarter. The report required in Condition A.19e above shall be used to demonstrate monitor availability. In the event 95% availability is not achieved, the permittee shall provide the Compliance Authority with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit.

{Permitting Note: Compliance with these requirements will ensure compliance with the other applicable CEMS requirements such as: NSPS Subpart GG; Rule 62-297-520, F.A.C.: 40 CFR 60.7(a)(5) and 40 CFR 60.13; 40 CFR Part 51, Appendix P; 40 CFR 60, Appendix B - Performance Specifications; and 40 CFR 60, Appendix F - Quality Assurance Procedures.}

[Permit No. PSD-FL-301A; Rules 62-4.070(3), 62-210.700(5), and 62-212.400(BACT), F.A.C.]

#### RECORDS AND REPORTS

A.20 <u>Semiannual CEMS Report</u>: In addition to the reports required pursuant to 40 CFR 60.7, the permittee shall submit semiannual reports for each gas turbine summarizing the CEMS data and equipment. For each calendar quarter, the report shall include: the 24-hour block compliance averages for each day of operation; the number of 1-hour emission averages excluded from each 24-hour compliance average; the emissions rate of the excluded monitoring data; the reason for excluding monitoring data; the hours of missing data due to monitor downtime; the reason for any monitor downtime; unusual maintenance or repair of the CEMS; and a summary of any RATA tests performed. Based on operational data, the permittee shall also update the general range of ammonia flow rates required to meet NOx emissions limitations over the range of gas turbine load conditions. A report covering operations from January through June shall be submitted by July 30<sup>th</sup> of each year. A report covering operations from July through December shall be submitted by January 30<sup>th</sup> of each year. The report due dates may be modified by the Title V permit. Permit No. PSD-FL-301A; Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]



#### Subsection B. Fuel Yard

#### **DESCRIPTION OF EMISSIONS UNIT**

The specific conditions in this subsection apply to the activities and equipment comprising Emissions Unit 008, which is the existing fuel yard. Activities related to the existing fuel yard include: barge unloading of coal (clamshell and continuous); railcar unloading of coal; truck, barge, and train unloading of flux; and the transfer and storage of these materials. The following table identifies the emissions points and particulate matter control equipment information.

Table B-1. Emission Point Summary for Fuel Yard

ID No.	Throughput TPH	Control Method	Efficiency
FH-001/002	2,300	DS	95%
FH-003/004	2,300	DS 💉	95%
FH-005	2,300	DS 💉	95%
FH-006	2,300	**DS 💸	95%
FH-007	2,300	/DS/E	95%
FH-008/009	2,300	***DS/E	95%
FH-011	2,300	DS/E	90%
FH-012	2,300	**ĎS/E	90%
FH-013 🚜	2,300	DS/E	95%
FH-014	2,300	**DS/E	95%
FH-015	2,300	**DS/E	95%
FH-016	2,300	**DS/E	90%
FH-017	2,300	**DS/E	90%
FH-018	z 2,300	**DS/E	90%
🦒 FH-019 🎢	2,300	**DS/E	90%
FH-020	2,300	DS	70%
FH-021	2,300	DS	70%
FH-022/023		DS	50%
FH-044		DS	50%
AH-001	400	DS	85%
AH-002	400	DS/E	90%
OMH-001			
OMH-002			
OMH-003			
OMH-004			
OMH-005			
	FH-001/002 FH-003/004 FH-005 FH-006 FH-007 FH-008/009 FH-011 FH-012 FH-013 FH-014 FH-015 FH-016 FH-017 FH-018 FH-019 FH-020 FH-021 FH-022/023 FH-044 AH-001 AH-002 OMH-001 OMH-002 OMH-003 OMH-004	TPH FH-001/002 2,300 FH-003/004 2,300 FH-005 2,300 FH-006 2,300 FH-007 2,300 FH-010 2,300 FH-011 2,300 FH-012 2,300 FH-013 2,300 FH-014 2,300 FH-015 2,300 FH-016 2,300 FH-017 2,300 FH-018 2,300 FH-019 2,300 FH-020 2,300 FH-021 2,300 FH-021 2,300 FH-021 2,300 FH-044 AH-001 400 AH-002 400 OMH-001 OMH-003 OMH-004	TPH Method  FH-001/002 2,300 DS  FH-003/004 2,300 DS  FH-005 2,300 DS  FH-006 2,300 **DS  FH-007 2,300 DS/E  FH-011 2,300 DS/E  FH-012 2,300 DS/E  FH-013 2,300 DS/E  FH-014 2,300 **DS/E  FH-015 2,300 **DS/E  FH-016 2,300 **DS/E  FH-017 2,300 **DS/E  FH-018 2,300 **DS/E  FH-019 2,300 **DS/E  FH-019 2,300 DS  FH-020 2,300 DS  FH-021 2,300 DS  FH-044 DS  AH-001 400 DS  AH-002 400 DS/E  OMH-001  OMH-003  OMH-003  OMH-004

Notes: "DS" means dust suppressant. "E" means enclosure. The double asterisk (\*\*) identifies the dust suppressant application point.

{Permitting Note: The above activities are regulated under the following: Rule 62-296.711, F.A.C. (Materials Handling, Sizing, Screening, Crushing and Grinding Operation); and Rule 62-296.700, F.A.C. (Reasonably Available Control Technology (RACT) for Particulate Matter). The existing fuel yard equipment served F. J. Gannon Station Units 1 through 6. The coal-fired boilers are permanently shut down. The coal yard is not currently in operation.}

#### Subsection B. Fuel Yard

# ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

- B.1 Permitted Capacity: Coal throughput for this facility shall not exceed 2.85 million tons in any 12 consecutive months. [Rules 62-4.160(2), 62-210.200 (PTE), and 62-212.400(2)(a)2, F.A.C.; Permit No. 0570040-006-AC]
- B.2 <u>Hours of Operation.</u> This emissions unit is allowed to operate continuously (8760 hours per year). [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

#### **CONTROL TECHNIQUES**

- B.3 Control Techniques: Water sprays or chemical wetting agents and stabilizers are acceptable methods to be used on coal storage piles as necessary to maintain an opacity of less than or equal to 5%. Other appropriate methods may be applied to maintain this opacity, after they are approved by the Department. Facilities that cause frequent, valid complaints may be required by the Compliance Authority to take these or other reasonable precautions. In determining what constitutes reasonable precautions for a particular source, the Compliance Authority shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice. [Permit Nos. 0570040-006-AC and 0570040-010-AC]
- B.4 Application of Dust Suppressants: Dust suppressants shall be applied to the fuel either prior to or at the time of delivery and at all emission points as specified in Table B.1 of this subsection to control fugitive particulate matter emissions and maintain an opacity of less than or equal to 5%. For the application of dust suppressants prior to delivery, the permittee shall keep monthly records of: 1) the amount of dust suppressant applied for each type and amount of coal delivered, and 2) the type of dust suppressant used (e.g., MSD sheets, product name). [Permit No. 0570040-006-AC]

# EMISSION LIMITATIONS AND STANDARDS.

B.5 <u>Visible Emissions</u>. Visible emissions generated by fugitive or unconfined particulate matter from fuel handling systems and storage shall not exceed 5% opacity. {Permitting note: The averaging time for this condition is based on the specified averaging time of the applicable test method, unless otherwise specified in this permit.} [Rule 62-296.711(2)(a), F.A.C.; Permit No. AC29-152987]

# TEST METHODS AND PROCEDURES.

<u>Visible Emissions</u>: A thirty (30) minute visible emissions test shall be performed on the following material transfer operations during each federal fiscal year (October 1 - September 30):

- 1. The clamshell to the hopper;
- 2. The railcar to the hopper; and
- 3. Either conveyor E1 or E2 to their respective stockpiles where the initial free fall is at least 30 feet.

The test method for visible emissions shall be determined using EPA Method 9, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C. [Rules 62-204.800, 62-297.310(4)(a)2, 62-297.310(7)(a)4, F.A.C.; Permit No. 0570040-006-AC]

# MONITORING OF OPERATIONS

- B.6 <u>Proper Maintenance</u>: All controls associated with the transfer points (i.e., the grab buckets, the windshield, the enclosures and the wet spray systems) shall be maintained to the extent that the capture efficiencies credited will be achieved. [Rule 62-4.070(3), F.A.C.; Permit No. AO29-216480]
- B.7 Operation and Maintenance Plan for Particulate Matter Control
  - a. Process Parameters

#### Subsection B. Fuel Yard

- 1. Operation Schedule: 8760 hours per year
- 2. Equipment Data

Conveyor Hoods: Corrugated Aluminum Transfer Point Enclosures: Carbon Steel

- 3. Manufacturer of Wet Dust Suppression Equipment: Benetech
- b. Inspection and Maintenance Procedures: The fuel yard particulate matter control equipment shall receive regular preventative maintenance as follows:
  - 1. Conveyor Enclosures
    - Daily random visual inspections of conveyor hoods.
    - Daily random visual inspection of the transfer points chute work
  - 2. Dust Suppression System
    - Quarterly inspection of system for water leaks.
    - Quarterly inspection of spray nozzles.

The pumps, tanks, etc., that make-up the dust suppression system undergo normal maintenance including lubrication, flushing, and draining.

[Rule 62-296.700, F.A.C.]

# RECORDKEEPING AND REPORTING REQUIREMENTS.

- B.8 Testing Rates: All compliance testing shall be conducted during normal operation and at the maximum material (including limestone or iron ore where applicable) transfer rate attainable during the test period. Actual material handling rates will be determined using the totalizer readings obtained from scales located on C, L, and H conveyors. The readings from these scales will be recorded at the start and finish of the visible emissions test. The difference between the values recorded divided by the test duration will be the values used to represent the material handling rates. Alternatively, values from the circular chart recorders located in the coalfield control room will be used in the event a problem with a scale totalizer arises. The test result shall indicate if iron ore has been included in the corresponding material transfer rate. Failure to include the actual process or production rate in the results may invalidate the test. [Rule 62-4.070(3), F.A.C.; Permit No. A029-216480]
- B.9 O&M Records: Records of inspections, maintenance, and performance parameters shall be retained for a minimum of five years and shall be made available to the Compliance Authority upon request. [Rules 62-213.440(1)(b)2.b; and 62-296.700(6)(e), F.A.C.]
- B.10 Common Compliance Testing Requirements: Appendix CT of this permit identifies other compliance testing requirements commonly applicable to the emissions units in this subsection. These include the following requirements: Rule 297.310(7)(a)9, F.A.C. (Test Notification); Rule 62-297.310(5), F.A.C. (Determination of Process Variables); Rule 62-297.310(8), F.A.C. (Test Reports); and Rule 62-297.310(7), F.A.C. (Special Compliance Tests).

