STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Lake Worth Generation, LLC
245 Winter Street, Suite 300
Waltham, MA 02451

Authorized Representative:
Brian Chatlosh, Manager

Lake Worth Generation, LLC
Air Permit No. 0990568-003-AC
186 MW Simple Cycle Gas Turbine
Palm Beach County, Florida

Enclosed is Final Air Permit No. 0990568-003-AC, which authorizes the construction of a 186 MW simple cycle gas turbine project. The new equipment will be installed within the boundaries of the City of Lake Worth's existing Tom G. Smith Power Plant at 117 College Street in Lake Worth, Florida. As noted in the attached Final Determination, only minor changes and clarifications were made. 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.

Trina L Vielhauer

Trina Vielhauer, Chief
Bureau of Air Regulation

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 1/6/2004 to the persons listed:

Mr. Brian Chatlosh, LWG*
Mr. Ken Kosky, Golder Associates
Mr. Jim Stormer, PBCHD
Mr. Tom Tittle, SED
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

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

Victoria Gibson (Clerk) January 6, 2004 (Date)

Florida Department of Environmental Protection

Memorandum

TO: Michael G. Cooke, Division of Air Resources Management

THRU: Trina Vielhauer, Bureau of Air Regulation
Al Linero, New Source Review Section

FROM: Jeff Koerner, New Source Review Section JK

DATE: December 19, 2003

SUBJECT: Air Permit No. 0990568-003-AC
Lake Worth Generation, LLC
186 MW Simple Cycle Gas Turbine Project

The Final Permit for this project is attached for your approval and signature, which authorizes Lake Worth Generation, LLC to construct a 186 MW simple cycle gas turbine. The project is located within the boundaries of the existing Tom G. Smith Power Plant, which is owned and operated by the City of Lake Worth. The permit restricts the unit to simple cycle operation only and a maximum of 4500 hours per year. Based on the permit conditions, the project is not subject to PSD preconstruction review because potential emissions are below the PSD major facility threshold.

The project was originally permitted in 1999 as a combined cycle unit and substantial construction commenced, including placement of the gas turbine. However, the construction company was an affiliate of Enron Corporation and eventually filed for bankruptcy. In turn, Lake Worth Generation, LLC also filed for bankruptcy. Ultimately, the project may be sold. Recent information suggests that the project may not continue at all, but that the existing equipment will be sold piecemeal including the gas turbine.

The Department distributed an "Intent to Issue Permit" package on July 22, 2003. The applicant published the "Public Notice of Intent to Issue" in The Palm Beach Post on November 24, 2003. The Department received the proof of publication on December 17, 2003. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed.

Day #90 is March 3, 2004. I recommend your approval of the attached Final Permit for this project.

Attachments

FINAL DETERMINATION

PERMITTEE

Lake Worth Generation, LLC
245 Winter Street, Suite 300
Waltham, MA 02451

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
New Source Review Section
2600 Blair Stone Road, MS #5505
Tallahassee, Florida, 32399-2400

PROJECT

Air Permit No. 0990568-003-AC
Lake Worth Generation, LLC

This permit authorizes the construction of a 186 MW simple cycle gas turbine with electrical generator set and associated equipment in accordance with the application and conditions of this permit. The new electrical generating power plant will be located within the boundaries of the existing Tom G. Smith Power Plant (owned and operated by the City of Lake Worth) at 117 College Street in Lake Worth, Florida 33461. The project was originally configured as a combined cycle gas turbine (Permit No. PSD-FL-266) and was classified as a new PSD major facility in accordance with Rule 62-212.400, F.A.C. This new permit authorizes simple cycle only operation. In accordance with the conditions of this permit, the new facility is considered a minor source of air pollution and is not subject to PSD preconstruction review.

NOTICE AND PUBLICATION

The Department distributed an "Intent to Issue Permit" package on July 22, 2003. The applicant published the "Public Notice of Intent to Issue" in The Palm Beach Post on November 24, 2003. The Department received the proof of publication on December 17, 2003. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed.

COMMENTS

No comments on the Draft Permit were received from the public, the Department's Southeast District Office, the Palm Beach County Health Department, EPA Region 4, the National Park Service, or the applicant.

CONCLUSION

Only minor revisions were made to correct typographical errors. The final action of the Department is to issue the permit with the changes described above.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Lake Worth Generation, LLC
245 Winter Street, Suite 300
Waltham, MA 02451

Authorized Representative:
Brian Chatlosh, Manager

Lake Worth Generation, LLC
Air Permit No. 0990568-003-AC
186 MW Simple Cycle Gas Turbine
Palm Beach County, Florida

Enclosed is Final Air Permit No. 0990568-003-AC, which authorizes the construction of a 186 MW simple cycle gas turbine project. The new equipment will be installed within the boundaries of the City of Lake Worth's existing Tom G. Smith Power Plant at 117 College Street in Lake Worth, Florida. As noted in the attached Final Determination, only minor changes and clarifications were made. 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.

