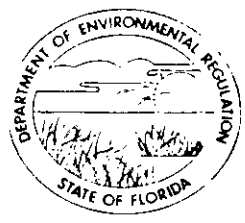


File

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY

February 12, 1988

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Harry Schindehette, Director
Ft. Pierce Utilities Authority
P. O. Box 3191
Ft. Pierce, Florida 33448

Dear Mr. Schindehette:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit for Ft. Pierce Utilities Authority to install a 31.6 MW Combined Cycle Gas Turbine in Ft. Pierce, St. Lucie County, Florida.

Please submit, in writing, any comments which you wish to have considered concerning the Department's proposed action to Mr. Bill Thomas of the Bureau of Air Quality Management.

Sincerely,

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/TH/s

Attachments

cc: Stephanie Brooks, SE District
Lloyd H. Stebbins, P.E.

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Application for Permit by:

Ft. Pierce Utilities Authority DER File No. AC 56-141460
P. O. Box 3191
Ft. Pierce, Florida 333448

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit (copy attached) for the proposed project as detailed in the applications specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Ft. Pierce Utilities Authority, applied on November 2, 1987, to the Department of Environmental Regulation for a permit to construct/install a 31.6 MW combined cycle gas turbine (a 23.4 MW combustion turbine generator, a steam generator and a 8.2 MW condensing turbine generator) to be located at Ft. Pierce, St. Lucie County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The Department has determined that an air construction permit was needed for the proposed work.

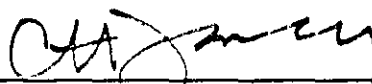
Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, FAC, you (the applicant) are required to publish at your own expense the enclosed Notice of Proposed Agency Action on permit applications. The notice must be published one time only in a section of a major local newspaper of general circulation in the county in which the project is located and within thirty (30) days from receipt of this intent. Proof of publication must be provided to the Department within seven days of publication of the notice. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits.

The Department will issue the permits with the attached conditions unless petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S. A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. Petitions must comply with the

requirement of Florida Administrative Code Rules 17-103.155 and 28-5.201 (copy enclosed) and be filed with (received by) the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant must be filed within fourteen (14) days of receipt of this intent. Petitions filed by other persons must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this intent, whichever first occurs. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes, concerning the subject permit application. Petitions which are not filed in accordance with the above provisions will be dismissed.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

Copies furnished to:

Stephanie Brooks, SE District
Lloyd H. Stebbins, P.E.

RULES OF THE ADMINISTRATIVE COMMISSION
MODEL RULES OF PROCEDURE
CHAPTER 28-5
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

- (1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed, typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.
- (2) All petitions filed under these rules should contain:
 - (a) The name and address of each agency affected and each agency's file or identification number, if known;
 - (b) The name and address of the petitioner or petitioners;
 - (c) All disputed issues of material fact. If there are none, the petition must so indicate;
 - (d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;
 - (e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;
 - (f) A demand for the relief to which the petitioner deems himself entitled; and
 - (g) Such other information which the petitioner contends is material.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on 2-12-88.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby
acknowledged.

Maria Alice
Clerk

2-12-88
Date

State of Florida
Department of Environmental Regulation
Notice of Intent

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Ft. Pierce Utilities Authority to install/construct a 31.6 MW combined cycle gas turbine (a 23.4 MW combustion turbine generator, a steam generator and a 8.2 MW condensing turbine generator) to be located at Ft. Pierce, St. Lucie County, Florida. Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative determination (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within this time period constitutes a waiver of any right such person has to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

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

Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dept. of Environmental Regulation
Southeast Florida District
1900 S. Congress Ave. Suite A
P. O. Box 3858
West Palm Beach, Florida 33406

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

Technical Evaluation
and
Preliminary Determination

Ft. Pierce Utilities Authority
Ft. Pierce, St. Lucie County, Florida

Permit No. AC 56-141460
31.6 MW Combined Cycle Gas Turbine
APIS No. 50WPB56000309

Bureau of Air Quality Management
Central Air Permitting
New Source Review Section

February 12, 1988

I. NAME AND ADDRESS OF APPLICANT

Ft. Pierce Utilities Authority
Post Office Box 3191
Ft. Pierce, Florida 33448

II. REVIEWING AND PROCESS SCHEDULE

Date of Receipt of Application: November 2, 1987

Completeness Review (30 days): Department's
letter of December 1, 1987

Response to Request for Additional Information:

Ft. Pierce Utilities Authority's letter of
December 17, 1987

Application Completeness Date: December 18, 1987

III. FACILITY INFORMATION

III.1 Facility Location

The proposed source is located on 311 North Indian river
Drive in Ft. Pierce, St. Lucie County, Florida. The UTM
coordinates are 566.8 East and 3063.3 North.