[Florida Administrative Code]

Plant Operated By: Tampa Electric Company

ORIS Code No. 0646

# SUBSECTION A. THIS SUBSECTION ADDRESSES ACID RAIN, PHASE II.

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

EU No.	Description
020	Bayside Unit CT-1A, Combined Cycle Gas Turbine
021	Bayside Unit CT-1B, Combined Cycle Gas Turbine
022	Bayside Unit CT-1C, Combined Cycle Gas Turbine
023	Bayside Unit CT-2A, Combined Cycle Gas Turbine
024	Bayside Unit CT-2B, Combined Cycle Gas Turbine
025	Bayside Unit CT-2C, Combined Cycle Gas Turbine
026	Bayside Unit CT-2D, Combined Cycle Gas Turbine



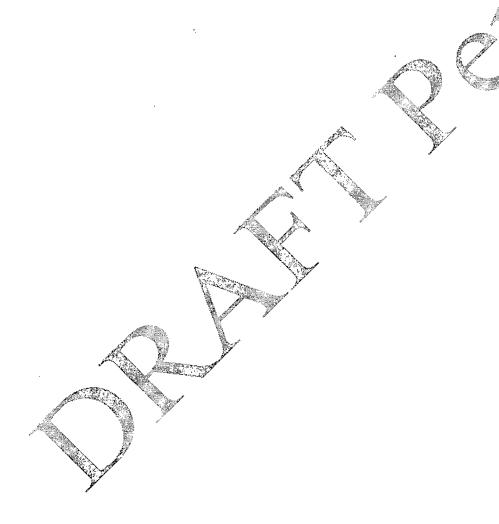
{Permitting Note: In accordance with the Consent Final Judgment (DEP vs. TECO) dated December 6, 1999 and the Consent Decree (U.S. vs. TECO) dated February 29, 2000, coal-fired Emissions Units 001 through 006 are permanently shut down.}

- A.1 Phase II Acid Rain Permit: The Phase II permit application submitted for this facility, as approved by the Department, is a part of this permit (included as an Attachment). The owners and operators of these Phase II acid rain units must comply with the standard requirements and special provisions set forth in the Title V renewal application [DEP Form No. 62-210.900(1)(a)] dated 07/02/04. [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]
- A.2 <u>SO2 Allowance Allocations</u>: Sulfur dioxide (SO2) allowance allocations for each Acid Rain unit are as follows:

EU No.	EPA	SO2 allowances, under Table 2 or 3 of 40 CFR 73				
EU NO.	ID	2003	2004	2005	2006	2007
020	CT1A	0*	9*	0*	0*	0*
021	CT1B	0,*/	₹ 0*	0*	0*	0*
022	CT1C	0*	0*	0*	0*	0*
023	CT2A	0*	0*	0*	0*	0*
024	CT2B	0*	0*	0*	0*	0*
<b>£</b> 025	CT2C	0*	0*	0*	0*	0*
026	CT2D	0*	0*	0*	0*	0*

- The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the U.S. EPA under Table 2 or 3 of 40 CFR 73.
- A.3 <u>Emission Allowances</u>: Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.
  - a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a

- permit revision pursuant to Rule 62-213.400(3), F.A.C.
- b. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
- c. Allowances shall be accounted for under the Federal Acid Rain Program.
- [Rule 62-213.440(1)(c)1, 2 and 3, F.A.C.]
- A.4 <u>Statement of Compliance</u>: The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. *{Permitting Note: See condition No. 51 in Appendix TV-4, Title V Conditions.}* [Rule 62-214.420(11), F.A.C.]
- A.5 <u>Fast-Track Revisions of Acid Rain Parts</u>: Those Acid Rain sources making a change described at Rule 62-214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, Fast-Track Revisions of Acid Rain Parts. [Rules 62-213.413 and 62-214.370(4), F.A.C.]
- A.6 Comments, Notes and Justifications: None.



# Tampa Electric Company H. L. Culbreath Bayside Power Station Title V Air Operation Permit No. 0570040-023-AV

Appendix A-1. Citation Formats

Appendix AR. Phase II Acid Rain Permit Application/Compliance Plan received July 2, 2004

Appendix BD. Final BACT Determinations and Emissions Standards (Gas Turbines)

Appendix CD. Consent Decree (U.S. EPA vs. TECO)

Appendix CFJ. Consent Final Judgment (DEP vs. TECO)

Appendix CT. Common Compliance Test Requirements

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

Appendix GG. NSPS Subpart GG Requirements for Gas Turbines

Appendix TV-4. Title V Conditions

Appendix XS. Semi-Annual Continuous Monitor Systems Report

#### APPENDIX A. CITATION FORMATS

The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

# **Abbreviations and Acronyms**

ARMS - Air Resource Management System (state database)

BACT - Best Available Control Technology

CFR - Code of Federal Regulations

DEP - State of Florida, Department of Environmental Protection

DARM - Division of Air Resource Management

EPA - United States Environmental Protection Agency

F.A.C. - Florida Administrative Code

F.S. - Florida Statute

ISO - International Standards Organization (288° K, 60% relative humidity, and 101.3 kPa pressure)

MMBtu - million British Thermal Units

MW - Megawatt

# Regulatory Citations

Example: [40 CFR 60.334]

Where: "40" refers to Title 40 of the Code of Federal Regulations (CFR)

"60" refers to Part 60

"334" refers to the section (§ 60.334) regarding the monitoring of operations from gas turbines

Example: [Rule 62-213, F.A.C.]

Where: "62" refers to Title 62 of the Florida Administrative Code (F.A.C.)

"213" refers to Chapter 62-213 regarding Title V sources "205" refers to Rule 62-213.205 regarding Title V annual fees

# Facility Identification (ID) Numbers

Example: Facility ID No. 1050221 (Tracking number used in the state database.)

Where: "105" is a unique 3-digit number code identifying that the facility is located in Polk County

"0221" is a unique 4-digit number code identifying the specific facility in the state database

#### Permit and Certification Numbers

Example: Air Permit No. 1050221-001-AC or 1050221-002-AV (New Permit Numbers)

Where: "1050221" represents the facility ID number

"001 or 002" are unique 3-digit project numbers assigned by the state database "AC" means Air Construction Permit and "AV" means Title V Air Operation Permit

Example: Air Permit No. AC50-123456 or Air Permit No. AO50-123456 (Old Permit Numbers)

Where: "AC" means Air Construction Permit and "AO" means Air Operation Permit

"123456" is the sequential permit number

Example: Air Permit No. PSD-FL-185

Where: "PSD" means a an air construction permit for the Prevention of Significant Deterioration

"FL" means that it was issued in Florida "185" is the sequential permit number

Example: Certification No. PA95-01

Where: "PA" means a certification based on the Power Plant Siting Act

"95" means that it was issued in 1995

"01" is the sequential certification number for that year

# APPENDIX AR. ACID RAIN PART APPLICATION (TITLE IV)

Attached is the federal Acid Rain Part Application submitted with the renewal application for a Title V air operation perm received by the Department on July 2, 2004.				
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# Emissions Standards for Bayside Units 1 - 2 (Emissions Units 020 through 026)

Each emissions unit consists of a General Electric Model PG7241(FA) gas turbine-electrical generator set, an automated gas turbine control system, an inlet air filtration system, an evaporative inlet air cooling system, an unfired heat recovery steam generator (HRSG), a single exhaust stack that is 150 feet tall and 19.0 feet in diameter, and associated support equipment. Each unit Natural gas is the exclusive fuel. At a compressor inlet air temperature of 59° F and firing 1842 MMBtu (HHV) per hour of natural gas, each unit produces a nominal 169 MW of shaft-driven electricity. Exhaust gases exit the stack with a volumetric flow rate of approximately 1,030,000 acfm at 220° F.

Pollutant	Controls and Standards a	
Standards based o	on emissions performance tests at permitted capacity and an inlet temperature of 59° F:	
Ammonia	Standard: 5 ppmvd @ 15% O2 b	
00	Control: DLN combustion technology and exclusive firing of natural gas	
CO (BACT)	Standard: 7.8 ppmvd @ 15% O2	
(Brier)	Standard: 28.7 lb/hour	
	Controls: SCR with DLN combustion technology and exclusive firing of natural gas	
NOx	Standard: 3.5 ppmvd @ 15% O2	
	Standard: 23.1 lb/hour	
	Controls: DLN combustion technology and exclusive firing of natural gas	
PM/PM10	Standard: 10% opacity, 6-minute average	
(BACT)	Comments: The CO CEMS standard serves as a continuous indicator of efficient combustion. The estimated maximum emissions are 12 lb/hour (front-half catch only).	
SAM/SO2	Standard: Exclusive firing of natural gas (< 2 grains per 100 SCF, 12 month rolling average)	
VOC	Controls: DLN combustion technology and exclusive firing of natural gas	
VOC (BACT)	Comments: The CO CEMS standard serves as a continuous indicator of efficient combustion. The estimated maximum emissions are 3 lb/hour (1.3 ppmvd @ 15% O2).	
Standards based o	on CEMS data:	
СО	Control: DLN combustion technology and exclusive firing of natural gas	
(BACT)	Standard: 9.0 ppmvd @ 15% O2, 24-hour block average	
NOx	Controls: SCR with DLN combustion technology and exclusive firing of natural gas	
	Standard: 3.5 ppmvd @ 15% O2, 24-hour block average	

#### Notes:

- a. "BACT" means Best Available Control Technology. "SCR" means selective catalytic reduction system. "DLN" means dry low-NOx combustion technology.
- b. If the tested ammonia slip rate exceeds 5 ppmvd corrected to 15% oxygen during the required annual test, the permittee shall begin testing and reporting the ammonia slip for each subsequent calendar quarter. Before the ammonia slip exceeds 7 ppmvd corrected to 15% oxygen, the permittee shall take corrective actions that result in lowering the ammonia slip to less than 5 ppmvd corrected to 15% oxygen. The permittee shall test and demonstrate that the ammonia slip is less than 5 ppmvd corrected to 15% oxygen within 15 days after completing the corrective actions.

A detailed description of each BACT evaluation is presented in the Technical Evaluation and Preliminary Determination. Any changes are noted in the Department's Final Determination issued simultaneously with the final permit.

#### **Final BACT Determinations**

Actual emissions of NOx and SO2 from the re-powered plant will decrease due to the shutdown of existing coal-fired units. Therefore, the project nets out of PSD for NOx and SO2 emissions. However, each gas turbine is required to fire natural gas as the primary fuel and to incorporate an SCR system as a result of the DEP/TEC Consent Final Judgment and the EPA/TEC Consent Decree. The gas turbines are subject to the acid rain requirements, which require a continuous emissions

#### APPENDIX BD. FINAL BACT DETERMINATIONS AND EMISSIONS STANDARDS

monitoring system (CEMS) for NOx emissions. The NOx CEMS will also be used to demonstrate compliance with the specified permit standards.

The project did result in significant net actual emissions increases of carbon monoxide (CO) and volatile organic compounds (VOC). Based on an interpretation by EPA Region 4, emissions of particulate matter (PM/PM10) would also be significant if BACT-level controls had previously been installed on the existing Gannon Units. For CO, PM/PM10, and VOC emissions, the Department determines that the efficient combustion of pipeline-quality natural gas and good operating practices represent BACT for the combined cycle units. In addition to the control requirements, the CO, PM/PM10, and VOC emissions standards specified in the permit and summarized in the above table represent the determination of Best Available Control Technology (BACT). A continuous emission monitoring system (CEMS) is required to demonstrate continuous compliance with the CO standards. The CO CEMS will also serve as a continuous indicator of efficient combustion to minimize PM and VOC emissions. The Department's detailed technical review and rationale for the determinations of Best Available Control Technology (BACT) are presented in Technical Evaluation and Preliminary Determination issued with the draft PSD permit package.