Trina L Vielhauer

Trina Vielhauer, Chief
Bureau of Air Regulation

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 1/6/2004 to the persons listed:

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Mr. John Bunyak, NPS

Clerk Stamp

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

Victoria Gibson (Clerk) January 6, 2004 (Date)

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

PERMITTEE

Lake Worth Generation, LLC
245 Winter Street, Suite 300
Waltham, MA 02451

Authorized Representative:
Brian Chatlosh, Manager

Permit No. 0990568-003-AC
Expires: March 31, 2005
186 MW Simple Cycle Gas Turbine
SIC No. 4911
Palm Beach County, Florida

PROJECT AND LOCATION

This permit authorizes Lake Worth Generation, LLC to construct a 186 MW simple cycle gas turbine with electrical generator set and associated equipment in accordance with the application and conditions of this permit. The new electrical generating power plant will be located within the boundaries of the existing Tom G. Smith Power Plant (owned and operated by the City of Lake Worth) at 117 College Street in Lake Worth, Florida 33461.

{Permitting Note: This project was originally configured as a combined cycle gas turbine (Permit No. PSD-FL-266) and was classified as a new PSD major facility in accordance with Rule 62-212.400, F.A.C. This new permit authorizes simple cycle only operation. In accordance with the conditions of this permit, the new facility is considered a minor source of air pollution and is not subject to PSD preconstruction review.}

STATEMENT OF BASIS

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.), and Subpart GG in Part 60 of Title of the Code of Federal Regulations. The above named permittee is authorized to construct the emissions units in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department). This permit supersedes previous air construction Permit No. PSD-FL-266.

APPENDICES

The attached appendices are a part of this permit:

Appendix A.	Citation Format
Appendix B.	Construction Permit General Conditions
Appendix GG.	NSPS Provisions

Michael G. Cooke, Director
Division of Air Resources Management

FACILITY DESCRIPTION

This permit authorizes Lake Worth Generation (LWG) to construct a new simple cycle gas turbine. The permittee will lease property from the City of Lake Worth that is within the boundaries of its existing Tom G. Smith Power Plant. City employees will operate and maintain the new unit under the control of LWG. This new facility consists of the following emissions unit.

EU No.	Emissions Unit Description
001	186 MW simple cycle gas turbine

{Permitting Note: The project was originally proposed as a combined cycle unit, but is modified by this permit to authorize simple cycle only operation.}

REGULATORY CLASSIFICATIONS

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

Title IV: The new facility operates units subject to applicable Acid Rain provisions of the Clean Air Act.

Title V: The new facility is a Title V major facility pursuant to Chapter 62-213, F.A.C.

PSD: The new facility is not a PSD major facility pursuant to Rule 62-212.400, F.A.C.

NSPS: The gas turbine is subject to New Source Performance Standards of Subpart GG in 40 CFR 60.

Siting: The project is not subject to Chapter 62-17, F.A.C. for Power Plant Site Certification.

RELEVANT DOCUMENTS

The documents listed below are not part of this permit, but specifically relate to this permitting action.

- *Project No. 0990568-001-AC*: Air Permit No. PSD-FL-266 issued on 11/14/99 and all related documents for a combined cycle gas turbine.
- *Project No. 0990568-002-AC*: Permit modification (PSD-FL-266A) issued on 08/30/00 to revise VOC standards for combined cycle operation and all related documents.
- *No Project Number*: Permitting action (PSD-FL-266B) issued on 04/03/01 to extend permit expiration date (and authority to construct) and all related documents.
- *Project No. 0990568-003-AC*: Application to modify current air permit (PSD-FL-266) for a simple cycle only gas turbine received on May 19, 2003 and all related correspondence.

Unless otherwise specified by this permit, the following conditions apply to all activities this facility.

ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.
2. Compliance Authorities: All documents related to reports, tests, minor modifications and notifications shall be submitted to the Air Pollution Control Section of the Palm Beach County Health Department at P.O. Box 29 (901 Evernia Street), West Palm Beach, Florida 33402-0029. Copies of these items shall also be submitted to the Department's Air Resources Section of the Southeast District Office at P.O. Box 15425 (400 North Congress Avenue), West Palm Beach, Florida, 33416-5425.
3. Previous Permits: This air construction permit supersedes previous Permit No. PSD-FL-266.
4. Permit Applications: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C.
5. Citation Format: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code. *Appendix A* lists abbreviations and methods for citing regulations used throughout this permit.
6. General Conditions: The owner and operator is subject to, and shall operate under, the attached General Conditions listed in *Appendix B* of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
7. Applicable Regulations: Unless otherwise indicated in this permit, the construction and operation of the subject emission units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, and 62-297; and the applicable requirements in Title 40 of the Code of Federal Regulations. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. [Rule 62-210.300, F.A.C.]
8. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
9. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
10. Source Obligation: This project is subject to Rule 62-212.400(2)(g), F.A.C., which states, "If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7,1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it." This includes, but is not limited to, increases in

maximum heat input rates, hours of operation, pollutant emission rates, or a request for combined cycle operation. [Rule 62-212.400(2)(g), F.A.C.]

11. Expiration and Extension: For good cause, the permittee may request that this PSD permit be extended. Such a request shall be submitted at least sixty (60) days before the expiration of this permit. [Rules 62-4.070(3) and 62-4.080, F.A.C.]