III.2 Standard Industrial Classification Code (SIC)

This facility is classified as follows:

Major Group No. - 49 ELECTRIC, GAS, AND SANITARY
SERVICES

Group No. - 491 ELECTRIC SERVICES

Industry No. - 4911 ELECTRIC SERVICES

III.3 Facility Category

Ft. Pierce Electric Utility is a major facility for
nitrogen oxides (NOx) and carbon monoxide (CO).

The proposed project will increase the overall NOx and CO
emissions by 19.7 TPY and 99.2 TPY, respectively.

III.3.1 Background Information

A revision of the current existing permits at the Ft.
Pierce facility was conducted by Environmental Science and
Engineering Inc.

It was concluded that the contemporaneous emissions calculations, as presented, are creditable in accordance with Rule 17-2.500(2)(e)4, Creditable Emissions Changes. The current operating rate for all boilers (Unit 6, Unit 7, and Unit 8) are less than the permitted rates (hours per year) listed on the operating permits. These permitted rates (hours/year) will be decreased as a result of the operation of the new combined cycle turbine (see Table 2). The current operating permits will be modified as follows:

Parameter	Unit 6		Unit 7		Unit 8	
	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
Part.	0.04	0.0024	0.568	0.382	0.945	3.017
SOx	12.38	0.0743	0.1199	0.0806	0.1917	0.612
NOx	1.31	0.007854	104.35	70.126	173.20	552.86
VOC	0.0236	0.000142	0.266	0.179	0.441	1.407
CO	0.15	0.0009	7.589	5.100	12.59	40.20
hrs/yr	12		1344		6384	

IV. PROJECT DESCRIPTION

The new source at Ft. Pierce Utility Authority will consist of a combustion turbine-generator, a heat recovery steam generator (HRSG), cooling tower, and a steam turbine-generator.

Electrical energy will be produced directly from the combustion turbine generator (23.4 MW). A significant portion of the waste heat from the products of combustion will be captured by passing the hot gas steam through a heat recovery steam generator (boiler). The steam produced will drive a smaller (8.2 MW) condensing turbine-generator.

Power produced by the facility will be transferred to the authority's transmission system via step-up transformers and the existing 69 KV substation at the power plant.

The combined cycle unit will provide baseload power to the Ft. Pierce community and the regional grid. The new unit will use natural gas as the primary fuel and No. 2 fuel oil as an emergency secondary fuel.

Emissions control will be provided by steam injection into the turbine, which will reduce NOx emissions by 65%.

V. RULE APPLICABILITY

The proposed project is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code, (FAC).

The facility site is in an area, St. Lucie County, designated attainment for all pollutants in accordance with Rule 17-2.420, Florida Administrative Code (FAC).

Ft. Pierce Electric Utilities Authority is classified as a major facility. Emissions of nitrogen oxides are in the order of 776 tons per year.

This source, combined cycle gas turbine, is exempt from the New Source Review Requirements of the Prevention of Significant Deterioration, Rule 17-2.500 because the net emissions increases of NOx and CO are below the significance levels, Rule 17-2.500(2)(e)4., FAC.

This project shall be permitted under Rule 17-2.520 Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements. The proposed source shall comply with Rule 17-2.660 Standards of Performance for New Stationary Sources (NSPS). Specifically, Subpart GG, NSPS for Gas Turbines, Rule 17-2.610, General Particulate Emissions Limiting Standards and Rule 17-2.700 Stationary Point Sources Emissions Test Procedures.