#### Mass Emission Rate Summary

The following table summarizes the hourly mass emission rates (lb/hour) at various the compressor inlet temperatures.

Pollutant	Compressor Inlet	Mass Emission Rate
l Ollutalit	Temperature	lb/hour
СО	18° F	31.1
	35° F	30.0
	59° F	28.7
	72° F	27.8
	93° F	26.9
NOx	18° F	24.7
	35° F	23.8
	59° F	23.1
	72° F	22.6
	93° F	21.9
PM/PM10	18° F	11.5
	35° F	11.4
	59° F	11.3
	72° F	11.3
	93° F	11.2
VOC	18° F	3.0
•	35° F	3.0
	59° F	2.8
	72° F	2.7
	93° F	2.7

#### Notes:

- This table represents the mass emission rates for the General Electric Model PG7241(FA) gas turbine (combined cycle) firing natural gas with a selective catalytic reduction system to reduce NOx emissions.
- NOx emission rates are reported as NO2 and are based on control with DLN combustion and an SCR system.
- PM emission rates are based on EPA Method 5 (front-half catch only).
- VOC emission rates are measure as methane.

# APPENDIX CD. CONSENT DECREE (UNITED STATES VS. TECO)

On October 4, 2000, the United States and Tampa Electric Company entered into a settlement agreement (Consent Decree Civil Action No. 99-2524). In May of 2001, this agreement was amended. These documents are attached as part of this permit for completeness, but are distributed to the permittee only with the Final Permit. Other persons requesting copies of these documents shall be provided one copy when requested or otherwise appropriate.			
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# APPENDIX CFJ. CONSENT FINAL JUDGMENT (DEP VS. TECO)

On December 7, 1999, the Florida Department of Environmental Protection and the Tampa Electric Company entered in a settlement agreement (Consent Final Judgment, Case No. 99-009737. This document is attached as part of this perm for completeness, but is distributed to the permittee only with the Final Permit. Other persons requesting copies of the document shall be provided one copy when requested or otherwise appropriate.		
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# APPENDIX CT. GENERAL COMPLIANCE TEST REQUIREMENTS

Unless otherwise specified in the permit, the following testing requirements apply to each emissions unit as necessary.

#### 62-297.310 General Compliance Test Requirements.

The focal point of a compliance test is the stack or duct which vents process and/or combustion gases and air pollutants from an emissions unit into the ambient air.

(1) 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% below the allowable emission limiting standard.

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

- (2) Operating Rate During Testing. Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operating at permitted capacity as defined below. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate 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 purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
  - (a) Combustion Turbines. (Reserved)
  - (b) All Other Sources. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit.

[Rule 62-297.310(2), F.A.C.]

- (3) <u>Calculation of Emission Rate</u>. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
- (4) Applicable Test Procedures.
  - (a) Required Sampling Time.
    - Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no
      less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of
      equal intervals of at least two minutes.
    - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
      - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
      - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

- c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

TABLE 62-297.310-1: TEST EQUIPMENT CALIBRATION SCHEDULE

	MINIMUM		
	CALIBRATION		TO LED ANGE
ITEM	FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in Glass	Annually	ASTM Hg in glass reference	+/- 2%
Thermometer		thermometer or equivalent or	
,		thermometric points.	
Bimetallic	Quarterly	Calibrated liquid in glass	5°F
Thermometer		thermometer.	
Thermocouple	Annually	ASTM Hg in glass reference	5°F
		thermometer;	
		NBS calibrated reference and	
		potentiometer.	
Barometer	Monthly	Hg barometer or NOAA station.	+/- 1% scale
Pitot Tube	When required or when	By construction or measurements in	See EPA Method 2,
	damaged	wind tunnel D greater than 16" and	Figures 2-2 and 2-3.
		standard pitot tube.	
Probes Nozzles	Before each test or when	Micrometer	+/- 0.001" mean of
	nicked, dented, or		at least 3 readings.
	corroded.		Maximum allowed
			deviation between
			readings is 0.004".
Dry Gas Meter	1. Full scale: initially	Spirometer or calibrated wet test or	2%
and Orifice Meter	when received; annually	dry gas test meter.	
	when 5% change		
	observed.		
	2. One point: semiannually		
	3. Check after each test	Comparison check.	5%
	series.	Companion oncom	370

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

# (5) 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.]

- (6) Required Stack Sampling Facilities. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.
  - (a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities. (b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

#### (c) Sampling Ports.

- 1. All sampling ports shall have a minimum inside diameter of 3 inches.
- 2. The ports shall be capable of being sealed when not in use.
- 3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
- 4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
- 5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

#### (d) Work Platforms.

- 1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
- 2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
- 3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
- 4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

# (e) Access to Work Platform.

- 1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.
- 2. Walkways over free-fall areas shall be equipped with safety rails and toeboards.
- (f) Electrical Power.

#### APPENDIX CT. GENERAL COMPLIANCE TEST REQUIREMENTS

- 1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.
- 2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.
- (g) Sampling Equipment Support.
  - 1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.
    - a. The bracket shall be a standard 3 inch × 3 inch × one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
    - b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
    - c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
  - 2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.
  - 3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]

- (7) <u>Frequency of Compliance Tests</u>. 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.
    - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
      - a. Visible emissions, if there is an applicable standard;
      - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
      - c. Each NESHAP pollutant, if there is an applicable emission standard.
    - 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.
    - 10. An annual compliance test conducted for visible emissions shall not be required for units exempted from air permitting pursuant to subsection 62-210.300(3), F.A.C.; units determined to be insignificant pursuant to subparagraph 62-213.300(2)(a)1., F.A.C., or paragraph 62-213.430(6)(b), F.A.C.; or units permitted under the General Permit provisions in paragraph 62-210.300(4)(a) or Rule 62-213.300, F.A.C., unless the general permit specifically requires such testing.
  - (b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

# APPENDIX CT. GENERAL COMPLIANCE TEST REQUIREMENTS

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

# (8) <u>Test Reports.</u>

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
  - 1. The type, location, and designation of the emissions unit tested.
  - 2. The facility at which the emissions unit is located.
  - 3. The owner or operator of the emissions unit.
  - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
  - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
  - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
  - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
  - 8. The date, starting time and duration of each sampling run.
  - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
  - 10. The number of points sampled and configuration and location of the sampling plane.
  - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
  - 12. The type, manufacturer and configuration of the sampling equipment used.
  - 13. Data related to the required calibration of the test equipment.
  - 14. Data on the identification, processing and weights of all filters used.
  - 15. Data on the types and amounts of any chemical solutions used.
  - 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
  - 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
  - 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
  - 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
  - 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
  - 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

(9) Stack or Duct: The terms stack and duct are used interchangeably in this rule. [Rule 62-297.310(9), F.A.C.]

#### APPENDIX I. LIST OF INSIGNIFICANT EMISSIONS UNITS AND/OR ACTIVITIES

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

Based on the Title V renewal application received on July 2, 2004, the following emissions units and activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

- 1. Emergency diesel 600 kW generator.
- 2. Freshwater cooling tower.
- 3. Brazing, soldering or welding equipment.
- 4. Comfort heating units with a gross minimum heat output of less than 1 MMBtu/hour.
- 5. No. 2 and No. 6 fuel oil storage tanks.
- 6. No. 2 and No. 6 fuel oil truck unloading operations.
- 7. Fuel oil processing and treating equipment.
- 8. Laboratory equipment used exclusively for chemical or physical analyses.
- 9. Fire and safety equipment.
- 10. Turbine vapor extractors.
- 11. Non-halogenated solvent storage and cleaning operations.
- 12. Architectural (and equipment) maintenance painting.
- 13. Surface coating operations within a single facility if the total quantity of coatings containing greater than 5.0 percent VOCs (by volume) used is 6.0 gallons per day or less averaged monthly, provided:
  - Such operations are not subject to a volatile organic compound Reasonably Available Control Technology (RACT) requirement of Chapter 62-296, F.A.C.
  - The amount of coatings used shall include any solvents and thinners used in the process including those used for cleanup.
- 14. Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume.
- 15. Degreasing units using heavier-than-air vapors exclusively, except any such unit using or emitting any substance classified as a hazardous air pollutant.
- 16. Internal combustion engines in boats, aircraft and vehicles used for transportation of passengers or freight.
- 17. Equipment used for steam cleaning.
- 18. Petroleum lubrication systems.

# NSPS SUBPART GG REQUIREMENTS

[Note: Inapplicable provisions have been deleted in the following conditions, but the numbering of the original rules has been preserved for ease of reference to the original rules. The term "Administrator" when used in 40 CFR 60 shall mean the Department's Secretary or the Secretary's designee. Department notes and requirements related to the Subpart GG requirements are shown in **bold** immediately following the section to which they refer. The rule basis for the Department requirements specified below is Rule 62-4.070(3), F.A.C.]

# Pursuant to 40 CFR 60.332, Standard for Nitrogen Oxides:

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

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

Where:

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

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

F = NOx emission allowance for fuel-bound nitrogen as de-fined in paragraph (a)(3) of this section.

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

Fuel-bound nitrogen (percent by weight)	F (NOx percent by volume)
N≤0.015	0
0.015 <n≤0.1< td=""><td>0.04(N)</td></n≤0.1<>	0.04(N)
0.1 <n≤0.25< td=""><td>0.004+0.0067(N-0.1)</td></n≤0.25<>	0.004+0.0067(N-0.1)
N>0.25	0.005

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

<u>Department requirement</u>: For natural gas, the "F" value shall be assumed to be 0.

{Note: This is required by EPA's March 12, 1993 determination regarding the use of NOx CEMS. The "Y" value provided by the applicant is approximately 10.0 for natural gas. The equivalent emission standard is 108 ppmvd @ 15% oxygen. The permit standards are more stringent than this requirement.}

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

#### Pursuant to 40 CFR 60.333, Standard for Sulfur Dioxide:

On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with:

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

#### {Note: The permit specifies a much lower fuel sulfur content for natural gas.}

# Pursuant to 40 CFR 60.334, Monitoring of Operations:

- (b) The owner or operator of any stationary gas turbine subject to the provisions of this subpart shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:
  - (2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on

the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with paragraph (b) of this section.

<u>Department requirement</u>: The requirement to monitor the nitrogen content of pipeline quality natural gas fired is waived. For purposes of complying with the sulfur content monitoring requirements of this rule, the owner or operator shall obtain a monthly report from the vendor indicating the sulfur content of the natural gas being supplied from the pipeline for each month of operation.

{Note: This is consistent with EPA's custom fuel monitoring policy and guidance from EPA Region 4.}

- (c) For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:
  - (1) Nitrogen oxides. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with 40 CFR 60.332 by the performance test required in § 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in § 60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).

<u>Department requirement</u>: NOx CEMS data shall substitute for the above requirement because NOx monitoring is required to demonstrate compliance with the permit standards. NOx CEMS data shall be used to determine "excess emissions" for purposes of 40 CFR 60.7 subject to the conditions of the permit.