12. Transfer of Permit: Within thirty (30) days after the sale or legal transfer of a permitted facility, an "Application for Transfer of Air Permit" (DEP Form 62-210.900(7)) shall be submitted to the Permitting Authority. This form must be completed with the notarized signatures of both the permittee and the proposed new permittee. 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. 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. *{Permitting Note: In reviewing a request for a transfer of the air permit, the Department will reconsider the issues of "common control" and "single facility" due to the proximity of this new facility within the boundaries the existing Tom G. Smith Power Plant, which is owned operated by the City of Lake Worth.}* [Rule 62-4.120, F.A.C.]

13. Application for Title IV Permit: At least 24 months before the date on which the new unit begins serving an electrical generator greater than 25 MW, the permittee shall submit an application for a Title IV Acid Rain Permit to the EPA Region 4 office with copy to the Department's Bureau of Air Regulation in Tallahassee. [40 CFR 72]

14. Application for Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may require by law. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

EMISSION STANDARDS

15. Unconfined Emissions of Particulate Matter: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

16. Odor: No person shall cause, suffer, allow or permit the discharge of air pollutants that cause or contribute to an objectionable odor. An objectionable odor is defined as 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. [Rules 62-296.320(2) and 62-210.200(203), F.A.C.]

OPERATIONAL REQUIREMENTS

17. Plant Operation - Problems: If 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 notify the Compliance Authorities within one (1) working day. The 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. [Rule 62-4.130, F.A.C.]

18. Circumvention: 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.]

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

19. Operating Rate During Testing. Unless otherwise specified in this permit, testing of emissions shall be conducted with the emissions unit operating at permitted capacity (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. [Rule 62-297.310(2), F.A.C.]

20. 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 two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

21. Calculation of Emission Rate: The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

22. Test Procedures shall meet all applicable requirements of Rule 62-297.310(4), F.A.C.

23. Determination of Process Variables: 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. Equipment or instruments used to directly, or indirectly, determine process variables 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. Examples of such devices include belt scales, weight hoppers, flow meters, and tank scales. [Rule 62-297.310(5), F.A.C.]

24. Required Stack Sampling Facilities: All emissions units requiring stack testing shall be designed to accommodate testing and sampling facilities. Sampling facilities shall conform to the requirements of Rule 62-297.310(6), F.A.C. .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.

25. Test Notification: The owner or operator shall notify the Compliance Authorities at least 30 days prior to the scheduled initial NSPS tests and at least 15 days prior to all other scheduled compliance tests. Notification shall include the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and conducting the test. [Rule 62-297.310(7)(a)9., F.A.C. and 40 CFR 60.8]

26. 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 facility to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions units and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

27. Records Retention: All measurements, records, and other data required by this permit shall be recorded in a permanent form and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to the Department's representatives upon request. [Rule 62-213.440, F.A.C.]

28. Test Reports: 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. 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. 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 applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.]

29. Excess Emissions Reporting: If excess emissions occur, the owner or operator shall notify the Compliance Authorities within one (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. Within thirty (30) days following each calendar quarter, the owner or operator shall submit a report summarizing any incident of the excess emissions or stating that no excess emissions occurred during the given calendar quarter. The summary of each incident shall include the amount, the duration, the cause, and the action taken to minimize and correct the excess emissions. Pursuant to the New Source Performance Standards, excess emissions shall also be reported in accordance with § 60.7, Subpart A. Periods of startup, shutdown, and malfunction shall be monitored, recorded, and reported as excess emissions when monitored emission levels exceed any permitted standards. [Rules 62-4.070(3), 62-4.130 and 62-210.700(6), F.A.C.]

30. Annual Operating Report (AOR): The Annual Operating Report form shall be completed each year and submitted to the Compliance Authorities by March 1st of the following year. [Rule 62-210.370(3), F.A.C.]

EU 001. Simple Cycle Gas Turbine

The specific conditions of this section address the following emissions unit.

EU No.	Emissions unit Description
001	Simple Cycle Gas Turbine: This emissions unit consists of a General Electric Model PG7241(FA) gas turbine with electrical generator set. The gas turbine design incorporates dry low-NOx (DLN) combustion technology to reduce NOx emissions when firing natural gas. A water (or steam) injection system is included to reduce NOx emissions when firing distillate oil as a restricted alternate fuel. The General Electric Speedtronic™ Gas Turbine Control System will monitor and control the gas turbine combustion process and operating parameters. An absorption or evaporative cooling system may be installed to reduce the turbine inlet air temperature for a corresponding increase in power generation. Continuous monitors will record carbon monoxide emissions, nitrogen oxide emissions, and the water-to-fuel ratio during oil firing. The exhaust stack is 22 feet in diameter and 98 feet tall. When firing natural gas, the gas turbine generates approximately 176 MW of electrical power. Exhaust gases exit the stack at a temperature of 1110° F and a volumetric flow rate of 2,681,000 actual cubic feet per minute. When firing low sulfur distillate oil, the gas turbine generates approximately 186 MW of electrical power. Exhaust gases exit the stack at a temperature of 1080° F and a volumetric flow rate of 2,763,000 actual cubic feet per minute. The exhaust gas parameters are approximate considering base load operation and a turbine inlet air temperature of 45° F.