For a future modification, this facility may be subject to a Prevention of Significant Deterioration Review, Rule 17-2.500, if the net increase of emissions of any criteria pollutant is equal to or greater than the significant emission rates listed in Table 500-2, FAC.

VI. EMISSIONS SUMMARY

The operation of the combined cycle gas turbine will produce emissions of nitrogen oxides (NOx), sulfur dioxide (SO₂), carbon monoxide (CO), particulate matter (PM), and volatile organic compounds (VOC) to the atmosphere.

Table 1 summarizes the potential to emit all pollutants regulated under the ACT which are affected by the proposed project. These permitted emissions are in compliance with all applicable requirements of Chapter 17-2, FAC.

Table 2 shows a summary of the existing and proposed emissions for this facility.

VI.1 Air Quality Analysis

From a technical review of the application, the department has determined that the installation and operation of this source will not have a detrimental impact on Florida's ambient air quality standards.

VI.2 Air Toxics Information

Currently, the Department is developing acceptable ambient concentrations for toxic substances. Specifically, sources classified as Category A (carcinogens and highly toxic substances) and Category B (moderately toxic substances).

In the event toxics emission limits are set during the term of this permit or any subsequent permit, the Department may seek modification pursuant to Rule 17-4.08, FAC.

VII. CONCLUSION

Based on the review of the data submitted by Ft. Pierce Electric Authority, the Florida Department of Environmental Regulation (FDER) concludes that compliance with all applicable state air quality regulations will be achieved provided certain specific conditions are met. The impact of installing and operating the combined cycle gas turbine at the Ft. Pierce facility will not cause or contribute to a violation of any ambient air quality standards.

Table 1
 Allowable Emission Limits
 31.6 MW Combined Cycle Gas Turbine

Pollutant	Standard	Gas Turbine (1)	Waste Heat Boiler
NOx	0.0075 $\frac{14.4}{Y} + F^{(2)}$	84 ppm (gas); 172.5 TPY 134 ppm (No. 2 oil)	
SO ₂	0.8% by weight 0.015% by volume at 15% oxygen on a dry basis	0.17 lb/hr 0.576 TPY (gas)	
PM		15% opacity	15% opacity
CO	---	32.85 lbs/hr (gas) 110.4 TPY (gas)	

(1) The combined cycle gas turbine will be operating mostly with natural gas. Diesel fuel No. 2 will be used for emergency back-up. The NOx allowance for oil burning is 50 ppm. The maximum sulfur content in the oil shall not exceed 0.5% by weight.

(2) F = 0 (NOx emission allowance for fuel-bound nitrogen). Natural gas has virtually no fuel-bound nitrogen.

Table 2

SUMMARY OF EMISSIONS
(tons per year)

PRESENT ACTUAL EMISSIONS

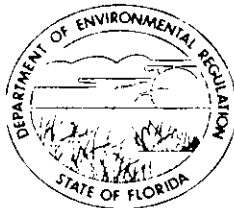
Pollutant	No. 6 12 hrs (0.07 wks)	No. 7 2748.6 hrs (16.3 wks)	No. 8 7262.9 hrs (43.2 wks)	6,7,8 10023.5 hrs TOTAL
Part	0.0061	0.781	3.451	4.238
SOx	0.0743	0.16485	0.70002	0.93917
NOx	0.007854	143.4134	632.338	775.760
VOC	0.000142	0.36507	1.6096	1.974
CO	0.0009	10.43	45.98	56.41

PROJECTED EMISSIONS

Pollutant	No. 6 12 hrs (0.07 wks)	No. 7 1344 hrs (8 wks)	No. 8 6384 hrs (38 wks)	No. 9 6720 hrs (40 wks)	6,7,8,9 144460 hrs TOTAL	Net Emissions Increase	Significant Emission Rate
Part	0.0024	0.382	3.017	13.44	16.841	12.607	25
SOx	0.0743	0.0806	0.612	0.567	1.334	0.395	40
NOx	0.007854	70.126	552.86	172.52	795.51	19.75	40
VOC	0.000142	0.179	1.407	12.10	13.69	11.72	40
CO	0.0009	5.100	40.20	110.4	155.7	99.29	100