{Note: As required by EPA's March 12, 1993 determination, the NOx monitor shall meet the applicable requirements of 40 CFR 60.13, Appendix B and Appendix F for certifying, maintaining, operating and assuring the quality of the system; shall be capable of calculating NOx emissions concentrations corrected to 15% oxygen; shall have no less than 95% monitor availability in any given calendar quarter; and shall provide a minimum of four data points for each hour and calculate an hourly average. The requirements for the CEMS specified by the specific conditions of this permit satisfy these requirements.}

(2) Sulfur dioxide. Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent.

#### Pursuant to 40 CFR 60.335, Test Methods and Procedures:

- (a) To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Administrator to determine the nitrogen content of the fuel being fired.
- (b) In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as pro-vided for in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this section.
- (c) The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 and 60.333(a) as follows:
  - (1) The nitrogen oxides emission rate (NOx) shall be computed for each run using the following equation:

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

Where:

NOx = emission rate of NOx at 15 percent O2 and ISO standard ambient conditions, volume percent

NOxo = observed NOx concentration, ppm by volume

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

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

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

e = transcendental constant, 2.718

Ta = ambient temperature, °K

#### APPENDIX GG. NSPS SUBPART GG REQUIREMENTS FOR GAS TURBINES

<u>Department requirement</u>: The owner or operator is not required to have the NOx monitor continuously correct NOx emissions concentrations to ISO conditions. However, the owner or operator shall keep records of the data needed to make the correction, and shall make the correction when required by the Department or Administrator.

{Note: This is consistent with guidance from EPA Region 4.}

(2) The monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with 40 CFR 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

<u>Department requirement</u>: The permittee is allowed to conduct initial performance tests at a single load because a NOx monitor shall be used to demonstrate compliance with the specified NOx limits.

{Note: This is consistent with guidance from EPA Region 4.}

(3) Method 20 shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NOx emissions shall be determined at each of the load conditions specified in paragraph (c)(2) of this section.

<u>Department requirement</u>: The permittee is allowed to make the initial compliance demonstration for NOx emissions using certified CEMS data, provided that compliance is based on a minimum of three test runs representing a total of at least three hours of data, and that the CEMS be calibrated in accordance with the procedure in section 6.2.3 of Method 20 following each run. Alternatively, initial compliance may be demonstrated using data collected during the initial relative accuracy test audit (RATA) performed on the NOx monitor. The span value specified in the permit shall be used instead of that specified in paragraph (c)(3) above.

{Note: These initial compliance demonstration requirements are consistent with guidance from EPA Region 4. The span value is changed in the permit pursuant to Department authority and is consistent with guidance from EPA Region 4.}

(d) The owner or operator shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) as follows: ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels (incorporated by reference – see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.

Department requirement: The permit species sulfur monitoring methods.

(e) To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the methods specified in paragraphs (a) and (d) of this section to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

{Note: The fuel analysis requirements of the permit meet or exceed the requirements of this rule and will ensure compliance with this rule.}

# APPENDIX TV-4. TITLE V CONDITIONS

{Permitting Note: Appendix TV-4 (Title V Conditions) is distributed to the permittee only. of these conditions shall be provided one copy when requested or otherwise appropriate.}	Other persons requesting copies
$\cdot$	

#### Chapter 62-4, F.A.C.

1. **Not federally enforceable.** General Prohibition. Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained, constructed, expanded, or modified without the appropriate and valid permits issued by the Department, unless the source is exempted by Department rule. The Department may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the provisions of Chapter 403, F.S., or the rules promulgated thereunder. A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit.

[Rule 62-4.030, Florida Administrative Code (F.A.C.); Section 403.087, Florida Statute (F.S.)]

- 2. Not federally enforceable. Procedures to Obtain Permits and Other Authorizations; Applications.
  - (1) Any person desiring to obtain a permit from the Department shall apply on forms prescribed by the Department and shall submit such additional information as the Department by law may require.
  - (2) All applications and supporting documents shall be filed in quadruplicate with the Department.
  - (3) To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution, shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. All applications for a Department permit shall be certified by a professional engineer registered in the State of Florida except, when the application is for renewal of an air pollution operation permit at a non-Title V source as defined in Rule 62-210.200, F.A.C., or where professional engineering is not required by Chapter 471, F.S. Where required by Chapter 471 or 492, F.S., applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.
  - (4) Processing fees for air construction permits shall be in accordance with Rule 62-4.050(4), F.A.C.
  - (5) (a) To be considered by the Department, each application must be accompanied by the proper processing fee. The fee shall be paid by check, payable to the Department of Environmental Protection. The fee is non-refundable except as provided in Section 120.60, F.S., and in this section.
    - (c) Upon receipt of the proper application fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin.
    - (d) If the applicant does not submit the required fee within ten days of receipt of written notification, the Department shall either return the unprocessed application or arrange with the applicant for the pick up of the application.
    - (e) If an applicant submits an application fee in excess of the required fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin upon receipt, and the Department shall refund to the applicant the amount received in excess of the required fee.
  - (6) Any substantial modification to a complete application shall require an additional processing fee determined pursuant to the schedule set forth in Rule 62-4.050, F.A.C., and shall restart the time requirements of Sections 120.60 and 403.0876, F.S. For purposes of this Subsection, the term "substantial modification" shall mean a modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review.
  - (7) Modifications to existing permits proposed by the permittee which require substantial changes in the existing permit or require substantial evaluation by the Department of potential impacts of the proposed modifications shall require the same fee as a new application for the same time duration except for modification under Chapter 62-45, F.A.C.

[Rule 62-4.050, F.A.C.]

- 3. <u>Standards for Issuing or Denying Permits</u>. Except as provided at Rule 62-213.460, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules.
- [Rule 62-4.070(7), F.A.C.]

  Modification of Permit Conditions.
  - (1) For good cause and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable

#### APPENDIX TV-4. TITLE V CONDITIONS

time to conform to the new or additional conditions and on application of the permittee the Department may grant additional time. For the purpose of this section, good cause shall include, but not be limited to, any of the following: (also, see Condition No. 38.).

- (a) A showing that an improvement in effluent or emission quality or quantity can be accomplished because of technological advances without unreasonable hardship.
- (b) A showing that a higher degree of treatment is necessary to effect the intent and purpose of Chapter 403, F.S.
- (c) A showing of any change in the environment or surrounding conditions that requires a modification to conform to applicable air or water quality standards.
- (e) Adoption or revision of Florida Statutes, rules, or standards which require the modification of a permit condition for compliance.
- (2) A permittee may request a modification of a permit by applying to the Department.
- (3) A permittee may request that a permit be extended as a modification of the permit. Such a request must be submitted to the Department in writing before the expiration of the permit. Upon timely submittal of a request for extension, unless the permit automatically expires by statute or rule, the permit will remain in effect until final agency action is taken on the request. For construction permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that, upon completion, the extended permit will comply with the standards and conditions required by applicable regulation. For all other permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that the extended permit will comply with the standards and conditions applicable to the original permit. A permit for which the permit application fee was prorated in accordance with Rule 62-4.050(4)(1), F.A.C., shall not be extended. In no event shall a permit be extended or remain in effect longer than the time limits established by statute or rule.

[Rule 62-4.080, F.A.C.]

8. Renewals. Prior to 180 days before the expiration of a permit issued pursuant to Chapter 62-213, F.A.C., the permittee shall apply for a renewal of a permit using forms incorporated by reference in the specific rule chapter for that kind of permit. A renewal application shall be timely and sufficient. If the application is submitted prior to 180 days before expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department or, if there is court review of the Department's final agency action, until a later date is required by Section 120.60, F.S., provided that, for renewal of a permit issued pursuant to Chapter 62-213, F.A.C., the applicant complies with the requirements of Rules 62-213.420(1)(b)3. and 4., F.A.C.

[Rule 62-4.090, F.A.C.]

- 6. Suspension and Revocation.
  - (1) Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.
  - (2) Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.
  - (3) A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or his agent:
    - (a) Submitted false or inaccurate information in his application or operational reports.
    - (b) Has violated law, Department orders, rules or permit conditions.
    - (c) Has failed to submit operational reports or other information required by Department rules.
    - (d) Has refused lawful inspection under Section 403.091, F.S.
  - (4) No revocation shall become effective except after notice is served by personal services, certified mail, or newspaper notice pursuant to Section 120.60(7), F.S., upon the person or persons named therein and a hearing held if requested within the time specified in the notice. The notice shall specify the provision of the law, or rule alleged to be violated, or the permit condition or Department order alleged to be violated, and the facts alleged to constitute a violation thereof.

[Rule 62-4.100, F.A.C.]

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7. **Not federally enforceable.** <u>Financial Responsibility</u>. The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules.

[Rule 62-4.110, F.A.C.]

- 8. Transfer of Permits.
  - (1) Within 30 days after the sale or legal transfer of a permitted facility, an "Application for Transfer of Permit" (DEP Form 62-1.201(1)) must be submitted to the Department. This form must be completed with the notarized signatures of both the permittee and the proposed new permittee. For air permits, an "Application for Transfer of Air Permit" (DEP Form 62-210.900(7)) shall be submitted.
  - (2) The Department shall approve the transfer of a permit unless it determines that the proposed new permittee cannot provide reasonable assurances that conditions of the permit will be met. The determination shall be limited solely to the ability of the new permittee to comply with the conditions of the existing permit, and it shall not concern the adequacy of these permit conditions. If the Department proposes to deny the transfer, it shall provide both the permittee and the proposed new permittee a written objection to such transfer together with notice of a right to request a Chapter 120, F.S., proceeding on such determination.
  - (3) Within 30 days of receiving a properly completed Application for Transfer of Permit form, the Department shall issue a final determination. The Department may toll the time for making a determination on the transfer by notifying both the permittee and the proposed new permittee that additional information is required to adequately review the transfer request. Such notification shall be served within 30 days of receipt of an Application for Transfer of Permit form, completed pursuant to Rule 62-4.120(1), F.A.C. If the Department fails to take action to approve or deny the transfer within 30 days of receipt of the completed Application for Transfer of Permit form, or within 30 days of receipt of the last item of timely requested additional information, the transfer shall be deemed approved.
  - (4) The permittee is encouraged to apply for a permit transfer prior to the sale or legal transfer of a permitted facility. However, the transfer shall not be effective prior to the sale or legal transfer.
  - (5) Until this transfer is approved by the Department, the permittee and any other person constructing, operating, or maintaining the permitted facility shall be liable for compliance with the terms of the permit. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility.

[Rule 62-4.120, F.A.C.]

9. Plant Operation-Problems. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. (also, see Condition No. 10.).

[Rule 62-4.130, F.A.C.]

10. For purposes of notification to the Department pursuant to Condition No. 9., Condition No. 12.(8), and Rule 62-4.130, F.A.C., Plant Operation-Problems, "immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. - 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays; and, for purposes of 40 CFR 70.6(a)(3)(iii)(B), "prompt" shall have the same meaning as "immediately". [also, see Conditions Nos. 9. and 12.(8).]