FEDERAL REGULATIONS

1. NSPS General Provisions: The gas turbine shall comply with all applicable provisions of Subpart GG in 40 CFR 60, the Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(7)(b), F.A.C. *Appendix GG* of this permit identifies the applicable NSPS requirements. The Subpart GG requirement to correct NOx test data to ISO conditions applies; however, such correction shall not be used for determining compliance with the state standards. [40 CFR 60, Subparts A and GG]

PERFORMANCE RESTRICTIONS

2. Allowable Fuels: The gas turbine shall fire pipeline natural gas containing no more than 1 grain of sulfur per 100 scf of natural gas. As a restricted alternate fuel, the gas turbine may fire No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight. Compliance with the fuel sulfur specifications shall be demonstrated by the record keeping requirements of this permit and the approved Alternate Monitoring Plan. [Application; Rule 62-210.200(PTE), F.A.C.]

3. Permitted Capacities: The gas turbine shall operate only in simple cycle mode. Based on the higher heating value of each fuel, a turbine inlet air temperature of 45° F, a relative humidity of 70%, and 100% base load, the permitted capacity shall be defined as the following maximum heat input rates.

   (a) *Gas Firing*: The maximum heat input rate is 1817 MMBtu/hour.

   (b) *Oil Firing*: The maximum heat input rate is 1965 MMBtu/hour.

   The maximum heat input rates will vary depending upon turbine inlet conditions and the gas turbine characteristics. Manufacturer's performance curves, corrected for site conditions or equations for correction to other turbine inlet conditions, shall be provided to the Permitting and Compliance Authorities within 45 days of completing the initial compliance testing. The performance curves shall include DLN operation for gas firing and water (or steam) injection for oil firing. The

permittee shall install, operate, calibrate, and maintain fuel metering systems to monitor the flow of natural gas and distillate oil. [Design; Rule 62-210.200(PTE), F.A.C.]

4. Hours of Operation: The gas turbine shall operate no more than 4500 hours during any consecutive 12 months. [Applicant Request; Rules 62-210.200(PTE) and 62-212.400(2)(g), F.A.C.]

5. Fuel Consumption Limit: No more than 9,369,750 gallons of distillate oil shall be fired during any consecutive 12 months. *{Permitting Note: The oil firing limit is equivalent to approximately 650 hours of oil firing per year at the maximum firing rate.}* [Applicant Request, Rules 62-210.200(PTE) and 62-212.400(2)(g), F.A.C.]

6. Operating Procedures: All operators and supervisors shall be properly trained to operate and maintain the gas turbine and pollution control devices in accordance with the guidelines and procedures established by each manufacturer. The training shall include good operating practices as well as methods of minimizing excess emissions. [Applicant Request; Rule 62-4.070(3), F.A.C.]

EMISSIONS CONTROLS

7. DLN Tuning: Prior to the required initial emissions performance testing, the gas turbine, dry low-NOx (DLN) combustors, and Speedtronic™ control system shall be tuned in accordance with the manufacturer's recommendations to optimize the reduction of CO, NOx, and VOC emissions. Thereafter, these systems shall be maintained and tuned as necessary to ensure efficient combustion. The Speedtronic™ control system shall be designed and operated to monitor and control the gas turbine combustion process and operating parameters including, but not limited to: fuel distribution and staging, turbine speed, load conditions, combustion temperatures, water injection, and fully automated startup, shutdown, and cool-down. [Design; Rule 62-4.070(3), F.A.C.]

8. Water Injection: The permittee shall install, calibrate, operate, and maintain an automated water (or steam) injection system to control NOx emissions when firing distillate oil. This system shall be maintained and adjusted in accordance with the manufacturer's recommendations to minimize NOx emissions. [Design; Rules 62-4.070(3) and 62-4.070(3), F.A.C.]

9. Turbine Inlet Air Cooling System: The permittee may install an absorption or evaporative cooling system to reduce the turbine inlet air temperature. [Applicant Request]

EMISSIONS STANDARDS

10. Simple Cycle Operation, Natural Gas: This permit authorizes simple cycle operation of the gas turbine when firing natural gas. Emissions shall not exceed following standards. [Applicant Request; Design; Rule 62-4.070(3), F.A.C.]

Pollutant	Controls [f]	Emission Standard
CO [a]	DLN	9.0 ppmvd corrected to 15% O2 based on a 24-hour CEMS average 9.0 ppmvd corrected to 15% O2 and 32.4 lb/hour based on a 3-run test average
NOx [b]	DLN	9.0 ppmvd corrected to 15% O2 based on a 24-hour CEMS average 9.0 ppmvd corrected to 15% O2 and 66.2 lb/hour based on a 3-run test average
PM/PM10 [c]	CF/CD	Visible emissions shall not exceed 10% opacity
SAM/SO2 [d]	CF	1 grain per 100 SCF of gas (fuel specification)
VOC [e]	DLN	1.4 ppmvw and 3.2 lb/hour (as methane) based on a 3-run test average

a. Compliance with the rolling 24-hour CEMS standard shall be demonstrated with data collected from the certified continuous CO emissions monitoring system (CEMS) required by this permit. The CEMS shall

calculate and record emissions for each 1-hour block of operation and determine a 24-hour average for each day of operation. Compliance with the 3-run test averages shall be determined by stack testing using EPA Method 10.

b. Compliance with the rolling 24-hour CEMS standard shall be demonstrated with data collected from the certified continuous NOx emissions monitoring system (CEMS) required by this permit. The CEMS shall calculate and record emissions for each 1-hour block of operation and determine a 24-hour average for each day of operation. Compliance with the 3-run test averages shall be determined by stack testing using EPA Method 7E (or 20).

c. Compliance with the visible emissions standard shall be determined by conducting EPA Method 9. *{Permitting Note: Estimated PM emissions are less than 0.005 lb/MMBtu when firing natural gas.}*

d. Compliance with the SAM/SO2 standard shall be demonstrated by firing only pipeline natural gas and the record keeping and reporting requirements of this permit.

e. Compliance with the VOC standards shall be determined by stack testing using EPA Method 25A. EPA Method 18 may be performed concurrently to deduct emissions of methane and ethane from the total measured VOC.

f. DLN means dry low-NOx controls. CF means clean fuels. CD means combustion design.