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400



BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

PERMITTEE:	Permit Number: AC 56-141460
Ft. Pierce Utilities Authority	Expiration Date: December 1, 1989
P. O. Box 3191	County: St. Lucie
Ft. Pierce, Florida 33448	Latitude/Longitude: 27° 27' 00"N 80° 19' 26"W
	Project: 31.6 MW Combined Cycle Gas Turbine

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the construction of a 31.6 MW combined cycle gas turbine (a 23.4 MW combustion turbine generator, a steam generator and a 8.2 MW condensing turbine generator). This will be located at the Ft. Pierce Utilities Authority facility in Ft. Pierce, St. Lucie County, Florida. The UTM coordinates of this site are Zone 17, 566.8 E and 3.306.3 N.

Construction shall be in accordance with the attached permit application, plans, documents, and drawings except as noted in the General Conditions and Specific Conditions of this permit.

Attachments:

1. Application to Construct Air Pollution Sources, DER Form 17-1.122(16) dated November 2, 1987.
2. Department's letter of December 1, 1987.
3. Applicant's letter of December 17, 1987.

PERMITTEE:
Ft. Pierce Utilities
Authority

Permit Number: AC 56-141460
Expiration Date: December 1, 1989

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
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(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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 does not constitute 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 the permit.
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement 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, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, 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.

PERMITTEE:
Ft. Pierce Utilities
Authority

Permit Number: AC 56-141460
Expiration Date: December 1, 1989

GENERAL CONDITIONS:

6. The permittee shall at all times 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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit; ;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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 notify and provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact 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.

PERMITTEE:
Ft. Pierce Utilities
Authority

Permit Number: AC 56-141460
Expiration Date: December 1, 1989

GENERAL CONDITIONS:

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 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 arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

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 17-4.12 and 17-30.30, 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 is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- (x) Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the Department, during the course of any unresolved enforcement action.

PERMITTEE:
Ft. Pierce Utilities
Authority

Permit Number: AC 56-141460
Expiration Date: December 1, 1989

GENERAL CONDITIONS:

- b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:
- the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - 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 submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. The maximum emission rates for the 31.6 MW combined cycle gas turbine during natural gas firing shall not exceed the limits required by 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, as follows:

PERMITTEE:
Ft. Pierce Utilities
Authority

Permit Number: AC 56-141460
Expiration Date: December 1, 1989

SPECIFIC CONDITIONS:

Nitrogen oxides NSPS Standards = $0.0075 \frac{(14.4)}{Y} + F$

or

= 84 ppm NOx

and

Sulfur dioxide NSPS Standard = 0.015% by volume at 15% oxygen
on a dry basis

Visible Emission Not to exceed 15% opacity

Fuel oil No. 2 Not to exceed 0.5% sulfur
content by weight

2. The combined cycle gas turbine shall be allowed to operate continuously (8736 hours per year). The gas turbine shall operate on natural gas at all times, except that No. 2 fuel oil with a maximum sulfur content of 0.5 percent by weight shall be allowed to be burned only as a emergency back-up fuel.

3. Before this construction permit expires, the 31.6 MW combined cycle gas turbine will be tested for sulfur dioxide, visible emissions, carbon monoxide and nitrogen oxides. Except as provided under 40 CFR 60.8(b), the performance tests shall be in accordance with the provisions of the following reference methods in Appendix A of 40 CFR 60.

- a. Method 1. Sample and Velocity Traverses
- b. Method 2. Volumetric Flow Rate
- c. Method 3. Gas Analysis
- d. Compliance with the opacity limitation will be determined by reference Method 9, Visual Determination of Opacity of Emission from Stationary Sources.
- e. Compliance with the sulfur dioxide emission limits will be determined by reference Method 20 or by calculations based on fuel analysis (ASTM 1552) for sulfur content.
- f. Compliance with the carbon monoxide emission limit will be determined by Method 10 Determination of Carbon Monoxide Emissions from Stationary Sources.

PERMITTEE:
Ft. Pierce Utilities
Authority

Permit Number: AC 56-141460
Expiration Date: December 1, 1989

SPECIFIC CONDITIONS:

- g. Compliance with the allowable emissions limits for nitrogen oxides shall be conducted using EPA reference Method 20 subpart GG Section 60.335.