[40 CFR 70.6(a)(3)(iii)(B)]

11. **Not federally enforceable.** Review. Failure to request a hearing within 14 days of receipt of notice of proposed or final agency action on a permit application or as otherwise required in Chapter 62-103, F.A.C., shall be deemed a waiver of the right to an administrative hearing.

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[Rule 62-4.150, F.A.C.]

12. <u>Permit Conditions</u>. All permits issued by the Department shall include the following general conditions:

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#### APPENDIX TV-4. TITLE V CONDITIONS

- (1) The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- (2) This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- (3) As provided in Subsections 403.087(7) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
- (4) This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- (5) This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.
- (6) The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- (7) The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
  - (a) Have access to and copy any records that must be kept under conditions of the permit;
  - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
  - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
- (8) If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information: (also, see Condition No. 10.)
  - (a) A description of and cause of noncompliance; and,
  - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
- (9) In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- (10) The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by F.S. or Department

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rules.

- (11) This permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- (12) This permit or a copy thereof shall be kept at the work site of the permitted activity.
- (14) The permittee shall comply with the following:
  - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
  - (c) Records of monitoring information shall include:
    - 1. the date, exact place, and time of sampling or measurements;
    - 2. the person responsible for performing the sampling or measurements;
    - 3. the dates analyses were performed;
    - 4. the person responsible for performing the analyses;
    - 5. the analytical techniques or methods used;
    - 6. the results of such analyses.
- (15) When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

[Rules 62-4.160 and 62-213.440(1)(b), F.A.C.]

## 13. Construction Permits.

- (1) No person shall construct any installation or facility which will reasonably be expected to be a source of air or water pollution without first applying for and receiving a construction permit from the Department unless exempted by statute or Department rule. In addition to the requirements of Chapter 62-4, F.A.C., applicants for a Department Construction Permit shall submit the following as applicable:
  - (a) A completed application on forms furnished by the Department.
  - (b) An engineering report covering:
    - 1. plant description and operations,
    - 2. types and quantities of all waste material to be generated whether liquid, gaseous or solid,
    - 3. proposed waste control facilities,
    - 4. the treatment objectives,
    - 5. the design criteria on which the control facilities are based, and,
    - 6. other information deemed relevant.

Design criteria submitted pursuant to Rule 62-4.210(1)(b)5., F.A.C., shall be based on the results of laboratory and pilot-plant scale studies whenever such studies are warranted. The design efficiencies of the proposed waste treatment facilities and the quantities and types of pollutants in the treated effluents or emissions shall be indicated. Work of this nature shall be subject to the requirements of Chapter 471, F.S. Where confidential records are involved, certain information may be kept confidential pursuant to Section 403.111, F.S.

(c) The owners' written guarantee to meet the design criteria as accepted by the Department and to abide by Chapter 403, F.S. and the rules of the Department as to the quantities and types of materials to be discharged

from the installation. The owner may be required to post an appropriate bond or other equivalent evidence of financial responsibility to guarantee compliance with such conditions in instances where the owner's financial resources are inadequate or proposed control facilities are experimental in nature.

- (2) The construction permit may contain conditions and an expiration date as determined by the Secretary or the Secretary's designee.
- (3) When the Department issues a permit to construct, the permittee shall be allowed a period of time, specified in the permit, to construct, and to operate and test to determine compliance with Chapter 403, F.S., and the rules of the Department and, where applicable, to apply for and receive an operation permit. The Department may require tests and evaluations of the treatment facilities by the permittee at his/her expense.

[Rule 62-4.210, F.A.C.]

14. **Not federally enforceable.** Operation Permit for New Sources. To properly apply for an operation permit for new sources, the applicant shall submit the appropriate fee and certification that construction was completed noting any deviations from the conditions in the construction permit and test results where appropriate.

[Rule 62-4.220, F.A.C.]

# Chapters 28-106 and 62-110, F.A.C.

15. <u>Public Notice, Public Participation, and Proposed Agency Action</u>. The permittee shall comply with all of the requirements for public notice, public participation, and proposed agency action pursuant to Rules 62-110.106 and 62-210.350, F.A.C.

[Rules 62-110.106, 62-210.350 and 62-213.430(1)(b), F.A.C.]

16. <u>Administrative Hearing</u>. The permittee shall comply with all of the requirements for a petition for administrative hearing or waiver of right to administrative proceeding pursuant to Rules 28-106.201, 28-106.301 and 62-110.106, F.A.C.

[Rules 28-106.201, 28-106.301 and 62-110.106, F.A.C.]

#### Chapter 62-204, F.A.C.

17. <u>Asbestos</u>. This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source.

[40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

# Chapter 62-210, F.A.C.

- 18. Permits Required. The owner or operator of any emissions unit which emits or can reasonably be expected to emit any air pollutant shall obtain an appropriate permit from the Department prior to beginning construction, modification, or initial or continued operation of the emissions unit unless exempted pursuant to Department rule or statute. All emissions limitations, controls, and other requirements imposed by such permits shall be at least as stringent as any applicable limitations and requirements contained in or enforceable under the State Implementation Plan (SIP) or that are otherwise federally enforceable. Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law.
  - (1) Air Construction Permits.
    - (a) Unless exempt from permitting pursuant to Rule 62-210.300(3)(a) or (b), F.A.C., or Rule 62-4.040, F.A.C., an air construction permit shall be obtained by the owner or operator of any proposed new or modified facility or emissions unit prior to the beginning of construction or modification, in accordance with all applicable provisions of Chapter 62-210, F.A.C., Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C. Except as provided under Rule 62-213.415, F.A.C., the owner or operator of any facility seeking to create or change an air emissions bubble shall obtain an air construction permit in accordance with all the applicable provisions of Chapter 62-210, F.A.C., Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C. The construction

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- permit shall be issued for a period of time sufficient to allow construction or modification of the facility or emissions unit and operation while the new or modified facility or emissions unit is conducting tests or otherwise demonstrating initial compliance with the conditions of the construction permit.
- (b) Notwithstanding the expiration of an air construction permit, all limitations and requirements of such permit that are applicable to the design and operation of the permitted facility or emissions unit shall remain in effect until the facility or emissions unit is permanently shut down, except for any such limitation or requirement that is obsolete by its nature (such as a requirement for initial compliance testing) or any such limitation or requirement that is changed in accordance with the provisions of Rule 62-210.300(1)(b)1., F.A.C. Either the applicant or the Department can propose that certain conditions be considered obsolete. Any conditions or language in an air construction permit that are included for informational purposes only, if they are transferred to the air operation permit, shall be transferred for informational purposes only and shall not become enforceable conditions unless voluntarily agreed to by the permittee or otherwise required under Department rules.
  - 1. Except for those limitations or requirements that are obsolete, all limitations and requirements of an air construction permit shall be included and identified in any air operation permit for the facility or emissions unit. The limitations and requirements included in the air operation permit can be changed, and thereby superseded, through the issuance of an air construction permit, federally enforceable state air operation permit, federally enforceable air general permit, or Title V air operation permit; provided, however, that:
    - a. Any change that would constitute an administrative correction may be made pursuant to Rule 62-210.360, F.A.C.;
    - b. Any change that would constitute a modification, as defined at Rule 62-210.200, F.A.C., shall be accomplished only through the issuance of an air construction permit; and
    - c. Any change in a permit limitation or requirement that originates from a permit issued pursuant to 40 CFR 52.21, Rule 62-204.800(10)(d)2., F.A.C., Rule 62-212.400, F.A.C., Rule 62-212.500, F.A.C., or any former codification of Rule 62-212.400 or Rule 62-212.500, F.A.C., shall be accomplished only through the issuance of a new or revised air construction permit under Rule 62-204.800(10)(d)2., Rule 62-212.400, or Rule 62-212.500, F.A.C., as appropriate.
  - 2. The force and effect of any change in a permit limitation or requirement made in accordance with the provisions of Rule 62-210.300(1)(b)1., F.A.C., shall be the same as if such change were made to the original air construction permit.
  - 3. Nothing in Rule 62-210.300(1)(b), F.A.C., shall be construed as to allow operation of a facility or emissions unit without a valid air operation permit.
- (2) Air Operation Permits. Upon expiration of the air operation permit for any existing facility or emissions unit, subsequent to construction or modification, or subsequent to the creation of or change to a bubble, and demonstration of compliance with the conditions of the construction permit for any new or modified facility or emissions unit, any air emissions bubble, or as otherwise provided in Chapter 62-210, F.A.C., or Chapter 62-213, F.A.C., the owner or operator of such facility or emissions unit shall obtain a renewal air operation permit, an initial air operation permit or general permit, or an administrative correction or revision of an existing air operation permit, whichever is appropriate, in accordance with all applicable provisions of Chapter 62-210, F.A.C., Chapter 62-213, F.A.C., and Chapter 62-4, F.A.C.
  - (a) Minimum Requirements for All Air Operation Permits. At a minimum, a permit issued pursuant to this subsection shall:
    - 1. Specify the manner, nature, volume and frequency of the emissions permitted, and the applicable emission limiting standards or performance standards, if any;
    - 2. Require proper operation and maintenance of any pollution control equipment by qualified personnel, where applicable in accordance with the provisions of any operation and maintenance plan required by the air pollution rules of the Department.
    - 3. Contain an effective date stated in the permit which shall not be earlier than the date final action is taken on the application and be issued for a period, beginning on the effective date, as provided below.

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- a. The operation permit for an emissions unit which is in compliance with all applicable rules and in operational condition, and which the owner or operator intends to continue operating, shall be issued or renewed for a five-year period, except that, for Title V sources subject to Rule 62-213.420(1)(a)1., F.A.C., operation permits shall be extended until 60 days after the due date for submittal of the facility's Title V permit application as specified in Rule 62-213.420(1)(a)1., F.A.C.
- b. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for six months or more prior to the expiration date of the current operation permit, shall be renewed for a period not to exceed five years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided:
  - (i) the owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and,
  - (ii) the owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and,
  - (iii) the emissions unit was operating in compliance with all applicable rules as of the time the source was shut down.
- c. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for five years or more prior to the expiration date of the current operation permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided the conditions given in Rule 62-210.300(2)(a)3.b., F.A.C., are met and the owner or operator demonstrates to the Department that failure to renew the permit would constitute a hardship, which may include economic hardship.
- d. The operation permit for an electric utility generating unit on cold standby or long-term reserve shutdown shall be renewed for a five-year period, and additional five-year periods, even if the unit is not maintained in operational condition, provided the conditions given in Rules 62-210.300(2)(a)3.b.(i) through (iii), F.A.C., are met.
- 4. In the case of an emissions unit permitted pursuant to Rules 62-210.300(2)(a)3.b., c., and d., F.A.C., include reasonable notification and compliance testing requirements for reactivation of such emissions unit and provide that the owner or operator demonstrate to the Department prior to reactivation that such reactivation would not constitute reconstruction pursuant to Rule 62-204.800(7), F.A.C.

[Rules 62-210.300(1) & (2), F.A.C.]

- 19. **Not federally enforceable.** <u>Notification of Startup</u>. The owner or operator of any emissions unit or facility which has a valid air operation permit which has been shut down more than one year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of 60 days prior to the intended startup date.
  - (a) The notification shall include information as to the startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.
  - (b) If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.