11. Simple Cycle Operation, Distillate Oil: This permit authorizes simple cycle operation of the gas turbine when firing a restricted amount of distillate oil. Emissions shall not exceed the following standards. [Applicant Request; Design; Rule 62-4.070(3), F.A.C.]

Pollutant	Controls[f]	Emission Standard
CO[a]	CD	20.0 ppmvd corrected to 15% O2 based on a 24-hour average 73.4 pounds per hour based on a 3-run test average
NOx[b]	WI	42.0 ppmvd corrected to 15% O2 based on a 24-hour average 362.4 pounds per hour based on a 3-run test average
PM/PM10[c]	CF/CD	Visible emissions shall not exceed 10% opacity (< 0.01 grains/dscf)
SAM/SO2[d]	CF/CD	Distillate oil containing no more than 0.05% sulfur by weight (fuel specification).
VOC[e]	CD	3.5 ppmvw (as methane) based on a 3-run test average 8.3 pounds per hour (as methane) based on a 3-run test average

a. Compliance with the rolling 24-hour CEMS standard shall be demonstrated with data collected from the certified continuous CO emissions monitoring system (CEMS) required by this permit. The CEMS shall calculate and record emissions for each 1-hour block of operation and determine a 24-hour average for each day of operation. Compliance with the 3-run test averages shall be determined by stack testing using EPA Method 10.

b. Compliance with the rolling 24-hour CEMS standard shall be demonstrated with data collected from the certified continuous NOx emissions monitoring system (CEMS) required by this permit. The CEMS shall calculate and record emissions for each 1-hour block of operation and determine a 24-hour average for each day of operation. Compliance with the 3-run test averages shall be determined by stack testing using EPA Method 7E (or 20).

c. Compliance with the visible emissions standard shall be determined by EPA Method 9. *{Permitting Note: Estimated PM emissions are less than 0.009 lb/MMBtu when firing distillate oil.}*

d. Compliance with the SAM/SO2 standard shall be demonstrated by low sulfur distillate oil containing no more than 0.05% sulfur by weight and the record keeping and reporting requirements of this permit.

e. Compliance with the VOC standards shall be determined by stack testing using EPA Method 25A. EPA Method 18 may be performed concurrently to deduct emissions of methane and ethane from the total

measured VOC.

f. CF means clean fuels. CD means combustion design. WI means water injection.

12. Annual NOx Emission Cap: NOx emissions from the simple cycle gas turbine shall not exceed 245.0 tons during any consecutive 12 months. [Rules 62-4.070(3) and 62-212.400(2)(g), F.A.C.]

EXCESS EMISSIONS

13. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited. These emissions shall be included in the calculation of the CEMS emission rates for compliance determinations. [Rule 62-210.700, F.A.C.]

14. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown, or malfunction of the gas turbine shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall not exceed two hours in any 24-hour period. Excluding startup and shutdown, operation below 50% base load is prohibited. If excess emissions occur due to malfunction, the owner or operator shall notify the Compliance Authorities within one working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. [Vendor Performance Curves; Rule 62-210.700, F.A.C.]

COMPLIANCE MONITORING AND RECORD KEEPING REQUIREMENTS

15. Sampling Facilities: The permittee shall design the gas turbine stack to accommodate adequate testing and sampling locations for demonstrating compliance with the applicable emission standards. [Rules 62-4.070(3) and 62-204.800, F.A.C., 40 CFR 60.40a(b)]

16. Gas Turbine Testing Capacity: Testing of emissions shall be conducted with the gas turbine operating at permitted capacity. Permitted capacity is defined as 90-100% of the maximum heat input rate allowed by the permit, corrected for the turbine inlet air temperature during the test (with 100% represented by a curve depicting heat input vs. turbine inlet temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. However, subsequent operation is limited by adjusting the entire heat input vs. turbine temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for the turbine inlet air temperature) and 105% of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Procedures for these tests shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapters 62-204 and 62-297, F.A.C. [Rule 62-297.310(2), F.A.C.]

17. Performance Test Methods: Compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A (1997 version), and adopted by reference in Rule 62-204.800, F.A.C.

(a) *EPA Method 7E*, "Determination of Nitrogen Oxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)".

(b) *EPA Method 9*, "Visual Determination of the Opacity of Emissions from Stationary Sources".

(c) *EPA Method 10*, "Determination of Carbon Monoxide Emissions from Stationary Sources". All CO tests shall be conducted concurrently with NOx tests.

(d) *EPA Method 20*, "Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines."