During performance tests to determine compliance with the proposed standard, measured NOx emission at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

$$\text{NOx} = (\text{NOx OBS}) \left(\frac{P_{\text{ref}}}{P_{\text{OBS}}} \right)^{0.5} e^{19(H_{\text{obs}} - 0.00633)} \left(\frac{T_{\text{AMB}}}{288^{\circ}\text{K}} \right)^{1.53}$$

where:

NOx = Emissions of NOx at 15% oxygen and ISO standard ambient conditions.

NOx obs = Measured NOx emission at 15% oxygen, ppmv.

P_{ref} = Reference combustor inlet absolute pressure at 101.3 kilopascals (1 atmosphere) ambient pressure.

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

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

e = Transcendental constant (2.718)

T_{AMB} = Temperature of ambient air at test.

Test results will be the average of 3 valid runs. The Department will be notified 15 days in advance of the compliance test. The test will be conducted at permitted capacity $\pm 10\%$.

5. A continuous monitoring system shall be installed to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine.

PERMITTEE:
 Ft. Pierce Utilities
 Authority

Permit Number: AC 56-141460
 Expiration Date: December 1, 1989

SPECIFIC CONDITIONS:

6. Sulfur and nitrogen content of the fuel being fired in the gas turbine shall be determined and recorded as specified in the NSPS for Gas Turbines 40 CFR 60, Subpart GG, Section 60.334. The records of fuel oil usage will be kept by the company, available for regulatory agency's inspection, for a two year period.

7. The applicant shall comply with all requirements of 40 CFR 60, Subpart GG, Standards of Performance for stationary gas turbines.

8. The operating permits for this facility shall be modified as follows:

Parameter	Unit 6		Unit 7		Unit 8	
	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
Part.	0.04	0.0024	0.568	0.382	0.945	3.017
SOx	12.38	0.0743	0.1199	0.0806	0.1917	0.612
NOx	1.31	0.007854	104.35	70.126	173.20	552.86
VOC	0.0236	0.000142	0.266	0.179	0.441	1.407
CO	0.15	0.0009	7.589	5.100	12.59	40.20
hrs/yr	12		1344		6384	

9. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, the Department must be notified in writing 60 days prior to the expiration of the construction permit and submit a new schedule and request for an extension of the construction permit, (Rule 17-2, FAC).

12. To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results and Certificate of Completion, to the Department's District office 90

PERMITTEE:
Ft. Pierce Utilities
Authority

Permit Number: AC 56-141460
Expiration Date: December 1, 1989

SPECIFIC CONDITIONS:

days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate, (Rules 17-2 and 17-4, FAC).

13. If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee must apply for a new permit to construct which can take up to 90 days to process a complete application, (Rule 17-4, FAC).

14. Upon obtaining an operation permit, the permittee will be required to submit annual reports on the actual operation and emissions of the facility. Annual reports shall be sent to the Department's District office in West Palm Beach.

Issued this _____ day of _____, 19____

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

Dale Twachtman, Secretary

ATTACHMENTS

Available Upon Request.

P 274 007 644

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

* U.S.G.P.O. 1985-480-794

PS Form 3800, June 1985

Mr. Harry Schindehette, Dir. Ft. Pierce Utilities Auth.	
Street and No P.O. Box 3191	
P.O. State and ZIP Code Ft. Pierce, FL 33448	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date Mailed: 12/1/87 Permit: AC 56-141460	

PS Form 3811, July 1985 447-945

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1 Show to whom, date and address of delivery

2 Restricted Delivery

3 Article Addressed to: Harry Schindehette
311 North Indian River Drive
Ft. Pierce Utilities Authority
P.O. Box 3191
Ft. Pierce, FL 33448

4 Type of Service: Registered Insured Certified COD Express Mail

Article Number: P 274 007 644

Always obtain signature of addressee or agent and
DATE DELIVERED

5 Signature - Addressee: *Harry Schindehette*

6 Signature - Agent: *[Signature]*

7 Date of Delivery: DEC - 4 1987

8 Addressee's Address (ONLY if requested and fee paid)

DOMESTIC RETURN RECEIPT