[Rule 62-210.300(5), F.A.C.]

## 20. Emissions Unit Reclassification.

(a) Any emissions unit whose operation permit has been revoked as provided for in Chapter 62-4, F.A.C., shall be deemed permanently shut down for purposes of Rule 62-212.500, F.A.C. Any emissions unit whose permit to operate has expired without timely renewal or transfer may be deemed permanently shut down, provided, however, that no such emissions unit shall be deemed permanently shut down if, within 20 days after receipt of

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written notice from the Department, the emissions unit owner or operator demonstrates that the permit expiration resulted from inadvertent failure to comply with the requirements of Rule 62-4.090, F.A.C., and that the owner or operator intends to continue the emissions unit in operation, and either submits an application for an air operation permit or complies with permit transfer requirements, if applicable.

(b) If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit.

[Rule 62-210.300(6), F.A.C.]

## 21. Transfer of Air Permits.

- (a) An air permit is transferable only after submission of an Application for Transfer of Air Permit (DEP Form 62-210.900(7)) and Department approval in accordance with Rule 62-4.120, F.A.C. For Title V permit transfers only, a complete application for transfer of air permit shall include the requirements of 40 CFR 70.7(d)(1)(iv), adopted and incorporated by reference at Rule 62-204.800, F.A.C. Within 30 days after approval of the transfer of permit, the Department shall update the permit by an administrative permit correction pursuant to Rule 62-210.360, F.A.C.
- (b) For an air general permit, the provision of Rules 62-210.300(7)(a) and 62-4.120, F.A.C., do not apply. Thirty (30) days before using an air general permit, the new owner must submit an air general permit notification to the Department in accordance with Rule 62-210.300(4), F.A.C., or Rule 62-213.300(2)(b), F.A.C.

[Rule 62-210.300(7), F.A.C.]

## 22. Public Notice and Comment.

- (1) Public Notice of Proposed Agency Action.
  - (a) A notice of proposed agency action on permit application, where the proposed agency action is to issue the permit, shall be published by any applicant for:
    - 1. An air construction permit;
    - 2. An air operation permit, permit renewal or permit revision subject to Rule 62-210.300(2)(b), F.A.C., (i.e., a FESOP), except as provided in Rule 62-210.300(2)(b)1.b., F.A.C.; or
    - 3. An air operation permit, permit renewal, or permit revision subject to Chapter 62-213, F.A.C., except Title V air general permits or those permit revisions meeting the requirements of Rule 62-213.412(1), F.A.C.
  - (b) The notice required by Rule 62-210.350(1)(a), F.A.C., shall be published in accordance with all otherwise applicable provisions of Rule 62-110.106, F.A.C. A public notice under Rule 62-210.350(1)(a)1., F.A.C., for an air construction permit may be combined with any required public notice under Rule 62-210.350(1)(a)2. or 3., F.A.C., for air operation permits. If such notices are combined, the public notice must comply with the requirements for both notices.
  - (c) Except as otherwise provided at Rules 62-210.350(2) and (5), F.A.C., each notice of intent to issue an air construction permit shall provide a 14-day period for submittal of public comments.
- (2) Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment Area Preconstruction Review.
  - (a) Before taking final agency action on a construction permit application for any proposed new or modified facility or emissions unit subject to the preconstruction review requirements of Rule 62-212.400 or 62-212.500, F.A.C., the Department shall comply with all applicable provisions of Rule 62-110.106, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:
    - A complete file available for public inspection in at least one location in the district affected which
      includes the information submitted by the owner or operator, exclusive of confidential records under
      Section 403.111, F.S., and the Department's analysis of the effect of the proposed construction or
      modification on ambient air quality, including the Department's preliminary determination of whether
      the permit should be approved or disapproved;

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- 2. A 30-day period for submittal of public comments; and,
- 3. A notice, by advertisement in a newspaper of general circulation in the county affected, specifying the nature and location of the proposed facility or emissions unit, whether BACT or LAER has been determined, the degree of PSD increment consumption expected, if applicable, and the location of the information specified in paragraph 1. above; and, notifying the public of the opportunity for submitting comments and requesting a public hearing.
- (b) The notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-110.106, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.
- (c) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall also be sent by the Department to the Regional Office of the U. S. Environmental Protection Agency and to all other state and local officials or agencies having cognizance over the location of such new or modified facility or emissions unit, including local air pollution control agencies, chief executives of city or county government, regional land use planning agencies, and any other state, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the new or modified facility or emissions unit.
- (d) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be displayed in the appropriate district, branch and local program offices.
- (e) An opportunity for public hearing shall be provided in accordance with Chapter 120, F.S., and Rule 62-110.106, F.A.C.
- (f) Any public comments received shall be made available for public inspection in the location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., is available and shall be considered by the Department in making a final determination to approve or deny the permit.
- (g) The final determination shall be made available for public inspection at the same location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., was made available.
- (h) For a proposed new or modified emissions unit which would be located within 100 kilometers of any Federal Class I area or whose emissions may affect any Federal Class I area, and which would be subject to the preconstruction review requirements of Rule 62-212.400, F.A.C., or Rule 62-212.500, F.A.C.:
  - 1. The Department shall mail or transmit to the Administrator a copy of the initial application for an air construction permit and notice of every action related to the consideration of the permit application.
  - 2. The Department shall mail or transmit to the Federal Land Manager of each affected Class I area a copy of any written notice of intent to apply for an air construction permit; the initial application for an air construction permit, including all required analyses and demonstrations; any subsequently submitted information related to the application; the preliminary determination and notice of proposed agency action on the permit application; and any petition for an administrative hearing regarding the application or the Department's proposed action. Each such document shall be mailed or transmitted to the Federal Land Manager within fourteen (14) days after its receipt by the Department.
- (3) Additional Public Notice Requirements for Facilities Subject to Operation Permits for Title V Sources.
  - (a) Before taking final agency action to issue a new, renewed, or revised air operation permit subject to Chapter 62-213, F.A.C., the Department shall comply with all applicable provisions of Rule 62-110.106, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:
    - A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S.; and,
    - 2. A 30-day period for submittal of public comments.
  - (b) The notice provided for in Rule 62-210.350(3)(a), F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-110.106, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action. If written comments received during the 30-day comment period on a draft permit result in the

Department's issuance of a revised draft permit in accordance with Rule 62-213.430(1), F.A.C., the Department shall require the applicant to publish another public notice in accordance with Rule 62-210.350(1)(a), F.A.C.

- (c) The notice shall identify:
  - 1. The facility;
  - 2. The name and address of the office at which processing of the permit occurs;
  - 3. The activity or activities involved in the permit action;
  - 4. The emissions change involved in any permit revision;
  - 5. The name, address, and telephone number of a Department representative from whom interested persons may obtain additional information, including copies of the permit draft, the application, and all relevant supporting materials, including any permit application, compliance plan, permit, monitoring report, and compliance statement required pursuant to Chapter 62-213, F.A.C. (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), and all other materials available to the Department that are relevant to the permit decision;
  - 6. A brief description of the comment procedures required by Rule 62-210.350(3), F.A.C.;
  - 7. The time and place of any hearing that may be held, including a statement of procedure to request a hearing (unless a hearing has already been scheduled); and,
  - 8. The procedures by which persons may petition the Administrator to object to the issuance of the proposed permit after expiration of the Administrator's 45-day review period.

[Rule 62-210.350, F.A.C.]

## 23. Administrative Permit Corrections.

- (1) A facility owner shall notify the Department by letter of minor corrections to information contained in a permit. Such notifications shall include:
  - (a) Typographical errors noted in the permit;
  - (b) Name, address or phone number change from that in the permit;
  - (c) A change requiring more frequent monitoring or reporting by the permittee;
  - (d) A change in ownership or operational control of a facility, subject to the following provisions:
    - 1. The Department determines that no other change in the permit is necessary;
    - 2. The permittee and proposed new permittee have submitted an Application for Transfer of Air Permit, and the Department has approved the transfer pursuant to Rule 62-210.300(7), F.A.C.; and
    - 3. The new permittee has notified the Department of the effective date of sale or legal transfer.
  - (e) Changes listed at 40 CFR 72.83(a)(1), (2), (6), (9) and (10), adopted and incorporated by reference at Rule 62-204.800, F.A.C., and changes made pursuant to Rules 62-214.340(1) and (2), F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-76510;
  - (f) Changes listed at 40 CFR 72.83(a)(11) and (12), adopted and incorporated by reference at Rule 62-204.800, F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-76510, provided the notification is accompanied by a copy of any EPA determination concerning the similarity of the change to those listed at Rule 62-210.360(1)(e), F.A.C.; and,
  - (g) Any other similar minor administrative change at the source.
- (2) Upon receipt of any such notification the Department shall within 60 days correct the permit and provide a corrected copy to the owner.
- (3) After first notifying the owner, the Department shall correct any permit in which it discovers errors of the types listed at Rules 62-210.360(1)(a) and (b), F.A.C., and provide a corrected copy to the owner.
- (4) For Title V source permits, other than general permits, a copy of the corrected permit shall be provided to EPA and any approved local air program in the county where the facility or any part of the facility is located.
- (5) The Department shall incorporate requirements resulting from issuance of a new or revised construction permit into an existing Title V source permit, if the construction permit or permit revision incorporates requirements of

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federally enforceable preconstruction review, and if the applicant requests at the time of application that all of the requirements of Rule 62-213.430(1), F.A.C., be complied with in conjunction with the processing of the construction permit application.

[Rule 62-210.360, F.A.C.]

- 24. Reports.
  - (3) Annual Operating Report for Air Pollutant Emitting Facility.
    - (a) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year.
    - (c) The annual operating report shall be submitted to the appropriate Department District or Department approved local air pollution control program office by March 1 of the following year unless otherwise indicated by permit condition or Department request.

[Rule 62-210.370(3), F.A.C.]

25. <u>Circumvention</u>. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly.

[Rule 62-210.650, F.A.C.]

- 26. Forms and Instructions. The forms used by the Department in the stationary source control program are adopted and incorporated by reference in this section. The forms are listed by rule number, which is also the form number, with the subject, title and effective date. Forms 62-210.900(1),(3),(4) and (5), F.A.C., including instructions, are available from the Department as hard-copy documents or executable files on computer diskettes. Copies of forms (hard-copy or diskette) may be obtained by writing to the Department of Environmental Protection, Division of Air Resource Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Notwithstanding the requirement of Rule 62-4.050(2), F.A.C., to file application forms in quadruplicate, if an air permit application is submitted using the Department's electronic application form, only one copy of the diskette and signature pages is required to be submitted.
  - (1) Application for Air Permit Title V Source, Form and Instructions (Effective 02/11/1999).
    - (a) Acid Rain Part (Phase II), Form and Instructions (Effective 04/16/2001).
      - 1. Repowering Extension Plan, Form and Instructions (Effective 07/01/1995).
      - 2. New Unit Exemption, Form and Instructions (Effective 04/16/2001).
      - 3. Retired Unit Exemption, Form and Instructions (Effective 04/16/2001).
      - 4. Phase II NOx Compliance Plan, Form and Instructions (Effective 01/06/1998).
      - 5. Phase II NOx Averaging Plan, Form (Effective 01/06/1998).
    - (b) Reserved.
  - (5) Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions (Effective 02/11/1999).
  - (7) Application for Transfer of Air Permit Title V and Non-Title V Source, (Effective 04/16/2001).