(e) *EPA Methods 18, 25 and/or 25*A, "Determination of Volatile Organic Concentrations."

No other test methods may be used for compliance testing without prior written approval from the Department. [Rules 62-297.200 and 62-204.800, F.A.C.; 40 CFR 60, Appendix A]

18. Initial Tests Required: Initial compliance with the allowable emission standards specified in this permit shall be determined within 60 days after achieving the maximum production rate, but not later than 180 days after initial operation of the emissions units. Initial tests for emissions from the gas turbine shall be conducted for carbon monoxide, nitrogen oxides, volatile organic compounds, and visible emissions separately for each fuel type. Initial performance test data shall also be converted into the units of the corresponding NSPS Subpart GG emissions standards to demonstrate compliance See Appendix GG. [Rule 62-297.310(7)(a)1, F.A.C.]

19. Annual Performance Tests: Annual compliance tests shall be conducted to determine the emissions of carbon monoxide, nitrogen oxides and visible emissions from the gas turbine. Tests required on an annual basis shall be conducted at least once during each federal fiscal year (October 1st to September 30th). When conducted at permitted capacity, the annual NOx continuous monitor RATA required pursuant to 40 CFR 75 may be substituted for the annual compliance stack test. Similarly, the CO continuous monitor RATA pursuant to 40 CFR 60, Appendix B may be substituted for the annual compliance stack test. [Rule 62-297.310(7)(a)4, F.A.C.]

20. Tests Prior to Permit Renewal: During the federal fiscal year (October 1st to September 30th) prior to renewing the air operation permit, compliance tests shall be conducted to determine the emissions of volatile organic compounds from the gas turbine. [Rule 62-297.310(7)(a)3, F.A.C.]

21. Special Compliance Tests: The Department may require additional performance tests after any substantial modifications and appropriate shake down period including the replacement of dry low-NOx combustors. Shake down periods shall not exceed 100 days after re-starting the gas turbine. [Rule 62-297.310(7)(b), F.A.C.]

22. Continuous Monitors: To demonstrate continuous compliance with the emissions limits for CO and NOx, the owner or operator shall install, calibrate, operate, and maintain a continuous emission monitoring systems (CEMS) to measure and record the CO, NOx and oxygen concentrations in the gas turbine exhaust. Alternatively, a monitor for carbon dioxide may be used in place of the oxygen monitor, but the system shall be capable of correcting the emissions to 15% oxygen.

    Compliance with the 24-hour rolling averages shall be demonstrated by continuous emissions monitoring data. The 24-hour rolling average shall be determined by calculating the arithmetic average of all hourly emission rates during the averaging period. Each 1-hour average shall be expressed in units of ppmvd corrected to 15% oxygen and calculated using four valid data points approximately 15 minutes apart. (The minimum requirement is two valid data points at least 15 minutes apart.) If any oil is fired during the hour, emissions shall be attributed towards compliance with the standards for oil firing.

    Continuous emission monitoring data required by this permit shall be collected and recorded during all periods of operation including startup, shutdown, and malfunction, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments. Although recorded, emissions during periods of startup, shutdown and malfunction are subject to the excess emission conditions specified in this permit.

The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of: Rule 62-297.520, F.A.C., including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications 2, 3 and 4; 40 CFR 60.7(a)(5); 40 CFR 60.13; 40 CFR 60, Appendix F; and 40 CFR Part 75, whichever is more stringent. A monitoring plan shall be provided to the DEP Emissions Monitoring Section Administrator and EPA for review no later than 45 days prior to the first scheduled certification test pursuant to 40 CFR 75.62. The plan shall consist of data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location.

When the CEMS reports CO or NOx emissions in excess of the standards allowed by this permit, the permittee shall notify the Compliance Authorities within one (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. [Rules 62-204.800, 62-210.700, 62-4.070(3), 62-4.130, 62-4.160(8), F.A.C and 40 CFR 60.7].

23. Fuel Records: The permittee shall comply with the fuel sulfur specifications in accordance with the following requirements.

    (a) *Natural Gas*: The permittee shall maintain records of the sulfur content of the natural gas being supplied for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods D4084-82, D3246-81 or equivalent methods. These methods shall be used to determine the sulfur content of the natural gas fired in accordance with any EPA-approved custom fuel monitoring schedule (see Alternate Monitoring Plan) or natural gas supplier data or the natural gas sulfur content referenced in 40 CFR 75 Appendix D. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335(e). However, the permittee is responsible for ensuring that the procedures in 40 CFR60.335 or 40 CFR75 are used to determine the fuel sulfur content for compliance with the SO_2 standard in 40 CFR 60.333.

    (b) *Low Sulfur Distillate Oil*: For all bulk shipments of low sulfur distillate oil received at this facility, the permittee shall obtain from the fuel vendor an analysis identifying the sulfur content. Methods for determining the sulfur content of the distillate oil shall be ASTM D129-91, D2622-94, or D4294-90 or equivalent methods. Records shall specify the test method used and shall comply with the requirements of 40 CFR 60.335(d).

    [Rules 62-4.070(3) and 62-4.160(15), F.A.C.]

24. Alternate Monitoring Plan: Subject to EPA approval, the following alternate monitoring may be used to demonstrate compliance.