[Rule 62-210.900, F.A.C.]

## Chapter 62-213, F.A.C.

27. <u>Annual Emissions Fee</u>. Each Title V source permitted to operate in Florida must pay between January 15 and March I of each year, upon written notice from the Department, an annual emissions fee in an amount determined as set forth in Rule 62-213.205(1), F.A.C.

[Rules 62-213.205 and 62-213.900(1), F.A.C.]

28....<u>Annual Emissions Fee</u>. Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C.

[Rule 62-213.205(I)(g), F.A.C.]

29. <u>Annual Emissions Fee</u>. Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a

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minimum of five (5) years and shall be made available to the Department upon request.

[Rule 62-213.205(1)(i), F.A.C.]

30. <u>Annual Emissions Fee</u>. A completed DEP Form 62-213.900(1), F.A.C., "Major Air Pollution Source Annual Emissions Fee Form", must be submitted by the responsible official with the annual emissions fee.

[Rule 62-213.205(1)(j), F.A.C.]

31. <u>Air Operation Permit Fees</u>. No permit application processing fee, renewal fee, modification fee or amendment fee is required for an operation permit for a Title V source.

[Rule 62-213.205(4), F.A.C.]

- 32. <u>Permits and Permit Revisions Required</u>. All Title V sources are subject to the permit requirements of Chapter 62-213, F.A.C.
  - (1) No Title V source may operate except in compliance with Chapter 62-213, F.A.C.
  - (2) Except as provided in Rule 62-213.410, F.A.C., no source with a permit issued under the provisions of this chapter shall make any changes in its operation without first applying for and receiving a permit revision if the change meets any of the following:
    - (a) Constitutes a modification;
    - (b) Violates any applicable requirement;
    - (c) Exceeds the allowable emissions of any air pollutant from any unit within the source;
    - (d) Contravenes any permit term or condition for monitoring, testing, recordkeeping, reporting or of a compliance certification requirement;
    - (e) Requires a case-by-case determination of an emission limitation or other standard or a source specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapters 62-212 or 62-296, F.A.C.;
    - (f) Violates a permit term or condition which the source has assumed for which there is no corresponding underlying applicable requirement to which the source would otherwise be subject;
    - (g) Results in the trading of emissions among units within a source except as specifically authorized pursuant to Rule 62-213.415, F.A.C.;
    - (h) Results in the change of location of any relocatable facility identified as a Title V source pursuant to paragraph (a)-(e), (g) or (h) of the definition of "major source of air pollution" at Rule 62-210.200, F.A.C.;
    - (i) Constitutes a change at an Acid Rain Source under the provisions of 40 CFR 72.81(a)(1),(2),or (3),(b)(1) or (b)(3), hereby incorporated by reference;
    - (j) Constitutes a change in a repowering plan, nitrogen oxides averaging plan, or nitrogen oxides compliance deadline extension at an Acid Rain Source;
    - (k) Is a request for industrial-utility unit exemption pursuant to Rule 62-214.340, F.A.C.

[Rules 62-213.400(1) & (2), F.A.C.]

- 33. <u>Changes Without Permit Revision</u>. Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation in each alternative method of operation:
  - (1) Permitted sources may change among those alternative methods of operation allowed by the source's permit as provided by the terms of the permit;
  - (2) Permitted sources may implement the terms or conditions of a new or revised construction permit if;
    - (a) The application for construction permit complied with the requirements of Rule 62-213.420(3) and (4), F.A.C.;
    - (b) The terms or conditions were subject to federally enforceable preconstruction review pursuant to Chapter 62-212, F.A.C.; and,
    - (c) The new or revised construction permit was issued after the Department and the applicant complied with all the requirements of Rule 62-213.430(1), F.A.C.;

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- (3) A permitted source may implement operating changes, as defined in Rule 62-210.200, F.A.C., after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;
  - (a) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change;
  - (b) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;
- (4) Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C.

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

- 34. Immediate Implementation Pending Revision Process.
  - (1) Those permitted Title V sources making any change that constitutes a modification pursuant to the definition of modification at Rule 62-210.200, F.A.C., but which would not constitute a modification pursuant to 42 USC 7412(a) or to 40 CFR 52.01, 60.2, or 61.15, adopted and incorporated by reference at Rule 62-204.800, F.A.C., may implement such change prior to final issuance of a permit revision in accordance with this section, provided the change:
    - (a) Does not violate any applicable requirement;
    - (b) Does not contravene any permit term or condition for monitoring, testing, recordkeeping or reporting, or any compliance certification requirement;
    - (c) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapter 62-212 or 62-296, F.A.C.;
    - (d) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and which the source has assumed to avoid an applicable requirement to which the source would otherwise be subject including any federally enforceable emissions cap or federally enforceable alternative emissions limit.
  - (2) A Title V source may immediately implement such changes after they have been incorporated into the terms and conditions of a new or revised construction permit issued pursuant to Chapter 62-212, F.A.C., and after the source provides to EPA, the Department, each affected state and any approved local air program having geographic jurisdiction over the source, a copy of the source's application for operation permit revision. The Title V source may conform its application for construction permit to include all information required by Rule 62-213.420, F.A.C., in lieu of submitting separate application forms.
  - (3) The Department shall process the application for operation permit revision in accordance with the provisions of Chapter 62-213, F.A.C., except that the Department shall issue a draft permit revision or a determination to deny the revision within 60 days of receipt of a complete application for operation permit revision or, if the Title V source has submitted a construction permit application conforming to the requirements of Rule 62-213.420, F.A.C., the Department shall issue a draft permit or a determination to deny the revision at the same time the Department issues its determination on issuance or denial of the construction permit application. The Department shall not take final action until all the requirements of Rules 62-213.430(1)(a), (c), (d), and (e), F.A.C., have been complied with.
  - (4) Pending final action on the operation permit revision application, the source shall implement the changes in accordance with the terms and conditions of the source's new or revised construction permit.
  - (5) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes until after the Department takes final action to issue the operation permit revision.
  - (6) If the Department denies the source's application for operation permit revision, the source shall cease implementation of the proposed changes.

[Rule 62-213.412, F.A.C.]

35. Permit Applications.

- (1) Duty to Apply. For each Title V source, the owner or operator shall submit a timely and complete permit application in compliance with the requirements of Rules 62-213.420, F.A.C., and Rules 62-4.050(1) through (3), F.A.C.
  - (a) Timely Application.
    - 3. For purposes of permit renewal, a timely application is one that is submitted in accordance with Rule 62-4.090, F.A.C.
  - (b) Complete Application.
    - 1. Any applicant for a Title V permit, permit revision or permit renewal must submit an application on DEP Form No. 62-210.900(1), which must include all the information specified by Rule 62-213.420(3), F.A.C., except that an application for permit revision must contain only that information related to the proposed change. The applicant shall include information concerning fugitive emissions and stack emissions in the application. Each application for permit, permit revision or permit renewal shall be certified by a responsible official in accordance with Rule 62-213.420(4), F.A.C.
    - For those applicants submitting initial permit applications pursuant to Rule 62-213.420(1)(a)1... F.A.C., a complete application shall be an application that substantially addresses all the information required by the application form number 62-210,900(1), and such applications shall be deemed complete within sixty days of receipt of a signed and certified application unless the Department notifies the applicant of incompleteness within that time. For all other applicants, the applications shall be deemed complete sixty days after receipt, unless the Department, within sixty days after receipt of a signed application for permit, permit revision or permit renewal, requests additional documentation or information needed to process the application. An applicant making timely and complete application for permit, or timely application for permit renewal as described by Rule 62-4.090(1), F.A.C., shall continue to operate the source under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, and in accordance with applicable requirements of the Acid Rain Program, until the conclusion of proceedings associated with its permit application or until the new permit becomes effective, whichever is later, provided the applicant complies with all the provisions of Rules 62-213.420(1)(b)3. and 4. F.A.C. Failure of the Department to request additional information within sixty days of receipt of a properly signed application shall not impair the Department's ability to request additional information pursuant to Rules 62-213.420(1)(b)3. and 4., F.A.C.
    - 3. For those permit applications submitted pursuant to the provisions of Rule 62-213.420(1)(a)1., F.A.C., the Department shall notify the applicant if the Department becomes aware at any time during processing of the application that the application contains incorrect or incomplete information. The applicant shall submit the corrected or supplementary information to the Department within ninety days unless the applicant has requested and been granted additional time to submit the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days or such additional time as requested and granted shall render the application incomplete.
    - 4. For all applications other than those addressed at Rule 62-213.420(1)(b)3., F.A.C., should the Department become aware, during processing of any application that the application contains incorrect information, or should the Department become aware, as a result of comment from an affected State, an approved local air program, EPA, or the public that additional information is needed to evaluate the application, the Department shall notify the applicant within 30 days. When an applicant becomes aware that an application contains incorrect or incomplete information, the applicant shall submit the corrected or supplementary information to the Department. If the Department notifies an applicant that corrected or supplementary information is necessary to process the permit, and requests a response, the applicant shall provide the information to the Department within ninety days of the Department request unless the applicant has requested and been granted additional time to submit the information or, the applicant shall, within ninety days, submit a written request that the Department process the application without the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days, or such additional time as requested and granted, or to demand in writing within ninety days that the application be processed without the information shall render the application incomplete. Nothing in this section shall limit any

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other remedies available to the Department.

[Rules 62-213.420(1)(a)3. and 62-213.420(1)(b)1., 2., 3. & 4., F.A.C.]

36. <u>Confidential Information</u>. Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA. (also, see Condition No. 50.)

[Rule 62-213.420(2), F.A.C.]

37. <u>Standard Application Form and Required Information</u>. Applications shall be submitted under Chapter 62-213, F.A.C., on forms provided by the Department and adopted by reference in Rule 62-210.900(1), F.A.C. The information as described in Rule 62-210.900(1), F.A.C., shall be included for the Title V source and each emissions unit. An application must include information sufficient to determine all applicable requirements for the Title V source and each emissions unit and to evaluate a fee amount pursuant to Rule 62-213.205, F.A.C.

[Rule 62-213.420(3), F.A.C.]