    (a) The NOx CEMS data may be used in lieu of the monitoring system for water-to-fuel ratio and the reporting of excess emissions in accordance with 40 CFR 60.334(c)(1). The calibration of the water-to-fuel ratio-monitoring device required in 40 CFR 60.335(c)(2) will be replaced by the 40 CFR 75 certification tests of the NOx CEMS.

    (b) The NOx CEMS data shall be used in lieu of the requirement for reporting excess emissions in accordance with 40 CFR 60.334(c)(1).

    (c) When requested by the Department, the CEMS emission rates for NOx on this unit shall be corrected to ISO conditions to demonstrate compliance with the NOx standard established in 40 CFR 60.332.

(d) A *custom fuel monitoring schedule* pursuant to Appendix D of 40 CFR 75 for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60.334(b)(2) provided the following conditions are met.

(1) The permittee shall apply for an Acid Rain permit within the deadlines specified in § 72.30.

(2) The permittee shall submit a monitoring plan, certified by signature of the Authorized Representative, that commits to using a primary fuel of pipeline supplied natural gas containing no more than 1 grain of sulfur per 100 scf of gas pursuant to § 75.11(d)(2);

(3) Each unit shall be monitored for SO_2 emissions using methods consistent with the requirements of 40 CFR 75 and certified by the U.S. EPA.

This custom fuel-monitoring schedule will only be valid when pipeline natural gas is used as a primary fuel. If the primary fuel for these units is changed to a higher sulfur fuel, SO_2 emissions must be accounted for as required pursuant to 40 CFR 75.11(d).

[40 CFR 60, Subpart GG, Applicant Request]

25. Daily Operations Log: Before the end of the following calendar day, the owner or operator shall record the following information in a log for the previous day of operation: total hours of operation; gallons of distillate oil fired; heat input (MMBtu) from distillate oil firing; and the average water injection rate (lb/hour) during oil firing. Information may be recorded and stored as an electronic file, but must be available for inspection and/or printing at the request of the Compliance Authorities. [Rule 62-4.160(15), F.A.C.]

26. Monthly Operations Summary: By the fifth calendar day of each month, the owner or operator shall record the following information in a log for the previous month of operation: total hours of operation; million cubic feet of natural gas fired; gallons of distillate oil fired; the heat input rate (MMBtu) from distillate oil firing, and tons of NOx emitted. The owner or operator shall also calculate and record the rolling totals for the previous 12 months of operation. Information may be recorded and stored as an electronic file, but must be available for inspection and/or printing at the request of the Compliance Authorities. [Rule 62-4.160(15), F.A.C.]

SECTION IV.

List of Appendices

Appendix A. Citation Format
Appendix B. Construction Permit General Conditions
Appendix GG. NSPS Provisions

Appendix A. Citation Format

ABBREVIATIONS AND ACRONYMS

° F	-	Degrees Fahrenheit
DEP	-	State of Florida, Department of Environmental Protection
DARM	-	Division of Air Resource Management
EPA	-	United States Environmental Protection Agency
F.A.C.	-	Florida Administrative Code
F.S.	-	Florida Statute
SOA	-	Specific Operating Agreement
DLN	-	Dry Low-NOX Combustion Technology

RULE CITATIONS

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

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

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

Where:

62	-	refers to Title 62 of the Florida Administrative Code (F.A.C.)
62-213	-	refers to Chapter 62-213, F.A.C.
62-213.205	-	refers to Rule 62-213.205, F.A.C.

Facility Identification (ID) Number:

Example: Facility ID No. 0990001

Where:

099	-	3 digit number indicates that the facility is located in Palm Beach County
0221	-	4 digit number assigned by state database identifies specific facility

New Permit Numbers:

Example: Permit No. 0992222-001-AC or 0992222-001-AV

Where:

AC	-	identifies permit as an Air Construction Permit
AV	-	identifies permit as a Title V Major Source Air Operation Permit
099	-	3 digit number indicates that the facility is located in Palm Beach County
2222	-	4 digit number identifies a specific facility
001	-	3 digit sequential number identifies a specific permit project

Old Permit Numbers:

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

Where:

AC	-	identifies permit as an Air Construction Permit
AO	-	identifies permit as an Air Operation Permit
123456	-	6 digit sequential number identifies a specific permit project

Appendix B. Construction Permit General 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 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

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 Florida Statutes 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 or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

   (a) Have access to and copy and records that must be kept under the conditions of the permit;
   (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
   (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

   (a) A description of and cause of non-compliance; and
   (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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

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

403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extend it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

    (a) Determination of Best Available Control Technology (NA);

    (b) Determination of Prevention of Significant Deterioration (NA); and

    (c) Compliance with New Source Performance Standards (X).

14. The permittee shall comply with the following:

    (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    (c) Records of monitoring information shall include:

        1) The date, exact place, and time of sampling or measurements;
        2) The person responsible for performing the sampling or measurements;
        3) The dates analyses were performed;
        4) The person responsible for performing the analyses;
        5) The analytical techniques or methods used; and
        6) The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

Appendix GG. NSPS Provisions

Federal New Source Performance Standards, 40 CFR 60

40 CFR 60, Subpart A - NSPS General Provisions

Applicable portions of 40 CFR 60, Subpart A, General Provisions include:

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

{Permitting Note: For copies of these requirements, please contact the Department's New Source Review Section.}

40 CFR 60, Subpart GG - Stationary Gas Turbines

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

§ 60.330 Applicability and designation of affected facility.