- 38. a. Permit Renewal and Expiration. Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) and 62-213.420(3), F.A.C. Unless a Title V source submits a timely application for permit renewal in accordance with the requirements of Rule 62-4.090(1), F.A.C., the existing permit shall expire and the source's right to operate shall terminate. No Title V permit will be issued for a new term except through the renewal process.
  - b. Permit Revision Procedures. Permit revisions shall meet all requirements of Chapter 62-213, F.A.C., including those for content of applications, public participation, review by approved local programs and affected states, and review by EPA, as they apply to permit issuance and permit renewal, except that permit revisions for those activities implemented pursuant to Rule 62-213.412, F.A.C., need not meet the requirements of Rule 62-213.430(1)(b), F.A.C. The Department shall require permit revision in accordance with the provisions of Rule 62-4.080, F.A.C., and 40 CFR 70.7(f), whenever any source becomes subject to any condition listed at 40 CFR 70.7(f)(1), hereby adopted and incorporated by reference. The below requirements from 40 CFR 70.7(f) are adopted and incorporated by reference in Rule 62-213.430(4), F.A.C.:

# 40 CFR 70.7(f): Reopening for Cause. (also, see Condition No. 4.)

- (1) This section contains provisions from 40 CFR 70.7(f) that specify the conditions under which a Title V permit shall be reopened prior to the expiration of the permit. A Title V permit shall be reopened and revised under any of the following circumstances:
  - (i) Additional applicable requirements under the Act become applicable to a major Part 70 source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii).
  - (ii) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approved by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
  - (iii) The permitting authority or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
  - (iv) The Administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (2) Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
- (3) Reopenings under 40 CFR 70.7(f)(1) shall not be initiated before a notice of such intent is provided to the Part 70 source by the permitting authority at least 30 days in advance of the date that the permit is to be reopened, except that the permitting authority may provide a shorter time period in the case of an emergency.

[Rules 62-213.430(3) & (4), F.A.C.; and, 40 CFR 70.7(f)]

- 39. Insignificant Emissions Units or Pollutant-Emitting Activities.
  - (a) All requests for determination of insignificant emissions units or activities made pursuant to Rule 62-213.420(3)(m), F.A.C., shall be processed in conjunction with the permit, permit renewal or permit revision application submitted pursuant to Chapter 62-213, F.A.C. Insignificant emissions units or activities shall be approved by the Department consistent with the provisions of Rule 62-4.040(1)(b), F.A.C. Emissions units or activities which are added to a Title V source after issuance of a permit under Chapter 62-213, F.A.C., shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify as insignificant pursuant to Rule 62-213.430(6), F.A.C.
  - (b) An emissions unit or activity shall be considered insignificant if all of the following criteria are met:
    - 1. Such unit or activity would be subject to no unit-specific applicable requirement;
    - 2. Such unit or activity, in combination with other units or activities proposed as insignificant, would not cause the facility to exceed any major source threshold(s) as defined in Rule 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s);
    - 3. Such unit or activity would not emit or have the potential to emit:
      - a. 500 pounds per year or more of lead and lead compounds expressed as lead;
      - b. 1,000 pounds per year or more of any hazardous air pollutant;
      - c. 2,500 pounds per year or more of total hazardous air pollutants; or
      - d. 5.0 tons per year or more of any other regulated pollutant.

[Rule 62-213.430(6), F.A.C.]

40. <u>Permit Duration</u>. Permits for sources subject to the Federal Acid Rain Program shall be issued for terms of five years, provided that the initial Acid Rain Part may be issued for a term less than five years where necessary to coordinate the term of such part with the term of a Title V permit to be issued to the source. Operation permits for Title V sources may not be extended as provided in Rule 62-4.080(3), F.A.C., if such extension will result in a permit term greater than five years.

[Rule 62-213.440(1)(a), F.A.C.]

41. <u>Monitoring Information</u>. All records of monitoring information shall specify the date, place, and time of sampling or measurement and the operating conditions at the time of sampling or measurement, the date(s) analyses were performed, the company or entity that performed the analyses, the analytical techniques or methods used, and the results of such analyses.

[Rule 62-213.440(1)(b)2.a., F.A.C.]

42. Retention of Records. Retention of records of all monitoring data and support information shall be for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

[Rule 62-213.440(1)(b)2.b., F.A.C.]

43. <u>Monitoring Reports</u>. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports.

[Rule 62-213.440(1)(b)3.a., F.A.C.]

44. <u>Deviation from Permit Requirements Reports</u>. The permittee shall report in accordance with the requirements of Rules \*62-210.700(6) and 62-4.130, F.A.C., deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.

[Rule 62-213.440(1)(b)3.b., F.A.C.]

45. Reports. All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4),

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F.A.C.

[Rule 62-213.440(1)(b)3.c, F.A.C.]

46. If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect.

[Rule 62-213.440(1)(d)1., F.A.C.]

47. It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity.

[Rule 62-213.440(1)(d)3., F.A.C.]

48. Any Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C.

[Rule 62-213.440(1)(d)4., F.A.C.]

49. A situation arising from sudden and unforeseeable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference.

[Rule 62-213.440(1)(d)5., F.A.C.]

50. <u>Confidentiality Claims.</u> Any permittee may claim confidentiality of any data or other information by complying with Rule 62-213.420(2), F.A.C. (also, see Condition No. 36.).

[Rule 62-213.440(1)(d)6., F.A.C.]

- 51. Statement of Compliance.
  - (a) 2. The permittee shall submit a Statement of Compliance with all terms and conditions of the permit using DEP Form No. 62-213.900(7). Such statements shall be accompanied by a certification in accordance with Rule 62-213.420(4), F.A.C. Such statement shall be submitted (postmarked) to the Department and EPA:
    - a. Annually, within 60 days after the end of each calendar year during which the Title V permit was effective, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement; and
    - b. Within 60 days after submittal of a written agreement for transfer of responsibility as required pursuant to 40 CFR 70.7(d)(1)(iv), adopted and incorporated by reference at Rule 62-204.800, F.A.C., or within 60 days after permanent shutdown of a facility permitted under Chapter 62-213, F.A.C.; provided that, in either such case, the reporting period shall be the portion of the calendar year the permit was effective up to the date of transfer of responsibility or permanent facility shutdown, as applicable.
    - 3. The statement of compliance status shall include all the provisions of 40 CFR 70.6(c)(5)(iii), incorporated by reference at Rule 62-204.800, F.A.C.
  - (b) The responsible official may treat compliance with all other applicable requirements as a surrogate for compliance with Rule 62-296.320(2), Objectionable Odor Prohibited.

[Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

52. Permit Shield. Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall, as of the effective date of the permit, be deemed compliance with any applicable requirements in effect, provided that the source included such applicable requirements in the permit application. Nothing in Rule 62-213.460, F.A.C., or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program.

[Rule 62-213.460, F.A.C.]

53. <u>Forms and Instructions</u>. The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The form is listed by rule number, which is also the form

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number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or by contacting the appropriate permitting authority.

- (1) Major Air Pollution Source Annual Emissions Fee Form. (Effective 01/03/2001)
- (7) Statement of Compliance Form. (Effective 01/03/2001)

[Rule 62-213.900, F.A.C.: Forms (1) and (7)]

## Chapter 62-256, F.A.C.

54. **Not federally enforceable.** Open Burning. This permit does not authorize any open burning nor does it constitute any waiver of the requirements of Chapter 62-256, F.A.C. Source shall comply with Chapter 62-256, F.A.C., for any open burning at the source.

[Chapter 62-256, F.A.C.]

# Chapter 62-281, F.A.C.

- 55. Refrigerant Requirements. Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Rule 62-281.100, F.A.C. Those requirements include the following restrictions:
  - (1) Any facility having any refrigeration equipment normally containing 50 (fifty) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added pursuant to 40 CFR 82.166;
  - (2) No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided at 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved pursuant to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
  - (3) No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or Class II substance at 40 CFR 82, Subpart A, Appendices A and B, except in compliance with Rule 62-281.100, F.A.C., and 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;
  - (4) No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or Class II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined at 40 CFR 82.152) for service, maintenance or repair unless the person has been properly trained and certified pursuant to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance pursuant to 40 CFR 82.158 and unless the person observes the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
  - (5) No person may dispose of appliances (except small appliances, as defined at 40 CFR 82.152) without using equipment certified for that type of appliance pursuant to 40 CFR 82.158 and without observing the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
  - (6) No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined at 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82, Subpart F.

[40 CFR 82; and, Chapter 62-281, F.A.C. (Chapter 62-281, F.A.C., is not federally enforceable)]

# Chapter 62-296, F.A.C.

- 56. <u>Industrial, Commercial, and Municipal Open Burning Prohibited</u>. Open burning in connection with industrial, commercial, or municipal operations is prohibited, except when:
  - (a) Open burning is determined by the Department to be the only feasible method of operation and is authorized by an air permit issued pursuant to Chapter 62-210 or 62-213, F.A.C.; or,
  - (b) An emergency exists which requires immediate action to protect human health and safety; or,
  - (c) A county or municipality would use a portable air curtain incinerator to burn yard trash generated by a hurricane,

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tornado, fire or other disaster and the air curtain incinerator would otherwise be operated in accordance with the permitting exemption criteria of Rule 62-210.300(3), F.A.C.

[Rule 62-296.320(3), F.A.C.]

## 57. Unconfined Emissions of Particulate Matter.

- (4) (c) 1. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions.
  - 3. Reasonable precautions include the following:
    - a. Paving and maintenance of roads, parking areas and yards.
    - b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
    - c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
    - d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
    - e. Landscaping or planting of vegetation.
    - f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
    - g. Confining abrasive blasting where possible.
    - h. Enclosure or covering of conveyor systems.
  - 4. In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

[Rules 62-296.320(4)(c)1., 3., & 4. F.A.C.]

{Electronic Filename: TV-4.DOC}

## APPENDIX XS. SEMI-ANNUAL CONTINUOUS MONITOR SYSTEMS REPORT

{Note: This form is based on 40 CFR 60.7, Subpart A, General Provisions.} Pollutant (Circle One): Nitrogen Oxides (NOx) Carbon Monoxide (CO) Reporting period dates: From to Company: Emission Limitation: Monitor Manufacturer and Model No.: Date of Latest CMS Certification or Audit: Process Units Description: Total source operating time in reporting period <sup>a</sup>: Emission data summary a CMS performance summary a 1. Duration of Excess Emissions In Reporting Period Due To: 1. CMS downtime in reporting period due to: a. Startup/Shutdown a. Monitor Equipment Malfunctions b. Control Equipment Problems b. Non-Monitor Equipment Malfunctions c. Quality Assurance Calibration c. Process Problems d. Other Known Causes d. Other Known Causes e. Unknown Causes e. Unknown Causes 2. Total Duration of Excess Emissions 2. Total CMS Downtime 3. [Total Duration of Excess Emissions] x (100%) 3. [Total CMS Downtime] x (100%) [Total Source Operating Time] [Total source operating time] For opacity, record all times in minutes. For gases, record all times in hours. b For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted. Note: On a separate page, describe any changes to CMS, process or controls during last 6 months. For each quarter, summarize the ammonia injection rates over various loads and the data excluded due to startups, shutdowns, and malfunctions. I <u>certify</u> that the information contained in this report is true, accurate, and complete. Name

Date

Title

Signature

# Friday, Barbara

To:

gmbriggs@tecoenergy.com; rcalderon@tecoenergy.com; eavance@tecoenergy.com; 'tdavis@ectinc.com'; Kissel, Gerald; Waters, Jason; campbell@epcjanus.epchc.org; John\_Bunyak@nps.gov

Cc:

Koerner, Jeff

Color of DDAET THE

**Subject:** DRAFT Title V Permit Renewal-Air Construction Revision #0570040-021-AC/0570040-023-AV - TECO-Bayside Power Station

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

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

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