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

§ 60.331 Definitions.

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

(a) *Stationary gas turbine* means any simple cycle gas turbine, regenerative cycle gas turbine or any gas turbine portion of a combined cycle steam/electric generating system that is not self propelled. It may, however, be mounted on a vehicle for portability.

(b) *Simple cycle gas turbine* means any stationary gas turbine which does not recover heat from the gas turbine exhaust gases to preheat the inlet combustion air to the gas turbine, or which does not recover heat from the gas turbine exhaust gases to heat water or generate steam.

(d) *Combined cycle gas turbine* means any stationary gas turbine which recovers heat from the gas turbine exhaust gases to heat water or generate steam.

(f) *Ice fog* means an atmospheric suspension of highly reflective ice crystals.

(g) *ISO standard day conditions* means 288 degrees Kelvin, 60 percent relative humidity and 101.3 kilopascals pressure.

(h) *Efficiency* means the gas turbine manufacturer's rated heat rate at peak load in terms of heat input per unit of power output based on the lower heating value of the fuel.

(i) *Peak load* means 100 percent of the manufacturer's design capacity of the gas turbine at ISO standard day conditions.

(j) *Base load* means the load level at which a gas turbine is normally operated.

(p) *Gas turbine model* means a group of gas turbines having the same nominal air flow, combustor inlet pressure, combustor inlet temperature, firing temperature, turbine inlet temperature and turbine inlet pressure.

(q) *Electric utility stationary gas turbine* means any stationary gas turbine constructed for the purpose of supplying more than one-third of its potential electric output capacity to any utility power distribution system for sale.

§ 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 paragraphs (b) of this section shall comply with one of the following, except as provided in paragraphs (e) of this section.

(1) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

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

Where:

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

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

F = NOx emission allowance for fuel-bound nitrogen as defined in the following table:

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

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

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

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

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

§ 60.333 Standard for sulfur dioxide.

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

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

§ 60.334 Monitoring of operations.

(a) The owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water injection to control NOx emissions shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within +/- 5.0 percent and shall be approved by the Administrator.

(b) The owner or operator of any stationary gas turbine subject to the provisions of this subpart shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

(1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.

(2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with paragraph (b) of this section.

(c) For the purpose of reports required under § 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 § 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 § 60.335(a).

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

(3) Ice fog. Each period during which an exemption provided in § 60.332(g) is in effect shall be reported in writing to the Administrator quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.

§ 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 § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided for in § 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 § 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:

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

Where

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

NOx_o = 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.

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

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

(d) The owner or operator shall determine compliance with the sulfur content standard in § 60.333(b) as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels (incorporated by reference--see Sec. 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.

(e) To meet the requirements of § 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.

Figure 1. Summary Report for Excess NSPS Emissions and Monitoring System Performance

Pollutant *(Circle One)*: SO_2 NOx TRS H_2S CO Opacity

Reporting period dates: From _____ to _____

Company: _____

Emission Limitation: _____

Address: _____

Monitor Manufacturer and Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period [1]: _____

Emission Data Summary [1]		CMS Performance Summary [1]	
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. Process problems	____	c. Quality assurance calibration	____
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) / [Total source operating time]	____ % [2]	3. [Total CMS Downtime] x (100) / [Total source operating time]	____ % [2]

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] 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.

On a separate page, describe any changes since last quarter in CMS, process or controls.

I certify that the information contained in this report is true, accurate, and complete.

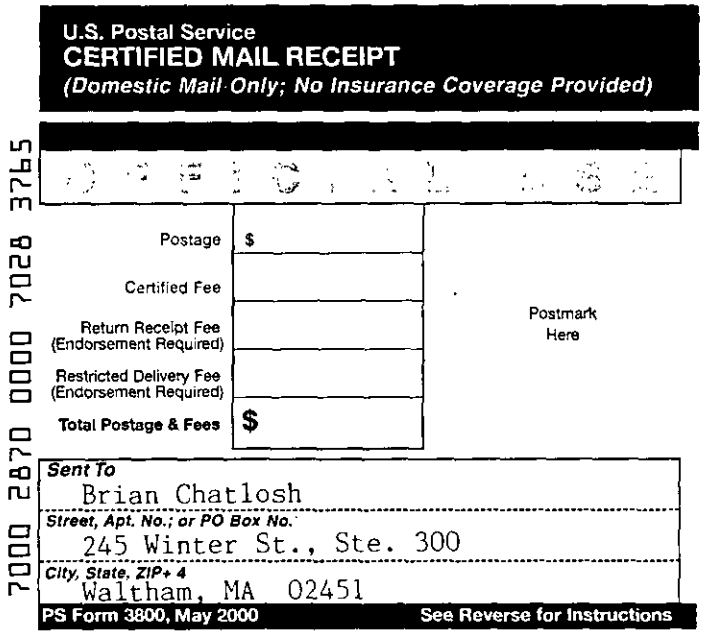
Name: _____

Signature: _____

Title: _____

Date: _____

{Note: This format is referenced in § 60.7, Subpart A, General Provisions. It should only be used to summarize compliance and excess emissions with regard to the federal NSPS standards.}



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